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Transcript Exhibit(s)

Docket #(s): T-00000A-00-0194

Exhibit # : See attached Exhibit List for the Status of each Exhibit.

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HAND DELIVERED

August 2, 2001

Ms. Lyn Farmer
Chief Administrative Law Judge
ACC – HEARING DIVISION
1200 West Washington, 1st Floor
Phoenix, AZ 85007

Re: Qwest / Cost Docket Phase II No. T-00000A-00-0194

Dear Ms. Farmer:

Following is a breakdown of the original exhibits from the hearing held in the above-referenced matter that began on July 16, and ended on July 31, 2001:

ATT/XO Exhibits Nos. ATT/XO 1 through 43

Exhibits Nos. 1, 2, 3, 7, 9, 10, 18, 19, 20, 23, 26, 27, 31, 38, 39, 40, and 42 are being filed with Docket Control this date.

Confidential Exhibits Nos. 4, 5, 6, 8, 11, 12, 13, 14, 15, 16, 17, 21, 22, 24, 28, 29, 30, 32, 33, 34, 35, 36, 37, 41, and 43 are enclosed herewith.

Exhibit No. 25 was not offered, and is being returned to ATT/XO.

ATT/WorldCom Exhibits Nos. ATT/WorldCom 1 through 16

Exhibits Nos. 1 and 2 have not be provided to the court reporter by the party as of this date.

Exhibits Nos. 3, 4, 7, 9, 10, 11, 13, 14, 15, and 16 are being filed with Docket Control this date.

Confidential Exhibits Nos. 5, 6, 8, and 12 are enclosed herewith.

Cox Exhibits Nos. Cox 1 through 4

Exhibits Nos. 1, 2, and 4, are being filed with Docket Control this date.

Confidential Exhibit No. 3 is enclosed herewith.

Qwest Exhibits Nos. Qwest 1 through 36

Exhibits Nos. 2, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 18, 19, 20, 21, 22, 23, 24, 27, 28, 30, 31, 32, 33, 34, 35, and 36, are being filed with Docket Control this date.

Confidential Exhibits Nos. 1, 3, 17, 25, 26, and 29 are enclosed herewith. Also, three boxes containing attachments to Teresa Million's exhibits.

Sprint Exhibits Nos. Sprint 1 through 4

Exhibits Nos. 2, 3, and 4, are being filed with Docket Control this date.

Confidential Exhibit No. 1 is enclosed herewith.

Staff Exhibits Nos. S 1 through 34

Exhibits Nos. 1, 2, 3, 4, 5, 8, 9, 16, 20, 24, 25, 26, 28, 29, 31, 33, and 34 are being filed with Docket Control, this date.

Confidential Exhibits Nos. 6, 7, 11, 13, 14, 15, 17, 18, 19, 21, 22, 23, 27, 30, and 32 are enclosed herewith.

Exhibits Nos. 10 and 12 were not offered, and are being returned to Staff.

WorldCom Exhibits Nos. WorldCom 1 through 18

Exhibits Nos. 1, 2, 3, 4, 7, 8, 9, 10, 11, 14, 15, 16, 17, and 18 are being filed with Docket Control, this date.

Please note that Exhibits Nos. 13, 14, 15 and 16 were inadvertently omitted from the index, but were identified (Pages 1228 and 1229) and admitted (Page 1230) during the testimony of Roy Lathrop on 07-20-2001.

Confidential Exhibits Nos. 5, 6, and 13 are enclosed herewith.

Exhibit No. 12 was not offered, and is being returned to WorldCom.

Z-Tel Exhibits Nos. Z-Tel 1 and 2

Exhibits Nos. 1 and 2 are being filed with Docket Control this date.

We are also returning the Docket File to Docket Control.

If you have any questions, or if we can be of any further assistance, please let us know.

Very truly yours,

Marta T. Hetzer
Administrator/Owner

Enclosures

Copy to: AT&T/XO
Legal Division, ACC
Michael Patten, Esq.
Sprint
Qwest
WorldCom
Docket Control

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QWEST

COST DOCKET

NO. T-00000A-00-0194

ATT/XO ORIGINAL EXHIBITS

PUBLIC

Qwest

Loop Module (LoopMod) User Manual

Version 2

July 2000

Market Services & MSEA Economic Analysis

Market Services And Economic Analysis Organization

EXHIBIT

tabbies

ATT/XO-1

Admitted

Qwest

LOOPMOD USER MANUAL

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LOOPMOD USER MANUAL

SECTION 1 INTRODUCTION AND OVERVIEW

I. Introduction

A. Overview

The LoopMod program is a Qwest model that is designed to estimate the forward-looking economic costs associated with the provision of the local loop and drop outside plant. The program is a collection of Microsoft Excel based spreadsheets that contain data on the footages and quantities of the required network components, the prices for those components and the labor necessary to install them. These investments include the material, engineering and construction labor required to build loop plant from the central office to the customer. The local loop includes feeder facilities, digital loop carrier systems (DLCs), serving area interfaces (SAIs), distribution facilities, drop wires, and network interface devices (NIDs). The investments from LoopMod, when converted to monthly costs, can be used to assist in making pricing decisions for access lines or certain unbundled network elements (UNEs).

The access line includes, in addition to the loop and drop plant, all the non-traffic sensitive cost elements associated with a basic service connection. This includes a portion of the local serving central office. LoopMod models the loop and drop portions only. Other components of the access line are developed in separate studies and models. Figure 1 illustrates this relationship. In the discussion that follows, the term "loop" shall mean both the loop and drop wire facilities.

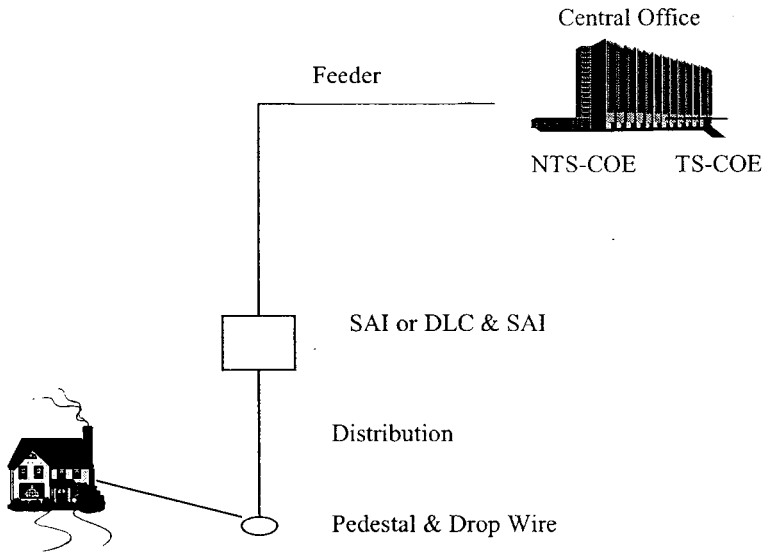


Figure 1

LoopMod develops the network components required to provide local telephony service by incorporating data on customer locations and demand quantities with forward-looking

network designs. The program builds feeder sections from the distant customer locations back to the serving wire center. It establishes cable sizes and types based on user controlled inputs for sizing factors and crossover points for copper versus fiber and underground versus buried.

B. Economic Methodology

One of the objectives of the LoopMod program is to produce an average investment for local loops that, when converted to monthly costs, can be used as a starting point for pricing decisions. The studies may be for statewide, zones (groups of wirecenters or distance bands), or for specific wirecenters.

Most economists agree that incremental costs are the correct costs to be considered as a starting point for product pricing decisions. The additional cost of one more unit of service is referred to as a incremental cost. Incremental costs can be calculated by taking the change in total direct costs at two different production levels and dividing that difference by the additional units produced. In that situation, fixed costs of providing service are ignored and could be expected to be very low when facilities are available. When facilities are not available, the incremental cost can be quite high. Thus, incremental loop costs would vary significantly from location to location in the network.

Providing subscriber loops is accomplished by placing feeder cable facilities with large capacities. The facilities also may be digital loop carrier systems served by either fiber optic cables or copper cables. For example, to meet expected growth in a facility route, a cable with 2,100 pairs (loops) could be placed. This facility results in a large lump of investment when it is placed, but may be adequate for needs in the next several years. As these facilities are used to provide new loops, another facility will need to be placed to meet new loop requirements. The large differences in capital costs required for the next unit can be smoothed out by looking at a larger number of units as well as many locations in the network. A study must be large enough in scope to allow for complete adaptation of facilities to the expected demand for loops. As the number of loops in the increment increases to provide for several years' needs, the result is a long run incremental cost (LRIC). With a long run methodology, no one customer or loop is burdened with all the costs of placing a new facility.

LoopMod develops the average investment per loop in a bottoms-up fashion by constructing the amount of facilities necessary to serve the existing base of customers and dividing the resulting investment by the number of working lines. Cables and equipment are sized using a user adjustable input that allows for sufficient stand-by capacity to respond to maintenance and "readiness to serve" requirements. The model uses data on customer demand associated with their direction and distance from the serving wire center to build feeder routes. Based on engineering parameters the model determines

whether to use physical copper or Digital Loop Carrier (DLC) systems and how to place the cabling (underground , buried or aerial).

II. Changes from RLCAP / LoopMod 1 to LoopMod 2

There are several major changes that occurred in the update from LoopMod V1.x to LoopMod V2.0. These changes are:

User input screen selections
New customer location and feeder length data.
DA specific area and demand data.
Adjustability in distribution design lengths.
Data processed by wire center instead of wire center group.
User definable zones.

In addition, other standard updates such as line counts, component costs, and contractor costs are included.

A. Input Screens

Although the user interfaces remain fairly similar between LoopMod V1.x and LoopMod V2.0, there are some selection changes that relate to the other modifications. A short list of the primary changes includes new selections boxes on the Start screen for the Distribution File, the Report View (Summary vs WC Detail), and the Process Group (all WCs, specific WCs, and Zones). Also, the Additional Options screen now includes a selection that allows the user to designate specific wire centers for processing.

B. Data Sources

So as to provide more state/location specific network development LoopMod now uses data for feeder that is based on theoretical rectilinear routing to customer concentrations. This data is produced by the BCPM preprocessor and is used in lieu of the existing Loop Engineering Information System (LEIS) feeder length measurements. New data (also from LEIS) for analysis of Distribution Areas (DAs) has also been included to allow for DA by DA mapping to the programs standard Distribution Group (DG) designs. This data also facilitates adjustment of the DG3, DG4 and DG5 designs to each individual DA processed.

C. Feeder Development

LoopMod V2.0 has eliminated the standard wire center group feeder design structure used previously and implemented a methodology using the location of customer concentrations and their rectilinear distance from the serving wire center. The program builds facilities from the most distant location in each quadrant back to central office, adding demand along the route. The data includes the line demand at the SAI (also sometimes referred to as a Feeder Distribution Interface or FDI), the sub-feeder or lateral length and the main feeder length. At each taper point the line demand is incremented to show total demand used for cable sizing. In addition the distance at each location is used in determining the technology and placement methodology that will be utilized. If the technology used is fiber based DLC, the demand is shown as number of fibers required to support the DLC remote terminals. If the technology selection is copper cable, the demand is shown as copper pairs required. The engineering fill factor is applied to this demand to determine the copper cable size or to determine the DLC size the program will utilize.

D. Distribution Development

The Distribution Group designs used in the earlier versions of LoopMod and RLCAP are now adjusted in LoopMod V2.0 to reflect the density differences that occur DA to DA. Information about each DA is matched against density and building entrance terminal rules to map each DA to the appropriate DG design. The lot oriented designs (DG3, DG4 & DG5) are then adjusted based on a cable multiplier that reflects the difference between the standard design lot frontage and the frontage calculated for each individual DA.

III. LoopMod Outside Plant Components

LoopMod develops the investments for the network components necessary to provide connectivity from the serving wire center to the customer location. Listed below are descriptions of these components and how they combine to form the local loop.

A. Loop Description

The loops serving a specific geographic area come together to be connected to the overall network at a central office. This geographic area served by the central office (or offices) is known as a wire center. The design of outside plant loop facilities is affected by the density and distances served in these wire centers. The portion of the loop nearest the central office is referred to as feeder plant. The feeder terminates on a distribution frame to allow routing flexibility and electrical protection. The feeder typically leaves the office in a underground conduit system and may transition to a buried or aerial environment as it gets further from the office. The environment determines the type of support structure the facility uses, i.e. poles for aerial, ducts or innerducts for underground, and trenching for buried. At various points along the main feeder route, sub-feeder will be connected

(spliced) into the main cable. The sub-feeder extends from the main route to a feeder distribution interface (FDI) or serving area interface (SAI) that connects feeder plant to distribution plant. If fiber feeder cable is in use the fiber must first connect to the remote terminal of a digital loop carrier (DLC) system. The DLC will then extend copper facilities to an SAI.

Distribution cables extend from the SAI and route throughout the distribution area to each customer location. The distribution cables loop through buried or aerial terminals that connect the distribution cables to the individual service wires or drops that extend to the customer location. The drops terminate on a protector or network interface device (NID). In the case of multi-tenant buildings, the distribution cable may loop through a splice terminal and a smaller cable will extend to the customer location, connecting to a wall mounted terminal. This terminal serves the same purpose as the NID, providing electrical protection and an interface to the inside wire.

B. Outside Plant Components

Network Interface Device

The NID provides electrical protection and a point of interface between the drop or building entrance cable and the customers' inside wire. The NID may be housed in a small case on the side of residence or business, or it may be in a larger outside wall mounted building terminal for apartment buildings or small office buildings. In high density situations the NID would likely be associated with a terminal in the building basement or equipment closet.

Drop

The service wire or drop is a two to six pair facility that extends from the NID to the terminal on the distribution cable. The terminal contains a connecting block with lugs for terminating the drop wires. Where demand exceeds a certain level, entrance cables, not drops, are used and are terminated on building terminals.

Distribution

Distribution contains cabling and terminals that "distribute" facilities throughout a distribution serving area. The SAI acts as a cross connect between the feeder cable and the distribution cable. The distribution cable follows easements through the housing area, business park, etc. to pass each customer location. The distribution cables splice to the connecting block in the drop terminals. Distribution cables may be buried, aerial or underground. Underground is typically placed in a building owner provided raceway.

Feeder

Feeder cables complete the loop from the distribution area SAI to the serving wire center. The feeder may be physical copper cables (where each voice grade circuit requires a pair of wires) or they may be fiber optic cables that use DLC electronics to provide a high bandwidth path between the serving wire center and the DLC remote terminal. The DLC then demultiplexes the signal to an electrical analog signal on a copper pair that will connect to the SAI and the distribution facilities. Feeder also uses buried, aerial and underground support structures. Feeder has a higher probability than distribution of being in underground (conduit systems), especially in high density locations.

IV. Input Data

A. Line Counts

LoopMod uses counts of working access lines from the Integrated Forecasting Tool (IFT). IFT provides a current count of lines by service type, by wire center. This data is then matched to the demand information contained in the LEIS DA Detail information and the demand is trued to IFT.

B. Feeder Data

The first step taken by LoopMod in the development of the outside plant network is to build the feeder cable routes. Each wirecenter may have a maximum of four main feeder routes. The wire center serving area is divided into four quadrants.

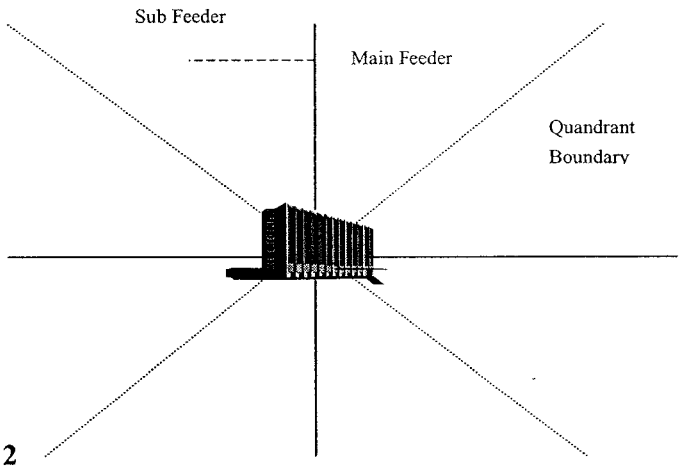


Figure 2

The four main routes serving those quadrants typically run north, east, south and west from the wire center. Sub feeder branches off from the main feeder and extends to the interface (SAI) between the feeder plant and the distribution plant. The feeder section

data is dervied from the feeder section pre-processor utilized by BCPM in the USF modeling. This information includes the Feeder Distribution Interface code, the main feeder length, the sub-feeder length and the demand at the FDI. LoopMod determines the cable sizing for sub-feeder based on the demand at each SAI plus a level of user detemined spare capacity to handle maintenance and rearrangements. The default input is 80%. The main feeder is sized in a similar fashion, accumulating the demand from each of the sub feeder legs as it runs toward the wire center. If multiple cables appear in the same route the model reflects the fact that structure would be shared. If the appearance is in the underground each cable has a unique duct (or innerduct in the case of fiber) while sharing the overall conduit system. The program then builds a matrix of cable types, cable sizes and cable footages required to serve the study area (WC, Zone or State). The program also accumulates the number of central office terminals, remote terminals, and the channel units that are required based on the number of customer concentrations, demand at those locations, and user provided spare capacity (fill) percentage. The utilization of DLC will also be determined based on a user defined cross-over point. The default is 12 kilofeet of feeder length.

Figure 3 depicts the relationship between the feeder and distribution portions of the outside plant cabling As mentioned earlier the SAI (or FDI) serves as the demarcation or connection point between the feeder and distribution.

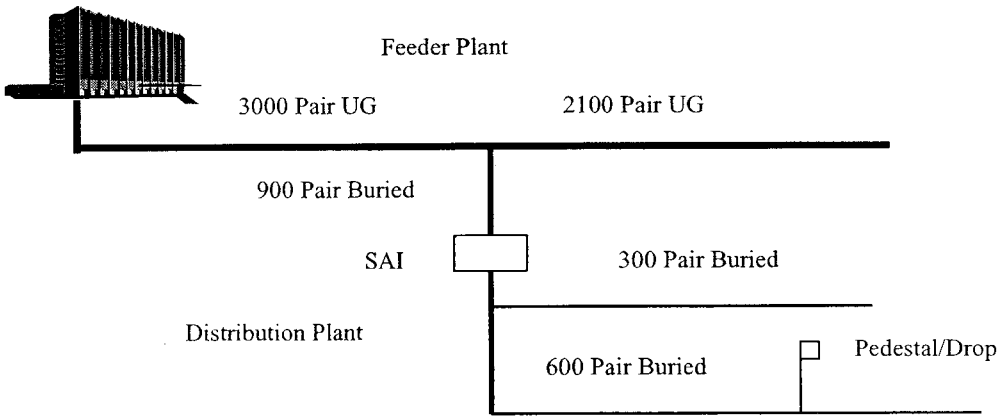


Figure 3

C. Distribution Area Information

The input data for the Distribution calculations are from the Loop Engineering Information System (LEIS) database. This data includes a Distribution Area (DA) code, the number of working lines in the DA, the longest loop in the DA and information on the number and size of entrance terminals. In addition, the program uses area data for each DA. This information is used in determining how to map each actual DA to the programs standard distribution designs for the various density levels.

The five distribution models are DG1 (high rise buildings), DG2 (industrial parks, shopping centers, apartment complexes or condominium developments), DG3 (Serving Area Concept urban, e.g. single family housing development), DG4 (large acreage housing developments) and DG5 (farm or ranch type properties).

Within the program are design profiles which contain the total cable footages and equipment for these standard distribution plant designs. The data for longest loop in each DA and the area (square miles) of each DA are used to make a comparison of the lot frontage in the standard design versus the actual DA. A multiplier is then developed that will either decrease or increase the cable footage in the standard design. This calculation is carried out for each DA processed that maps to DG3, DG4 and DG5. The cable adjustments provides recognition of the lot size variance the actual DA has from the standard design. The profiles also include the SAI, the drop terminals, drops and NIDs. The total investment for the profile is calculated and divided by the number of working lines for the design to develop an average investment per working line for each DA.

D. Placing Methods and Costs

LoopMod uses a mix of placing methods for buried plant in each of the distribution DGs and in the two types of buried feeder plant (urban buried and rural buried). The mix for each scenario varies to reflect the change in density. The methods include open trench, standard trenching, directional boring, cut & restore (concrete, asphalt, or sod), and plowing. The costs for these activities are taken from the contracts Qwest has with construction firms in each state. Thus they are what Qwest currently pays to place outside plant in a buried environment. In addition to buried placement the model also develops costs for aerial placement and underground placement based on ratios of structure to the supported facility. The ratio is applied to the investment for aerial or underground cable to produce the investment for poles, conduit, and innerduct.

E. Component Costs

The network components in LoopMod include copper and fiber cables, DLC equipment, SAIs, building entrance terminals, drop terminals, drop wires, and NIDs. The costs for these items are from the current vendor contracts Qwest has signed with companies that produce and provide this equipment. The contracts reflect what Qwest currently pays and reflects the economies of scale that a large local exchange company can achieve when purchasing equipment. This information is updated as necessary to include contract changes.

V. Output Summaries

A. Statewide Averages

The standard output from the program includes information on the average investment for the state by account code. It also includes information on the number of working lines, the percentage served by DLC and the average loop length.

B. Wirecenter Detail

If the user selects Wirecenter Detail on the report format the program will write a record containing the same sort of data as shown for the Statewide summary each time it processes a wirecenter. The user can then weight this data together into zones or rate groups.

SECTION 2 METHODOLGY

I. Introduction

LoopMod Version 2 is a Microsoft Excel™ based workbook that produces investments for the average local loop plant. The process is divided into two distinct steps. The first is the development of feeder investments, and the second is the development of distribution investment. The worksheets involved in this process are listed below and depicted in a flowchart included at the end of this section.

A. FeederSections

This worksheet contains feeder input data created by the FeedMod.xls preprocessor. The information in this worksheet contains the following fields for all of the Wire Centers that are to be processed:

Cable This is a code that describes the type of cable to be used in this section (Copper or Fiber), the placement technique to be used (Buried, Underground, or no placement added) and the environment in which it will be placed (Urban or Rural)

Lines For copper cables, this is the demand needed for this section before the fill is applied. For fiber cables, this represents the number of fibers needed in this section.

Feet This is the total number of feet in this feeder section.

Zone This denotes which Distance Zone the section is in (if applicable).

WCG This denotes the Wire Center Group (Very Small, Small, Medium, or Large) of the Wire Center.

Services For copper cable this is the same as Lines. For fiber cable, this represents the demand needed at the end of this section. This field is only populated for sections which will interface with distribution. If a section is a continuation of the route (main feeder cable) and does not directly interface with distribution, there is no data in this field.

Distance This denotes the total distance from the Central Office. This field is only populated for sections that interface with distribution.

Description This field provides the CLLI code of the Wire Center, the Route number, and the type of section (Sub Feeder or Main)

B. FiberFeeder

This sheet contains the results of the feeder processing inside of LoopMod version 2. The sections from FeederSections are evaluated and if a section is determined to be fiber, it is copied to this worksheet. If the number of fibers needed for a particular section greater than the maximum size for a fiber cable, the section is broken down into the maximum cable size plus an additional section with the same footage and the residual fibers needed.

The field Cable and Zone is calculated on this sheet. This is a formula that determines the actual fiber cable size need for this section. This information is utilized on the CableFootages sheet.

C. CopperFeeder

This sheet contains the results of the feeder processing inside of LoopMod version 2. The sections from FeederSections are evaluated and if a section is determined to be copper, it is copied to this worksheet. The Lines field contains the number of pairs need in this section BEFORE the copper feeder fill is applied and the Demand field contains the number of pairs needed AFTER the fill is applied. If the number of pairs needed for a particular section greater than the maximum size for a copper cable, the section is broken down into the maximum cable size plus an additional section with the same footage and the residual pairs needed.

The field Cable and Zone is calculated on this sheet. This is a formula that determines the actual copper cable size need for this section. This information is utilized on the CableFootages sheet.

The Calculated Copper Feeder Fill (displayed on the Summary Sheet) is calculated for the State and each Distance Zone (if applicable) on the right side of this sheet.

D. CableFootages

This spreadsheet summarizes all of the sections in the FiberFeeder and CopperFeeder sheets. All of the section footages are summed by cable size and type. If Distance Zones have been created, the footage is further broken down by Distance Zone. The total footage for each cable size and type is multiplied by the cost per foot for that cable size and type giving a total investment by cable size and type for use in the FeederInvestments sheet. The cost per foot information comes from the DATA sheet.

If Distance Zones have been created, the investments are further broken down by Distance Zone

E. FeederStats

This worksheet contains information about the number of lines that were used in creating the feeder sections. This information is imported from the FeedMod.xls preprocessor. Each Wire Center that is processed has it's line information broken down into several categories (if Distance Zones were created, there will be multiple entries for Each Wire Center representing each Zone processed). The fields imported into this sheet are as follows:

CLLI	This is the Wire Center's CLLI code
Zone	This is the Distance Zone (if applicable)
UG Copper	This is the number of lines that terminate in an Underground Cooper feeder section.
UG Fiber	This is the number of lines that terminate in an Underground Fiber feeder section.
Buried Copper	This is the number of lines that terminate in a Buried Cooper feeder section.
Buried Fiber	This is the number of lines that terminate in a Buried Fiber feeder section.
32	This is the number of lines that are served by a 32 line Digital Loop Carrier system.
96	This is the number of lines that are served by a 96 line Digital Loop Carrier system.
192	This is the number of lines that are served by a 192 line Digital Loop Carrier system.
672	This is the number of lines that are served by a 672 line Digital Loop Carrier system.
1344	This is the number of lines that are served by a 1344 line Digital Loop Carrier system.

F. FeederInvestments

This worksheet summarizes all of the investments calculated in the CableFootages sheet by placement type (all cable sizes are summed together). If Distance Zones were created, the investments are summarized by Distance Zone. The total feeder cable investment is then calculated and each placement type is given a percentage which represents its portion of the total investment. The total number of lines is calculated from the FeederStats sheet and the total investment is divided by this amount to give the total feeder cable investment per line. The Summary Sheet multiplies each placement type's percentage times the total investment to determine the investment by account code.

Additionally, the feeder investments for Poles (1C) and Conduit (4C) are calculated on this sheet and displayed on the Summary Sheet.

G. Equipment-In

This worksheet contains information about the type of Digital Loop Carrier (DLC) equipment that was used in creating the feeder sections. This information is imported from the FeedMod.xls preprocessor. Each Wire Center that is processed has it's equipment information broken down into several categories (if Distance Zones were created, there will be multiple entries for Each Wire Center representing each Zone processed). The fields imported into this sheet are as follows:

CLLI This is the Wire Center's CLLI code

Zone This is the Distance Zone (if applicable)

Systems (RT & COT2) - 32, 96, 192, 672, and 1344
These fields contain the number of remote terminals and the central office terminal equipment associated with additional remote terminals for each size system.

Systems (RT & COT1) - 32, 96, 192, 672, and 1344
These fields contain the number of remote terminals and the central office terminal equipment associated with the first remote terminal for each size system.

Number of Cards - 32, 96, 192, 672, and 1344
These fields contain the number of cards that are needed to run all of the DLC systems used.

H. Equipment-Investment

This worksheet summarizes the information in the Equipment-In sheet. All of the DLC equipment for each Wire Center to be processed are summarized. If Distance Zones were

created, each Distance Zone is also summarized. The total number of remote and central office terminals are multiplied by the per unit cost and all of the cards are multiplied by their cost. The costs are developed in the DATA sheet. The total number of lines is calculated from the FeederStats sheet and the total equipment investment is divided by this amount to give the total equipment investment per line. This result is displayed on the Summary Sheet as the feeder Pair Gain investment (257C).

I. DistributionDetail

This worksheet contains information about all of the Distribution Areas to be processed. There are two separate parts to this worksheet. The left part of the worksheet contains the Distribution Area (DA) data imported from the distribution preprocessor. The right part of the screen contains the results of each DA's processing on the DistributionWorking sheet.

The left side of this worksheet contains the following fields, imported from the distribution preprocessor:

WCG This denotes the Wire Center Group (Very Small, Small, Medium, or Large) of the Wire Center.

CLLI This is the Wire Center's CLLI code

DA This is the code assigned to the Distribution Area (DA). If "Distribution Area Detail" is selected as the Distribution File on the Start Sheet, then this code is the actual DA designator as assigned by Network. . If "Wire Center Detail" is selected as the Distribution File on the Start Sheet, then this code is a number assigned by the distribution preprocessor. The distribution preprocessor will average all of the DA's within a Wire Center which have the same DG (See below). This "averaged" DA will yield the same result as running all of the individual DA's separately. This averaging is done to reduce processing time.

DG This is a code which is assigned by the distribution preprocessor. In the distribution preprocessor, each DA is evaluated and "mapped" to a Distribution Group (DG). LoopMod version 2 has 5 DG's which represent the different types of distribution environments.

These five Distribution Groups are:

DG 1 - High Rise buildings (structures with a single entrance facility)

DG 2 - Multi-building/Multi-tenant
DG 3 - Single family Serving Area Concept with standard lot size
DG 4 - Single family Serving Area Concept with large lot size
DG 5 - Very low density

Working This is the number of lines terminated in this DA.

LotLength This is a figure which is calculated in the distribution preprocessor. If a DA is determined to be something other than a building, the lot frontage for each lot within the DA is calculated. This is accomplished by dividing the number of houses within the DA by the DA's square footage. It is assumed that the lots are twice as deep as they are wide.

Feet This field denotes the feeder distance from Central Office to the DA's crossbox.

Following the imported DA data to the right is the results of processing each DA in the DistributionWorking sheet. Each distribution account code (1C – 862C) is displayed for each DA along with the average total loop length with the DA and the Distance Zone of the DA (if applicable).

Further to the right, each DA is weighted based on its number of lines and the total investment by account code and average loop length are calculated. If Distance Zones were created, this information is further broken out by Distance Zone. All of this information is displayed on the Summary Sheet.

J. DistributionModel

This worksheet contains the distribution models for all Distribution Groups (DG's). This information is imported from DistMod.xls and is based on the selection made on the Start Sheet under Pairs Per Site. The possible selections include:

"Engineering Standard " designs 2 pairs for DG1 and DG2, 3 pairs for DG3 and DG4, and 2 pairs for DG5.

"1-Pair per Site" will change the design in all Distribution Groups to a single pair per site.

"2-Pairs per Site" will change the design in all Distribution Groups to two pairs per site.

"Custom Model" will allow the distribution cable to be sized by selecting a fill factor for each Density Group, i.e., 33% = 3 pairs per site, 50% = 2 pairs per site.

K. DistributionWorking

This worksheet calculates the investment for all distribution account codes and calculated the average loop length. LoopMod version 2 copies each DA from the DistributionDetail sheet one at a time and places it in the "Current Record" section of this sheet. The DA is then processed against its corresponding DG model from the DistributionModel sheet.

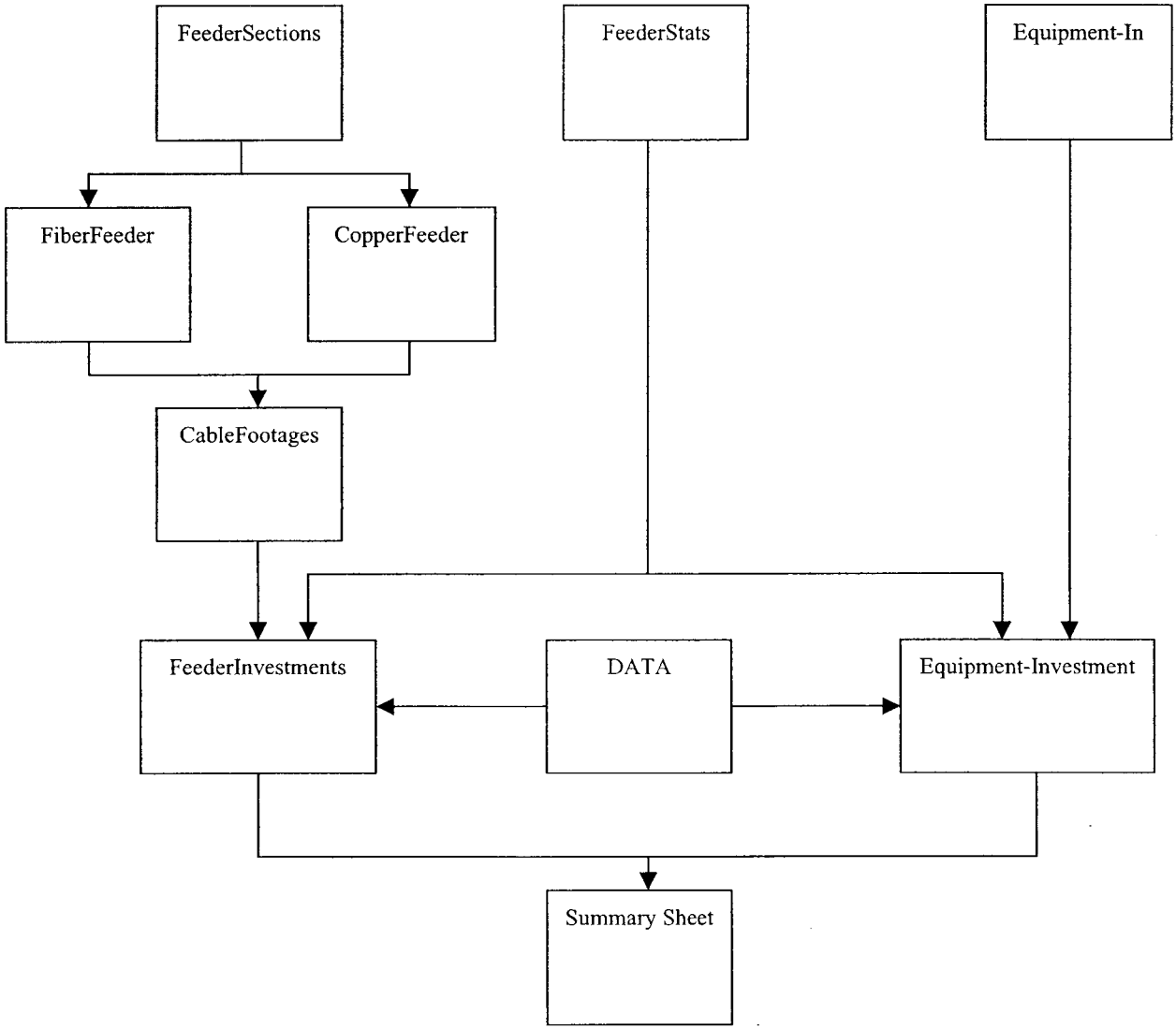
If the current DA is not a building, then the LotLength field of the DA is compared to default lot length of the corresponding DG. A "Multiplier" is then created using the ratio of the DA's lot length and the default lot length. The cable footage of the default DG model is then adjusted by this "Multiplier" to account for size difference between the actual DA and the modeled DG. The resulting footages are then multiplied by their respective costs, from the DATA sheet, and then summarized by account code. This information is then copied back to the DistributionDetail sheet.

Additionally, the average loop length for the DG is added to the feeder length for the DA and the resulting average total length is copied to DistributionDetail sheet.

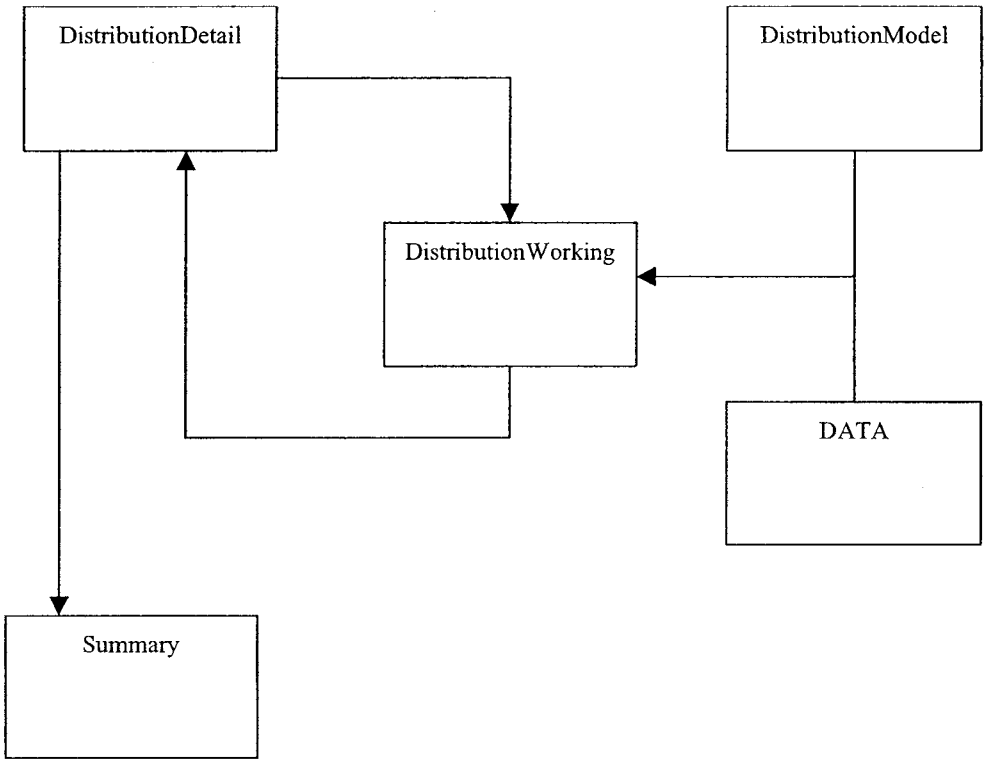
If Distance Zones were created, the Distance Zone is also calculated and copied to DistributionDetail sheet.

II. LoopMod version 2 Model Data Flow

A. Feeder Process



B. Distribution Process



Arizona
Docket No. T-00000A-00-0194
AT&T 003-114

INTERVENOR: AT&T Communications of the Mountain States, Inc.

REQUEST NO: 114

Please provide a complete and legible copy of any and all analyses (including all related workpapers, computer models, and supporting documents) performed by or for Qwest and all other documents that support the 12Kft. crossover point reflected in LoopMod2AZ.xls.

RESPONSE:

There are no formal analyses of the 12 kilo-foot crossover between copper and DLC. The 12 kilo-foot crossover is based on the current network architecture that recommends that any feeder facility placed to serve locations in excess of 12 kilo-feet of feeder distance from the serving wire center should employ fiber fed digital loop carrier (DLC). In addition, comparisons of the cost for copper versus DLC in older vintages of RLCAP showed a crossover point of 13 to 17 kilo-feet of feeder distance. These comparisons did not take into account the TELRIC requirement to avoid the use of loaded cable. Thus the model default was moved to 12 kilo-feet to comply with the current Qwest network guidelines and avoid the necessity of loading the cable plant.

Respondent: Jennifer Peppers

EXHIBIT
ATT/XO-2
Admitted

Arizona
Docket No. T-00000A-00-0194
AT&T 09-202

INTERVENOR: AT&T Communications of the Mountain States, Inc.

REQUEST NO: 202

Please state the date of the working access line count obtained by Qwest from the Integrated Forecasting Tool for use as an input to the LoopMod in this proceeding. Please confirm that the line counts used by Qwest total 2,627,617. Please explain the difference between the line count used in LoopMod and the line count input used by Mr. Fitzsimmons in his testimony at Exhibit WLF-2.

RESPONSE:

October 1998. Yes, with sold wire centers removed. Different vintage.

Respondent: Jennifer Peppers

EXHIBIT
ATTAG-3

Arizona
Docket No. T-00000A-00-0194
AT&T 07-152

INTERVENOR: AT&T Communications of the Mountain States, Inc.

REQUEST NO: 152

Please identify each individual Arizona Distribution Area as referenced in the Direct testimony of Mr. Buckley at p.8, ln. 4 and state the Density Group to which each Arizona Distribution Area is assigned. In addition, please produce all available maps of the Arizona Distribution Areas as identified in Mr. Buckley's testimony.

RESPONSE:

Please see Attachment A, the file "AZDA - Distribution Details.XLS" and Attachment B, the file "AZDistribution.XLS". The mapping referred to in testimony was in regard to logical mapping. LoopMod does not use actual geographic DA maps.

Respondent: Jennifer Peppers

EXHIBIT
ATT/XO-7
Admitted

CLLI	Route	DA	CSA	FEEDER DISTANCE (KFT)	DISTRIBUTION DISTANCE (KFT)	Working
AGFIAZSR	1	110361	1103	13.5	14.3	52
AGFIAZSR	1	110571	1105	26.1	10	83
AGFIAZSR	1	110961	1109	66.9	8.1	0
AGFIAZSR	1	113011	1130	7.7	4	140
AGFIAZSR	1	113411	1134	0.3	2.6	243
AGFIAZSR	1	113671	1136	1.5	7.9	296
AGFIAZSR	1	117912	1179	9.5	7	402
AGFIAZSR	1	117971	1179	9.5	6	356
AGFIAZSR	1	118511	1185	4.2	0.1	20
AGFIAZSR	1	118521	1185	4.2	0.1	26
AGFIAZSR	2	210311	2103	9.4	0.1	617
AGFIAZSR	2	210312	2103	9.6	0	11
AGFIAZSR	2	210313	2103	9.4	0.1	297
AGFIAZSR	2	210332	2103	9.4	0.1	2
AGFIAZSR	2	210361	2103	9.4	0.1	7
AGFIAZSR	2	210511	2105	12.3	4.4	403
AGFIAZSR	2	210512	2105	12.3	5.2	756
AGFIAZSR	2	210611	2106	14.2	3.5	760
AGFIAZSR	2	210612	2106	14.2	3	887
AGFIAZSR	2	210663	2106	14.2	7.8	23
AGFIAZSR	2	210711	2107	17.8	4.4	745
AGFIAZSR	2	210712	2107	17.8	5.3	821
AGFIAZSR	2	212013	2120	7.4	5.6	427
AGFIAZSR	2	212014	2120	7.4	3	679
AGFIAZSR	2	212015	2120	7.4	4.3	606
AGFIAZSR	2	212016	2120	7.4	2.5	576
AGFIAZSR	2	212111	2120	10.9	6.2	258
AGFIAZSR	2	212511	2125	12.7	5.2	691
AGFIAZSR	2	212512	2125	12.7	5.9	761
AGFIAZSR	2	212513	2125	12.7	5.2	456
AGFIAZSR	2	212514	2125	12.7	5.2	522
AGFIAZSR	2	212521	2125	12.7	5.2	5
AGFIAZSR	2	212561	2125	12.7	4.4	151
AGFIAZSR	2	212671	2126	14.6	4.8	654
AGFIAZSR	2	212711	2127	17.3	3	644

Arizona
Docket No. T-00000A-00-0194
AT&T 07-152
ATTACHMENT A

AGFIAZSR	2	213011	2130	13.8	4.8	741
AGFIAZSR	2	213012	2130	13.8	4.1	479
AGFIAZSR	2	213111	2131	15.3	4.6	773
AGFIAZSR	2	213112	2131	15.3	4.1	503
AGFIAZSR	2	213113	2131	4.7	4.9	484
AGFIAZSR	2	213312	2133	22.7	5.3	126
AGFIAZSR	2	213371	2133	20.5	5.4	88
AGFIAZSR	2	213412	2134	23.6	5.2	298
AGFIAZSR	2	213461	2134	23.6	5.2	117
AGFIAZSR	2	213511	2135	23.8	7.6	424
AGFIAZSR	2	213711	2137	26.3	9.3	37
AGFIAZSR	2	215011	2150	15.3	10.4	7
AGFIAZSR	2	215071	2150	15.3	10.4	202
AGFIAZSR	2	215211	2154	22.7	6.6	156
AGFIAZSR	2	215212	2154	0	0	43
AGFIAZSR	2	215411	2154	25.3	5.2	20
AGFIAZSR	2	215412	2154	25.3	5.3	10
AGFIAZSR	3	310211	3102	9.4	2.6	233
AGFIAZSR	3	310212	3102	9.4	2.6	341
AGFIAZSR	3	310511	3105	19.9	3	532
AGFIAZSR	3	310611	3106	13.3	3.5	760
AGFIAZSR	3	311012	3110	2.9	2.6	213
AGFIAZSR	3	311013	3110	2.9	5.2	114
AGFIAZSR	3	311014	3110	2.9	2.6	227
AGFIAZSR	3	311071	3110	2.9	1.2	7
AGFIAZSR	3	311511	3115	17.1	2.5	458
AGFIAZSR	3	311512	3115	17.1	6.1	319
AGFIAZSR	3	311612	3116	19.1	3.1	553
AGFIAZSR	3	311721	3117	10.5	0.2	596
AGFIAZSR	3	311811	3118	12.2	4.5	378
AGFIAZSR	3	311901	3119	19	0	36
AGFIAZSR	3	312111	3121	15.9	2.6	352
AGFIAZSR	4	410211	4102	18.4	0.1	287
AGFIAZSR	4	410212	4102	19.3	0	58
AGFIAZSR	4	412011	4120	20.7	6	152
AGFIAZSR	4	412211	4122	16.3	6.6	206

WCG	CLLI	DA	DG	Working	LotLength	Kft
MD	AGFIAZSR	110361	4	48.32599217	490.907597	13500
MD	AGFIAZSR	110571	5	77.13571828	610.2201203	26100
MD	AGFIAZSR	113011	3	130.1084405	113.2395191	7700
MD	AGFIAZSR	113411	3	225.8310788	92.72477338	300
MD	AGFIAZSR	113671	4	275.086417	255.2741302	1500
MD	AGFIAZSR	117912	4	373.5970933	194.0933174	9500
MD	AGFIAZSR	117971	4	330.8471772	176.7876084	9500
MD	AGFIAZSR	118511	5	18.58692007	1188.918326	4200
MD	AGFIAZSR	118521	3	24.16299609	123.0490078	4200
MD	AGFIAZSR	210311	3	573.4064841	2.238118038	9400
MD	AGFIAZSR	210312	2	10.22280604		9600
MD	AGFIAZSR	210313	3	276.015763	3.225873588	9400
MD	AGFIAZSR	210332	2	1.858692007		9400
MD	AGFIAZSR	210361	3	6.505422023	21.01244305	9400
MD	AGFIAZSR	210511	3	374.5264394	91.85910141	12300
MD	AGFIAZSR	210512	3	702.5855785	105.1400103	12300
MD	AGFIAZSR	210611	3	706.3029625	66.37683054	14200
MD	AGFIAZSR	210612	3	824.329905	55.99961152	14200
MD	AGFIAZSR	210663	5	21.37495808	904.1828266	14200
MD	AGFIAZSR	210711	3	692.3627725	83.69628065	17800
MD	AGFIAZSR	210712	3	762.9930688	77.70176903	17800
MD	AGFIAZSR	212013	3	396.8307434	125.1056425	7400
MD	AGFIAZSR	212014	3	631.0259363	64.00471041	7400
MD	AGFIAZSR	212015	3	563.183678	97.10860445	7400
MD	AGFIAZSR	212016	3	535.3032979	57.91010286	7400
MD	AGFIAZSR	212111	3	239.7712689	75.57460946	10900
MD	AGFIAZSR	212511	3	642.1780883	37.84212046	12700
MD	AGFIAZSR	212512	3	707.2323086	115.7216619	12700
MD	AGFIAZSR	212513	3	423.7817775	135.3775006	12700
MD	AGFIAZSR	212514	3	485.1186138	126.5300447	12700
MD	AGFIAZSR	212521	5	4.646730017	1292.837411	12700
MD	AGFIAZSR	212561	1	140.3312465		12700
MD	AGFIAZSR	212671	3	607.7922862	76.81100335	14600

MD	AGFIAZSR	212711	2	598.4988262		17300
MD	AGFIAZSR	213011	3	688.6453885	98.02970659	13800
MD	AGFIAZSR	213012	3	445.1567356	104.1457782	13800
MD	AGFIAZSR	213111	3	718.3844606	91.98005271	15300
MD	AGFIAZSR	213112	3	467.4610397	73.54204746	15300
MD	AGFIAZSR	213113	3	449.8034656	64.95171495	4700
MD	AGFIAZSR	213312	4	117.0975964	262.4920571	22700
MD	AGFIAZSR	213371	4	81.7824483	270.8346075	20500
MD	AGFIAZSR	213412	4	276.945109	165.0547516	23600
MD	AGFIAZSR	213461	2	108.7334824		23600
MD	AGFIAZSR	213511	3	394.0427054	144.6661969	23800
MD	AGFIAZSR	213711	5	34.38580212	849.9779431	26300
MD	AGFIAZSR	215011	5	6.505422023	2185.294077	15300
MD	AGFIAZSR	215071	4	187.7278927	375.8927383	15300
MD	AGFIAZSR	215211	4	144.9779765	293.7698394	22700
MD	AGFIAZSR	215212	3	39.96187814	82.91603259	0
MD	AGFIAZSR	215411	5	18.58692007	646.4187055	25300
MD	AGFIAZSR	215412	5	9.293460034	931.7543715	25300
MD	AGFIAZSR	310211	3	216.5376188	94.69367179	9400
MD	AGFIAZSR	310212	3	316.9069871	78.27475697	9400
MD	AGFIAZSR	310511	3	494.4120738	27.67471969	19900
MD	AGFIAZSR	310611	3	706.3029625	70.58083917	13300
MD	AGFIAZSR	311012	3	197.9506987	99.03965427	2900
MD	AGFIAZSR	311013	4	105.9454444	270.7550012	2900
MD	AGFIAZSR	311014	3	210.9615428	95.93696798	2900
MD	AGFIAZSR	311071	4	6.505422023	252.1493166	2900
MD	AGFIAZSR	311511	3	425.6404695	64.94307363	17100
MD	AGFIAZSR	311512	3	296.4613751	102.8513829	17100
MD	AGFIAZSR	311612	3	513.9283399	73.28662088	19100
MD	AGFIAZSR	311721	3	553.890218	4.55441326	10500
MD	AGFIAZSR	311811	3	351.2927893	128.6744093	12200
MD	AGFIAZSR	311901	2	33.45645612		19000
MD	AGFIAZSR	312111	3	327.1297932	77.04200659	15900
MD	AGFIAZSR	410211	3	266.722303	3.281592278	18400

Arizona
Docket No. T-00000A-00-0194
WD 09-193

INTERVENOR: Arizona Corporation Commission

REQUEST NO: 193

Separately for each of the years 1996-2000, please provide Qwest's actual local loop fill factor for Arizona. Please provide these figures separately for feeder and distribution, if available separately.

RESPONSE:

The fill percentages for Arizona for the years during the requested time period where data is available are shown below:

Year	Fill
1995	62.7%
1997	64.3%
1998	63.2%
2000	63.9%

The 2000 data is as of 03/28/01. The fill numbers are main frame utilization or percent of available feeder pairs that are working. Distribution is not tracked in this manner.

Respondent: Jennifer Peppers, Cost Interface Manager, Qwest

EXHIBIT
ATT/XO-9
Admitted

WILLIAM A. MUNDELL
CHAIRMAN
JIM IRVIN
COMMISSIONER
MARC SPITZER
COMMISSIONER

BRIAN C. McNEIL
EXECUTIVE SECRETARY

ARIZONA CORPORATION COMMISSION

July 10, 2001

UNREDACTED – PROPRIETARY VERSION

DOCKET NO. T-00000A-00-0194

Ms. Lynn Farmer
Chief Administrative Law Judge
Arizona Corporation Commission
1200 West Washington Street
Phoenix, Arizona 85007

In Re: Questions for Cost Docket witnesses

Dear Ms. Farmer:

Having reviewed the filed testimony in this Docket, I have the following questions and would appreciate it if you could ensure these questions are answered during the hearings. Please allow all parties the opportunity to respond to questions addressed to other individuals, if they so choose, please also accept any written responses that may be provided by the parties.

Thank you for your assistance.

ROBERT F. KENNEDY, for Qwest

Collocation
October 11, 2000 Testimony
Page 16, Line 11
In that section, you discuss the recurring monthly charges for collocation space lease. As applied to the recent Qwest rate settlement, are those charges for space lease within Basket 3? If so, what are the anticipated revenues that will offset Basket 1 prices?

Collocation
June 27, 2001 Testimony
Page 21, Lines 1-2
In that section, you state that Qwest has had "few, if any" requests for adjacent collocation. In the March 15, 2001 testimony of Mr. Fitzsimmons, for Qwest, at Page 22, Lines 3-8, and again in his rebuttal testimony at page 10, line 13 through page 13, line 3, he argues that Qwest is in a highly

JUL 12 '01 11:59 FR FENNEMORE CRAIG #5 1 602 9165999 TO 02476781724013 03 P.03/21

competitive situation in Arizona. Mr. Fitzsimmons, in fact, at Page 22, Lines 3-8 of his March 15th testimony states, "As of December 31, 2000, there were 32 active competitors collocated in Qwest's wire centers in Arizona, and 94.3 percent of Qwest's access lines were in wire centers with one or more collocated competitors. Eighty percent of Qwest's access lines were in wire centers with three or more collocated competitors." Simply put, which way is it? Is Qwest suffering the slings and arrows of collocated competitors, or is there still, as you state at Page 21, Line 2 of your rebuttal testimony, "no meaningful data upon which to develop costs"? Has any state approved an SGAT with 19 Individual Case Basis prices?

Collocation
October 11, 2000 Testimony
Page 18, Line 17
In that section, you state that a call out of a maintenance technician for a collocated CLEC will involve a three- hour minimum charge. How does this comport with Qwest's filed tariffs?

UNE Rates
March 15, 2001 Testimony
Page 43
In that section, at Lines 1-3, and Lines 20-22 you offer the exact same defining language for UDF-Loop and E-UDF. Newton's Telecom Dictionary, 17th Edition, 2001 contains neither term. Can you tell me if UDF-Loop and E-UDF are the same item?

JAMES C. OVERTON, for Qwest

MDU/MTE's
June 29, 2001 Testimony
Page 2, Line 10 through Page 5, Line 7
In that section, you rebut the testimony of Mr. Collins for Cox. Your testimony relies on the 'Cable Wire Service Termination Policy' of Qwest, the 'CWSTP'. Were CLEC's involved in the drafting of the CSWTP? Did the FCC review or approve the CWSTP as being non-discriminatory? Did the ACC review or approve the CWSTP as being non-discriminatory and in compliance with Qwest's filed tariffs and Commission Rules?

Line Sharing
March 15, 2001 Testimony
Page 22, Line 17
In that section, you state, "The principal decision regarding line sharing network architecture is where to place the POTS splitter within the central office." [See also, Robert J. Hubbard, for Qwest, October 11, 2000; Page 6, Lines 13-20, same statement is made.]
Why then are there so many non-recurring engineering charges proposed by Qwest for collocation?

TERESA K. MILLION, for Qwest

Fill Factors
March 15, 2001 Testimony
Page 34, Lines 1-7
In that section, you argue that the past Commission decision in Docket U-3021-96-448 to reject the use of objective fills in cost studies should also apply in this docket. By reducing the fill factors, what will happen to the UNE rate for Loops? Are any other UNE's impacted? If we adopt the 85% fill factor some have proposed what happens to the UNE rate for Loops? Other UNE's?

Fill Factors
Mr. Denney, for AT&T/WorldCom/XO, in his May 16, 2001 testimony, at Page 38, Lines 11-13 states that the HAI Model uses a cable sizing factor of 75% in distribution, resulting in an average actual fill factor of 48.8%. How do these factors compare to Qwest's estimates?

Line Sharing
March 15, 2001 Testimony
Page 69, Lines 15-16
In that section, you propose a $5 charge for the High Frequency Portion of the Loop (HFPL). Given Qwest's repititious argument that the residential loop is subsidized by business; the loop is already paid for isn't it? That is, Qwest's currently-approved rates and tariffs allow Qwest to recoup their 'loss' on the residential portion of the loop through business rates; so won't this $5 charge for the HFPL result in a gratuitous 'extra' recovery on the loop? Should the $5 charge for HFPL further reduce the residential loop rate?

TELRIC
October 11, 2000 Testimony
Page 13, Line 17 through Page 14, Line 1
In that section, you identify the cost factors included in estimating operating costs for TELRIC analysis. You discuss productivity increases, are the productivity increases in your model the same productivity factors in the Qwest rate settlement?

UNE- Loop
October 11, 2000 Testimony
Page 33, Lines 7-13
In that section, you present the proposed rates for unbundled 2-wire and Line Sharing 2 wire UNE. What are the current wholesale rates charged by Qwest for these services? What are the current retail rates for these services, if such a market exists?

UNE- Loop
October 11, 2000 Testimony
Page 61, Lines 12-18
In that section, you present the proposed deaveraged unbundled loop rates, by zone. What are the current Arizona retail rates, by zone for 1FR? [See also, Direct Confidential Testimony, Exhibit TKM-2, page 1]

UNE- DSL
October 11, 2000 Testimony
Exhibit TKM-3, Page 1
In that section, you present the proposed UNE Recurring rates for DS1 and DS3 Loops. How many customers can be served by each of these loops?

MAUREEN ARNOLD, for Qwest

UNE Rates
March 15, 2001 Testimony
Page 8, Lines 2-7
In that section, you state, "Qwest recommends that the Commission set prices for interconnection services and UNE's at a level that will permit Qwest a fair opportunity to compete in the marketplace and to earn a reasonable return on its investment in Arizona." Then, in Exhibit MA1, Page 8 you propose Unbundled SubLoop Rates that are priced higher than the retail rate Qwest charges. Should the Commission not be concerned with 'permitting CLEC's a fair opportunity to compete in the marketplace and to earn a reasonable return on their investment in Arizona'? If the argument is 1FR is subsidized by business then see Page 2, this letter, Last Paragraph, Line Sharing question for Teresa K. Million.

Qwest Overhead Factor
In the testimony of Mr. Dunkel, for Staff, at Page 17, Lines 20-21, he recommends an overhead factor for Qwest of 15%. In the rebuttal testimony of Ms. Gude, for Qwest, at Page 39, Lines 16-18, she argues that the Qwest data show an actual overhead factor of 14.6% over the past five years and 12.9% in 2000. What are the implications of adopting Ms. Gude's lower proposals rather than Mr. Dunkel's 15%? Given that the Commission adopted the 15% factor in Decision 60635, is Qwest willing to agree now to a lower factor?

TELRIC
In the testimony of Mr. Hydock for AT&T/WorldCom/XO dated May 18, 2001, at page 36, line 11 through page 37, line 10, he argues that Qwest has filed a TELRIC study which has identical or higher investment and expense figures than US West had four years ago. Do you agree? What are the implications of higher investment and expense figures in TELRIC? Mr. Hydock also argues that Qwest relied on assumptions of stagnant and inflated prices to drive up TELRIC and that productivity increases were not factored in Qwest's TELRIC. What productivity factor was used in the study and how does it compare to the productivity increases Qwest and US West

predicted during their merger? How does it compare to the productivity factor adopted in the Qwest rate settlement?

UNE- Loop

Mr. Dunkel, for Staff, at Page i of his June 12, 2001 testimony proposes the following rates:

	Including Sold Exchanges	Excluding Sold Exchanges
Zone I	$ 9.35	$ 9.35
Zone II	$14.57	$14.20
Zone III	$43.80	$36.34
State Avg.	$13.22	$11.89

Please explain the anticipated effects on competition from adopting these rates.

Mr. Denney, for AT&T/WorldCom, at Page 46 of his May 16, 2001 testimony proposes the following rates:

	Including Sold Exchanges	Excluding Sold Exchanges
Zone I	$ 7.34	$ 7.34
Zone II	$11.23	$10.91
Zone III	$32.06	$26.59
State Avg.	$10.11	$ 9.14

Please explain the anticipated effects on competition from adopting these rates.

Ms. Million, for Qwest, at Page 1 of Exhibit TKM-2, October 11, 2000 proposes the following rates:

	Including Sold Exchanges	Excluding Sold Exchanges
Zone I	$12.19	$12.17
Zone II	$14.54	$14.50
Zone III	$26.32	$23.60
State Avg.	$	$15.83

Please explain the anticipated effects on competition from adopting these rates.
In the rebuttal testimony of Teresa K. Million, for Qwest, at Page 58, Line 14 through page 59, line 13; she proposes new break points and new costs as follows (excluding sold exchanges): Zone I - $16.89; Zone II – $22.57; Zone III - $34.34; State Avg. - $25.95. Please explain the anticipated effects on competition from adopting these rates.

Dr. Collins, for Cox, at Page 21 of his May 23, 2001 testimony proposes the following rates:

	Including Sold Exchanges	Excluding Sold Exchanges
Zone I	$	$11.26
Zone II	$	$15.20
Zone III	$	$25.49
State Avg.	$	$

Please explain the anticipated effects on competition from adopting these rates.

RENEE ALBERSHIEM, for Qwest

OSS Modification Costs
March 15, 2001
Page 24, Lines 12-19
In that section, you propose that Qwest recover $12,826,720 in costs incurred to operate Line Sharing. Mr. Nacchio has often publicly stated that Qwest expects to profit from selling wholesale. Does Qwest expect to profit from its proposed UNE rates for Line Sharing? What are the expected profits for Line Sharing, per year? Why should Qwest's competitors pay for Qwest's OSS modifications if those costs are to be recovered during the lifetime of the business relationship?

DICK BUCKLEY, for Qwest

TELRIC
March 15, 2001 Testimony
Page 9, Lines 21-23
In that section, you show the LOOPMOD and HAI Model rates for Loop Only and argue that they are within a 'zone of reasonableness'. If so, then is the HAI Model 'reasonable'? What would be the implications of adopting the HAI Model for TELRIC in this docket?

WILLIAM L. FITZSIMMONS, for Qwest

UNE- Loop
March 15, 2001 Testimony
Page 4, Lines 12-19
In that section, you argue that the price of basic residential service is below cost and that Qwest is recovering that shortfall through increased rates on other services. If it is already subsidized, and already recovered, shouldn't the $5 HFPL charge result in a further reduction of that rate? If not, then see Page 11, Lines 18-19 of your same testimony, "There is no single correct allocation of joint and common costs." Can't this Commission determine that the HFPL charge should further reduce the basic residential rates, both at the wholesale and the retail level?

UNE- Loop
March 15, 2001 Testimony
Page 22, Lines 3-8
In that section, [and in your rebuttal testimony at page 10, line 13 through page 13, line 3] you argue that Qwest is in a highly competitive situation in Arizona. You cite numbers of collocated CLEC's and numbers of CLEC's as competitive forces. How many miles of loop does Qwest have in Arizona? How many miles do its competitors? Haven't Qwest officials argued that the line into the home is the key to profits? [See Telecommunications Reports, December 13, 1999,

"Turning DSL into Dough is the Goal of US West" pg. 36] That is, once you have the basic service line, you can maximize other services and drive up your profit? If so, then is the total number of miles of owned-loop a better indicator of the state of competition in Arizona? Or, is the number of customers a better indicator? If so, what percentages of Arizona lines are served by Qwest? By CLEC's?

UNE- Loop
Rebuttal Testimony
Page 26, Lines 3-12
In that section, you cite a New York Administrative Law Judge statement debunking the HAI Model, HM5.2a. Was that language retained in the final order? Did the New York Public Service Commission uphold ALJ Linsider's recommended opinion? Was the opinion legally challenged? Was the challenge, if any, successful and was the Loop Cost model related to the challenge? Have any other states found that the HAI Model is "flawed"?

D.M. GUDE, for Qwest

UNE Rates
March 15, 2001
Page 4, Lines 7-15
In that section, you present Qwest's proposed 'avoided costs' for basic business and residential service. You propose that Qwest will only avoid 9.41% of its costs when selling business exchanges wholesale and only 4.19% when selling residential exchange wholesale. Has any state, anywhere, ever adopted such low avoided costs? What would be the ability of any CLEC to purchase at those rates and earn, as Ms. Arnold puts it, "a level that will permit [CLEC's] a fair opportunity to compete in the marketplace and to earn a reasonable return on its investment in Arizona"?

UNE Rates
March 15, 2001
Page 13, Lines 7-10
In that section, you state that the current resale discounts in Arizona are 12% for basic residential service and 18% for most other services. Do you have any facts showing effective competition in Arizona at those rates? What would be the impact (to competition) of reducing the resale discounts to the extent you propose?

UNE Rates
March 15, 2001
Page 39, Lines 3-4; Lines 13-16; Lines 17-18
In those sections, you state that Qwest's advertisements benefit its competitors by building product awareness. Are you aware of any business model that relies on competitor advertisements as a means of improving business? Will Qwest remove its corporate insignia, name and any/all other identifying information from every advertisement that is related to any

product or service offered through resale? Why or why not? Is there any evidence you can provide showing that that Qwest's advertisements benefit its competitors more than Qwest? Is there any evidence you can provide showing a state or FCC decision to allow such costs to be charged through resale?

PERRY W. HOOKS, JR. for Qwest

UNE- Loop
Page 9, Lines 6-16
In that section, you argue that the cost of the loop should be recovered by those services that benefit from the loop. According to Qwest, that is not the case in Arizona, Qwest argues that the cost of the loop is largely recovered by increased rates on other services. If the cost of the loop is already being recovered from non-loop related services, does your argument about direct cost causation apply? That is, if basic residential service is already below cost and Qwest is recovering that shortfall through increased rates on other services, how can Qwest continue to argue for direct cost causation? In Mr. Fitzsimmons' testimony for Qwest, he states, "There is no single correct allocation of joint and common costs." Do you agree with that statement? Can't this Commission determine that the HFPL charge should further reduce the basic residential rates, both at the wholesale and the retail level?

ACC Staff

Resale Discounts
In the rebuttal testimony of D.M. Gude, for Qwest, filed June 27, 2001, at Page 46, Line 10 through Page 48, Line 4, she argues that the resale discounts proposed by Mr. Dunkel for Staff run counter to the U.S. District Court's findings in US West v. Jennings. Have you analyzed her argument? Is it correct? Have you analyzed Mr. Dunkel's proposed resale discounts [12% basic residential; 18% other services] would they violate US West v. Jennings?

Power Charges
Mr. Lathrop, for AT&T/WorldCom/XO, in his May 16, 2001 testimony, at page 55, line 19 through Page 57, line 16, argues that Qwest's power plant investments and costs are excessively high, unexplained and possibly inconsistent. Has the Commission reviewed the rates Qwest is being charged by its power provider? Are the actual costs Qwest incurs for power reflected in Qwest's proposal in this docket? Has the Commission made any determination regarding the power charges and rates proposed by Qwest in this docket?

WILLIAM DUNKEL, for Staff

UNE- Loop
In the rebuttal testimony of Mr. Fitzsimmons, for Qwest, UNE- Loop, at Page 62, Lines 3-18, he states that your run of the HAI Model was "a mishmash"; unsound; and "a mongrel". Does Mr. Fitzsimmons provide any actual information regarding your run of the HAI Model and if so, is the information he provides correct? Please feel free to respond to Mr. Fitzsimmons allegations.

UNE - Loop
June 12, 2001 Testimony
Page 1
On that page you present your proposed unbundled loop rates, by zone. They are as follows:

	Including Sold Exchanges	Excluding Sold Exchanges
Zone I	$ 9.35	$ 9.35
Zone II	$14.57	$14.20
Zone III	$43.80	$36.34
State Avg.	$13.22	$11.89

Please explain the anticipated effects on competition from adopting these rates.

Mr. Denney, for AT&T/WorldCom, at Page 46 of his May 16, 2001 testimony proposes the following rates:

	Including Sold Exchanges	Excluding Sold Exchanges
Zone I	$ 7.34	$ 7.34
Zone II	$11.23	$10.91
Zone III	$32.06	$26.59
State Avg.	$10.11	$ 9.14

Please explain the anticipated effects on competition from adopting these rates.

Ms. Million, for Qwest, at Page 1 of Exhibit TKM-2, October 11, 2000 proposes the following rates:

	Including Sold Exchanges	Excluding Sold Exchanges
Zone I	$12.19	$12.17
Zone II	$14.54	$14.50
Zone III	$26.32	$23.60
State Avg.	$	$15.83

Please explain the anticipated effects on competition from adopting these rates.

In the rebuttal testimony of Teresa K. Million, for Qwest, at Page 58, Line 14 through page 59, line 13; she proposes new break points and new costs as follows (excluding sold exchanges): Zone I - $16.89; Zone II – $22.57; Zone III - $34.34; State Avg. - $25.95. Please explain the anticipated effects on competition from adopting these rates.

Dr. Collins, for Cox, at Page 21 of his May 23, 2001 testimony proposes the following rates:

	Including Sold Exchanges	Excluding Sold Exchanges
Zone I	$	$11.26
Zone II	$	$15.20
Zone III	$	$25.49
State Avg.	$	$

Please explain the anticipated effects on competition from adopting these rates.

Line Sharing
June 12, 2001 Testimony
Page iii
On that page, you propose a line-sharing rate of $2.38 for the HFPL. Qwest argues that the price of the loop for basic residential service is below cost and that the Commission allows Qwest to recover the cost through increase rates on non-loop services. If that is true, and the loop is already subsidized by ratepayers; shouldn't the cost of HFPL be allocated to reductions in the wholesale and retail costs of basic residential service?

UNE Rates
June 12, 2001 Testimony
Page iv
On that page, you argue that the proposed discount rates of Qwest are too low and you propose retaining the current ACC-approved discounts. In Ms. Gude's testimony for Qwest, March 15, 2001 at Page 4, Lines 7-15, she argues that Qwest only avoids 9.41% of its costs when selling business exchanges wholesale and only 4.19% when selling residential exchange wholesale. At page 58, of your same testimony you state the following states have adopted the following discounts: CO – 13%; IO – 10.27%; NE – 22.5%; NM - 15.05%; SD – 15.49%; UT – 12.2%; WA – 16%. Has any state, anywhere, ever adopted avoided costs of 9.41% or 4.19%? What would be the ability of any CLEC to purchase at Qwest's proposed discount rates and earn, as Ms. Arnold puts it, "a level that will permit [CLEC's] a fair opportunity to compete in the marketplace and to earn a reasonable return on its investment in Arizona"? What would be the effect on competition of adopting your proposal, which is to retain the 12% discount for residential basic exchange serve and the 18% discount for other services?

UNE Rates
In the rebuttal testimony of D.M. Gude, for Qwest, filed June 27, 2001, at Page 49, Lines 13 through Page 50, Line 1, she argues that Qwest has provided this Commission with sufficient information to support Qwest's proposed discounts. Please respond to her arguments. Can the

Commission adopt the discounts you propose and expect to succeed if challenged legally? Have other states been so challenged? What was/were the result(s)?

UNE Rates
In the rebuttal testimony of D.M. Gude, for Qwest, filed June 27, 2001, at Page 53, Line 11 through Page 56, Line 1, she argues that your reliance on the discount formula: *avoided costs, divided by revenue* is not supported in the 1996 Telecommunications Act and that other states have explicitly rejected it in favor of the Qwest-preferred formula: *avoided costs, divided by total costs*. What states have adopted the *avoided costs/revenue* formula? Were those decisions successfully challenged due to reliance on that formula? What are the effects of each formula on discounts, costs and competition?

Collocation
June 12, 2001 Testimony
Page 5, Line 19 through Page 18, Line 4
In that section, you discuss your concerns with Qwest's collocation cost study. Have you reviewed Qwest's rebuttals to that section? If so, do you still believe that your proposed interconnection and collocation rates should be adopted, rather than Qwest's? What would be the effect on competition of adopting Qwest's cost study and appurtenant rates? What would be the effect of adopting your proposed rates?

Collocation
June 12, 2001 Testimony
Page 20, Lines 8-17
In that section, you discuss Qwest's proposed 'engineering fee' of $1,274.63 for splitter jobs, which are, according to Qwest witnesses, the 'principal concern' in collocation. What would be the effect of adopting Qwest's proposed 'engineering fee'? What would be the effect of adopting your proposed fee, at page 22, line 5-10, of ten hours' engineering time, or $560?

Collocation
June 12, 2001 Testimony
Page 22, Lines 7-10
In that section, you propose a $120 fee for 'filling the bay' orders. Please explain 'filling the bay'. What fee does Qwest propose for such service? What would be the effects on competition of adopting Qwest's proposed fee? Of adopting your proposed fee?

Collocation
Mr. Lathrop for AT&T/WorldCom/XO, in his May 16, 2001 testimony, at page 53, lines 20-22 recommends that the Commission require Qwest to use the cage costs developed in its response to discovery request ATT 02-103. Have you reviewed that request and Qwest's response? If so, what would be the impact of adopting Qwest's response?

Current to Book Ratio
June 12, 2001 Testimony
Page 27, Lines 4-13
In that section, you explain the negative effect of adopting Qwest's proposed 'current to book' adjustments to its asset base. Have you reviewed Qwest's rebuttal of your testimony? [Gude, June 27, 1001, Page 35, Line 14 through page 37, Line 12] If so, please explain the dispute. What do you recommend the Commission do in this instance?

OSS Costs
June 12, 2001 Testimony
Page 34, Line 21 through Page 35, Line 5
In that section, you explain the effect of allowing Qwest to recover OSS costs on a recurring basis from the CLEC's it serves. You argue that a $100 per order fee (recovered at $2.74 per month over 36 months) would harm competition. Please elaborate. On page 36, you recommend a monthly cost of $0.10 per line. What was Qwest's response to that proposal? What would be the effect on competition of each proposed rate?

UNE Rates
June 12, 2001 Testimony
Page 45, Line 5 through Page 46, Line 2
In that section, you discuss 'vertical services' and the proposals of Qwest and the CLEC's. Have you found any state that adopted rates for vertical services similar to Qwest's proposal? What would be the impact of adopting Qwest's rates? You and the CLEC's recommend that vertical services be included in the 'port' UNE rate. Have other states followed that model? What would be the impact of adopting your proposal?

Loop Conditioning
June 12, 2001 Testimony
Page 52, Lines 1-15
In that section, you agree with Sprint's witness, Randi Farrar in that the non-recurring charges proposed by Qwest for loop conditioning are excessive. Have you reviewed Qwest's rebuttal to your testimony? If so, do you continue to believe that your proposed rates on Schedule WD-8 are appropriate? If so, please explain the effect of your proposed rates? Of Qwest's?

TELRIC
June 12, 2001 Testimony
Page 68, Line 10 through Page 74, Line 18
In that section, you discuss Qwest's LoopMod cost model for establishing TELRIC rates. Have you reviewed the AT&T/WorldCom and XO proposal to adopt HM 5.2a as the cost model for establishing TELRIC rates? Which do you recommend the Commission adopt? What are the expected impacts of adopting LoopMod? Of adopting HM 5.2a?

EDWARD J. CAPUTO, for WorldCom

UNE Rates
May 16, 2001 Testimony
Page 8, Line 8-17
In that section, you argue that the FCC made clear that the DAL database is a UNE and that it must be available to CLEC's on a non-discriminatory basis. You argue at page 11, lines 7-9 that the Qwest proposed rate of $0.025 per initial listing and each update is 3000 times the actual cost. Please elaborate. What would be the effect on competition in Arizona if the Qwest proposal were adopted? What do you recommend?

UNE Rates
May 16, 2001 Testimony
Page 13, Line 9-19
In that section, you discuss Qwest's proposed rates for ICNAM, which includes caller I.D. with name and line information such as fraud checks, valid calling card numbers, etc. What would be the effect of adopting Qwest's proposed rates for ICNAM on competition in Arizona? What do you recommend?

THOMAS H. WEISS, for AT&T/WorldCom/XO

Fill Factors
May 18, 2001 Testimony
Page 12, Line 21 through Page 13, Line 7
In that section, you recommend the Commission adopt fill factors of 0.625 and 0.6667. Have you reviewed Qwest's rebuttal of that testimony in which they argue your factors are unrealistic? [Buckley, June 27, 2001, Page 7] What other state(s) is/are similar to Arizona in terms of geography and population distribution? What fill factors have they adopted? What is the impact on rates of adopting a fill factor that is too low? Of adopting a fill factor that is too high?

TELRIC – Boring Costs
May 18, 2001 Testimony
Page 25, Line 20 through Page 28 Line 2
In that section, you discuss Qwest's reliance on boring as a method of cable placement and Qwest's assumptions about cable placement activities. Have you reviewed Qwest's rebuttal testimony [Buckley, June 27, 2001, Page 2] in which they reduce their reliance on boring and make other adjustments to cable placement? If so, does this resolve your concerns?

TELRIC – Boring Costs
May 18, 2001 Testimony
Page 29, Lines 17-19
In that section, the following appears: "TOM – can't you add anything to this based on your own experience and opinions? Can you at least say that the Commission's percentages are realistic (or - better yet – conservative)". Understanding exactly what that comment is, I would still be interested in hearing your answer to it, are the Commission percentages for structure sharing and boring 'realistic', 'conservative'? What are the impacts of 'realistic' and 'conservative' percentages? Are Qwest's new proposals either?

TELRIC
May 18, 2001 Testimony
Page 38, Lines 14-19
In that section, you conclude that the engineering portion of the LoopMod cost model proposed by Qwest "fails to yield logical estimates of Qwest's costs to produce UNE loops." Have you seen Qwest's rebuttal of your testimony? If so, have your conclusions changed? In Mr. Buckley's March 15, 2001 Testimony for Qwest, at Page 9, Lines 21-23 he shows the LOOPMOD and HAI Model rates for Loop Only and argues that they are within a 'zone of reasonableness'. Do you agree that both LoopMod and HAI are within a 'zone of reasonableness'?

TELRIC
May 18, 2001 Testimony
Page 44, Line 7 through Page 45, Line 2
In that section, you argue that HM5.2a is the 'only reliable loop costing model available in the industry today'. What state commissions have relied on HM5.2a? To what extent does the FCC rely on HM5.2a? What would be the implications of adopting the HAI Model for TELRIC in this docket?

TELRIC
May 16, 2001 Testimony
Page 12, Lines 5-8
In that section, you argue that the FCC's local interconnection rules prohibit developing TELRIC that reflect, among other things, 'revenues [that] subsidize other services'. Qwest continues to argue that basic residential loop prices are set below cost and that other services subsidize basic residential loop prices. If so, would that violate the FCC's rules? From your studies, is Qwest correct regarding basic residential loop prices being subsidized by other services?

UNE Rates
May 16, 2001 Testimony
Page 28, Lines 5 through Page 29, Line 5
In that section, you state that the inclusion of certain costs, including product advertising, are prohibited by the FCC from inclusion in the 'calculation of the forward-looking economic cost of

an element.' In the March 15, 2001 testimony of D.M. Gude, for Qwest, at Page 39, Lines 3-4; Lines 13-16; Lines 17-18, she argues that Qwest's advertisements benefit its competitors by building product awareness. Has the FCC reviewed any similar claims by Qwest or other RBOC's? If so, what did it find? If not, what would you expect the FCC response to be?

UNE Rates
May 16, 2001 Testimony
Page 37, Line 10 through Page 38, Line 2
In that section, you argue that Qwest's claim that it should be allowed to increase the costs of certain UNE elements to incorporate 'uncollectible' revenues is inappropriate. Can you cite any FCC or ACC rule or decision that supports your argument? Are you aware of any business model that does not include the costs of 'uncollectibles' in the price of goods or services? What about requiring performance bonds for resellers with weak financials? Would that protect Qwest from 'uncollectibles' and protect CLEC's from paying extra costs to cover that risk?

MICHAEL HYDOCK, for AT&T/WorldCom/XO

Loop Conditioning
May 18, 2001 Testimony
Page 21, Line 21 through Page 22, Line 5
In that section, you state that the Qwest proposed loop-conditioning costs would be 'so excessive that it would take literally years for a CLEC to recover those costs from its own customers.' Have you reviewed the testimony of Mr. Dunkel for Staff? If so, what would be the effect of adopting his proposed loop conditioning charges found at Schedule WD-8 of his June 12, 2001 testimony? What would be the effect on competition of adopting those proposed rates?

MDU's/MTE's
May 18, 2001 Testimony
Page 25, Line 2 through Page 26, Line 10
In that section, you argue that the Qwest proposal for a quote preparation fee of $1,631.67 for a Field Connection Point (FCP) will stop facilities-based competition in Arizona. Please elaborate. Is there a way to resolve this issue that will harm neither the incumbent nor the CLEC's?

UNE - Vertical Features
May 18, 2001 Testimony
Page 42, Line 19 through Page 43, Line 3
In that section, you argue that Qwest's proposed rates for vertical features violates the 1996 Telecommunications Act; FCC Rules; the 8th Circuit's July 17, 1997 opinion and the U.S. Supreme Court's January 1999 decision. Have you reviewed the recommendation of Mr. Dunkel, for Staff, in his June 12, 2001 testimony, at page 45, Line 5 through Page 46, Line 2, in which he recommends vertical features be included in the 'port UNE rate'? Do you agree? What

would be the impact on competition in Arizona of adopting Qwest's rates for vertical features? Of adopting Staff's proposal?

Collocation
May 18, 2001 Testimony
Page 47, Line 6 through 48, Line 15
In that section, you argue that Qwest's proposal to have nineteen rates determined on an Individual Case Basis (ICB) is contrary to FCC and DOJ findings. Please elaborate. Has any state adopted an SGAT with so many items determined ICB? What would be the impact on competition in Arizona of adopting such an SGAT?

DOUGLAS DENNEY, for AT&T/WorldCom/XO

TELRIC
May 16, 2001
Page 38, Lines 11-13
In that section, you state that the HAI Model uses a cable-sizing factor of 75% in distribution, resulting in an average actual fill factor of 48.8%. In the rebuttal testimony of Qwest witness, Garrett Y. Fleming, filed June 27, 2001, at page 91, Lines 15-21, he states that the HAI Model uses a fill factor of 94%. What is the fill factor in the HAI Model? How does it compare to industry standards? Qwest statements? Similar states? Have any states adopted the HM5.2a as their cost model? Have any states adopted the Qwest LoopMod cost model? What would be the effect on competition in Arizona of adopting HM5.2a? Of adopting LoopMod?

UNE - Loop
Mr. Dunkel, for Staff, at Page i of his June 12, 2001 testimony proposes the following rates:

	Including Sold Exchanges	Excluding Sold Exchanges
Zone I	$ 9.35	$ 9.35
Zone II	$14.57	$14.20
Zone III	$43.80	$36.34
State Avg.	$13.22	$11.89

Please explain the anticipated effects on competition from adopting these rates.

Mr. Denney, for AT&T/WorldCom, at Page 46 of his May 16, 2001 testimony proposes the following rates:

	Including Sold Exchanges	Excluding Sold Exchanges
Zone I	$ 7.34	$ 7.34
Zone II	$11.23	$10.91
Zone III	$32.06	$26.59
State Avg.	$10.11	$ 9.14

Please explain the anticipated effects on competition from adopting these rates.

Ms. Million, for Qwest, at Page 1 of Exhibit TKM-2, October 11, 2000 proposes the following rates:

	Including Sold Exchanges	Excluding Sold Exchanges
Zone I	$12.19	$12.17
Zone II	$14.54	$14.50
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State Avg.	$	$15.83

Please explain the anticipated effects on competition from adopting these rates.
In the rebuttal testimony of Teresa K. Million, for Qwest, at Page 58, Line 14 through page 59, line 13; she proposes new break points and new costs as follows (excluding sold exchanges): Zone I - $16.89; Zone II – $22.57; Zone III - $34.34; State Avg. - $25.95. Please explain the anticipated effects on competition from adopting these rates.

Dr. Collins, for Cox, at Page 21 of his May 23, 2001 testimony proposes the following rates:

	Including Sold Exchanges	Excluding Sold Exchanges
Zone I	$	$11.26
Zone II	$	$15.20
Zone III	$	$25.49
State Avg.	$	$

Please explain the anticipated effects on competition from adopting these rates.

UNE- Loop
May 16, 2001 Testimony
Page 49, Lines 10-18
In that section, you argue against Qwest's break points between zones. In the rebuttal testimony of Teresa K. Million, for Qwest, at Page 58, Line 14 through page 59, line 13; she proposes new break points and new costs as follows (excluding sold exchanges): Zone I - $16.89; Zone II – $22.57; Zone III - $34.34; State Avg. - $25.95. Please explain the anticipated effects on competition from adopting these rates.

UNE- DSL
May 16, 2001 Testimony
Page 55, Lines 9-10
In that section, you propose the following rates for xDSL:

G.lite

UNE Type	Copper Feeder	DLC Feeder
Capable Loop	$5.74	$11.90
Equipped Loop	n.a.	n.a.
Voice UNE's	$3.90	$3.90

HDSL 4-wire

UNE Type	Copper Feeder	DLC Feeder

Capable Loop	$7.46	$15.47
Equipped Loop	n.a.	n.a.
Voice UNE's	n.a.	n.a.

Have you reviewed the June 12, 2001 testimony of Mr. Dunkel for Staff, in particular, Exhibit 8, Page 9? What would be the impact of adopting his proposed rates? Of adopting your proposed rates? Of adopting Qwest's?

ROY LATHROP, for AT&T/WorldCom/XO

Collocation
May 16, 2001 Testimony
Page 47, Lines 2-10
In that section, you argue that Qwest's engineering charges for line sharing and CLEC-CLEC interconnections are overstated. Have you reviewed the rebuttal testimony of Teresa K. Million for Qwest, at Page 13, Line 8 through Page 15, Line 4, in which she rebuts Mr. Knowles testimony on CLEC-CLEC interconnections? Do you have a response to her arguments? Have you reviewed the proposal of Mr. Dunkel for Staff? What would be the effect on competition of adopting his recommended rates?

Dr. FRANK R. COLLINS, for Cox

MDU/MTE
May 23, 2001 Testimony
Page 14, Lines 8-17
In that section, you propose a resolution to the MDU/MTE access dispute; your proposal is that the Commission require Qwest to convey the facilities in question under the 1996 Telecommunications Act to the property owner. Please elaborate on this proposal and its expected effect on competition in Arizona. How will it comport with this Commission's past decisions on depreciation and rates? Has any other state adopted a similar proposal? If so, what was/were the effect(s)?

MDU/MTE
In the rebuttal testimony of Garrett Y. Fleming, for Qwest, filed June 27, 2001, at Page 103, Lines 14-22, he argues that revising the prices for MDU/MTE would result in increased prices for other portions of the distribution loop. Is that argument accurate? What might be the effect of revising MDU/MTE prices on other portions of the distribution loop? What would by the effect of adopting your proposal (above) on the prices of other portions of the distribution loop?

Fill Factors
May 23, 2001 Testimony
Page 16, Lines 1-8

In that section, you seem to recommend a sizing factor of 80%. Is that the sizing factor you recommend in this docket? What would the resulting average actual fill factor be if that sizing factor were adopted? What would be the impact on loop costs of adopting and 80% sizing factor? Mr. Denney, for AT&T/WorldCom/XO, in his May 16, 2001 testimony, at Page 38, Lines 11-13 states that the HAI Model uses a cable sizing factor of 75% in distribution, resulting in an average actual fill factor of 48.8%. How do these factors compare to Cox's estimates? What would be the impact on loop costs of adopting the Denney figures?

I look forward to the hearings and the responses to the above questions. Needless to say, this is not a complete list of all my questions, and all parties should expect further questions during the hearings.

Very Truly Yours,

Marc Spitzer
Commissioner

Cc: Chairman William Mundell
Commissioner Jim Irvin
Hercules Dellas
Patrick Black
All Parties

Arizona
Docket No. T-00000A-00-0194
AT&T 09-203

INTERVENOR: AT&T Communications of the Mountain States, Inc.

REQUEST NO: 203

Please review the direct testimony of Dick Buckley at Exhibit RJB-3, page 4 of 18. Please confirm that the "latest contracts the Network Department has for placement of buried plant" referenced in that testimony as "support" for placement costs have been produced by Qwest with its supplemental response to Data Request AT&T 2-92 dated June 29, 2001. Please state whether there are any contracts upon which these placement costs are based that have not been produced.

RESPONSE:

The contracts produced by Qwest are the current contracts in effect with outside plant placement contractors. The LoopMod placing costs are based on contracts that were in effect at the time that Loopmod was developed. Some of those contractors are no longer doing business with Qwest, so there are no current contracts for those vendors.

Respondent: Jennifer Peppers

EXHIBIT
ATT/XO-10
Admitted

Arizona
Docket No. T-00000A-00-0194
AT&T 08-161

INTERVENOR: AT&T Communications of the Mountain States, Inc.

REQUEST NO: 161

Please review Rebuttal Testimony of Dick Buckley at page 11, line 6. What percentage of the placement of buried cable for Qwest in Arizona was done by contracted construction firms in the first quarter of 2001? If this information is not available for the requested time period, please provide it for the most recent time period for which the information is available.

RESPONSE:

Qwest does not track this information.

Respondent: Maryann Klasinski, Manager

EXHIBIT
ATT/KO-18
Admitted

Arizona
Docket No. T-00000A-00-0194
WD 04-112

INTERVENOR: Arizona Corporation Commission

REQUEST NO: 112

A. In 1999, what percent of the total feet installed of the buried distribution cable that was actually installed by Qwest did Qwest have to cut (remove and replace) asphalt (or concrete)? If this figure is not available for all of 1999, please provide a figure based upon a representative sample, or a reasonable estimate from knowledgeable personnel. Please provide the source of the figure provided.

B. In 1999, what percent of the total feet installed of the buried feeder cable that was actually installed by Qwest did Qwest have to cut (remove and replace) asphalt (or concrete)? If this figure is not available for all of 1999, please provide a figure based upon a representative sample, or a reasonable estimate from knowledgeable personnel. Please provide the source of the figure provided.

C. In 1999, what percent of the total feet installed of the interoffice cable that was actually installed by Qwest did Qwest have to cut (remove and replace) asphalt (or concrete)? If this figure is not available for all of 1999, please provide a figure based upon a representative sample, or a reasonable estimate from knowledgeable personnel. Please provide the source of the figure provided.

RESPONSE:

Qwest doesn't track this information.

Scott Weakley
Capacity Planner
700 W. Mineral
Littleton, CO

EXHIBIT
ATT/XO-19
Admitted

Arizona
Docket No. T-00000A-00-0194
AT&T 002-067

INTERVENOR: AT&T Communications of the Mountain States, Inc.

REQUEST NO: 067

RE: Loop Pricing
Witness: Buckley

Please produce the most recent documentation available of Qwest's actual loop placement activities in the state of Arizona. This should include documents indicating the extent to which Qwest uses trenching, directional boring, plowing, and other placement activities assumed in LoopMod too place loop facilities in the state of Arizona.

RESPONSE:

Qwest objects to this request on the grounds that the requested information is not relevant or likely to lead to the discovery of relevant information. Qwest does not retain records of the quantity of placement methods used in growing and maintaining the existing network at the level requested. Furthermore, the placement activities that Qwest is experiencing in adding to or maintaining the existing network are not pertinent to the modeling of a total replacement network. The TELRIC models are structured to reflect the economies that can be achieved in using forward-looking technologies and serving the universe of demand. The placement activities associated with the existing network do not address this modeling approach.

Respondent: Jennifer Peppers

EXHIBIT
ATT/XO-20
Admitted

Arizona
Docket No. T-00000A-00-0194
SPR 02-025

INTERVENOR: Sprint Communications Company L.P.

REQUEST NO: 025

Please provide the mix of plant type (buried, aerial, underground) utilized in Qwest's recurring loop study for unbundled network elements. Please provide a breakdown between feeder and distribution cable, as well as copper and fiber.

RESPONSE:

For distribution sheath distance, buried represents 82.95%, aerial is 14.11%, underground is 2.83%, and building cable is 0.11%. For feeder, fiber represents 74% of the sheath distance and copper represents 26%. Buried feeder is 50.6%, underground feeder is 49.3%, and aerial feeder is 0.1%. These figures were calculated after the removal of the wire centers proposed for sale.

Respondent: Jennifer Peppers

EXHIBIT
ATT/XO-23
Admitted

Arizona
Docket No. T-00000A-00-0194
WD 09-187

INTERVENOR: Arizona Corporation Commission

REQUEST NO: 187

Please respond to the following:

A. Is it correct that in your service territory during the development of a new residential subdivision, the developers normally provide the trench used to place distribution cables in that subdivision? If this is not a correct statement, please provide the correct statement.

B. Please state, generally, in your area during the development of a residential subdivision, what costs of the telephone distribution system installed in that subdivision are borne by the developer, and what costs are borne by the telephone company.

C. In your TELRIC loop costing model submitted in this proceeding, have you excluded from the costs in that study, those costs which are normally paid for by the developer? If yes, please explain what costs were excluded and where in your model those costs are excluded. If you have not excluded those costs, please explain why not.

D. Is it a correct statement that in your service territory when a new residential subdivision is being developed, the normal practice is for the LEC to install the buried distribution cables generally prior to the time that the roads driveways, sidewalks, lawns, bushes, etc. are in place? If this is not a correct statement, please provide the correct statement.

E. In your TELRIC loop costing model submitted in this proceeding, please indicate what percent of the distribution cables in a residential subdivision were assumed to include the costs of installing them <u>before</u> the roads, driveways, sidewalks, lawns, bushes, etc. are in place, and what percent were assumed to be installed after these surface obstructions were in place.

F. In your TELRIC loop costing model submitted in this proceeding, what percent of the loop costs, on average, is associated with digging the trench used to place distribution cables?

G. Is it a correct statement that in your TELRIC loop costing model submitted in this proceeding, you have included the costs of digging the trenches used to place distribution cables in residential subdivisions? If this si not a correct statement, please provide the corrected statement.

RESPONSE:

A. The availability of a common trench can vary from one new sub-division to another. However, it is common for developers to provide utilities access to a common trench in new sub-divisions.

EXHIBIT
ATT/XO-26
Admitted

B. The developer often provides the trench and the local telephone company will pay for the cable, its placement in the developer provided trench, and its termination, as well as any associated distribution equipment such as Feeder Distribution Interfaces, drop pedestals, drop wires and Network Interface Devices. In addition, there are developer agreements that limit the total cost that will be paid by the local telephone company in cases where the developer may desire a non-standard distribution design.

C. Yes. The TELRIC loop study is based on a total rebuild of the local loop outside plant network. The assumptions include the use of the forward-looking technologies available and being deployed by Qwest today. This provides economies that do not actually exist in the embedded network, but the model will also reflect the placement of plant in the current environment (i.e. existing, mature neighborhoods), not as the placement would have incurred in a growth approach. Thus, there is consistency between both the forward-looking technology utilized and the method used to put it into service. The model does reflect the fact that there will be some opportunities in the replacement of the existing network to share the distribution cable trenching costs with other entities. The sharing factors for cable placement are 20% for buried, 50% for aerial and 5% for underground. Thus, in a buried distribution plant situation, the assumption is that 20% of the cost for trenching and restoration work will be covered by some other entity, whether it be a developer or another utility.

D. Yes. In new sub-divisions where the developer coordinates with the utilities, outside plant facilities are generally placed prior to the placement of streets and landscaping.

E. The sharing inputs for buried plant assume that 20% of the cost for trench work will be avoided, either through placing plant in new subdivisions where the developer covers the cost of the trench or placing plant in a trench that is shared with another utility provider. In the latter situation, the cost of the trench would be paid for by all providers using the common trench. In all other placements, the TELRIC model assumes that the plant placement must contend with the existing infrastructure.

F. The average investment for the loop is reduced by approximately 33% if the trench cost inputs for buried distribution are changed to zero.

G. Please see the response to WD-9-187, part E. The TELRIC models assume a total network replacement with forward-looking technologies and the economies of scale that could be achieved by a single provider serving all customers. Associated with this would be plant placement in areas where the streets, sidewalks, and landscaping are already in place. In those areas, the developer is no longer involved with the sub-division and would not provide an open trench. Qwest would be responsible for the costs associated with cable placement.

Respondent: Jennifer Peppers, Cost Interface Manager, Qwest

Arizona
Docket No. T-00000A-00-0194
AT&T 08-167

INTERVENOR: AT&T Communications of the Mountain States, Inc.

REQUEST NO: 167

Please state whether Qwest has actually installed the equipment necessary to demultiplex DS-1 loops to DS-0 loops in its central offices as assumed by LoopMod for the purpose of providing unbundled loops to competitive providers. Please identify each central office in which the equipment is available and state whether the equipment is used for any purpose other than demultiplexing IDLC loops to be provisioned to CLECs.

RESPONSE:

Qwest is currently unaware of how much equipment is installed or how many UNE loops have been ordered which require grooming of IDLC. Qwest will supplement this answer when it can find the data.

Respondent: Jennifer Peppers

EXHIBIT
AT&T 10-27
Admitted

Nos. 00-511, 00-555, 00-587, 00-590 & 00-602

IN THE

Supreme Court of the United States

FEDERAL COMMUNICATIONS COMMISSION, *et al.*,
Petitioners,

v.

IOWA UTILITIES BOARD, *et al.*,
Respondents.

On Writ of Certiorari to the United States Court of Appeals for the Eighth Circuit

BRIEF FOR RESPONDENT QWEST COMMUNICATIONS INTERNATIONAL, INC.

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Counsel for Respondent Qwest Communications International, Inc.

June 8, 2001

EXHIBIT
tabbies
Att XO 31
Admitted

CORPORATE DISCLOSURE STATEMENT

Pursuant to Supreme Court Rule 29.6, respondent Qwest Communications International, Inc. states as follows:

Respondent Qwest Communications International, Inc. is a publicly held corporation that has no parent company. Through its operating subsidiaries, Qwest Communications International, Inc. provides broadband Internet-based data, voice, and image communications for business and consumers. No publicly held company owns ten percent or more of Qwest Communications International, Inc. stock.

U S WEST, Inc. merged with and into Respondent Qwest Communications International, Inc. on June 30, 2000. U S WEST, Inc. was formerly the parent and sole shareholder of U S WEST Communications, Inc. U S WEST Communications, Inc. was renamed Qwest Corporation on July 6, 2000. Qwest Corporation is a wholly owned subsidiary of Qwest Communications International, Inc. Qwest Corporation is a local exchange carrier that provides local exchange telecommunications, exchange access, information access, data services, wireless services, and intraLATA long distance services pursuant to tariff and contract.

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OPINION BELOW

The opinion of the United States Court of Appeals is reported at 219 F.3d 744 and reprinted at pages 1a-43a of the Petitioner's Appendix in No. 00-511 ("Pet. App."). That opinion reviewed and vacated portions of the Federal Communications Commission's First Report and Order, *Implementation of the Local Competition Provisions in the Telecommunications Act of 1996*, CC Dkt. No. 96-98 (rel. Aug. 8, 1996) (the "order"), and accompanying regulations. The order is reported at 11 FCC Rcd 15,499 and reprinted in relevant part at J.A. ___-___.

JURISDICTION

The judgment of the court of appeals was entered on July 18, 2000. The government filed its petition for a writ of certiorari in No. 00-587 on November 29, 2000. This Court granted that petition, and related petitions, on January 22, 2001, and has jurisdiction pursuant to 28 U.S.C. § 1254(1).

PERTINENT STATUTORY PROVISIONS

This case involves sections 251 and 252 of the Telecommunications Act of 1996, 47 U.S.C. §§ 251, 252, section 706 of the Administrative Procedure Act, 5 U.S.C. § 706, and Federal Communications Commission regulations codified at 47 C.F.R. §§ 51.501-51.511. These provisions are reprinted at Pet. App. 152a-177a.

STATEMENT OF THE CASE

This case concerns an issue that is central to the goal of the Telecommunications Act of 1996 ("1996 Act") to create real competition in the local telephone market: what prices incumbent local exchange carriers ("incumbents" or "ILECs") may charge when they are required to share their facilities with new competitive local exchange carriers ("CLECs"). Congress directed that these prices be based on the cost of providing the facility involved. The FCC, how-

ever, determined that these prices should be based on the totally theoretical cost of a newly constructed, idealized network that "use[s] the most efficient telecommunications technology currently available and the lowest cost network configuration." 47 C.F.R. § 51.505(b)(1). The United States Court of Appeals for the Eighth Circuit vacated this pricing rule. That decision should be affirmed.

By passing the 1996 Act, Congress signaled its desire to foster, on a nationwide basis, what technological developments now permit: real competition between local telephone service providers. Congress specifically sought to encourage rival competitors to deploy alternative network facilities. At the same time, it recognized that, at least in the short term, new entrants would not be able to construct ubiquitous networks. Accordingly, Congress enabled entrants to lease individual pieces of the incumbents' facilities, called unbundled network elements or UNEs. Congress required that the prices for such UNEs be based on "the cost . . . of providing the . . . network element," 47 U.S.C. § 252(d)(1), and it charged the Federal Communications Commission ("FCC") with devising guidelines by which state public utility commissions would determine UNE prices.

The FCC adopted a forward-looking pricing methodology that it called TELRIC — short for total element long run incremental cost. That methodology does not attempt to determine the forward-looking costs that an *ILEC* will incur in providing an element. Rather, with a single unexplained exception, the FCC's methodology ignores altogether the ILEC's existing network and the iterative process by which an actual network is built. In its place, the methodology attempts to estimate the costs that a hypothetical carrier would incur if, each time a CLEC seeks to purchase a UNE, the hypothetical carrier instantaneously constructed an entirely new network using the least-cost, most-efficient available technologies and network configuration.

As the court of appeals held, while the FCC has discretion to determine the cost of providing an element using forward-looking costs, the 1996 Act does *not* give the agency authority to ignore altogether the ILEC's costs of providing an element. The FCC's mandate of the TELRIC methodology accordingly was a fatally flawed implementation of the Act. Whatever its role as a theoretical economic construct, TELRIC as applied by the FCC is so extreme that it significantly undermines the very purposes of the Act. In relying on such a methodology, the FCC thwarted the development of the real-world competitive process that Congress intended to permit, and instead created a marketplace distorted by artificial regulatory incentives concerning investment and entry. The FCC's TELRIC methodology cripples the incentives of CLECs and ILECs to invest in competitive facilities, and, contrary to the FCC's claim, fails to reflect how real-world markets operate. The court of appeals properly recognized that TELRIC therefore is directly contrary to Congress's intent, and that court's decision to vacate the portion of the FCC's rules that bases prices on a hypothetical, ideally efficient network should be affirmed.

A. The Telecommunications Act of 1996

The 1996 Act marked Congress's rejection of the premise that local telephone service is a natural monopoly. *See AT&T v. Iowa Utils. Bd.*, 525 U.S. 366, 371 (1999). Congress instead embraced the notion that technological advances have made local service competition possible. *See id.*; H.R. Conf. Rep. No. 104-458, at 113, 148 (1996) ("Conf. Rep."). It sought broadly to encourage that competition and the rollout of new advanced technologies in all telecommunications sectors and in all regions. *See* Conf. Rep. at 113. To achieve this objective, Congress ended the monopoly franchises previously granted by the states, preempting any state or local law that "may prohibit or have the effect of prohibiting the ability of any entity to provide any interstate or intrastate telecommunications service." 47 U.S.C. § 253(a).

Congress recognized that, at least in the near term, new entrants in the local telephone market may be unable to deploy ubiquitous network facilities. *See* Conf. Rep. at 148. As a result, the Act provides three distinct routes by which a carrier can begin to offer competing local service without deploying a complete network. First, any carrier may, on request, interconnect its network facilities with the facilities of an incumbent LEC, allowing customers of different carriers seamlessly to call each other. *See* 47 U.S.C. § 251(c)(2). Second, CLECs may obtain access to selected pieces of the incumbent's network as unbundled network elements "at any technically feasible point . . . in a manner that allows requesting carriers to combine such elements in order to provide . . . telecommunications service." *Id.* § 251(c)(3). Third, CLECs may buy complete services from the incumbent at wholesale prices and resell those services. *See id.* § 251(c)(4).

The legislative history of the Act confirms that Congress believed that "meaningful facilities-based competition is possible." *See, e.g.*, Conf. Rep. at 148. It confirms, too, what the logic of the Act and basic economics suggest: Congress intended to encourage facilities-based competition no less than competition using UNEs or service resale. Congress sought "to provide . . . a pro-competitive, de-regulatory national policy framework designed to *accelerate* . . . *deployment of advanced telecommunications and information technologies* . . . by opening all telecommunications markets to competition." *Id.* at 113 (emphasis added); *id.* at 1 (the Act was intended to "accelerate rapidly private sector deployment of advanced telecommunications and information technologies"). Thus, any interpretation that prefers competition by means of UNEs or resold services over facilities-based competition is a serious misreading of the Act.

Indeed, the Act places limits on the availability and pricing of UNEs precisely to ensure that CLECs' rights to use UNEs will not be so broad as to stifle the CLECs' incentives to deploy facilities of their own (or to stifle incentives for

ILECs to invest in new facilities). *See, e.g., Iowa Utils. Bd.*, 525 U.S. at 387-92 (relevant language "requires the FCC to apply *some* limiting standard, rationally related to the goals of the Act"). Not every network facility must be unbundled and provided to competing carriers. Congress charged the FCC with "determining what network elements should be made available." 47 U.S.C. § 251(d)(2). In fulfilling that charge,

> the Commission shall consider, at a minimum, whether—
>
> (A) access to such network elements as are proprietary in nature is *necessary*; and
> (B) the failure to provide access to such network elements would *impair* the ability of the telecommunications carrier seeking access to provide the services that it seeks to offer.

Id. (emphasis added). This mandate has come to be referred to as the "necessary and impair standard."

For UNE pricing, Congress relied first on incumbents and new entrants to negotiate prices in the context of broader interconnection agreements. *See id.* § 252(a). The statute allows carriers to bargain "without regard" to the Act's requirements, including the provision concerning pricing of UNEs. *Id.* §§ 251(c)(1), 252(a)(1), 252(e)(2)(A). Only if the parties cannot reach agreement may state commissions set UNE prices through arbitration proceedings. *See id.* § 252(b). Such UNE prices must be "based on the cost (determined without reference to a rate-of-return or other rate-based proceeding) of providing the . . . network element," must be "just and reasonable," and "may include a reasonable profit." *Id.* § 252(d)(1).

B. The FCC's Notice of Proposed Rulemaking

On April 19, 1996, the FCC released a notice of proposed rulemaking to implement the local competition provi-

sions of the Act. *Implementation of the Local Competition Provisions in the Telecommunications Act of 1996*, Notice of Proposed Rulemaking, 11 FCC Rcd 14,171 (re. Apr. 19, 1996). The FCC posited that the UNE pricing provisions of the Act "appear[] to contemplate the use of . . . forms of cost-based price regulation, such as . . . the setting of prices based on a forward-looking cost methodology that does not involve the use of an embedded rate base, such as long-run incremental cost (LRIC)." *Id.* ¶ 123. It pointed to some state laws as examples of the model that it contemplated, *id.* ¶ 127, including a Michigan law requiring that the "[t]echnology used in a long-run incremental cost study should be the least-cost, most efficient technology that is currently available for purchase." *See* Michigan Public Service Commission, *Re A Methodology to Determine Long Run Incremental Cost*, 156 P.U.R.4th 1 (1994), Exhibit A. Under this principle, "the selection of the least cost technology is not based on the economics of adding to the current stock of telecommunications equipment providing service today, but rather assumes no equipment is currently in service and a completely new network is to be installed." *Id.* (internal quotations omitted).

Many commenters objected to the use of the pricing methodology contemplated by the FCC. They submitted testimony by economists such as Alfred Kahn and Timothy Tardiff, who challenged the premise "that the proper basis for the pricing of LEC services sold to competitors . . . is the . . . the total forward-looking cost of a hypothetical, ideally efficient system built by either the incumbent or some other carrier starting with a blank slate, using the most efficient current technology." Bell Atlantic Reply Comments, Kahn & Tardiff Decl. ¶ 8, CC Dkt. No. 96-98 (May 30, 1996). Kahn and Tardiff rejected the view that a "blank-slate" approach would mimic "the level to which competition would drive prices. . . . In a world of continuous technological progress, it would be irrational for firms constantly to update their facilities in order *completely* to incorporate today's lowest-cost technology, as though starting from scratch: investments

made today . . . would instantaneously be outdated tomorrow and, in consequence, never earn a return sufficient to justify the investments in the first place." *Id.* Kahn and Tardiff concluded that fostering the development of a real competitive marketplace requires that entrants be allowed to compete against the *ILEC's* costs, not those of a hypothetical, most efficient firm: "considerations of economic efficiency *require* that the prices charged to competitors be based upon the LECs' *actual* costs; to the extent competitors can provide these inputs more efficiently than the LECs, this will fully preserve their incentive to do so and thereby promote efficient facilities-based entry."[1] *Id.* (emphasis in original).

C. The FCC's Local Competition Order

The FCC released the order on review on August 8, 1996. In addressing which facilities ILECs must unbundle as UNEs, the order read the Act to "impose[] on an incumbent LEC the duty to provide *all* network elements for which it is *technically feasible* to provide access on an unbundled basis." J.A. __ (Order ¶¶ 278, 286-87) (emphasis added). The FCC "decline[d] to adopt" the view that the necessary and

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[1] Other economic witnesses voiced similar concerns about the FCC's proposed model. As one noted, using such a model would guarantee that ILECs were always compensated at less than *their* forward-looking costs because, "[e]ven if actual . . . investment decisions were always completely efficient at the time they were made, improvements in technology will *always* guarantee that a totally new, hypothetical, network will have a theoretical lower cost than the actual network in place (or otherwise the older technology could be used in the hypothetical network)." GTE Comments, Hausman Aff. ¶ 14 n.4, CC Dkt. No. 96-98 (May 16, 1996) (emphasis in original); *see also id.* ¶ 3 ("Technological change will deprive LECs of recovering costs if rates are always measured on the basis of a forward-looking optimal network model."); GTE Comments, Crandall Decl. ¶¶ 15-16, CC Dkt. No. 96-98 (May 16, 1996) ("There are simply no market analogues for [the FCC's proposed model]. . . . Unfortunately, there is simply no evidence that such hypothetical networks would represent an efficient use of society's resources. If this were not the case, *someone would be building them.*") (emphasis in original).

impair standard requires it to consider whether a new entrant could obtain the requested element from a source other than the incumbent. *Id.* at __ (Order ¶¶ 283, 287). The order declared that *any* increase in cost or decrease in quality, no matter how trivial, would satisfy the impairment standard, on the ground that "requiring new entrants to duplicate unnecessarily *even a part of the incumbent's network* could generate delay and higher costs for new entrants, and thereby impede entry by competing local providers and delay competition, contrary to the goals of the 1996 Act." *Id.* at __ (Order ¶¶ 283, 285) (emphasis added). "The 1996 Act . . . does not impose *any* limitations on carriers' ability to obtain access to unbundled network elements." *Id.* at __ (Order ¶ 329) (emphasis added).

The order then turned to the pricing of UNEs. It adhered to the FCC's proposal to base UNE rates on the theoretical forward-looking costs of an idealized hypothetical competitor. *See* J.A. __ (Order ¶¶ 672-73, 704-07). Notwithstanding the criticisms voiced in the comments, the agency essentially adopted the same model it had proposed. The FCC "coin[ed]" a new term, Total Element Long-Run Incremental Cost ("TELRIC"), for a model that purported to gauge the LRIC of network *elements*, rather than *services*.[2] *See id.* at __ (Order ¶ 678).

The TELRIC methodology is expressly based on the "use of the most efficient telecommunications technology currently available and the lowest cost network configuration." 47 C.F.R. § 51.505(b)(1); *see also* J.A. __ (Order ¶¶ 683-85, 690). In other words, by imagining a period "long enough so that all of a firm's costs become variable or avoid-

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[2] The FCC made this change on the assumption that elements are likely to have fewer joint and common costs than services. J.A. __ (Order ¶ 678). The order nevertheless acknowledges that incumbents still will have joint and common costs and that states may permit such costs to be recovered in UNE prices. *See id.* at __ (Order ¶ 695).

able," *id.* at __ (Order ¶¶ 677, 692), the model seeks to determine what a most efficient, least-cost network would look like if it were reconstructed from scratch at the time when UNE prices are being set, and then hypothesizing what the costs of that network would be. *See Iowa Utils. Bd.*, 525 U.S. at 374 n.3 ("TELRIC pricing is based upon the cost of operating a hypothetical network built with the most efficient technology available"). UNE prices are to reflect this idealized network's imagined costs.

The FCC acknowledged that a TELRIC methodology would "discourage facilities-based competition by new entrants because new entrants can use the incumbent LEC's existing network based on the cost of a hypothetical least-cost, most efficient network" and therefore would have sharply reduced incentives to build their own facilities. J.A. __ (Order ¶ 683). The FCC's only palliative was to allow the inclusion of one real-world factor: regulators would "assume that wire centers will be placed at the incumbent LEC's current wire center locations."[3] *Id.* at __ (Order ¶ 685). The FCC's methodology ignores the actual location of all the other facilities in an ILEC's network and instead reconstructs the network based on the theoretically ideal locations for such facilities. The FCC said that its consideration of actual wire center locations would "encourage[] facilities-based competition to the extent that new entrants, by designing more efficient network configurations, are able to provide the service at a lower cost than the incumbent LEC." *Id.* at __ (Order ¶ 685). The FCC did *not* explain why the same rationale does not apply to the locations of ILEC network facilities other than wire centers — that is, why CLECs should be encouraged to invest in facilities only when they can locate wire centers more efficiently than the incumbent has and not when they can locate other parts of the network more ef-

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[3] A wire center is the physical location where subscriber lines connect to a switch.

ficiently. Nor did the FCC explain why its rationale does not apply when CLECs could employ more efficient technologies than the incumbent.

The agency did recognize that it *could* have based forward-looking costs "on incumbent LECs' existing network infrastructures, taking into account changes in depreciation and inflation." J.A. __ (Order ¶¶ 683-84). But the agency rejected that approach in a single sentence, labeling it "essentially an embedded cost methodology." *Id.*

D. Subsequent Proceedings

Incumbent LECs and state commissions sought review of the order in the Eighth Circuit. That court held that the FCC lacked jurisdiction to adopt pricing rules, and it accordingly did not reach the merits of those rules. *See Iowa Utils. Bd. v. AT&T*, 120 F.3d 753, 800 (8th Cir. 1997). This Court reversed, holding "that the Commission has jurisdiction to design a pricing methodology." *Iowa Utils. Bd.*, 525 U.S. at 385.

This Court also rejected the FCC's conclusion that the necessary and impair standard imposes no limitations on a carrier's ability to obtain access to unbundled network elements. *See id.* at 387-91. The FCC's error in reading the standard sprang from its mistaken understanding that the Act empowers it to assume the existence of a perfectly competitive market for telecommunications services, an assumption similar to the theoretical perfection that underlies TELRIC. "In a world of perfect competition, in which all carriers are providing their service at marginal cost, the Commission's total equating of increased cost (or decreased quality) with 'necessity' and 'impairment' might be reasonable; *but it has not established the existence of such an ideal world.*" *Id.* at 390 (emphasis added). Congress could have written language authorizing "blanket access to incumbents' networks," but did not, and the FCC could not make up for the omission

by importing perfect competition assumptions found nowhere in the statute.[4] *Id.*

On remand, the court of appeals for the first time addressed the merits of TELRIC pricing. It upheld the FCC's decision to base prices on forward-looking rather than historical costs and rejected as unripe the takings challenge by ILECs to that decision. *See* Pet. App. 10a-18a. The court agreed with the FCC that the "the term 'cost,' as it is used in the statute [was] ambiguous," and it deferred to the FCC's choice of forward-looking costs. *Id.* at 11a-12a. But the court rejected the FCC's particular forward-looking cost approach. The court concluded that TELRIC, by completely divorcing the prices that an ILEC may charge for UNEs from the ILEC's costs of providing the elements, was directly contrary to the Act. The court ruled that UNE prices must instead be based on an ILEC's *own* forward-looking costs:

> Costs can be forward-looking in that they can be calculated to reflect what it will cost the ILEC in the future to furnish to the competitor those portions or capacities of the ILEC's facilities and equipment that the competitor will use including any system or component upgrading that the ILEC chooses to put in place for its own more efficient use. . . . At bottom . . . Congress has made it clear that it is the cost of providing the actual facilities and equipment that will be used by the competitor (and not some state of the art presently available technology ideally configured but neither deployed by the ILEC nor to be used by the competitor) which must be ascertained and determined.

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[4] The FCC issued a new order interpreting the "necessary and impair" standard on remand. *Implementation of the Local Competition Provisions of the Telecommunications Act of 1996*, Third Report and Order, 15 FCC Rcd 3696 (rel. Nov. 5, 1999) ("*UNE Remand Order*"). That order is under review yet again in the court of appeals. *See United States Telecom Ass'n v. FCC*, Nos. 00-1015 & 00-1025 (D.C. Cir.).

Id. at 9a-10a.

As a result, while leaving intact much of the FCC's pricing regime, the court of appeals vacated the particular rule requiring that prices be based, not on the ILEC's costs, but on the costs that a hypothetical carrier would incur through "use of the most efficient telecommunications technology currently available and the lowest cost network configuration." *See id.* at 10a (vacating 47 C.F.R. § 51.505(b)(1)).

Several incumbents sought review of the court of appeals' rejection of historical costs. The FCC and a number of CLECs petitioned for certiorari to review the court's decision vacating the agency's rule basing UNE prices on a hypothetical most efficient network. This Court granted certiorari on both sets of pricing issues.[5] Qwest respectfully submits that the decision of the court of appeals to vacate the FCC's pricing rule should be affirmed.

SUMMARY OF ARGUMENT

The FCC's TELRIC methodology is inconsistent with the 1996 Act and arbitrary and capricious. The Act requires that UNE prices be based on the costs that an *ILEC* incurs in "providing" an element. The FCC instead based UNE rates on the costs that a *hypothetical carrier* would incur in using an ideally efficient network that never will exist and that the ILEC never will use to provide any element. Rather than foster the development of an actual competitive process, the FCC's order prescribes prices that correspond to the agency's guess at what the end result might be in a theoretical world of perfect competition and instantaneous deployment of new

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[5] The Court also granted the FCC's petition for certiorari to review the lower court's ruling on rules concerning the conditions under which ILECs could be required to combine UNEs. Qwest joins the separate Respondents' brief on that issue. *See* Brief for Respondents Verizon Entities, BellSouth Corp., SBC Communications, Inc., and United States Telecom Association (June 8, 2001).

technologies. This approach could not be more at odds with the language of the Act or its deregulatory purposes. It embodies the same error that this Court found infected the agency's reading of the "necessary and impair" test for unbundling: even if the FCC's reading might be reasonable "[i]n a world of perfect competition . . . it has not established the existence of such an ideal world." *Iowa Utils. Bd.*, 525 U.S. at 390. The FCC's ideal world is divorced from the actual market context in which carriers compete. It lowers *prices* without any corresponding decrease in *costs* and thereby distorts market signals and discourages investment in network facilities, contrary to the goals of the Act.

The FCC's methodology also is arbitrary and capricious on its own terms. The assumptions embodied in TELRIC about how a real-world competitive market works are simply wrong, especially where, as in the telecommunications sector, the market is capital-intensive and characterized by frequent cycles of innovation and declining costs. Carriers do not instantly and ubiquitously replace their network facilities every time a more efficient technology becomes available, nor do they immediately reduce their prices to the incremental costs of the new network. Instead, building a network is an iterative process. A carrier adjusts the capacity and location of network facilities as customer populations shift and grow, and it invests in new facilities only when the gap between prevailing prices and the costs of the new technology becomes sufficiently great to allow the carrier to price between those two levels and expect to earn a return on its investment. The utter failure of TELRIC to mimic the operation of a market explains why the FCC is unable to point to any instance in which such a methodology has been used to set prices in similar circumstances. The end result of the FCC's methodology is to ensure that the incumbent has no chance to recover its costs of providing network elements — a result in direct contravention of the Act.

Contrary to the suggestion by petitioners, rejection of the TELRIC model by no means requires the conclusion that the term "cost" has a "single meaning" or that the FCC lacks discretion in establishing pricing guidelines for UNEs. In place of the one rule vacated by the court of appeals, the FCC could use the "historical cost" model championed by Verizon or a model based in whole or part on forward-looking costs. But the court below properly concluded that the agency does not have discretion to adopt a methodology such as TELRIC that eschews the incumbent's costs altogether in favor of the agency's hypothesis of the costs of a nonexistent network built to serve perfectly estimated demand in the most efficient way conceivable with available technologies. That methodology is contrary to the statutory text and its animating purposes and is arbitrary and capricious.

ARGUMENT

I. TELRIC IS FLATLY INCONSISTENT WITH THE TEXT OF THE STATUTE.

Section 252(d)(1) provides that UNE rates "shall be . . . based on the cost (determined without reference to a rate-of-return or other rate-based proceeding) of providing the . . . network element," shall be "just and reasonable," and "may include a reasonable profit." 47 U.S.C. § 252(d)(1). These provisions require that UNE prices be based on the costs that an ILEC will incur in providing a particular element. While the Act does not mandate a single methodology for determining those costs, it *does* limit the FCC's discretion by forging a relationship between the price an ILEC may charge for a UNE and the costs that the *ILEC* incurs in providing the UNE. TELRIC severs that relationship, and links UNE prices instead to the costs that would be incurred by a hypothetical competitor using "the most efficient telecommunications technology currently available and the lowest cost network configuration." 47 C.F.R. § 51.505(b)(1). The Eighth Circuit correctly vacated this rule as inconsistent with the

text of section 252(d)(1), and this Court should affirm. *See, e.g., United States v. Wells*, 519 U.S. 482, 490 (1997) (natural reading of the full text is the "first criterion in the interpretive hierarchy" for statutes); *Connecticut Nat'l Bank v. Germain*, 503 U.S. 249, 253-54 (1992) ("[C]ourts must presume that a legislature says in a statute what it means and means in a statute what it says there.").

Section 252(d)(1) requires that UNE rates be "based on *the cost . . . of providing the* . . . network element." 47 U.S.C. § 252(d)(1) (emphasis added).[6] The FCC and its supporters focus on the term "cost" in isolation and assert that the ambiguity of that term gives the FCC virtually carte blanche discretion. *See* FCC Pet. Br. at 27-28; AT&T Pet. Br. at 29; WorldCom Pet. Br. at 25-26. But even assuming that "cost" itself may have different meanings, this does not imply that the term imposes no constraints at all, and the rest of the words in the statutory directive preclude the FCC's choice of TELRIC. First, by mandating that UNE rates be "based on the cost . . . of *providing*" an element, Congress directed the FCC to choose a methodology that measures the costs that the ILEC — which is doing the providing — incurs in providing elements. TELRIC, by contrast, bases UNE prices on the costs that a hypothetical carrier would theoretically incur in providing the element's functions over an imaginary network that uses only the most efficient technology and network layout available at all times. *See, e.g.*, J.A. __ (Order ¶¶ 683-85). Since those hypothetical costs will never correspond to (and, indeed, will always be lower than) the costs that the ILEC incurs in providing the element, TELRIC does not produce a price "based on the cost . . . of providing" the UNE.

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[6] As the FCC has noted, the parenthetical term "determined without reference to a rate-of-return or other rate-based proceeding" does not "define the type of costs that may be considered, but rather specifies a type of proceeding that may not be employed." J.A. __ (Order ¶ 704).

Second, as the court of appeals concluded below, by linking UNE prices to the cost of providing "*the* . . . network element," the statute focuses on the *actual* element or functionality that will be provided. *See* Pet. App. 7a-9a.[7] If Congress had intended UNE rates to reflect the costs of a hypothetical UNE that might be provided by a nonexistent carrier in a market where prices instantly reflect the most efficient technology available, it could have, and would have, used language to that effect. But Congress did not do so, and the FCC is not empowered to treat the statute as though it had.

The legislative history of section 252(d)(1) confirms that Congress intended UNE prices to correspond to the costs of the providing ILEC, not the costs of a hypothetical competitor. The House bill specified a pricing standard "requir[ing] that the costs *that a carrier incurs* in offering . . . unbundled . . . elements . . . shall be borne by the users of such . . . elements." H.R. Rep. No. 104-204, at 4 (1995) (emphasis added). The Senate Report likewise noted that the UNE pricing provision (then enumerated section 251(d)) "provides that any charge determined by the State through arbitration or intervention shall be based on the cost of *that* unbundled element and may include a reasonable profit." S. Rep. No. 104-23, at 21 (1995) (emphasis added). This language reinforces the text of the statute: section 252(d)(1) ties rates for a given element to the costs not of some hypothetical alternative, but of *that* element, in the *actual context* in which the ILEC will provide it. TELRIC ignores this clear congressional mandate.

Congress's intention that UNE prices relate to an ILEC's costs is further corroborated by the terms that Congress used

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[7] This does not mean, as WorldCom suggests, that a unique price must be assigned to every individual switch or loop. *See* WorldCom Pet. Br. at 27-28. A regulator may choose to set a single average price for loops, or for loops within a particular geographic area, but that price must be based on the costs that the incumbent will incur in providing *its* loops.

elsewhere in section 252(d)(1). The statute directs that rates "may include a reasonable profit." Although this language gives regulators some discretion to decide whether or not to include a profit, they could not even *consider* the question unless the ratesetting mechanism took account of the ILEC's actual investments and expenditures. Time and again, courts, economists, and other authorities have construed the term "profit" to refer to the amount by which an entity's returns exceed its costs. *See, e.g., California Dental Ass'n v. FTC*, 526 U.S. 756, 767 n.6 (1999) ("[A]ccording to a generally accepted definition 'profit' means gain from business or investment over and above expenditures, or gain made on business or investment where both receipts or payments are taken into account.") (internal quotations omitted); Steven E. Landsburg, *Price Theory and Applications* 782 (3d ed. 1995) (defining "profit" as "[t]he amount by which revenue exceeds costs"); Black's Law Dictionary 1211 (6th ed. 1990) (defining profit as the "[g]ain realized from business or investment over and above expenditures"). Indeed, the FCC's order here acknowledges that, "in plain English, profit is defined as 'the excess of returns over expenditure in a transaction or series of transactions.'" J.A. __ (Order ¶ 699).[8]

By directing regulators to consider whether to include a "profit," Congress voiced its expectation that a UNE rate would be set based on an *ILEC*'s costs. TELRIC forecloses any potential for profit by setting UNE prices such that the ILEC has no chance to recoup its costs, even of *future* investments, except at a hypothetical instant at which every

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[8] The FCC attempted to reconcile this definition of profit with its TELRIC standard by stating conclusorily that "[p]ossible accounting losses from the sale of . . . unbundled network elements using a reasonable forward-looking cost-based methodology do not necessarily indicate that incumbent LECs are being denied a 'reasonable profit' under the statute." J.A. __ (Order ¶ 701). That assertion does not explain how a methodology that disregards everything about an incumbent's actual network can measure the incumbent's costs or, *a fortiori*, its return in excess of costs.

component of its facilities is the most efficient component available. *See, e.g.*, GTE Comments, Hausman Aff. ¶ 14. As discussed more fully below, *see* Part III, *infra*, that instant never will arrive in practice for any ILEC; and if it did, prices and costs would immediately diverge again as further technological advancements are reflected in lower UNE prices, even though neither the ILEC nor any competitor had implemented those advancements in its network.[9]

II. THE FCC'S METHODOLOGY IS NOT DEREGULATORY, CREATES ARTIFICIAL INCENTIVES, AND DISCOURAGES INVESTMENT, ALL IN DIRECT CONTRAVENTION OF THE ACT'S PURPOSES AND POLICY.

The FCC's TELRIC methodology also thwarts the Act's purposes and "frustrate[s] the policy that Congress sought to implement." *Securities Indus. Ass'n v. Board of Governors of the Fed. Reserve Sys.*, 468 U.S. 137, 143 (1984) (internal quotations omitted); *see also John Hancock Mut. Life Ins.*

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[9] The statute's requirement that UNE rates be "just and reasonable" further cements the link between UNE rates and the ILEC's costs. Federal courts, including this Court, routinely have held that, to be "just and reasonable," rates must at least "enable the company to operate successfully, to maintain its financial integrity, to attract capital, and to compensate its investors for the risks assumed." *FPC v. Hope Natural Gas Co.*, 320 U.S. 591, 605 (1944); *see also Wisconsin v. FPC*, 303 F.2d 380, 388 (D.C. Cir. 1962) ("It is established by tradition and by many court decisions that for a public utility, rendering service by use of fixed equipment, a just and reasonable rate is one which returns a fair profit upon the investment, or which supplies the utility with adequate revenues to command needed funds upon an economically reasonable basis."), *aff'd*, 373 U.S. 294 (1963). By choosing a methodology that ensures ILECs will never recover their costs, the FCC has violated the settled meaning of the requirement that UNE prices be "just and reasonable." *Neder v. United States*, 527 U.S. 1, 21 (1999) ("[W]here Congress uses terms that have accumulated settled meaning under the common law, a court must infer, unless the statute otherwise dictates, that Congress means to incorporate the established meaning of these terms.") (internal quotation marks omitted).

Co. v. Harris Trust & Sav. Bank, 510 U.S. 86, 94-95 (1993) (agency construction must be consistent with statute's "object and policy"). Congress intended to deregulate local telecommunications and rely on market forces to encourage all participants to invest and innovate. Rather than encourage the development of an actual competitive *process*, the FCC prescribed prices it guessed would prevail in a perfectly competitive market in a theoretical world. In so doing, the FCC abandoned the deregulatory goals of the Act in favor of just another form of regulation that distorts the marketplace by deterring investment and facilities-based competition.

Congress intended sections 251 and 252 to serve the Act's objective of fostering a competitive marketplace. Ultimately, the statute is *deregulatory* in nature: Congress's objective was to create a competitive marketplace so that market forces would drive decisions about entry, investment, and pricing. *See, e.g.*, Conf. Rep. at 113 (Act creates a "deregulatory national policy framework"); J.A. ___ (Order ¶ 3) (Act is "deregulatory"). As the order itself observes, by passing the Act, Congress intended to "look to the market, not to regulation, for the answer." *Id.* at __ (Order ¶ 12).

A critical part of Congress's deregulatory vision was to encourage investment in new facilities and technologies. As the FCC itself has recognized, a "fundamental goal of the Act is to promote investment and innovation by all participants in the telecommunications marketplace, and, in particular, to encourage rapid deployment of new telecommunications technologies." *UNE Remand Order*, 15 FCC Rcd at 3748, ¶ 110. Congress broadly mandated that "[t]he Commission and each State commission with regulatory jurisdiction over telecommunications services shall encourage the deployment on a reasonable and timely basis of advanced telecommunications capability to all Americans" and "take immediate action to accelerate deployment of such capability by removing barriers to infrastructure investment." 47 U.S.C. § 157 note.

Congress believed that such infrastructure investment would lead to facilities-based competition in the local telecommunications market. The premise of the Act is that local telephone service is not a natural monopoly and that facilities-based competition is therefore both possible and desirable. *See Iowa Utils Bd.*, 525 U.S. at 371; Conf. Rep. at 148 (endorsing view that "meaningful facilities-based competition is possible").[10] Indeed, facilities-based competition is clearly preferable to competition based on UNEs: "[C]ompetition [is] increased by encouraging [firms] to [develop rival facilities], rather than taking the easier and less competitive course of obtaining access to another's facilities." 3A Philip E. Areeda & Herbert Hovenkamp, *Antitrust Law* ¶ 773b2, at 203-04 (1996). As Justice Breyer observed, "[i]t is in the *un*shared, not in the shared, portions of the enterprise that meaningful competition would likely emerge." *Iowa Utils. Bd.*, 525 U.S. at 429 (Breyer, J., concurring in part and dissenting in part) (emphasis in original). Although the Act may not require the FCC to *favor* facilities-based competition over UNEs (and resale), at a minimum it requires that the FCC not erect artificial disincentives to that strategy. J.A. __ (Order ¶ 12) ("Section 251 neither explicitly nor implicitly expresses a preference for one particular entry strategy.").

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[10] *See also* Conf. Rep. at 1 (passage of the Act would "accelerate rapidly private sector deployment of advanced telecommunications and information technologies"); *Communications Law Reform: Hearings Before the Subcomm. on Telecommunications and Finance of the House Comm. on Commerce*, 104th Cong. 9 (1995) (the Act "rightly stresses a need for facilities-based competitors to lead the way in providing a true alternative to today's monopoly in the local exchange service. In fact, it is no exaggeration to say that the entire bill is premised on the existence of robust facilities-based competitors.") (statement of Rep. Schaefer); 141 Cong. Rec. 22,040 (1995) (the Act is intended to "give[] new entrants the incentive to build their own local facilities-based networks, rather than simply repackaging and reselling the local services of the local telephone company") (statement of Rep. Goodlatte).

A. The FCC's Order Distorts Entry and Investment Incentives by Relying on Regulation Rather than the Marketplace.

The FCC's order defeats Congress's goal of fostering a deregulated competitive marketplace in which entry and investment decisions are based on market signals. Instead, the order uses regulation to *simulate* a theoretically perfect market through regulation — that is, it prescribes rates at levels that the agency theorized would prevail in a nonexistent, perfectly competitive market without regard to whether its actions would encourage or impede the development of a competitive process. J.A. __ (Order ¶ 679). As Justice Breyer explained in *Iowa Utilities Board*, such an approach — far from deregulatory — simply substitutes one form of regulation for another: "[t]he competition that the Act seeks is a process, not an end result; and a regulatory system that imposes through administrative mandate a set of prices that tries to mimic those that competition would have set does not thereby become any less a regulatory process, nor any the more a competitive one."[11] *Iowa Utils. Bd.*, 525 U.S. at 424

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[11] The FCC itself recognized this very distinction in an order released less than a year after the order at issue here. The agency rejected calls by carriers such as AT&T and WorldCom to prescribe the level of access charges (charges paid by long distance carriers to LECs to originate and terminate long distance calls) on the basis of forward-looking costs:

> We decide that adopting a primarily market-based approach to reforming access charges will better serve the public interest than attempting immediately to prescribe new rates for all interstate access services based on the long-run incremental cost or forward-looking incremental cost of interstate access services. Competitive markets are superior mechanisms for protecting consumers by ensuring that goods and services are provided to consumers in the most efficient manner possible and at prices that reflect the cost of production. . . . In addition, using a market-based approach should minimize the potential that regulation will create and maintain distortions in the

(Breyer, J., concurring in part and dissenting in part). Indeed, because the FCC's TELRIC methodology discourages investment in network facilities, *see infra* Part II.B, its methodology actually is a barrier to the development of a real competitive marketplace.

In setting UNE prices based on the assumption of a theoretically perfect market, the FCC committed much the same error that infected its determination that the statutory "impair" test was met by any increase in cost. *See* J.A. __ (Order ¶ 285). As this Court explained in reversing that determination, "[i]n a world of perfect competition, in which all carriers are providing their service at marginal cost, the Commission's total equating of increased cost . . . with 'necessity' and 'impairment' might be reasonable; *but it has not established the existence of such an ideal world.*" *Iowa Utils. Bd.*, 525 U.S. at 390 (emphasis added). Likewise here, although UNE prices might tend toward some measure of incremental costs *in a world of perfect competition*, that is not this world. *See* James C. Bonbright, Albert L. Danielsen & David R. Kamerschen, *Principles of Public Utility Rates* 146 (2d ed. 1988) ("*Public Utility Rates*") ("[T]he concept of perfect competition makes no sense whatsoever" as a pricing standard.).

Finally, the FCC's methodology makes a nullity of the voluntary negotiation provisions of the Act. The statute allows carriers to engage in good-faith, private negotiations "without regard" to the Act's requirements, including the provision concerning pricing of UNEs. 47 U.S.C. §§ 251(c)(1), 252(a)(1), 252(e)(2)(A). Only if the parties cannot reach agreement may regulators set UNE prices. *See id.* § 252(b). But negotiations over UNE rates under these

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investment decisions of competitors as they enter local telecommunications markets.

Access Charge Reform, First Report and Order, 12 FCC Rcd 15,982, 16,094, ¶ 263 (rel. May 16, 1997).

provisions are meaningless where the default price is set based on a hypothetical, idealized network and below any real-world price, as TELRIC mandates.

B. The Order Creates Disincentives to Investment by Both CLECs and ILECs.

The FCC's attempt to simulate a perfectly competitive market rather than foster an actual competitive process distorts market signals and suppresses the level of investment and innovation by ILECs and CLECs alike in direct contravention of Congress's intent.

1. In the case of CLECs, TELRIC discourages investment in at least three ways:

First, the methodology reduces the incentive of CLECs to invest, because, no matter how efficient, they by definition will never be able to invest at costs lower than the idealized TELRIC price for UNEs. Indeed, the order makes explicit that UNE prices should never exceed and "in most cases" will be below "the forward-looking cost that an efficient entrant would incur in providing a given element." J.A. __ (Order ¶ 698); *see also* Alfred E. Kahn, *Letting Go: Deregulating the Process of Deregulation* 101 (1998) ("*Letting Go*") ("What is the point of a CLEC constructing its own facilities if it can lease or purchase them from the incumbent companies at the theoretically estimated *minimum* cost (let alone below that cost [as under TELRIC]) that would be incurred by a new entrant building from the ground up?").

The FCC's order gives CLECs the pricing benefits of cost-saving innovations where those innovations have not been implemented and costs have not actually declined. This mismatch between prices and costs distorts market signals and creates *disincentives* to the investment in facilities that actually would drive costs down to an efficient level:

> The economic purpose of prices set at incremental cost is to inform buyers — and make them pay —

> the cost that society will *actually* incur if they purchase more or would *actually* save if they reduced their purchases, entirely or partially. These can only be the costs of the supplier whose prices are being set, not some hypothetical ideal producer. Moreover, such prices give challengers the proper target at which to shoot — the proper standard to meet or beat and the proper reward if they succeed. If they can achieve costs lower than that, they will enter and *in the process* (which the FCC's pricing rules would omnisciently short-circuit) beat prices down to efficient levels. In contrast, TELRIC-based charges — if the FCC's apparent expectation that such rates would be lower than rates based on telephone companies' actual costs is correct — would actually discourage competitors coming in and building their own facilities . . . .

Alfred E. Kahn, Timothy Tardiff & Dennis L. Weisman, *The Telecommunications Act at three years: an economic evaluation of its implementation by the Federal Communications Commission*, 11 Info. Econ. & Pol'y 319, 330 (1999) ("*Economic Evaluation*") (emphasis in original).[12]

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[12] This same mismatch of prices and costs explains the infirmity of petitioners' suggestion that failure to price elements at TELRIC will permit incumbents to engage in a "price squeeze." *See* WorldCom Pet. Br. at 11, 40; AT&T Pet. Br. at 18, 32. According to petitioners, if CLECs must buy UNEs at prices above TELRIC, they will have to price their services above TELRIC prices in order to recover their full costs. In the meantime, petitioners posit, incumbents will price their services at TELRIC and therefore will be able to squeeze the CLECs out of the market. *See* WorldCom Pet. Br. at 11. But this argument assumes that carriers are operating in a perfectly competitive market in which prices are at marginal costs and that the incumbent or some other seller is an ideally efficient carrier whose costs actually equal TELRIC. Of course, that is not the case. As long as the CLEC obtains an element from the ILEC at or below the ILEC's costs (as opposed to the TELRIC costs of a hypothetical competitor), there is no possibility of a price squeeze: both the CLEC and the ILEC must recover the same costs for that element in the retail

The order's uncoupling of UNE prices from costs is evident also in its faulty analysis of a CLEC's entry decision. The FCC states that its methodology focuses on "factors relevant to any carrier's present choices in a competitive market with respect to entry, expansion, and pricing." FCC Pet. Br. at 21. The agency observes that, all other things being equal, if a more efficient and less costly facility is available as a substitute for an incumbent's element, a rational entrant will not pay more than the cost of that substitute facility for the element. *See id.* at 22-23, 29. But the FCC follows with a non sequitur: that the price for the incumbent's less efficient element should be set at the cost of the more efficient substitute, since that is all a rational entrant would pay. Of course, if in fact a more efficient alternative facility is available, CLEC investment in that facility — and not purchase of the less efficient incumbent UNE at an artificially low price — will promote the development of competition. The FCC's methodology, however, strongly discourages such an investment from being made.

Second, TELRIC deters investment in facilities because investing in current technology exposes a CLEC to the very real risk that the mere availability of a still newer technology will instantaneously be reflected in the incumbent's UNE prices and put its own facilities at a competitive disadvantage as compared to CLECs relying on UNEs. To the extent that a CLEC does consider investing to install even today's most efficient technology, the CLEC (like the incumbent) will realize that it would be unable to recoup the investment, because the prices of the incumbent's UNEs would immedi-

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price for the service. Indeed, if anything, TELRIC pricing puts *ILECs* in a price squeeze. Because a CLEC can obtain an element (or indeed, under the FCC's order, all the elements needed to provide a service) at the costs that would be incurred by an ideally efficient competitor, the CLEC can price below the costs of the ILEC, who — as petitioners insist, *see* FCC Pet. Br. at 28-29; AT&T Pet. Br. at 4, 18, 19, 33 — is not ideally efficient.

ately reflect tomorrow's further innovations, even if nobody had invested to install them. Of course, a competitor in a capital-intensive market with rapidly evolving technologies and declining costs always must weigh the risk of obsolescence against the potential gain in efficiency that investing in the current technology may bring. But, under TELRIC, CLECs can gain the benefit while entirely avoiding the risk of obsolescence by relying on UNEs and the automatic reduction of UNE prices to reflect every technological advance. In so doing, the CLEC purchasing UNEs will obtain an artificial regulatory advantage over a CLEC that invests in its own facilities.

Third, TELRIC pricing discourages CLEC investment because it artificially expands the list of UNEs to encompass facilities the CLEC could self-provision or obtain from third parties at costs that, while above TELRIC, are lower than the incumbent's costs. As originally written, the FCC's order deemed the statutory "impair" test to be satisfied by *any* increase in cost that the CLEC would incur if it did not have access to the element in question. J.A. __ (¶ 285). Not surprisingly, having defined the price of a element to be equal to the cost that a hypothetical, ideally efficient carrier would incur, the FCC found this test to be satisfied by every element it examined. In *Iowa Utilities Board*, this Court held that the FCC's interpretation drained the "impair" test of any substance and accordingly directed the FCC to impose a rational limiting standard. 525 U.S. at 387-91. On remand, the FCC has indicated that the impair test is met when there is a "material" difference in cost. *See UNE Remand Order* at 3725, ¶ 51. Whatever that may mean, it is clear that, because UNEs are priced at the incremental cost of an ideally efficient competitor, self-provisioning (or obtaining elements from third parties) will be "materially" more costly than unbundling even in situations where the CLEC could build or

obtain an element more efficiently than the ILEC.[13] And once that element is made available for unbundling, the CLEC will have little incentive to self-provision instead of leasing the element from the incumbent at the cost of an ideally efficient carrier it could not hope to outcompete.[14]

2. TELRIC pricing also undercuts *incumbents'* incentives to invest and innovate. As two prominent economists have explained, "[u]nder the FCC's TELRIC price regulation, if a new service is successful, a competitor can buy the service at its total . . . long-run incremental cost . . . . For a successful new service, the ILEC recovers at most its cost. For unsuccessful services, the ILEC recovers nothing and loses its sunk investment." Jerry A. Hausman & J. Gregory Sidak, *A Consumer-Welfare Approach to the Mandatory Unbundling of Telecommunications Networks*, 109 Yale L.J. 417, 459-60 (1999). As a result, "the expected return to the ILEC [for research and development costs] would always be negative," and "regulation would completely eliminate the economic incentive to provide the new service." *Id.*; *see also Iowa Utils. Bd.*, 525 U.S. at 429 (Breyer, J., concurring in part and dissenting in part) ("Nor can one guarantee that firms will undertake the investment necessary to produce complex technological innovations knowing that any com-

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13 Indeed, with one exception, the FCC required unbundling of all the same elements as in its original order and then *expanded* the list to include additional elements. *See UNE Remand Order*, 15 FCC Rcd 3696 (rel. Nov. 5, 1999), *review pending*, *United States Telecom Ass'n v. FCC*, Nos. 00-1015 & 00-1025 (D.C. Cir.).

14 Of course, some CLECs have made substantial investments in facilities. But, as facilities-based CLECs told the FCC on remand from this Court, the FCC's unbundling rules, including TELRIC, suppress the amount of such investments. *See, e.g.*, Cox Communications Comments at 3, CC Dkt. No. 96-98 (May 26, 1999) ("A regulatory regime that fosters the broad availability of incrementally priced UNEs discourages competing carriers from building their own networks and leaves them dependent over the long term on the ILECs, to the detriment of the public interest.").

petitive advantage deriving from those innovations will be dissipated by the sharing requirement."); *Economic Evaluation* at 347-49 ("The notion that the ILECs are likely . . . to engage in . . . risky investments under a regulatory regime that requires them immediately to share those facilities with their competitors . . . at prices based on the FCC's efficient-firm cost standards is, quite simply, ludicrous.").[15]

In the end, even the FCC acknowledged the perverse investment incentives created by UNE prices based on a hypothetical, ideally efficient network. It conceded that such prices "discourage facilities-based competition by new entrants because new entrants can use the incumbent LEC's existing network based on the cost of a hypothetical least-cost, most efficient network" and therefore have little incentive to build their own facilities. J.A. __ (Order ¶ 683). The FCC's "solution" was to make a single bow toward reality by adjusting its methodology so that the locations of incumbent's wire centers would be held constant. *See id.* __ (Order ¶ 685). This, the FCC said, will give CLECs an incentive to invest in facilities when and if they can use more efficient wire center locations. *See id.*

But the FCC failed to recognize the significance of this concession. It offered no explanation as to why it makes sense to encourage a CLEC to invest when it can choose a more efficient switch location than the ILEC, but not when it can be more efficient than the ILEC in any other way, whether by using a newer technology or by locating parts of

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[15] To be sure, incumbents may not be required to unbundle "proprietary" elements unless the FCC finds access to such elements to be "necessary." 47 U.S.C. § 251(d)(2). However, many innovations and investments are not "proprietary" and, in any event, the FCC has already indicated an intention to override the statutory "necessary" standard whenever it decides (based on entirely unspecified criteria) "that the incumbent LEC's asserted proprietary interest is outweighed by the benefits of facilitating more rapid deployment of competition for the greatest number of consumers." *UNE Remand Order* at 3718-19, ¶ 37.

its network other than switches more efficiently than the ILEC. In point of fact, if a CLEC can build or locate any network element more efficiently than the competing ILEC has done, costs are reduced when the CLEC invests in that element rather than continuing to rely on the less efficient and more costly (even if favorably *priced*) ILEC element.

In sum, the FCC's rule requiring UNE prices to be based on the cost of a hypothetical, ideally efficient network cannot be reconciled with the Act, because the rule contravenes Congress's goals of creating a deregulated competitive marketplace and encouraging investment in facilities by CLECs and ILECs alike. Accordingly, the court of appeals' decision to vacate the rule should be affirmed.

III. THE FCC'S METHODOLOGY IS ARBITRARY AND CAPRICIOUS ON ITS OWN TERMS BECAUSE IT IS BASED ON ERRONEOUS ASSUMPTIONS THAT DO NOT REFLECT HOW REAL-WORLD MARKETS OPERATE.

The FCC's TELRIC methodology is unlawful also because, although it purports to simulate the results of a competitive market, TELRIC relies on unsupported and inaccurate assumptions that fail to mimic how a real-world competitive market operates. The FCC's TELRIC methodology assumes that, (1) as soon as a new cost-saving technology becomes available, (2) a carrier will immediately install that technology throughout its service region without regard to its previously installed facilities, and (3) immediately reduce its prices completely to its new lower incremental costs. None of these assumptions holds in a competitive market, particularly in one such as telecommunications that is capital intensive and characterized by rapid technological change and declining costs. By basing UNE prices on these flawed assumptions, the FCC's methodology ensures that the incumbent will forever be required to charge less than it invested in its facilities and never will recover the costs of even new (let alone historical) investments. *See, e.g.*, GTE Comments,

Hausman Aff. ¶ 14 n.4 ("[I]mprovements in technology will *always* guarantee that a totally new, hypothetical, network will have a theoretical lower cost than the actual network in place . . . . Thus, basing cost on the current most efficient technology will impart a downward bias on estimates of actual network costs, causing an economic loss to the LECs . . . .").

"Available" Technologies. Requiring UNE prices to be based on the most efficient technology that is "currently available," as TELRIC does, 47 C.F.R. § 51.505(b)(1), is contrary to how prices are set in a competitive market. The mere availability of a new technology, whether in a lab or even in the channels of commerce, is not sufficient to drive prices down in a real-world competitive marketplace. *See* J. Gregory Sidak & Daniel F. Spulber, *Givings, Takings and the Fallacy of Forward-Looking Costs*, 72 N.Y.U. L.J. 1068, 1142 (1997). Rather, a new technology affects prices only if at least one competitor has installed it (or certainly will do so in the near future) in sufficient quantities to supply a significant portion of the relevant market. Even AT&T's expert has grudgingly conceded that "in a competitive market the availability of a small amount of less-costly improved equipment does not immediately lead to an equivalent reduction in the affected prices" and that the FCC's TELRIC methodology therefore may require some "readjustment." William J. Baumol & Thomas W. Merrill, *Does the Constitution Require that We Kill the Competitive Goose? Pricing Local Phone Services to Rivals*, 73 N.Y.U. L. Rev. 1122, 1147 (1998); *see also* GTE Comments, Hausman Aff. ¶ 14 n.4 ("In a competitive market, a potential entrant could choose a new technology, but if the potential entrant decides not to enter, the hypothetical costs do not enter the pricing decisions," notwithstanding the availability of the new technology).

Ubiquitous and Immediate Deployment. The FCC's methodology also fails to reflect real-world markets because it bases, and lowers, UNE prices on the erroneous assump-

tion that carriers operate in a perpetual greenfield. No carrier instantaneously installs a new network whenever a cost-saving innovation appears, as though it had no investment in existing facilities. Rather, even when a carrier decides to invest in a new technology, it generally does so incrementally, not ubiquitously throughout its network. For example, a carrier may use a new, more efficient loop technology first to extend service to a new neighborhood or development. But to assume (as the FCC's methodology does) that the carrier will simultaneously replace all existing loops in its network with the new technology belies reality. As Professor Kahn explains, TELRIC

> assume[s] in effect that the 'efficient firm' simply takes over the current volume of sales of the incumbent, sizing its plant to serve that demand at minimum cost. This assumption ignores the fact that many telecommunications assets are long-lived and that capacity is not deployed all at once, overnight, but expands incrementally to serve growing and changing demand. Ignoring the dynamic character of this process inherently understates the minimum costs of serving demand as it materializes in the real world, over time.

Economic Evaluation at 333-34; *see also* Baumol & Merrill, 73 N.Y.U. L. Rev. at 1147.

Firms systematically practice what economists term "anticipatory retardation." Rather than building a network from scratch to incorporate the newest technology the moment it becomes available, a firm invests in a new technology only when and where the cost of that technology is sufficiently below current prices that the firm can expect to earn a return on its investment in new assets over their economic lives. *See, e.g.*, *Economic Evaluation* at 326. As a result, each carrier has capital plant of several vintages, with each vintage becoming outmoded over time as technological innovations permit lower costs. When the cost differential becomes suf-

ficiently great to justify making the investment needed to install a new technology in a particular location, the carrier does so and thereby achieves a cost advantage over other carriers whose plants have vintages that are in varying degrees less efficient than the new one.

Because no real-world carrier instantaneously installs a new technology throughout its network, the FCC's assumption of ubiquity artificially lowers UNE prices. Under the agency's methodology, each time the network is reconstructed to calculate UNE prices, the facilities hypothetically deployed have the perfect amount of capacity and are in the ideal locations given current and reasonably foreseeable demand. In the real world, of course, even efficient carriers do not have the benefit of such hindsight. They must project at the outset how much capacity they will need and where; then, if demand grows, they must increase capacity by, for example, adding modules to an existing switch — typically less efficient than buying a switch perfectly sized for the new output. *See* Bell Atlantic Reply Comments, Epstein Decl. ¶ 15 (TELRIC "imagines that in a competitive industry an efficient firm makes all the correct decisions on cost and design for the optimal network the first time out of the box, and has perfect foresight of how technology will develop. Stated in this form, the proposal offers a parody and not a description of a competitive industry.").

Moreover, the FCC's methodology posits a "bulk purchase" of the new facilities, when in fact carriers are likely to buy and install a new technology in much smaller increments with correspondingly higher costs (since they will not benefit from the same volume discounts). Finally, even when a new technology is installed, it lowers costs only in the particular location where the installation occurs. The airline industry illustrates this phenomenon. If a more efficient airline begins service on a route – say, from Richmond to Atlanta – and charges fares based on its lower costs, competitors may be forced to meet that reduced fare *on their Richmond to Atlanta*

flights. They are *not,* however, forced to match that fare throughout the rest of the country. Similarly, even in a fully competitive telecommunications market, if a carrier rolls out a new technology in a particular area, prices may begin to drop *in that area* (though, as discussed below, they will not fall to LRIC immediately), but not, as the FCC's TELRIC methodology assumes, everywhere at once.

Instantaneous Price Reduction. The FCC's methodology also erroneously assumes, again without explanation, the existence of a theoretically perfect market in which prices *immediately* reflect the full cost savings of a carrier's investment in a new lower-cost technology. But the opposite is true. A key incentive to install a new technology is to achieve a temporary cost advantage over competitors. *See, e.g., Economic Evaluation* at 348-49. As long as that cost advantage persists, the investing carrier can price sufficiently above its newly lowered costs to recoup its investment. When another carrier invests in a still newer and lower cost technology, the first carrier's cost advantage dissipates, and the second carrier achieves a cost advantage for a period of time (again pricing somewhere between the first carrier's costs and its own). *See, e.g.,* U S WEST Comments, Harris & Yao Aff. at 19, CC Dkt. No. 96-98 (May 16, 1996) ("[W]hat often occurs in competitive industries is that a production facility makes above average profits during its early years of operation, which decline over time until the firm is forced to upgrade or close down the production facility."). As this cycle of leapfrogging investment goes forward, each carrier has an opportunity to recoup its investments by pricing *above* its incremental costs, and thus has an incentive to invest. *See, e.g.,* William J. Baumol, Janusz A. Ordover, & Robert D. Willig, *Parity Pricing and Its Critics: A Necessary Condition for Efficiency in the Provision of Bottleneck Services to Competitors,* 14 Yale J. Reg. 145, 160 (1997) ("[F]or each firm in a competitive market, the market price will cover the incremental cost of its product, a competitive return on the cost outlay, and *a bonus exactly equal to any*

relative cost savings that the efficiency of the firm permits it to contribute." (emphasis added)); *see also Public Utility Rates* at 154-55.[16]

This cycle will tend to drive prices down over time in response to cost-reducing innovations, but prices will not, as the FCC's methodology assumes, continuously drop all the way to the costs of the most efficient installed technology, particularly in an industry marked by rapid innovation cycles. To the contrary, the ability to price above cost is a key inducement to innovation and investment: Just as patent and intellectual property laws recognize that exclusive rights in

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[16] To be sure, part of the return above incremental costs may represent recovery of joint and common costs not attributable to a particular service or element; and the FCC purports to permit states to make some provision for those costs. *See* J.A. __ (Order ¶¶ 672, 676, 682, 696). However, the recovery of such costs does not meet the need for some above-cost return to recoup an investment in new technology. Indeed, the FCC has asserted that joint and common costs in the case of unbundled elements (as distinguished from services) will be quite small. *See id.* at __ (Order ¶¶ 678, 695).

Moreover, the Order falls far short of ensuring that incumbents can recover joint and common costs. For example, it expressly forbids states to use so-called Ramsey pricing to allocate joint and common costs, under which costs are allocated in inverse proportion to demand elasticity so as to maximize the chance for recovery. *See id.* at __ (Order ¶¶ 645, 696). Economists generally accept the efficiency of Ramsey pricing, *see Iowa Utils. Bd.*, 525 U.S. at 426-27 (Breyer, J., concurring in part and dissenting in part); yet the FCC rejected it out of hand, J.A. __ (Order ¶ 696). Indeed, even the Interstate Commerce Commission Coal Rate Guidelines, which the FCC holds up as a model, relied on the principle of Ramsey pricing. *Coal Rate Guidelines, Nationwide*, 1 I.C.C.2d 520, 526-27 (1985), *aff'd sub nom., Consolidated Rail Corp. v. United States*, 812 F.2d 1444 (3d Cir. 1987). Here, by contrast, the FCC actually approved the use of "reverse Ramsey pricing" for recovery of joint and common costs, which is both inefficient and almost certain not to permit full recovery. *See* J.A. __ (Order ¶ 696); J. Gregory Sidak & Daniel F. Spulber, *The Tragedy of the Telecommons: Government Pricing of Unbundled Network Elements under the Telecommunications Act of 1996*, 97 Colum. L. Rev. 1081, 1109-10 (1997).

an innovation for a period of time are a necessary inducement for innovation, the market rewards innovation by giving an innovator the opportunity to price above its costs to make a return on the innovation:

> If prices did not adjust gradually, there would be no incentive to engage in research and development or to invest in costly manufacturing to introduce any generation of products bearing new technology. . . . [B]ecause of lags, companies earn a return on the current technology in the interim period before the new technology becomes available; after the new technology is introduced, the development cycle continues. To imagine that prices fall immediately as a new technology is spotted over the horizon would be to eliminate any incentives for R&D and investment in production.

Sidak & Spulber, 72 N.Y.U. L.J. at 1142; *see also Economic Evaluation* at 348.

In short, at least in a market such as telecommunications that is characterized by successive cost-reducing innovations, incremental costs drop iteratively, and prices lag behind. As a result, the FCC's supposition that prices always and instantaneously equal incremental costs in a competitive market is simply wrong. *See* Joseph A. Schumpeter, *Capitalism, Socialism and Democracy* 105 (3d ed. 1950) ("The introduction of new methods of production and new commodities is hardly conceivable with perfect — and perfectly prompt — competition from the start. And this means that the bulk of what we call economic progress is incompatible with it. As a matter of fact, perfect competition is and always has been temporarily suspended whenever anything new is being introduced . . . even in otherwise perfectly competitive conditions.").

At least one petitioner suggests that the FCC's model does not in practice assume that prices will instantly reflect

cost-saving technologies because interconnection contracts typically have three-year terms and so lock in prices for that period. *See* WorldCom Pet. Br. at 39. But this hardly corrects for the FCC's error. First, as noted, the FCC's methodology erroneously assumes that ILECs have incorporated the most efficient available technologies ubiquitously at the time the TELRIC methodology is employed. Second, an incumbent contracts with multiple CLECs at different times, and, under the FCC's methodology, the incumbent's network must be (figuratively) rebuilt every time. When this is coupled with the FCC's "pick and choose" rule, under which a CLEC can always opt into the favorable terms of another CLEC's subsequent interconnection agreement, *see* 47 C.F.R. § 51.809, the result is that technologies and prices are not locked in for the three-year term. Finally, even if TELRIC were applied only once every three years, it would still belie competitive reality, since no ILEC builds from a greenfield every three years.

The lack of connection between TELRIC and the operation of an actual market is further confirmed by the FCC's inability to point to any other instance in which a regulator has used the FCC's TELRIC methodology in similar circumstances — that is, to set prices in an environment marked by technological change in which the regulatory goal is not to *simulate* competition, but to *stimulate* competition by giving proper signals for investment. Petitioners note that incremental cost methodologies have been used by courts to set a price *floor* below which a price is deemed to be predatory for antitrust purposes. *See* AT&T Pet. Br. at 8, 29-30 (citing *MCI Communications Corp. v. AT&T*, 708 F.2d 1081, 1115-17, 1124-25 (7th Cir. 1983)); *see also* FCC Pet. Br. at 22. That makes perfect sense: a vendor would have little reason — other than predation — to price *below* its long run incremental costs, at least in a market (such as telecommunications) where incremental costs are generally decreasing. But to say that some measure of incremental cost represents a *floor* beneath which a party should not price does not justify

the use of incremental costs as a regulatory price *ceiling*.[17] Indeed, implicit in making LRIC a price floor is the recognition that in most situations competitors actually price *above* LRIC. As these cases recognize, when a party prices above LRIC, that creates an opportunity for a more efficient competitor to enter and undercut the incumbent. *See, e.g.*, *MCI Corp.*, 708 F.2d at 1120. By mandating that UNE prices always be equal to TELRIC, the FCC creates a disincentive for such entry.

Petitioners also rely on a single instance in which the Interstate Commerce Commission used a LRIC-type methodology to set rates that could be charged to captive shippers for carrying coal by rail. *See* FCC Brief at 24 & n.9 (citing Ex Parte No. 347 (Sub-No. 1) *Coal Rate Guidelines, Nationwide*, 1 I.C.C.2d 520, 542-46 (1985), *aff'd sub nom. Consolidated Rail Corp. v. United States*, 812 F.2d 1444, 1451, 1457 (3d Cir. 1987)). That situation was critically different. In that proceeding, the shippers were captive and the regulatory goal was *not* to increase competition so that the shipper would have multiple choices. With competition unavailable, the second best solution was for the regulator to attempt to predict the price that the end user shipper would have to pay if the market were competitive. Here, by contrast, Congress's goal was to send appropriate market signals to encourage investment and entry by other carriers, so that no end user will be a captive and market forces will determine prices. Setting a price based on the hypothesized outcome in a perfectly competitive market with an ideally efficient car-

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[17] Petitioners' reliance on predatory pricing cases is misleading in another respect: far from reflecting a consensus in support of a methodology similar to the FCC's, predatory pricing cases and literature are rife with conflicting views on the appropriate measure of costs for establishing a price floor. *See, e.g.*, *Barry Wright Corp. v. ITT Grinnell Corp.*, 724 F.2d 227, 231-32 (1st Cir. 1983); Phillip Areeda & Donald F. Turner, *Predatory Pricing and Related Practices Under Section 2 of the Sherman Act*, 88 Harv. L. Rev. 697 (1975).

rier is fundamentally contrary to that statutory purpose. Instead — as Congress prescribed — prices should be based on the incumbent's actual costs, so that others will enter the market and invest in facilities to the extent they can do so more efficiently.[18]

IV. THE ACT PERMITS THE FCC TO IMPLEMENT OTHER FORWARD-LOOKING METHODOLOGIES MORE CONSISTENT WITH THE STATUTORY PURPOSES.

The FCC and its supporters are simply wrong when they portray the agency as having a very limited number of extreme choices in setting UNE prices. In point of fact, the agency could have chosen a variety of pricing methodologies that were consistent with the Act. As Verizon argues, pricing on the basis of historical costs would satisfy the terms of the

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[18] LRIC-type methodologies have sometimes been used in the electricity industry. *See, e.g.*, *Norwood v. FERC*, 962 F.2d 20, 21 (D.C. Cir. 1992); *Central Lincoln Peoples' Util. Dist. v. Johnson*, 735 F.2d 1101, 1116 (9th Cir. 1984); J. Robert Malko & Philip R. Swensen, *Pricing and the Electric Utility Industry* in *Public Utility Regulation: The Economic and Social Control of Industry* at 35-77 (1989). There, however, long run incremental costs generally are *increasing*. *See, e.g.*, *Norwood*, 962 F.2d at 22; *Central Lincoln*, 735 F.2d at 1121-22. Thus, basing prices on a long run incremental cost methodology actually yields *greater* compensation to incumbents so that they can continue to invest and operate over the long run. The FCC and its allies suggest that it is unknown whether an ILEC's long run incremental costs will be higher or lower than its historic costs (that is, whether long run incremental costs are increasing or decreasing). *See, e.g.*, J.A. __ (Order ¶ 705); Sprint Pet. Br. at 17. That is disingenuous at best. The FCC itself acknowledged in its order that historical costs are generally higher, as did commenters such as MCI; and petitioners' briefs are replete with assertions about the rapid pace of technological change in this industry. *See* J.A. __ (Order ¶ 706); MCI Comments at 63, CC Dkt. No. 96-98 (May 16, 1996); AT&T Pet. Br. at 4, FCC Pet. Br. at 20. The lineup of the parties in this case leaves no doubt on this issue: CLECs would not be arguing for LRIC (and incumbents for historic costs) if they really thought historic costs were lower than LRIC.

statute. *See* Verizon Pet. Br. at 19-23. Moreover, contrary to the FCC's assertion that any attempt to measure an incumbent's own forward-looking costs amounts to an embedded cost methodology, *see* J.A. __ (Order ¶ 684), the Act gives the agency discretion to consider other, more forward-looking techniques that avoid the infirmities of TELRIC.

As an initial matter, petitioners are wrong when they suggest that forward-looking costs must be either "long term," reflecting the time horizon at which all costs are variable, or "short term," taking all existing plant as fixed and including only variable costs, but nothing in between. J.A. __ (Order ¶¶ 683-84); AT&T Pet. Br. at 17, 37-40; WorldCom Pet. Br. at 17. "Long term" and "short term" in this context are nothing more than the two ends of a continuum. *See* Alfred E. Kahn, *The Economics of Regulation: Principles and Institutions* 83-86 (1988). As economists recognize, "[i]n between these extreme cases, the very short and the very long run, there are all sorts of intermediate time periods in which the firm can make partial adjustments" so that some, but not all, costs that are fixed in the extreme short run become variable. William J. Baumol, *Economic Theory and Operations Analysis* 290 (4th ed. 1977); *see also Public Utility Rates* at 146-47, 423-24 ("[T]here is no point in assuming a greater degree of foresight than intelligent people can hope to enjoy at the time" of setting prices.).

The FCC could have calculated forward-looking costs over such an intermediate horizon (such as the three-or-four-year term of a typical arbitration agreement) and then included appropriate levels of fixed costs for any existing facilities that would remain in place during that time period and would be used to provide the element in question. *See, e.g.*, *Public Utility Rates* at 423 (forward-looking incremental costs should be measured over "the next several years, from increases in rates of output to be accomplished by whatever plant additions and improvements will be warranted in view of the actual layout and actual capacity of the present plant").

In this manner, the UNE price would reflect the efficiency improvements and new technologies that the ILEC could expect to have in place and benefit from during the relevant future period; at the same time, the price would reflect the actual operational and depreciation expenses of the other facilities that would be used to provide the element. This would ensure that CLECs do not operate at a competitive disadvantage vis-a-vis the ILEC and would send appropriate economic signals: if a CLEC could provide the element more efficiently than the ILEC (taking into account the expected efficiency gains the ILEC would achieve during the term of the agreement on a forward-looking basis), the CLEC would have the proper incentive to invest in its own facilities.

The FCC also could have avoided at least some of the distorting effect of its methodology if it had truly relied on a Total *Element* LRIC approach, rather than what amounts to a Total *Network* LRIC methodology. In other words, when pricing an element, the relevant increment could be the total supply of the element in question, with the remainder of the network held constant, in the same way that the FCC held wire center locations, but nothing else, constant. This would, for example, recognize the reality that any existing service provider looking to invest in a new facility must take account of constraints imposed by its other facilities.[19]

The FCC could have chosen the efficient component pricing rule ("ECPR") methodology advocated by numerous economists. *See, e.g.*, Sidak & Spulber, 97 Colum. L. Rev. at 1093-99; Baumol, Ordover, & Willig, 14 Yale J. Reg. at 149-54. This forward-looking methodology is competitively neu-

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[19] Consider, for example, a person considering the purchase of a word processing program. Suppose Word 8.0 is the most cost-efficient program in an abstract sense but requires Windows 2000 to operate, while Word 6.0 is less efficient but works with Windows 95. If the person has a computer with Windows 95 and will not replace it within the relevant time frame, the forward-looking cost for word processing should be the cost of Word 6.0.

tral and recognizes the economic reality that, in a real-world competitive market, the price for which a facility would be leased is based not only on its incremental costs but also on foregone opportunity costs. As Justice Breyer noted, "[t]he FCC rejected that system, but in doing so it did not claim, nor did its reasoning support the claim, that the use of such a system would be arbitrary or unreasonable." *Iowa Utils. Bd.*, 525 U.S. at 426 (concurring in part and dissenting in part); *see also* Sidak & Spulber, 97 Colum. L. Rev. at 1094-97 (explaining errors in FCC's discussion of ECPR).

The FCC also could have used a price cap model, as it and other agencies have done in other contexts. UNE prices would be based initially on historical costs or current prices but then reduced over time by an appropriate factor reflecting general improvements in productivity. *See Letting Go* at 95-96. Such an approach would give incumbents the incentive to innovate and invest, while at the same time giving CLECs reason to invest in their own facilities whenever they could provide the same element more efficiently than the incumbent (taking into account the reduction in price resulting from the productivity factor).

Neither the Act nor the court of appeals' decision requires the FCC to adopt any particular one of these or other possible approaches. Consideration of the alternatives is for the agency in the first instance. However, the FCC and its supporters are simply wrong in suggesting that the agency is faced with a limited choice between extreme approaches. The FCC remains free to consider methodologies that avoid frustrating the statutory purposes. But the FCC's choice of TELRIC is contrary to the Act and accordingly is unlawful.

CONCLUSION

This Court should affirm that part of the court of appeals' decision vacating the FCC's rule 51.505(b), which required UNE prices to be based on the costs of a hypothetical network "us[ing] the most efficient technology currently available and the lowest cost network configuration."

Respectfully submitted,

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June 8, 2001

Arizona
Docket No. T-00000A-00-0194
AT&T 002-094

INTERVENOR: AT&T Communications of the Mountain States, Inc.

REQUEST NO: 094

RE: Loop Pricing
Witness: Buckley

Who calculated the cost savings value input described at p. 25 of the direct testimony of Theresa K. Million? Please produce all documents setting forth the FCC, AT&T and the USTA X-factor productivity estimates used in calculating the cost savings value.

RESPONSE:

The cost savings value described at p. 25 of Ms. Million's direct testimony was calculated by Ed Freye, Manager, Cost Development, of Qwest Corporation.

The base year for TELRIC is 1999 and the cost savings factor reflects the difference between the base year and the study year which is 2001.

	FCC	ATT	USTA	Weighted
Ave (90,95)	5.8%	7.1%	2.9%	5.27%
Ave(91,95)	5.2%	6.3%	2.7%	4.73%
			Total	10.00%
			Average	5.00%

Two year gain = (1.05 x 1.05)-1 = 10.25%

Please refer to Attachment A, FCC document regarding X-Factor Calculations

Respondent: Wendy Jackson, Manager, Qwest Corporation

EXHIBIT
tabbies
ATT/40-38
Admitted

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	
	)	
Price Cap Performance Review for Local Exchange Carriers	)	CC Docket No. 94-1
	)	
Access Charge Reform	)	CC Docket No. 96-262

FOURTH REPORT AND ORDER IN CC DOCKET NO. 94-1 AND SECOND REPORT AND ORDER IN CC DOCKET NO. 96-262

Adopted: May 7, 1997; Released: May 21, 1997

By the Commission: Commissioners Quello, Ness, and Chong issuing separate statements.

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6. Effects of Access Reform

128. In the Access Reform Notice, we invited comment on the potential effects of access reform on TFP.[206] Some parties argue that replacing the per-minute carrier common line charge with a per line charge will depress measured TFP because access lines have historically grown more slowly than access minutes.[207] USTA argues that if either competition or regulatory action reduces the price-marginal cost margin on rapidly growing services, measured TFP will fall. USTA concedes it has no direct evidence of the expected magnitude of this effect and makes no specific prediction of the size of the reduction in TFP growth.[208] USTA estimates, however, that its access reform proposal, holding everything else constant, would reduce measured TFP growth for the period from 1990 to 1995 by 0.4 percent by changing the revenue weights of per-line and per-minute common line services.[209] USTA claims support for its assertion that measured TFP growth will be affected by restructuring the collection of common line costs from two articles from the literature of economics.[210] On the other hand, AT&T anticipates that access reform would increase productivity growth, because reducing rates to cost-based levels would stimulate demand.[211]

129. We find that USTA has not sufficiently considered the effect that moving prices towards marginal cost will have on LEC efficiency. Under our current access rate structure rules, before the revisions adopted in our companion Access Reform First Report and Order, incumbent LECs are often unable to offer access services at rates that reflect the manner they incur costs and therefore are faced with artificially depressed demand. The implicit cross-subsidies in our current access rate structure rules have resulted in increased demand for certain services and decreased demand for others. When demand for services is distorted in this fashion, incumbent LECs must provide those services at levels that do not enable them to minimize their per-unit costs. When prices reflect marginal costs, however, consumers increase their purchases of services previously priced above marginal cost, and reduce their purchases

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[206] Access Reform Notice at para. 233.

[207] US West 1997 Comments at 55; Aliant 1997 Comments at 68; USTA 1997 Reply at 40-41 and Att. 3 at 9-10.

[208] USTA 1997 Comments, Att. 5 at 7-8.

[209] USTA assumes that carrier common line charges are billed on a presubscribed line basis, and that the transport interconnection charge is collected on a bulk-billed basis. USTA 1997 Comments, Att. 5 at 8-9.

[210] USTA 1997 Comments, Att. 5 at 7 nn. 10, 11; citing Crandall and Galst, Productivity Growth in the U.S. Telecommunications Sector: The Impact of AT&T Divestiture (The Brookings Institution, February 1991) (Crandall and Galst); Fuss, Telecommunications Growth in Canadian Telecommunications, Canadian J. Econ. (May 1993).

[211] AT&T 1997 Reply at 35-36.

of services previously priced below marginal cost. The net result of such a change in rate structure will allow LECs to minimize the per-unit cost of producing their total output. Based on the current record, we find that access reform will have at most a very modest effect on the revenue weights used to aggregate output and that this effect will be offset at least in part by changes on the input side of the TFP equation as LECs adjust inputs to produce a more efficient mix of outputs. Thus, it would be speculative to attempt to adjust our TFP estimates now.

130. The articles cited by USTA are consistent with this analysis. They provide support only for the proposition that, if everything else is held constant, adjusting the weights of each category of LEC outputs for the margin between price and marginal cost reduces measured output, measured TFP, and TFP growth.[212]

131. Some parties contend that measured TFP will decrease under competition because incumbent LEC output will fall as new entrants successfully compete for existing customers. USTA asserts that a one percent reduction in LEC output growth will reduce LEC TFP growth by 0.3 to 0.5 percent. We are not persuaded that we should reduce our baseline productivity estimates we are using here to set an X-Factor that will apply to all incumbent price cap LECs and all their access services. We are not deciding what, if any, changes to the X-Factor we should make with the lowering of barriers to competitive entry or the development of competition.[213]

132. In summary, we find that the parties have not shown it reasonable to reduce the measured TFP growth of incumbent LECs in light of the overall effect of the rate restructuring adopted in the Access Reform First Report and Order.

E. Analysis and Prescription

133. Above, we have examined several individual issues regarding TFP calculation, determination of the input price differential, and other X-Factor calculation issues. On the basis of the record in this proceeding, we have determined the best available methods to perform each of the calculations necessary to conduct a TFP study, and we have developed a reasonable prediction of the future input price differential. We recognize that the results of any study are reliable only to the extent that the data used in the study is taken from a consistent series, and that the methods used in the study are internally consistent. We conclude that our staff analysis relies on consistent data sources and methods, and that our input price differential findings are based on consistent and reliable data.

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[212] Crandall and Galst at 28-29.

[213] See Section IV.C., infra.

134. For reasons discussed in Section V. below, we have decided not to adopt a moving average mechanism to update the X-Factor. In the Price Cap Fourth Further Notice, we sought comment on the best time period for studies used to calculate a fixed X-Factor.[214] Ad Hoc contends that we should use all the data since 1984, arguing that the divestiture of the Bell System in 1984 creates a "break" in the data, and that comparing data from before and after that time could yield anomalous results.[215] AT&T also uses post-divestiture for its TFP study. USTA recommends basing the X-Factor on a five-year moving average, and includes post-1988 data in its TFP study. USTA also contends, however, that the relevant period for the input price differential is from 1948 to the present. No other party commented on this issue. As discussed below, we base our analysis on data from 1986 to 1995.

135. USTA criticizes AT&T's model because it includes data only from the Bell Operating Companies (BOCs), while USTA's model includes data from GTE, Sprint, SNET, and Lincoln.[216] USTA also finds, however, that including non-BOC data results in only a 0.1 percent difference in the X-Factor for the period from 1988 to 1994, and no difference from 1989 to 1994.[217] In our analysis of the record, we rely only on BOC data, as AT&T does.

136. Parties have presented a wide range of X-Factor recommendations in our two proceedings. On the basis of its model, USTA proposes X-Factors ranging from 2.7 to 3.1.[218] At the other extreme, AT&T and Ad Hoc propose X-Factors between 8.0 and 10.0, in part on the basis of adjusting TFP for interstate productivity.[219] As discussed above,[220] MCI proposes an X-Factor of 8.5 percent based on a non-TFP methodology. Recently, a number of parties filing a joint ex parte statement have advocated an X-Factor of at least 7.5 percent, based largely on MCI's and Ad Hoc's recommendations.[221]

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[214] Price Cap Fourth Further Notice, 10 FCC Rcd at 13675 (paras. 104-06).

[215] Ad Hoc Reply, Att. at 25-26.

[216] USTA 1997 Comments, Att. 6 at 28-29.

[217] USTA 1997 Comments, Att. 6 at 29-30.

[218] See USTA 1997 Comments, Att. 5 at 1-4; USTA Comments, App. A at 30-32.

[219] Ad Hoc proposes 9.9 percent and AT&T proposes 8.5 percent. Ad Hoc Reply, Att. at 36; AT&T 1997 Reply, App. G at 32.

[220] See Section III.B.1., supra.

[221] On April 16, 1997, the American Petroleum Institute, Consumer Federation of America, Consumers Union, International Communications Association, Michigan Consumer Federation, Oregon Citizens' Board, and the National Retail Federation filed a joint ex parte statement in CC Docket Nos. 96-45 and 96-262. Ex Parte Letter from Brian R. Moir, Counsel to the International Communication Association, to William F. Caton,

137. The table in this Section presents the yearly X-Factor estimates (TFP plus any input price differential) submitted by USTA and AT&T, and the results of our analysis of the best methods and data available in the record of this proceeding, as well as various multi-year averages of total company productivity derived from the AT&T model and our own analysis. In its model, Ad Hoc does not present comparable yearly estimates, but only average estimates. We find that, for the 1985-95 period, the average annual growth in TFP estimated by USTA's simplified TFP model are about 0.2 percent less than our estimates. Based on more recent periods, the differences are somewhat greater. As discussed above, however, USTA has not provided any reliable estimate of the input price differential. For that reason, we cannot give any weight to its X-Factor estimates. Also as discussed above, Ad Hoc's model relies heavily on methodologies USTA employed in its original TFP model reviewed in the LEC Price Cap Performance Review and discussed in the Price Cap Fourth Further Notice. Ad Hoc's adjustments to the USTA original model do not adequately address the problems we found with that model, so we also give no weight to Ad Hoc's X-Factor estimates. We also place no weight on the joint ex parte statement's recommendation, which relies, without further analysis, on the MCI, Ad Hoc, and AT&T interstate-only proposals.[222] Our analysis does incorporate a number of the methods advocated by AT&T, but AT&T's estimate of the X-Factor relies as well on methods that do not provide the best estimates of productivity from this record. Thus, we will accord some weight to AT&T's estimates of the X-Factor, but will rely primarily on our own analysis, which is a synthesis of the most persuasive treatment of TFP suggested by the record. The results of our analysis are displayed in the table below.

Acting Secretary, FCC, April 16, 1997 (Joint Ex Parte Statement).

[222] The joint parties cite MCI's X-Factor proposal of an 8.5 percent X-Factor, Ad Hoc's proposal of 10 percent, and AT&T's interstate-only TFP proposal of 8.5 percent, and argue that the X-Factor should be at least 7.5 percent on the basis of these proposals. Joint Ex Parte Statement at 17-18. We explained in Sections III.B.1. and III.C.2., above, why we do not rely on MCI's and Ad Hoc's X-Factor calculations. In Section III.D.2., we conclude that we can place no weight on AT&T's interstate TFP adjustment. The Joint Ex Parte Statement relies on MCI's, Ad Hoc's, and AT&T's comments without providing any further analysis, and therefore provides no basis for reconsidering this conclusion.

SUMMARY OF X-FACTORS

YEAR	FCC	AT&T	USTA
1986	-0.5%	0.2%	N/A
1987	5.0%	4.1%	N/A
1988	5.0%	6.4%	N/A
1989	7.9%	8.8%	2.1%
1990	8.8%	11.0%	4.0%
1991	5.8%	6.0%	3.0%
1992	3.4%	4.1%	2.0%
1993	4.7%	6.0%	3.1%
1994	5.4%	5.9%	1.8%
1995	6.8%	9.4%	3.5%
Ave (86,95)	5.2%	6.2%	
Ave (87,95)	5.9%	6.9%	
Ave (88,95)	6.0%	7.2%	
Ave (89,95)	6.1%	7.3%	2.8%
Ave (90,95)	5.8%	7.1%	2.9%
Ave (91,95)	5.2%	6.3%	2.7%

138. The upper portion of the Table shows the year-by-year estimates of the X-Factor. The lower portion shows a series of averages of the annual X-Factor estimates derived from our analysis of the record and from the AT&T model. The first average includes all the years for which estimates were made. The next average excludes the oldest estimate. Each subsequent average drops the next oldest estimate until the average includes only the most recent five years, from 1991 to 1995. Taken as a whole, this series of averages gives the least weight to the oldest estimate, because that estimate only appears in the first average, and the most weight to the most recent five estimates, because these estimates appear in every average. We find that these averages, rather than the yearly estimates, provide the most reliable basis in the current record for estimating incumbent LEC productivity targets (including input price differential) for the immediate future. The "trimming" of the averages yields a range of possible productivity outcomes based on progressively more current sets of yearly estimates.

139. Focusing on the staff estimates, we note that the middle four averages are closely grouped around 6.0 percent. The first and last averages are 5.2 percent. We conclude that it

is reasonable to place less weight on these two averages. The first average is heavily influenced by the improbably low 1986 estimate of -0.5 percent. The estimate for 1986, the first period for which we have data, is improbably low in comparison to all the other estimates: the next lowest estimate is +3.4 percent and seven of the ten estimates are +5 percent or higher. The last average (1991-95) is the average most affected by the low 1992 estimate. The decline in the measured X-Factor in 1992 appears to be an artifact of a one-year jump in the measured productivity of the national economy as economic activity increased, rather than a change in the growth rate of LEC productivity or input prices. The measured TFP of the U.S. economy appears to be more sensitive to the business cycles than the measured TFP of LECs. Furthermore, we note that, although there are years in which incumbent LECs were able to achieve measured X-Factors that exceed 6 percent, there is no extended time period over which the measured X-Factor remained substantially above 6 percent. We also note that from 1993 onward there has been an upward trend in the X-Factor, with the 1995 estimate being 6.8 percent. The estimates provided by AT&T are somewhat higher than our analysis, but show the same pattern.

140. Based on this analysis, we conclude that a reasonable, challenging productivity offset for incumbent LECs lies within a range whose lower bound is 5.2 percent. If we were relying exclusively on our own analysis, we would conclude that the upper bound of our range of reasonableness is 6.1 percent. As a result of our reliance to some extent on AT&T's results, however, we have increased the upper bound of the range of reasonableness slightly, to 6.3 percent.

141. Because the averages listed above tend to show that the incumbent price cap LECs have fairly consistently achieved productivity growth near or at the upper end of the range of reasonableness, and because there appears to be a strong upward trend in productivity growth from 1992 to 1995, we determine that the most reasonable course at this time is to set the X-Factor in the upper portion of this range, 6.0 percent. AT&T's estimates reflecting total company productivity rather than interstate productivity alone, which range from 6.2 to 7.3 percent, also suggest that we should prescribe an X-Factor near the upper bound of the range of reasonableness. As discussed elsewhere, in order to ensure that increased benefits from the increased productivity we expect from incumbent LECs flow through to price cap customers, we also adopt a CPD of 0.5 percent, bringing the overall X-Factor prescribed for use in price cap PCIs to 6.5 percent. We are confident that an X-Factor of 6.5 percent can be achieved by the incumbent price cap LEC industry, yet provides a substantial increase over our current price cap plan in the benefits flowed through to price caps customers.

142. We expect the price cap LEC industry to be able to meet this target, for several reasons. First, price cap regulation seeks to replicate the incentives of a competitive market, but it is clearly not a substitute for competition. As a result, measured LEC TFP may not measure the actual productivity growth that incumbent LECs can achieve, but rather reflects the productivity growth LECs were encouraged to achieve under our original and interim price cap

plans. Under price cap regulation, LECs are required to reduce their prices only to the extent that their PCIs have been lowered by application of the price cap formulas, and are permitted to keep the rest of the cost reduction in the form of higher earnings. To the extent that a price cap LEC has not reduced its prices as much as it has reduced its costs under price cap regulation, and to the extent that lower prices would have led to demand stimulation, higher output growth, and the realization of additional scale economies, then measured LEC TFP underestimates the productive growth the price cap LECs could achieve with the right incentives. To the extent that LEC anticipated earnings would fall in the sharing range, LECs had less incentive than a firm operating under competition to realize all the possible productivity gains. It is not clear how great this underestimation is, given that not all price cap LECs set their prices so that their APIs are equal to their PCIs. On the other hand, many LECs were subject to sharing obligations under the original price cap plan.[223] On balance, we believe that measured LEC TFP may somewhat understate achievable gains in TFP. A second reason that we believe that LECs can achieve our 6.5 percent X-Factor is due to the actions we are taking in our Access Reform First Report and Order, which should greatly stimulate usage. We expect this increase in usage to lead to more efficient use of the LEC network.

143. In summary, we retain our existing formula for adjusting price cap PCIs. We decline to adopt a PCI adjustment formula based on a direct approach, i.e., a PCI formula excluding any economy-wide measure of inflation, because we have decided to prescribe an X-Factor at this time rather than adopt rules to calculate a new X-Factor each year and update the X-Factor using a five-year moving average. In addition, we find that the X-Factor should include LEC TFP and an input price differential. For the reasons discussed above, we find that TFP should be based on the Commission's prescribed depreciation rates. We have decided against adopting any interstate TFP adjustment, hedonic adjustment, or any adjustment based on the productivity growth of other industries. We also find that USTA has inadequately supported its contention that the input price differential is not significantly different from zero.

IV. PRICE CAP STRUCTURE ISSUES

A. Overview

144. We are today substantially revising the structure of our price cap plan to reflect the pro-competitive, deregulatory paradigm established by the 1996 Telecommunications Act as well as the enhanced methodologies and data available for estimating incumbent LEC productivity gains. By eliminating sharing, we are removing a major vestige of rate-of-

[223] In the LEC Price Cap Performance Review, we found that, from 1991 to 1994, the cumulative effect of savings due to below-cap filings was $1.14 billion, and the cumulative net effect of sharing obligations and low-end adjustments was $152 million. LEC Price Cap Performance Review, 10 FCC Rcd at 8987 (para. 60).

return regulation and eliminating the strongest LEC incentives to shift costs between services.[224] We also establish a structure conducive to the growth of competition and to progressive deregulation of incumbent LEC interstate access services as competition develops.[225]

145. Based on the limited information then available, both the original and the interim LEC price cap plans included multiple X-Factors, ranging from 3.3 percent to 5.3 percent, many with sharing obligations that provided LECs in sharing zones with rate-of-return-like incentives. Today, as discussed above, we prescribe a 6.5 percent X-Factor based on a total factor productivity analysis of the impact that LEC productivity growth and the change in LEC input prices have had on LEC industry unit costs over a ten-year period. Both the methodology and the data used in this analysis more accurately reflect price cap carriers' ability to reduce per-unit costs than previous studies used to set the X-Factor.[226] To ensure consumers share in all increases in LEC efficiency, and to provide efficiency-enhancing incentives to those LECs whose past performance has exceeded the industry average, we are adding a 0.5 percent CPD to the X-Factor.

146. In light of these changes, we here eliminate sharing as part of our overall strategy to devise a more deregulatory and efficiency-enhancing regulatory framework. The elimination of sharing removes a major vestige of rate-of-return regulation Additionally, the elimination of sharing facilitates progressive deregulation as services become subject to competition.

B. Sharing Obligations

147. Background. In the LEC Price Cap Performance Review, we found that sharing blunts the efficiency incentives that we sought to create with price cap regulation.[227] Therefore, we tentatively concluded that sharing should eventually be eliminated.[228] We also noted in the LEC Price Cap Performance Review and the Price Cap Fourth Further Notice, however, that sharing served a number of purposes in the price cap structure we then

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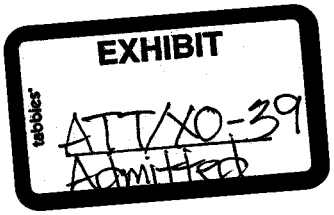
[224] This assumes of course that the X-Factor continues to be calculated on an industry-wide basis.

[225] According to NYNEX, Congress identified price cap regulation as a mechanism to encourage infrastructure investment when it adopted the 1996 Act, and eliminating sharing would further encourage infrastructure investment. NYNEX Reply at 21, citing Section 706(a) of the Telecommunications Act of 1996, 47 U.S.C. § 706(a).

[226] See LEC Price Cap Order, 5 FCC Rcd at 6885-6941 (App. C, App. D.); LEC Price Cap Performance Review, 10 FCC Rcd at 9159-95 (App. D).

[227] LEC Price Cap Performance Review, 10 FCC Rcd at 9045-46 (paras. 187-89).

[228] LEC Price Cap Performance Review, 10 FCC Rcd at 9049 (para. 197).



QWEST COMMUNICATIONS REPORTS STRONG FIRST QUARTER 2001 RESULTS DRIVEN BY GROWTH IN COMMERCIAL, INTERNET AND DATA REVENUES

Quarterly Revenue Grew Nearly 12 Percent Over Pro Forma 2000; EBITDA Growth of Nearly 16 Percent; Met or Exceeded Consensus of Analysts' Estimates for Revenue, EBITDA and EPS

First Quarter Results Compared to Pro Forma First Quarter 2000:

- Total revenue grew nearly 12 percent to $5.05 billion
- Internet and data services revenue grew 44 percent and represents approximately 25 percent of total revenue and more than 45 percent of commercial revenue
- Commercial revenue increased more than 26 percent
- Total EBITDA grew nearly 16 percent to $2 billion
- EBITDA margins increased 130 basis points from 38.2 percent to 39.5 percent

Operational Results:

- DSL customers grew 125 percent over first quarter 2000 to more than 306,000
- Wireless customers grew to approximately 908,000
- Activated 15th U.S. CyberCenter(sm) in Dallas for hosting and managed applications
- Achieved best service performance results in five to seven years
- Since the acquisition of U S WEST, revenue per employee increased from $249,000 to $310,000, a 24 percent improvement in productivity
- Achieved significant milestones for accelerated re-entry into the long-distance business in 14 Western states

DENVER, April 24, 2001 — Qwest Communications International Inc. (NYSE: Q), the broadband Internet communications company, today announced record revenue and earnings before interest, taxes, depreciation and amortization (EBITDA) for the first quarter of 2001. Total first quarter revenue of $5.05 billion was an 11.8 percent increase versus pro forma normalized first quarter 2000 revenue. First quarter EBITDA grew 15.8 percent to $2 billion. In addition, Qwest recorded pro forma normalized earnings per diluted share of $0.13 for the quarter. Qwest has met or exceeded the consensus of analysts' estimates for the sixteenth consecutive quarter.

"We are extremely pleased with the results the Qwest team achieved during the quarter. With our unique blend of assets, Qwest is well positioned for future growth across all segments of the communications marketplace," said Joseph P. Nacchio, Qwest's chairman and CEO. "We believe the industry will continue to provide solid growth opportunities in 2001, especially for

our broadband Internet and data services. Qwest is well positioned to take advantage of that growth at the local, national and global level."

The total revenue increase was driven by Internet and data services growth of 44 percent as demand for Qwest services remains robust. Digital subscriber line (DSL) growth remained strong with an increase of more than 125 percent annually to more than 306,000 customers. Commercial services revenues increased 26.5 percent to $2.7 billion as Qwest continued to focus on the broadband Internet and data needs of enterprise and wholesale customers. The company's small business and consumer units recorded services revenue growth of 6.3 percent, or 2.7 percent including out-of-region long-distance results.

First quarter EBITDA grew 15.8 percent to $2 billion as EBITDA margins expanded 130 basis points from 38.2 percent in first quarter 2000 to 39.5 percent in first quarter 2001. This increase in EBITDA margin resulted from continued tight cost controls and productivity improvements, as well as merger-related synergies.

Compared to first quarter 2000, gross margin decreased from 64.0 percent to 62.4 percent in the first quarter of 2001. Factors contributing to the decrease in gross margin include the increase in revenues and investments in high-growth services; the impact of regulatory access reform; and costs related to re-entry into the long-distance business in Qwest's 14- state local service area. The company expects gross margins to remain near the current level through the end of 2001.

Selling, general and administrative costs (SG&A) improved as a percentage of revenue from 25.9 percent in the first quarter of 2000 to 22.9 percent for first quarter of 2001. SG&A improvements resulted from strict cost controls and a reduction in payroll and employee-related expenses. Since the acquisition of U S WEST on June 30, 2000, annual revenue per employee increased from $249,000 to $310,000, representing a 24 percent increase in productivity.

"We are very pleased with our strong operating and financial results for the quarter. This solid performance positions us well to achieve our growth rates for 2001," said Robin R. Szeliga, Qwest executive vice president and CFO. "We achieved strong revenue and EBITDA growth for the quarter as our focus on execution and investment for growth continued to produce results. For the second quarter of 2001 we expect revenue to increase between 12 percent and 13 percent compared to pro forma second quarter 2000."

Qwest also reconfirmed its financial targets for 2001 of $21.3 to $21.7 billion in revenue and $8.5 to $8.7 billion in EBITDA. As a result of increased discounts from suppliers and other procurement synergies, Qwest expects capital expenditures for 2001 of $9.2 billion, $300 million less than previous estimates.

On a pro forma normalized basis and excluding merger-related and non-recurring items, the company recorded first quarter net earnings of $218 million, or $0.13 per diluted share, compared to net earnings of $239 million, or $0.14 per diluted share, a year ago. The decrease reflects increases in both interest expense and depreciation following Qwest's continued investment for growth. On a cash earnings per diluted share basis, the company reported $0.30 for the first quarter of 2001 versus cash earnings per share in the first quarter of 2000 of $0.31.

The information above has been presented on a pro forma normalized basis to exclude the

revenue from Qwest's divested interLATA (local access transport area) business in its local service area and charges from merger-related and other one-time items. The merger-related and non-recurring items included severance costs, a write-down of investments and premiums paid to retire high-interest notes.

COMMERCIAL, SMALL BUSINESS AND CONSUMER MARKETS

Qwest continued to win national and global business accounts with its portfolio of broadband Internet applications and communications services. Global business markets achieved more than $1 billion in new contracted sales, up more than 30 percent from the fourth quarter of 2000. Over 60 percent of new global business sales were for broadband Internet and data services with such companies as U.S. Bancorp, Hewlett-Packard and Target Corp.

The company continued to successfully penetrate the government and education sectors and recorded key wins with the states of Arizona and Georgia and the University of Utah. In Arizona, Qwest was awarded a $100 million contract to construct and support high-speed local area broadband networks that will provide Internet access to Arizona's 228 public school districts, giving children the opportunity to learn school lessons using the Internet.

As Qwest is opening its markets to competitors, it continues to see strong demand for its small-business and consumer communications services. Small business sales hit an all-time monthly high during the quarter, based on growth in bundles, Qwest DSL and Qwest wireless services. Sales of small business bundles grew approximately 117 percent during the first quarter of 2001, with nine percent of Qwest's small business customers now opting for bundled services. Through the first quarter, 28 percent of Qwest consumers subscribed to a bundled service -- a 44 percent increase over the first quarter of 2000. Qwest has also seen an increase in the average revenue per account of 32 percent since the introduction of bundles two years ago.

To ensure continued success in the small business and consumer markets, Qwest has split the operations between two executives. James A. Smith will continue to serve as Qwest's executive vice president of consumer markets, while Clifford S. Holtz was appointed earlier this month as Qwest's executive vice president of small business markets. The additional executive focus will allow Qwest to exploit unrealized potential for Qwest services in both consumer and small business markets.

Wireless services revenue grew 45 percent in the quarter to more than $152 million. Qwest wireless customers totaled approximately 908,000 at the end of the quarter compared with approximately 805,000 customers at the end of 2000. These results reflect the termination by Qwest of 30,000 customers in its low-value, pre-paid wireless business. The company expects to end prepaid wireless services for an additional 8,000 customers in the second quarter of 2001. Qwest is refocusing its wireless business to attract higher-volume consumer and small business customers.

INTERNET AND DATA SERVICES

Internet and data services revenue grew 44 percent and now represents approximately 25 percent of total revenue. Strong growth was realized in the following areas: Web hosting, dedicated Internet access (DIA), DSL, virtual private network (VPN), Internet professional services and other data services. During the quarter Qwest was awarded communications services contracts from ADP, Capital One, United Artists Theatres, Invesco Funds, and Gateway.

Qwest activated approximately 51,000 DSL customers during the quarter and had more than 306,000 DSL customers at the end of the quarter, up 125 percent from the end of the first quarter of 2000 and 20 percent from the end of the fourth quarter of 2000. Qwest is on target to achieve its objective of doubling the number of DSL subscribers to 500,000 by the end of 2001 and continues to lead the industry with more than 1,000 customers per central office with DSL-equipped facilities.

During the quarter Qwest began offering local broadband access services to commercial customers in Boston and Philadelphia. Qwest now provides local broadband services in 13 markets outside of its 14-state local service area. In addition, the company launched commercial DSL services in eight new markets and is now providing these services in 20 major markets outside its local service area. The company is on track to offer commercial local broadband access and DSL services in 25 markets by the end of 2001.

Qwest Cyber.Solutions (QCS) was awarded nearly $60 million in Applications Service Provider (ASP) contracts with new customers during the quarter, while 30 percent of the company's existing ASP customers increased or expanded the services they receive. To date, QCS has secured the three largest reported ASP contracts in the industry.

Qwest also announced its newest CyberCenter Internet hosting facility in Dallas. Qwest now operates a total of 15 U.S. CyberCenters, providing customers with complex Web hosting and managed applications services as well as high-speed links to Qwest's global broadband Internet network.

SERVICE IMPROVEMENT AND LONG-DISTANCE RE-ENTRY

During the quarter, Qwest continued to see positive results from initiatives to improve customer service and re-enter the long-distance business in the 14-state local service area.

The company's first-quarter 2001 service results in the 14-state local service area were the best in five to seven years for small business and residential customers. Qwest service data at the end of the first quarter 2001 for this category showed:

- The number of customers who had been waiting more than 30 days for the installation of their first telephone line reached their lowest levels in seven years – almost 80 percent fewer than March 2000
- In six states no customers waited more than 30 days for the installation of their first telephone line
- Nearly 99 percent of 5.1 million installation commitments were met on time – the best results in five years
- About 96 percent of total repair commitments were met on time – the best results in five years
- Repeat repairs within 30 days decreased more than seven percent from first quarter 2000
- About 89 percent of service outages were repaired in less than 24 hours – up 77 percent from a year ago -- the best customer service results on record

Qwest's internal service results are consistent with a recently released Federal Communications Commission (FCC) Service Quality report for 2000, which showed that among 12 major communications companies:

- Qwest was third in meeting its installation commitments to residential customers

- Qwest was second in completing 16.5 million residential installations within one day (on average) of the customer placing the order
- Qwest was second in taking an average of only 19 hours to fix residential service outages.

Qwest also has achieved two significant milestones in its efforts to re-enter the long-distance business in the 14 Western states where it provides local service. First, Qwest announced that it had begun region-wide independent testing of its operational support systems (OSS), a critical FCC checklist item. Thirteen of the states in Qwest's local service area are participating in the test -- the fourteenth state, Arizona, is conducting its own test separately. Both tests should end in mid-summer 2001.

The company also has completed 75 percent of the state workshops that evaluate Qwest's compliance with rules to re-enter the long-distance business. Both the OSS testing and the state workshops are scheduled to be completed this summer.

Qwest expects to file with the FCC an application for approval to offer long-distance services in one of its 14 states by late summer and to file applications for the remaining states later in 2001 and in early 2002. After the first application is filed, Qwest's OSS multi-state testing process is expected to accelerate FCC approval of the applications for the remaining states.

About Qwest
Qwest Communications International Inc. (NYSE: Q) is a leader in reliable, scalable and secure broadband Internet-based data, voice and image communications for businesses and consumers. The Qwest Macro Capacity® Fiber Network, designed with the newest optical networking equipment for speed and efficiency, spans more than 106,000 miles globally. For more information, please visit the Qwest web site at http://www.qwest.com/.

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As previously announced, Qwest will host a conference call with the investment community later this morning at 9:00 a.m. (Eastern time). On the call, Joseph P. Nacchio, chairman and CEO, and Robin R. Szeliga, executive vice president and CFO, will provide the company's perspective on the business and first quarter results. The call will be available on a Web broadcast at http://www.qwest.com/about/ir/

This release may contain projections and other forward-looking statements that involve risks and uncertainties. These statements may differ materially from actual future events or results. Readers are referred to the documents filed by Qwest with the Securities and Exchange Commission, specifically the most recent reports which identify important risk factors that could cause actual results to differ from those contained in the forward-looking statements, including potential fluctuations in quarterly results, volatility of Qwest' stock price, intense competition in the communications services market, changes in demand for Qwest' products and services, dependence on new product development and acceleration of the deployment of advanced new services, such as broadband data, wireless and video services, which could require substantial expenditure of financial and other resources in excess of contemplated levelshigher than anticipated employee levels, capital expenditures and operating expenses,rapid and significant changes in technology and markets, adverse changes in the regulatory or legislative environment affecting Qwests business and delays in Qwests ability to provide interLATA services within its 14state local service territory, failure to maintain rights of way, and failure to achieve the projected synergies and financial results expected to result from the acquisition of U S WEST timely or at all and difficulties in combining the operations of Qwest and U S WEST.This release may include analysts' estimates and other information prepared by third parties for which Qwest assumes no responsibility. Qwest undertakes no obligation to review or confirm analysts' expectations or estimates or to release publicly any revisions to any forwardlooking statements to reflect events or circumstances after the date hereof or to reflect the occurrence of unanticipated events.

The Qwest logo is a registered trademark of, and CyberCenter is a service mark of, Qwest Communications International Inc. in the U.S. and certain other countries.

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IR@qwest.com

ATTACHMENT A

QWEST COMMUNICATIONS INTERNATIONAL INC.

CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS (1) -PRO FORMA NORMALIZED
(IN MILLIONS, EXCEPT PER SHARE AMOUNTS)
(UNAUDITED)

	Three Months Ended March 31, 2001	Three Months Ended March 31, 2000	% Change
OPERATING REVENUES			
Commercial services	$ 2,749	$ 2,173	26.5
Consumer and small business services	1,684	1,640	2.7
Directory services	342	347	(1.4)
Switched access services	276	357	(22.7)
Total operating revenues	5,051	4,517	11.8
OPERATING EXPENSES			
Cost of sales	1,900	1,624	17.0
Selling, general and administrative	1,154	1,169	(1.3)
EBITDA	1,997	1,724	15.8
Depreciation	832	625	33.1
Goodwill and other intangible amortization	319	317	0.6
Operating income	846	782	8.2
OTHER EXPENSE			
Interest expense	338	249	35.7
Other expense-net	20	4	400.0
Total other expense-net	358	253	41.5
Income before income taxes	488	529	(7.8)
Income tax provision	270	290	(6.9)
NET INCOME	$ 218	$ 239	(8.8)
Basic earnings per share	$ 0.13	$ 0.15	(13.3)
Basic average shares outstanding	1,656	1,629	1.7
Diluted earnings per share	$ 0.13	$ 0.14	(7.1)
Diluted average shares outstanding	1,674	1,679	(0.3)
Diluted cash earnings per share (2)	$ 0.30	$ 0.31	(3.2)

(1) The condensed consolidated pro forma normalized statements give retroactive effect as though the merger of Qwest and U S WEST, Inc. had occurred as of the beginning of the periods presented. Shares outstanding and earnings per share have been restated to give retroactive effect to the exchange ratio resulting from the Merger. In addition, results have been adjusted to eliminate the impacts of nonrecurring items, such as merger costs, gains/losses on the sale of investments, change in the market value of investments, the one-time write-down of investments, and the elimination of in-region long-distance activity. The Merger has been accounted for as a purchase transaction. The purchase price allocation is preliminary

and is subject to change. Accordingly, net earnings and earnings per share are subject to change. Certain reclassifications have been made to prior periods to conform to the current presentation.

(2) Diluted cash earnings per share represent diluted earnings per share adjusted to add back the after tax amortization of goodwill and other intangible assets resulting from the Merger.

ATTACHMENT B

QWEST COMMUNICATIONS INTERNATIONAL INC.

CONDENSED CONSOLIDATED BALANCE SHEETS

(UNAUDITED)

In millions	March 31, 2001	December 31, 2000
ASSETS		
Current assets:		
Cash and cash equivalents	$ 306	$ 154
Accounts receivable – net	4,294	4,235
Inventories and supplies	302	275
Prepaid and other	864	712
Total current assets	5,766	5,376
Property, plant and equipment - net	27,700	25,583
Investments	8,053	8,186
Goodwill and intangibles - net	32,224	32,327
Other assets - net	2,031	2,029
Total assets	$ 75,774	$ 73,501
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Short-term debt	$ 4,103	$ 3,645
Accounts payable	2,358	2,049
Accrued expenses and other current liabilities	3,514	3,806
Advance billings and customer deposits	379	393
Total current liabilities	10,354	9,893
Long-term debt	17,676	15,421
Post-retirement and other post-employment benefit obligations	2,916	2,735
Deferred taxes, credits and other	4,172	4,148
Stockholders' equity	40,656	41,304
Total liabilities and stockholders' equity	$ 75,774	$ 73,501

ATTACHMENT C

QWEST COMMUNICATIONS INTERNATIONAL INC.

SELECTED CONSOLIDATED DATA

2000-2001

	As of and for the Three Months Ended March 31,		%
	2001	2000	Change
DSL (in 14-state region):			
Subscribers (thousands)	306	136	125.0%
DSL equipped central offices	303	257	17.9%
Subscribers per equipped central office	1,012	529	91.3%
Wireless/PCS:			
Revenues (millions)	$152	$105	44.8%
Subscribers (thousands)	908	600	51.3%
ARPU (dollars)	$50	$54	(7.4%)
Penetration	4.88%	4.02%	21.4%
Capital expenditures (millions)	$2,943	$2,161	36.2%
Access lines (thousands):			
Business	6,225	5,899	5.5%
Consumer	11,946	12,047	(0.8%)
Total access lines	18,171	17,946	1.3%
Voice grade equivalent access lines (thousands):			
Business	32,024	23,839	34.3%
Consumer	12,807	12,412	3.2%
Total voice grade equivalents	44,831	36,251	23.7%

ATTACHMENT D

QWEST COMMUNICATIONS INTERNATIONAL INC.

SELECTED CONSOLIDATED DATA (1)

(IN MILLIONS, EXCEPT PER SHARE AMOUNTS)
(UNAUDITED)

	Three Months Ended March 31, 2001	Three Months Ended March 31, 2000	% Change
OPERATING REVENUES			
Commercial services	$ 2,749	$ 1,207	127.8
Consumer and small business services	1,684	1,466	14.9
Directory services	342	347	(1.4)
Switched access services	276	357	(22.7)
Total operating revenues	5,051	3,377	49.6
OPERATING EXPENSES			
Cost of sales	1,900	986	92.7
Selling, general and administrative	1,154	883	30.7
EBITDA	1,997	1,508	32.4
Depreciation	832	586	42.0
Goodwill and other intangible amortization	319	-	-
Merger-related and other one time charges	209	15	1,293.3
Operating income	637	907	(29.8)
OTHER EXPENSE (INCOME)			
Interest expense	338	211	60.2
Change in market value of financial instruments	(23)	129	(117.8)
Gain on sales of investments	-	(79)	100.0
One-time investment write-down	139	-	-
Other expense (income)-net	20	(1)	2,100.0
Total other expense-net	474	260	82.3

Income before income taxes	163	647	(74.8)
Income tax provision	144	243	(40.7)
Net income, before extraordinary item	$ 19	$ 404	(95.3)
Extraordinary item – early retirement of debt, net of tax	(65)	-	-
NET INCOME(LOSS)	$ (46)	$ 404	(111.4)
Basic earnings(loss) per share (2)	$ (0.03)	$ 0.46	(106.5)
Basic average shares outstanding (2)	1,656	877	88.8
Diluted earnings(loss) per share (2)	$ (0.03)	$ 0.45	(106.7)
Diluted average shares outstanding (2)	1,656	889	86.3
Dividends per share (2)	$ 0.00	$ 0.31	(100.0)

(1) The condensed consolidated statements of operations reflect the results of operations for U S WEST, Inc. only (the accounting acquirer) for the three months ended March 31, 2000. For the three months ended March 31, 2001, the amounts reflect the results of operations for the merged Qwest entity.

(2) Earnings (loss) per share gives effect to the 1.72932 merger exchange ratio.

Arizona
Docket No. T-00000A-00-0194
AT&T 002-057

INTERVENOR: AT&T Communications of the Mountain States, Inc.

REQUEST NO: 057

RE: Cost Studies
Witness: Million

Please produce the annual cost factor book for Arizona and for Qwest.

RESPONSE:

Please see Confidential Attachment A. Confidential Attachment A is provided pursuant to the Confidentiality Agreement in this proceeding.

Respondent: Jennifer Peppers

EXHIBIT
ATT/XO-40
Admitted

Qwest

ARIZONA
DOCKET NO. T-00000A-00-0194
AT&T 02-057
ATTACHMENT A
CONFIDENTIAL

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Qwest

U S WEST ECONOMICS
CPI-U FORECAST
DOCUMENTATION

PURPOSE/DESCRIPTION:

The Consumer Price Index (CPI) measures the average change in prices over time of a fixed market basket of goods and services. The Bureau of Labor Statistics publishes indexes for two population groups:

1. CPI-U - All Urban Consumers covering about 80 percent of the total non-institutional civilian population.

2. CPI-W - Urban Wage Earners and Clerical Workers that makeup about one-half the population covered by the CPI-U.

The CPI-U, besides wage earners and clerical workers, includes groups such as professional, managerial, and technical workers, the self-employed, short-term workers, the unemployed, retirees, and others not in the labor force. Because the CPI-U encompasses a broader variety of professions and is approximately 80 percent of the non-institutional civilian population, it is a better measure of price changes for a fixed market basket of goods than is the less representative CPI-W.

APPLICATION:

The CPI is to be used for inflating everything other than wages & salaries.

QWEST TELEPHONE PLANT INDEX (TPI) DOCUMENTATION

PURPOSE:

The Telephone Plant Index is an index of the cost of constructing anew the existing telephone plant of the company.

SCOPE:

The TPI consists of one table that provides the index numbers by FRC (Field Reporting Code) or Account. Historical TPI's are provided from 1992 through 1998 and forecasted TPI's for 1999 through 2008.

The TPI comprises price indexes for the five main components making up telephone plant. Those components are buildings, central office equipment, station equipment, outside plant equipment, and general equipment. In turn, most components comprise several subaccounts.

SUMMARY OF METHODOLOGY:

The TPI methodology and calculations are provided by Joel Popkin & Company, economic consultants. The methodology uses econometric techniques to establish a mathematical relationship between the historical movement in each of the labor and materials components that make up the TPI and the historical movement in price indexes from the national income and product accounts, a country-wide wage rate, copper prices and other macroeconomic variables.

APPLICATION:

To apply the index, first determine the account investment. Next, find the index levels for both the base year and study year. From those two index levels, calculate the percentage change and then adjust the investment - up or down - by this difference. An illustrative example follows:

ILLUSTRATIVE EXAMPLE

Assumptions:

Account:	Poles(2411 or 1C)
Base Year (YRBase):	1993
Base Year Investment (INVBase):	$100
Base Year TPI(TPIBase):	106.4
Study Year (YRStudy):	1995
Study Year TPI (TPIStudy)	113.9

Calculations:

Calculate the percent change of the account between the base year and the study year....

$$\% \text{ Change} = \frac{(\text{TPIStudy} - \text{TPIBase})}{\text{TPIBase}}$$

$$= \frac{(113.9 - 106.4)}{106.4}$$

$$= 7.0489$$

Calculate the study year investment by adjusting the base year investment with the calculated % Change...

$$\text{INVStudy} = \text{INVBase} \otimes (1 + \%\text{Change})$$

$$= \$100 \otimes 1.070489$$

$$= \$107.05$$

If the % Change is negative...

$$\text{INVStudy} = \text{INVBase} \otimes (1 - \%\text{Change})$$

⇑ (Note the minus sign)

Qwest

WAGES AND SALARIES INFLATION INDEXES DOCUMENTATION

PURPOSE/DESCRIPTION:

The Wages & Salaries Inflation Indexes represent a percent change of wages plus other labor expenses, year over year. The indexes, calculated by the economic consultants of Joel Popkin & Co., are identified by 'Management', 'Nonmanagement', and a 'Combined' Management & Nonmanagement.

SCOPE:

The Wage & Salary Indexes are provided at a company level.

APPLICATION:

Cost Analysts may apply these indexes to straight budget dollars of wages & salaries. However, it is important to know that the 'Combined' Wages & Salaries Index has already been applied to the published labor rates.

Arizona
Docket No. T-00000A-00-0194
AT&T 08-182

INTERVENOR: AT&T Communications of the Mountain States, Inc.

REQUEST NO: 182

Do the "marketing-product management" costs incurred by Qwest's wholesale carrier market unit as described at page 6 of Ms. Gude's Rebuttal Testimony include costs incurred providing wholesale services to enhanced service providers, ISPs and ASPs, pay phone providers, or wireless carriers?

RESPONSE:

The marketing-product management costs incurred by the wholesale carrier market unit, as described in Ms. Gude's testimony, includes the costs associated with providing services to all wholesale providers, including enhanced service providers, ISPs, ASPs, pay phone providers, and wireless carriers. However, not all of the costs incurred by the wholesale carrier market unit are necessarily assigned to the product categories used for the determination of cost factors for wholesale product management and sales expenses.

Respondent: Marti Gude, Qwest

EXHIBIT
ATT/XO-42
Admitted

QWEST

COST DOCKET

NO. T-00000A-00-0194

ATT/WorldCom
ORIGINAL EXHIBITS

PUBLIC

THE ARIZONA CORPORATION COMMISSION

WILLIAM A. MUNDELL
Chairman
JAMES M. IRVIN
Commissioner
MARC SPITZER
Commissioner

IN THE MATTER OF	)	
INVESTIGATION INTO QWEST	)	
CORPORATION'S COMPLIANCE	)	
WITH CERTAIN WHOLESALE	)	DOCKET NO. T-00000A-00-0194
PRICING REQUIREMENTS FOR	)	
UNBUNDLED NETWORK ELEMENTS	)	
AND RESALE DISCOUNTS	)	

DIRECT TESTIMONY

OF

DOUGLAS DENNEY

ON BEHALF OF THE JOINT CASE OF

AT&T COMMUNICATIONS OF THE MOUNTAIN STATES, INC.,

WORLDCOM, INC., AND XO ARIZONA, INC.

RE: COST MODELS

MAY 16, 2001

PENGAD-Bayonne, N. J.
EXHIBIT
AT&T/WorldCom
3 admitted

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VIII. CONCLUSION 56

Executive Summary

The HAI Model, version 5.2a is a Total Long Run Incremental Cost ("TELRIC") cost model that can be used to estimate the Arizona specific unbundled network element costs associated with the loop, local switching, interoffice transport, interoffice signaling, and the total unbundled network element platform. The model is open, flexible, specific to Arizona, and incorporates multiple years of development and review before the Federal Communications Commission ("FCC"), state public utilities commissions, model developers and other interested, sometimes hostile, parties.

The HAI Model is non-proprietary. It utilizes non-proprietary line counts, usage data and over 1400 user adjustable inputs. All calculations in the model are open for review. The model's numerous output reports provide the user with a wealth of data that facilitates review. The model contains extensive documentation describing its operation and input values. The documentation on inputs defines the more than 1400 hundred user adjustable inputs and the source from which they were derived.

The HAI Model is flexible in that all input values and major assumptions are user adjustable. The model can easily incorporate updated information on line counts, expenses and network usage. The model calculates the cost of unbundled network elements, universal service and interconnection. The model produces results at the wire center, density zone and cluster level making it especially suitable for cost based geographic deaveraging.

The HAI Model incorporates Arizona specific customer locations and geographic data such as terrain characteristics, rock hardness and water depth. The model uses Qwest's publicly available wire center specific line counts, Qwest's actual switch

1 locations and Qwest's publicly available usage data.

2 The HAI Model served as the framework for the FCC Synthesis Model. The two
3 models share common methodology and modules.

4 Like the HAI Model, HAI XDSL Adjunct Model, is open and flexible. The
5 model estimates the cost of several UNEs associated with the "xDSL" family of Digital
6 Subscriber Line services. The HAI XDSL Adjunct Model relies upon the loop
7 calculations from the HAI Model. As a result it calculates estimates costs that reflect
8 characteristics specific to Arizona.

9 **I. INTRODUCTION**

10 **Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

11 A. My name is Douglas Denney. I work at 1875 Lawrence Street in Denver,
12 Colorado.

13 **Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?**

14 A. I am employed by AT&T as a Manager with Network Services, in the Local
15 Services and Access Management group. My responsibilities include tracking,
16 reviewing and analyzing local wholesale prices in Qwest's region; reviewing cost
17 studies; and representing AT&T as a witness in state regulatory proceedings in the
18 region relating to local wholesale price/cost issues.

19 **Q. PLEASE DESCRIBE YOUR EDUCATION AND PROFESSIONAL**
20 **BACKGROUND.**

21 A. I received a B.S. degree in Business Management in 1988. I spent three years
22 doing graduate work at the University of Arizona in Economics, and then I

transferred to Oregon State University where I have completed all the requirements for a Ph.D. except my dissertation. My field of study was Industrial Organization, and I focused on cost models and the measurement of market power. I taught a variety of economics courses at the University of Arizona and Oregon State University. I was hired by AT&T in December of 1996 and have spent most of my time with the Company analyzing cost models.

I have testified before most commissions in U S WEST 14-state territory on cost models -- including the HAI Model, BCPM, GTE's ICM, U S WEST's UNE cost models, and the FCC's Synthesis Model. I have also testified about issues relating to the wholesale cost of local service -- including universal service funding, unbundled network element pricing, geographic deaveraging, and competitive local exchange carrier access rates.

Q. HAVE YOU PREVIOUSLY TESTIFIED IN ARIZONA?

A. Yes. I filed testimony in the geographic deaveraging docket T-00000A-00-0194 (Phase I).

Q. WHAT IS THE PURPOSE OF THIS TESTIMONY?

A. The purpose of this testimony is to introduce the HAI Model, Release 5.2a ("HM 5.2a") to this Commission. In addition, I provide the Commission with a description of HM 5.2a and present the results of running the Model to establish forward-looking economic costs for Qwest Corp. ("Qwest") to provide UNEs in Arizona.

I also discuss how this model can best be used to create cost based deaveraged zones for the unbundled loop.

This testimony also introduces the HAI XDSL Adjunct Model that can be used to estimates the cost of several UNEs associated with the "xDSL" family of Digital Subscriber Line services, including a DS1 equipped loop.

Q. PLEASE SUMMARIZE YOUR TESTIMONY

A. My testimony introduces HM 5.2a as an appropriate TELRIC-based methodology for determining the cost of UNEs in Arizona.

The Model estimates the costs of a number of UNEs associated with the loop, local switching, interoffice transport, interoffice signaling, and the total UNE "platform." It produces results by line density range,[1] a useful tool for understanding how results vary from rural to suburban to urban areas, and by individual wire center. For example, calculation of Qwest's loop cost in Arizona by density zone and wire center are summarized in the following table of loop costs:

Monthly Total Loop Cost		
	Density Zone	**Wire Center**
Lowest	$5.25	$5.43
Highest	$89.70	$163.61
Average	**$10.10**	

The local switch usage cost is another UNE of importance and interest. The cost per minute of local switching for Qwest is shown in the following table:

Per Minutes Local Switching Costs	
Qwest Average	**$0.00121**

[1] Line density is defined as the number of lines per square mile. Low density corresponds to rural areas; high density, to urban areas.

UNE costs for local switching, tandem switching, interoffice transport and interoffice signaling are rolled into the cost of local network interconnection and, separately, interexchange ("IXC") access at the local switch and the tandem switch. The following table summarizes these per-minute costs:

Per Minute Network Interconnection Costs			
	At Local Switch	**At Tandem Switch**	**Average**
Local Network	$0.00125	$0.00248	
IXC Access	$0.00180	$0.00303	**$0.00205**

The HAI Model can also be used to establish deaveraged rates. Its ability to produce results by line density, cluster and wire center make it a flexible tool for establishing cost based deaveraged zones.

The HAI xDSL adjunct model builds upon HM 5.2a to produce estimated costs for the xDSL family of high-speed digital services.[2] The model's outputs include sufficient information to estimate the cost of both xDSL-capable loops, which are loops able to support xDSL with the appropriate addition of xDSL terminal equipment at both ends of the loop by the party purchasing the loop, xDSL-equipped loops, and xDSL services. The latter combines the xDSL-equipped loop with packet switching, interoffice transport, and element management.

The model separately considers the cost of xDSL over both all-copper loops and loops provisioned over fiber feeder. The cost of an all-copper xDSL-capable loop is just the cost of the underlying basic loop estimated by HM 5.2a. In the case of

[2] DSL stands for "Digital Subscriber Line;" the "X" denotes the existence of a family of such capabilities, such as Asymmetric DSL ("ADSL"), High-bit-rate DSL ("HDSL"), etc.

ADSL-capable loops provisioned over fiber feeder, however, the model accounts for the cost of upgrading the Digital Line Carrier Remote Terminal to accept ADSL line cards. The line cards themselves are considered to be equipment provided by the competitive entity.

Certain costs produced by the xDSL adjunct model are of particular interest in this proceeding. First, ADSL-capable loops are important because Qwest's competitors may use Qwest's loops in providing their own ADSL services. Second, HDSL-equipped loops are important because they are able to support DS-1 (1.544 megabits per second) offerings using HDSL-equipped loops. Therefore, one would expect Qwest's DS-1 rates, if cost-based, to be comparable to the HDSL cost. Finally, the "Additional Voice UNE" cost represents the cost of a voice platform minus the loop cost, and thus the additional cost for Qwest to provide a complete voice "platform" over and above the cost of the loop that supports both voice and ADSL.[3] The key cost results produced by the adjunct model are as follows:

Monthly XDSL Costs

xDSL Type	XDSL-Capable Loop		xDSL-Equipped Loop		Additional Voice UNEs	
Feeder→	Copper	DLC	Copper	DLC	Copper	DLC
G.Lite ADSL	$5.74	$11.90	N.A.	N.A.	$3.90	$3.90
HDSL (4-W)	$7.46	$15.74	$28.48	$36.50	N.A.	N.A.

Q. HOW IS THE REMAINDER OF YOUR TESTIMONY ORGANIZED?

A. My testimony is divided into six parts. Part I provides an overview of the HM

[3] I assume the competitive entity will be responsible for all customer premises equipment, including the premises splitter if any, and the Central Office splitter and DSLAM (for ADSL).

5.2a. This overview makes extensive reference to the HM 5.2a documentation provided in several exhibits to this testimony. Part II summarizes recent changes made to the HM 5.2a that are part of the ongoing process of the HAI Model to refine calculations and model operation as new data and modeling techniques are developed. Part III describes, in some detail, the customer location and clustering process, and how the resulting data is used by the Model. Part IV discusses the use of HM 5.2a to estimate the costs of Qwest UNEs, and presents the results calculated by the Model. Part V describes how to deaverage loop costs properly and uses the results from HM 5.2a to estimate loop costs for each deaveraged zone. Part VI describes the HAI XDSL Adjunct Model.

Q. ARE THERE ANY EXHIBITS TO YOUR TESTIMONY?

A. Yes. My testimony contains the following exhibits.

Exhibit DKD-1

A CD-ROM containing the HAI Model, Release 5.2a for Qwest in Arizona and documentation utilized in this testimony.

Exhibit DKD-2

Documentation: The HAI Model Release 5.2a, Model Description, Automation Description and User Guide (contained on CD ROM)

Exhibit DKD-3

Documentation: The HAI Model Release 5.2a, Inputs Portfolio (contained on CD ROM)

Exhibit DKD-4

A file showing the geocode success rates for Qwest wire centers in Arizona.

Exhibit DKD-5

"99 Actuals" worksheet, taken from the Expense Module of the HAI Model. (also contained on CD ROM)

Exhibit DKD-6

Part A: HAI 5.2a density zone UNE cost estimates. (also contained on CD ROM)

Part B: HAI 5.2a wire center UNE cost estimates (also contained on CD ROM)

Exhibit DKD-7

Part A: HAI 5.2a density zone UNE cost estimates with Commission Arbitration ordered inputs. (contained on CD ROM)

Part B: HAI 5.2a wire center UNE cost estimates with Commission Arbitration ordered inputs. (contained on CD ROM)

Exhibit DKD-8

Theoretical calculations of the impact of growth on loop costs.

Exhibit DKD-9

Section 4 of Qwest's Exchange and Network Services Tariff on construction charges.

Exhibit DKD-10

Wired Magazine article on pre-merger Qwest and their enthusiasm to share structure with competitors.

Exhibit DKD-11

A list of loop costs by wire center using recommended inputs in the HAI Model. This exhibit also indicates proposed wire center zones and loop costs for these, both before and after the pending sale of exchanges to Citizens. (also on CD-ROM)

Exhibit DKD-12

The deaveraging optimization program used to create the proposed deaveraged zones contained in Exhibit DKD-11. (contained on CD-ROM)

Exhibit DKD-13

The HAI xDSL Adjunct Model on CD ROM.

Exhibit DKD-14

Documentation for the HAI XDSL Adjunct Model. (on CD ROM)

Exhibit DKD-15

Summary output from the HAI XDSL Adjunct Model.

II. OVERVIEW OF THE HAI MODEL, VERSION 5.2A

Q. PLEASE PROVIDE A GUIDE TO THE DOCUMENTATION YOU HAVE ATTACHED AS EXHIBITS TO YOUR TESTIMONY THAT PROVIDE A DETAILED EXAMINATION OF THE NATURE AND CONTENT OF HM 5.2A.

A. Section 1.2 and Appendix A of the HM 5.2a Model Description contained in Exhibit DKD-2 discusses the evolution of the HAI Model over the past five years. This evolution has occurred in response to ongoing intensive internal reviews of the Model, scrutiny of past versions by various parties as well as more recent scrutiny of this version, new developments in modeling techniques and data sources, and new regulatory requirements. Section 2 of Exhibit DKD-2 summarizes the changes between HM 5.2a and HM 5.0a, which was the version of the Model originally submitted to the FCC for its use in estimating the costs of universal service. Part II of this testimony summarizes the most recent changes to HM 5.2a as well as principal changes adopted since this Commission reviewed and accepted Hatfield Model _2.2 in its prior Consolidated Costing and Pricing Arbitration, Docket No. U-3021-96-448, et. al..

Section 3 of Exhibit DKD-2 presents the basic local network structure assumed by the Model; it is the same structure assumed by earlier versions of the Model. The same can be said of the overall Model organization and structure described in Section 4. Sections 5 and 6 describe in some detail the Model's database and the operation of the individual modules of the Model, respectively. Finally, Section 7 summarizes the Model description.

Appendix B of Exhibit DKD-2 identifies and defines the more than 1400 user inputs to HM 5.2a; it is intended as a ready reference for a user making changes to the inputs through the user interface. Appendices C and D of Exhibit DKD-2 provide additional information on the databases and logic flow of HM 5.2a. The document titled "HM 5.2a Automation Description and User Guide" at the end of Exhibit DKD-2 explains the computer system requirement to run HM 5.2a, and how to install and run the Model. The description of how to run the Model includes the mechanism for changing the default values of user inputs, and for invoking various features and capabilities of the Model. Exhibit DKD-3, the HM 5.2a Inputs Portfolio ("HIP") provides the rationale and support for the default values of inputs used in HM 5.2a.

Q. PLEASE DESCRIBE THE FUNDAMENTAL NATURE OF HM 5.2A.

A. Like earlier versions of the HAI Model, HM 5.2a is a bottom-up economic-engineering costing model of basic local exchange service developed by HAI at the request of AT&T and WorldCom. The Model estimates in a consistent fashion, the costs that an efficient firm would incur to provide unbundled network elements, universal service, and interconnection services. Specifically, the HAI

1 Model estimates the costs that an efficient LEC would incur to provide
2 narrowband, voice-grade telephone services in a manner that is also capable of
3 providing access to advanced services.

4 **Q. WHAT DO YOU MEAN WHEN YOU SAY HM 5.2a IS A BOTTOM-UP**
5 **ENGINEERING AND ECONOMIC MODEL?**

6 A. I mean that HM 5.2a constructs a network based on detailed and granular
7 information as to service demand, network component capacities and costs, and
8 expenses. The Model thus contrasts with models that try to decompose total costs
9 or revenues of existing telephone companies into their constituents. The latter
10 models are often referred to as "top-down."

11 Specifically, the Model process has the following seven major steps. First, it
12 determines the amount and location of current demand for local exchange service,
13 network elements, and network interconnection for the Incumbent Local
14 Exchange Carrier ("ILEC") and jurisdiction under study. In doing so, the process
15 uses geocoded[4] customer location data when available, combined with a method
16 of assigning surrogate locations when geocoded location information is not
17 available for all customers. This step is described in Section 5.3 of Exhibit DKD-
18 2, and reflects a state-of-the-art approach to more precisely determining customer
19 locations.

20 Second, the process groups, or "clusters," adjacent customers, and associates
21 those clusters with serving areas that can be efficiently served by available local

[4] A geocoded customer location is one where a customer address can be precisely located (i.e. latitude and longitude can be determined).

exchange technology. In doing so, it determines the size, shape, location, number of lines, and serving wire center of each such cluster. The clustering process is described in Section 5.4 of Exhibit DKD-2. Once these clusters are identified, the process incorporates jurisdiction- and/or company-specific data on local terrain attributes and assigns these attributes to the customer clusters according to the cluster locations, in order to identify circumstances in which the terrain attributes will cause installation costs to increase over their normal levels.

Third, based on the forward-looking network architecture being deployed by ILECs today, the Model determines the amounts of various network components needed to support the known demand for the elements and services in question. In doing so, it employs numerous optimization routines that ensure 1) the use of outside plant structures that are most technically and economically suited to particular local conditions; 2) the appropriate economic choice of feeder technology between copper cable and fiber-based digital loop carrier systems; 3) at the user's option, the appropriate economic choice between wireline and wireless distribution systems; and 4) efficient interoffice fiber optics transport rings based on the widely-used Synchronous Optical Network ("SONET") family of standards.

Fourth, using public information and opinion from subject matter experts on the availability, capacities, and costs of network assets and facilities available in the marketplace today, which are provided to it through user inputs, the Model estimates the investment required to purchase and deploy the requisite quantities of each identified component considering detailed engineering design, material,

and labor. The ability to set meaningful values for these inputs has been greatly aided by the exhaustive analysis of inputs undertaken by the FCC in connection with its work on the universal service subsidy model.

Fifth, the Model determines the cost of operating and maintaining the network, taking into account all relevant capital carrying costs, network operations, maintenance, customer operations, and corporate overhead costs (with forward-looking adjustments where appropriate). Again, various parameters required to make these calculations are provided to the Model through user inputs and as appropriate the user can specify whether expenses are to be allocated on a per-line or relative investment basis.

Sixth, the Model calculates per-unit UNE costs, network interconnection costs, and the cost of universal service. At the user's discretion, these results can be displayed by line density range, wire center, or individual customer location "cluster."[5]

Finally, the Model run produces outputs and associated intermediate results that are available for public scrutiny, both in hard-copy and electronic form.

Q. WHAT IS THE ROLE OF USER INPUTS IN THIS PROCESS?

A. As I mentioned previously, the Model provides the user with the ability to specify over 1,400 inputs through a set of graphical user interface screens. These inputs

[5] Line density refers to the number of lines served per square mile. Many aspects of telephone network design, and associated investments and cost, are dependent on line density -- meaning they differ according to whether the area served is rural (low density), suburban (medium density) or urban (high density). Density zones in the model range from 0-5 lines per square mile at the low end to greater than 10,000 lines per square mile at the high end.

represent, for instance,

- "on-off" switches that allow the user to invoke certain alternative model algorithms;
- the prices of network components;
- certain attributes of the local exchange network under study, such as the designation of which switches are hosts, remotes and stand-alone units and the amount of different types of outside plant by line density zone;
- operations costs, specified on a per-line or per-investment-dollar basis; and
- parameters related to capital carrying costs, such as the percentages and cost of debt and equity, depreciation lives and net salvage values, and tax rates.

These inputs allow the user to reflect specific local conditions and circumstances, and/or to permit sensitivity analyses to be performed. Default values are set for each of these inputs that reflect industry practices, suitably adjusted to be consistent with the forward-looking orientation of the Model. Appendix B of Exhibit DKD-2 identifies, defines, and gives the default values of these user inputs. Exhibit DKD-3, the HAI Inputs Portfolio, provides the rationale and support for each of these inputs.

III. CHANGES FROM HM 2.2.2 TO HM 5.2A

Q. THE VERSION OF THE HAI MODEL SUBMITTED IN THE ARBITRATION DOCKET IN 1996 WAS HM 2.2.2. GENERALLY, WHAT ARE THE DIFFERENCES BETWEEN HM 2.2.2 AND HM 5.2A?

A. Compared to HM 2.2.2, HM 5.2a is a dramatically improved model. These improvements result first and foremost from the adoption of advances in the state

of the art of cost modeling, particularly with respect to determining the location of customers being served by the network that is modeled. Additionally, the Model has been the subject of continuing intense scrutiny by the developers of the Model, as well as its clients, regulators, and other, often hostile, parties. This scrutiny has led to the identification and incorporation of a number of changes to the Model and its inputs. The Model has benefited from the extensive modeling and input parameter investigation by the FCC-state joint board on universal service. Finally, the operation of the model has been improved in many respects, such as the amount of flexibility provided to users, the speed at which the code executes, and the elimination of various programming "traps" that can cause the model to suspend processing.

Q. PLEASE SUMMARIZE THE KEY DIFFERENCES BETWEEN HM 2.2.2 AND HM 5.2A.

A. At a high level – the extensive changes to all aspects of the model preclude a more exhaustive accounting – the most significant improvements in HM 5.2a compared to HM 2.2.2 are as follows:

- In contrast to HM 2.2.2, HM 5.2a locates and serves customers in small[6] population "clusters" based on the use of a mixture of geocoded information, where available, and surrogate road locations otherwise, as opposed to the previous use of Census Block Groups ("CBGs") that often have a much larger geographic extent in rural areas;

[6] In a large majority of cases, these clusters are no more than three miles on a side, and are usually much smaller than that.

- The use of customer clusters rather than CBGs, assigns customers more precisely to serving wire centers than could be done with CBGs, given the latter's geographic extent, and precisely locates the clusters relative to the wire centers that serve them rather than arbitrarily assigning locations to the center of quadrants of the CBGs;
- HM 5.2a much more precisely estimates the number of primary and secondary residential lines, single line business lines, multiple-line business lines, public telephone lines, and special access circuits in each cluster, rather than arbitrarily assuming business and special access lines are located at the same place as residential line concentrations;
- HM 5.2a bases the calculations of distribution cable types, sizes, and lengths on the actual extent and demographics of the population clusters being served, rather than on values pre-set by density zone;
- HM 5.2a optionally normalizes the amount of distribution cable in a population cluster to an independently-derived measure of the amount of cable required to connect all customers in a cluster, thereby ensuring the model produces sufficient cable to reach all customers;
- HM 5.2a allows the user to specify spare cable capacity in terms of a target utilization factor, rather than achieved fill, thereby specifically recognizing that achieved fill is typically substantially lower than target utilization due to the modularity of commercially-available cable sizes;
- HM 5.2a extends digital facilities – a combination of fiber optics feeder and, if necessary, T1 distribution systems – to within a user adjustable distance of

every customer, ensuring the network is capable of supporting high-quality voice service as well as broadband data services such as the xDSL family of digital subscriber line services;

- At the user's option, HM 5.2a selects between copper and fiber feeder based on relative life-cycle costs, determines the optimum mix of outside plant structures, invokes a wireless distribution option if it is more economical than a wireline network, and allows for a mixture of host, remote, and standalone local switching systems;
- In comparison to HM 2.2.2, HM 5.2a calculates the investment in local switching systems more precisely, using inputs derived from the FCC's extensive review of switching cost data;
- HM 5.2a models the interoffice network as a series of interconnected logical fiber rings built on physical rings which are laid out in a fashion that minimizes cost, and calculates the cost of transmission terminal equipment associated with these rings more precisely;
- In comparison to HM 2.2.2, HM 5.2a provides a more refined calculation of capital carrying cost that separates depreciation lives and net salvage values, and more properly reflects federal tax deferrals;
- At the user's option, HM 5.2a assigns the loop portion of all categories of expenses other than plant-specific expenses to loops on a per-line basis rather than on the relative amounts of cost in different loops;
- HM 5.2a incorporates more than twice as many user inputs, providing additional flexibility in areas such as the mix of outside plant types, the effect

of various terrain and soil attributes on outside plant structure costs, a more granular breakdown of network component costs generally, and the specification of expense to investment ratios for various categories of network equipment as an alternative to calculating the ratios based on ARMIS data;

- HM 5.2a presents user inputs for review and potential adjustment through a graphical user interface that consists of a number of logically-organized screens;
- HM 5.2a includes improved and more complete model documentation, particularly through the addition of the HIP that identifies the default value for each of the user inputs and provides the sources and rationale for each input used by the model; and
- HM 5.2a produces a much more complete set of results in the standard outputs of the model, while allowing the user to capture additional information on intermediate results of the model.

Again, I must emphasize that this is a high-level view of the changes; the documentation of each successive release of the model has provided several pages of details on the changes in that release relative to the previous version.

Q. HOW IS THE HAI MODEL RELATED TO THE FCC SYNTHESIS MODEL?

A. The FCC Synthesis Model is used by the FCC for determining Federal Universal Service support. The HAI Model serves as the framework for the FCC Model. The HAI subscriber database is the prototype for the FCC database. The FCC Synthesis Model adopted a clustering methodology similar to that used by the

HAI Model. The interoffice and expense modules used by the FCC Synthesis Model were taken from the HAI Model, and the user interface is adapted from the HAI Model.

The Synthesis Model uses a set of route-optimization algorithms that determine distribution and feeder cable route distances. HM5.2a has a corresponding strand-distance adjustment that allows it to approximate the Synthesis Model's route distance optimization methodology.

Although use by the FCC of the HAI Model as the framework for the FCC Synthesis Model validates the HAI Model, the FCC Synthesis Model cannot be used in this proceeding because it is not designed to produce UNE costs. The FCC Model was developed to produce USF costs at the wire center level. Furthermore, it cannot calculate costs below the wire center level; *i.e.*, at the density zone or cluster level.

IV. CUSTOMER LOCATION AND CLUSTERING

Q. WHAT IS THE PURPOSE OF THE CUSTOMER LOCATION AND CLUSTERING ALGORITHMS?

A. The location algorithm ensures that customers are located to the highest degree of specificity and accuracy possible, based on available data. The clustering algorithm ensures that the identified customer locations are served by outside plant that is configured to be economically efficient and consistent with design guidelines that are based on the characteristics of currently-available outside plant technology.

1 **Q. PLEASE SUMMARIZE THE CUSTOMER LOCATION PROCESS.**

2 A. This process is described in detail in Section 5.3 of Exhibit DKD-2. Sections 5.1
3 through 5.3 are also useful in understanding how residential and business line
4 counts are determined by wire center.[7]

5 Briefly, HM 5.2a utilizes the most precise customer location data that are
6 available. Wherever customer locations have been precisely determined by
7 geocoding, that information is used. Geocoding, as applied in HM 5.2a, locates
8 customers fifty feet from the center of the roads on which they are located. In
9 Arizona, the geocoding success rate is approximately 77% of all customer
10 locations for the state as a whole. Exhibit DKD-4 contains a list of the geocode
11 success rate by Qwest wire centers.

12 For those locations for which no geocoding information is available, the Model
13 uses the next most precise information source available: the U. S. Census
14 Bureau's location of residential households by census block ("CB"). In HM 5.2a,
15 surrogate locations are distributed uniformly along the roads they lie on and
16 within the boundaries of the CB. The road information is determined from the U.
17 S. Census Bureau's Topologically Integrated Geographic Encoding and
18 Referencing ("TIGER") files. Roads where customers are unlikely to reside have
19 been eliminated from consideration.[8] The uniform distribution of customer

[7] For Arizona, Qwest's publicly available wire center specific line counts were used in HM 5.2a.
[8] This includes, for instance, limited access highway segments, road segments that are in tunnels or underpasses, vehicular trails and roads passable only by four-wheel-drive vehicles, and private driveways and roads.

locations along roads in this fashion is still likely to overestimate the actual dispersion of customers to some extent, because households and businesses are commonly clustered to at least some degree. But this is the best way we know how to use the information that is available.

Q. PLEASE SUMMARIZE THE CUSTOMER CLUSTERING PROCESS.

A. This process is described in Sections 5.4 and 5.5 of Exhibit DKD-2. Its purpose is to identify subsets of the customer locations determined from the customer location that are close enough together to be efficiently engineered as a single telephone plant serving area. Customer locations must meet the following criteria to be considered members of a particular cluster:

- No point in a cluster may be more than 18,000 feet distant (based on right angle routing) from the cluster's centroid;
- Clusters are targeted not to exceed 1,800 lines in size;[9] and
- No point in a cluster may be farther than two miles from its nearest neighbor in the cluster.

Clusters so identified are classified as "main clusters" if they have five or more lines, and "outlier" clusters if they have fewer than five lines.

Once main clusters are identified in this fashion, the clustering algorithm calculates and records a rectangle whose 1) centroid and location are the same as

[9] This number results from 90% utilization of a 2016 line DLC Remote Terminal and a 7200 line SAI (Feeder plus Distribution pairs terminated). It is a target maximum size, but the final count of lines in a cluster may exceed 1,800 lines due to the final gross-up of geocode data to the study area line counts and the addition of special access lines and public telephones. If this occurs, the model adds sufficient remote terminals and SAIs to serve the actual line count, taking excess capacity into account.

the convex polygon that defines the cluster;[10] and 2) aspect ratio is the same as the aspect ratio of the minimum rectangle that bounds the original cluster shape. Thus, customers belonging to main clusters end up within the confines of a "rectangularized" cluster shape that allows the Model to estimate the type and amount of outside plant required to serve each cluster. As I have mentioned before, the aspect ratio is now calculated based on the actual orientation of the bounding rectangle, rather than being projected onto north-south and east-west axes. The cluster type and shape information, as well as other data about each cluster as listed in the Cluster Input Data Table in Section 6.1.1 of Exhibit DKD-2, including the strand distance calculated by HM 5.2a, become the demographic input data for the Model calculations.

Q. WHAT DOES THE MODEL DO WITH THE INFORMATION THAT RESULTS FROM THE LOCATION AND CLUSTERING PROCESS?

A. HM 5.2a treats each main cluster identified during the clustering process, along with its associated "outlier" clusters, as a serving area. As described in Section 6.3 of Exhibit DKD-2, the Model extends copper or fiber feeder cable to each main cluster. From there, copper distribution cable extends throughout the main cluster to reach the customers in the main cluster. If the distances involved exceed the maximum copper loop distance set by the user, the main cluster is divided into two or more sub-clusters, and fiber feeder is extended to terminals and Serving Area Interfaces located in each of the sub-clusters. Copper cables,

[10] A convex polygon is one whose internal angles are less than 180 degrees, meaning that it "bulges outward" at each of its vertices.

including, as necessary, T1 digital transmission equipment, also extend from the feeder termination in the main cluster to the remote clusters associated with the main cluster.

Q. WHAT IS THE NATURE OF THE STRAND DISTANCE THAT IS NOW CALCULATED FOR EACH CLUSTER AND INCLUDED IN THE DATA RECORD FOR THAT CLUSTER?

A. The strand distance is an independent measure of an amount of route mileage required to connect all the points that represent customer location to each other. It is related to a graph theory concept referred to as a Minimum Spanning Tree ("MST") of the points that represent the customer locations. But unlike a true MST, which would calculate distances based on connecting points with straight lines, the strand distance used in the Model provides for the extra distance required to connect points via "right angle routing," in which the connection between any two points follows a "horizontal, then vertical" path in a Cartesian coordinate system.[11]

Q. WHAT IS THE SIGNIFICANCE OF THE STRAND DISTANCE FOR A GIVEN CLUSTER?

A. It represents the amount of distribution route distance ("DRD"), which is the sum of all distribution and connecting cable components that the Model should produce in each cluster.

[11] In other words, the MST calculates the distance between two points as the sum of the length of the legs of a right triangle connecting the two points rather than the hypotenuse of the triangle, which represents the "airline" distance.

Q. HOW DO YOU ANSWER THE CRITICISM THAT THE STRAND DISTANCE IS AN ABSOLUTE MINIMUM MEASURE OF THE APPROPRIATE DRD, AND THE DRD SHOULD ACTUALLY EXCEED THE STRAND DISTANCE?

A. For a variety of reasons, the MST, while serving as an indicator of what the DRD might be, does not represent the true minimum DRD the Model should produce. This is because:

- The methodology used to determine surrogate customer locations when geocoded information is not available is likely to overly disperse those locations, because it assumes a uniform spacing of customer locations along roads that does not reflect clusters of customers that often exist, such as in small towns, settlements, and the like. Since MST takes surrogate locations as fact, strand distances based on these locations will also be over-estimated in this case.
- While the graph theory on which the MST concept is based assumes that branches can occur only at the nodes of the graph, which in this case are the customer locations, telephone plant will almost always have branching points at places other than at a customer location. Such "Steiner networks" are capable of connecting points with less cable than is required by MST assumptions.
- The strand distance may not account for all the cable used to connect customer locations to the feeder. Specifically, one must also account for the drop cables that connect the distribution cables to the individual customer

premises, and the substantial amounts of cable required to connect outlier clusters to main clusters, and to connect customers within outlier clusters.

Q. HOW IS THE STRAND DISTANCE USED IN HM 5.2A?

A. The HM developers have reservations about the meaningfulness of the MST for the reasons explained in my previous answer. Nonetheless, to allay the concerns of those who disagree, HM 5.2a includes the optional ability to normalize the DRD produced by the Model to the calculated strand distance, taking appropriate account of the drop cable lengths included in the strand distance estimate but not considered to be part of the DRD.

The user interface includes two parameters that can be set independently for each density zone. The first is a logical "on-off switch" that determines if the strand distance provided as part of the cluster information database is to be used in that density zone. The second is a multiplier of the strand distance that can be used to correct any systematic biases in the strand distance. It can, for instance, be used to lower the strand distance to correct for the effect of conservatively over-dispersing customer locations in the low density zones.

These parameters are used as follows. If the switch is off, the DRD is not normalized to the strand distance. If it is on, the strand distance provided in the cluster data record is multiplied by the second parameter, then the ratio of the adjusted strand distance to the DRD is computed, and finally each component of the DRD is multiplied by that ratio so the overall DRD will now equal the

adjusted strand distance.[12] This process is explained in detail in Section 6.3.4 of Exhibit DKD-2, which also describes the default values for these and another relevant parameters.

Q. ARE ANY ADJUSTMENTS TO THE DRD MADE IF THE STRAND DISTANCE NORMALIZATION IS TURNED OFF?

A. Yes. Even if the user does not invoke the normalization option, the Model nevertheless ensures that the DRD in each cluster is large enough for cable to reach the corners of the cluster rectangle that may be occupied by customers, using right-angle routing. For a cluster with two customer locations, this minimum distance is the sum of the height and width of the rectangle less two drop lengths for the cluster's density zone, under the assumption that customers are located at diagonally opposite corners of the rectangle. With this minimum, there is enough cable to connect opposite corners of the rectangle. For instance, starting, say, at the upper left corner, such a cable would extend to the right along the upper edge of the rectangle to the mid-point of the upper side, drop straight down through the middle of the rectangle to the bottom edge (intersecting the SAI along the way), and then travel towards the right along the bottom edge of the rectangle. For a cluster with three customer locations, the minimum distance is the sum of the height and 1.5 times the width, assuming customers are located at three corners of the rectangle; the additional amount of cable is sufficient to also extend from the middle vertical cable segment to the upper right or lower left

[12] The default user input value is –999, which causes the Model to use a multiplier of 1; if the user replaces, through the interface forms, the –999 indicator with a practical multiplier value, the Model will override its default factor with the user-selected one.

corner. Finally, for a cluster with four or more customer locations, the minimum distance is the sum of the height and twice the width of the rectangle, assuming customers are located at all four corners of the rectangle; this provides sufficient cable to extend to all four corners from the middle vertical cable segment.

Q. TO WHAT EXTENT DOES THE USE OF STRAND DISTANCE LEAD TO A CONSERVATIVE ESTIMATE OF THE REQUIRED AMOUNT OF STRUCTURE DISTANCE?

A. The calculations do not assume any sharing between feeder and distribution structure. In practice, feeder and distribution cable can sometimes occupy common structure. The Model thus conservatively estimates loop structure investment by not allowing for this form of sharing. Furthermore, the Model assumes that all structure, and hence cable, is routed in a right-angle fashion. In practice, pole and trench routes run diagonally to follow roads that do not run N-S or E-W. Such diagonal routing will generally lead to structure distances that are less than those obtained under the right-angle assumption. In addition, in testimony filed in Florida in July, 2000, HM5.2a's predecessor model, HM5.0a, was found to estimate significantly more loop structure distance than that computed by the BellSouth Telecommunications Loop Model ("BSTLM"), which is based on BellSouth's actual customer locations. In this case, the HM calculated 28% greater distribution distance and 436% (more than five times) more feeder distance than that estimated by BSTLM.[13] This version of the HM, HM5.0a, will

[13] Rebuttal Testimony of John C. Donovan and Brian F. Pitkin, Florida Public Service Commission Docket No. 990649-TP, July 31, 2000, Exhibit JCD/BFP-3.

generally produce somewhat less distance than that calculated by HM5.2a with the strand adjustment enabled. Thus, HM5.2a will produce even more conservative estimates of loop plant structure distance.

Q. PLEASE SUMMARIZE WHERE IN THE EXHIBITS TO YOUR TESTIMONY THE CUSTOMER LOCATION, CLUSTERING, AND DISTRIBUTION NETWORK DESIGN ALGORITHMS ARE DESCRIBED IN DETAIL.

A. Sections 5.3 and 5.4 as well as Appendix C, of the Model Description contained in Exhibit DKD-2, provides a detailed portrayal of the customer location and clustering algorithms, respectively. These processes in turn require an accurate determination of LEC wire centers and customer line counts by type. The process of obtaining these data is described in Sections 5.1 and 5.2. Sections 6.3 and 6.4 describe how the Model engineers outside plant to provide service to the identified clusters of customers.

Q. PLEASE DESCRIBE THE MECHANISM BY WHICH USERS MAY SET E/I RATIOS FOR VARIOUS PLANT CATEGORIES.

A. The Model calculates the operating expenses associated with each network plant category by multiplying the investment calculated by the Model for that category by an appropriate E/I ratio. In its "default" mode, the Model calculates the E/I ratio for a given plant category as the ratio of the expense and investment amounts entered in the "ARMIS Inputs" Worksheet of the Expense Module for that category. The user, however, can override the default E/I calculation by entering an E/I value for that category in the "99 Actuals" Worksheet.

Q. PLEASE DESCRIBE SPECIFICALLY HOW A USER CAN ENTER SUCH E/I RATIOS.

A. I will do so by reference to the "99 Actuals" Worksheet included as Exhibit DKD-5.[14] Focusing on Rows 3-51 of that worksheet, one observes various plant categories. Column F, labeled "calculated or user-defined factor," shows the E/I ratio for each plant category that is subsequently used by the Model to calculate operating expenses. For a given plant category, if Column H (which is labeled "User-Defined Factor") were blank, then Column F would contain an E/I calculated from the investments and expenses shown in Columns C and E (which are picked up from the ARMIS Inputs sheet). When there is an entry in Column H, however, the value entered in Column H overrides the normal E/I calculation, and Column F will be set equal to the Column H entry and used in subsequent calculations. For example, in Row 19 (ARMIS account 2212, Digital Electronic Switching), the value .0558 entered in Column H causes Column F to be .0558, rather than the ratio of 39,508 (Column E) to 823.252 (Column C), or .0480. In this fashion, the user is able to input E/I ratios for any and all plant categories.

To change the E/I ratios from the default values, a user should allow the Model to execute, enter one or more values in Column H, and depress the F9 key to recalculate.

[14] Exhibit-5 contains a "values only" version of the 98 Actuals worksheet, and so the formulas described below do not appear.

Q. WHAT IS THE PURPOSE OF COLUMNS I AND J AT ROWS 44-46 OF THE 99 ACTUALS WORKSHEET?

A. These additional columns, called Alternative Cable Maintenance Factors, allow the user to enter separate fiber cable and copper cable E/I ratios for each type of outside plant structure – aerial, underground, and buried. While it might appear from the exhibit that the copper cable values set in Column J control the value in Column H, and hence in Column F, in actuality, for these plant categories, the Model will automatically select the Column I entries when calculating fiber cable expenses, and Column J entries when calculating copper cable expenses.

Q. EXHIBIT DKD-5 SHOWS A NON-ZERO VALUE FOR EVERY PLANT CATEGORY IN COLUMN H. ARE THEY THE ACTUAL VALUES USED TO PRODUCE THE RESULTS FOR QWEST?

A. Yes, and they are the values that are set in the "99 Actuals" worksheet in the Model that is being filed electronically with this testimony. Therefore, the user does not need to take any action to have the Model calculate results with the set of ratios shown.

Q. PLEASE IDENTIFY THE SOURCE OF THE VALUES THAT APPEAR IN COLUMN H-J OF EXHIBIT DKD-5.

A. The values in Exhibit DKD-5 are those that the FCC determined to be appropriate. They appear in the *USF Inputs Order*.[15]

[15] Mechanism for High Cost Support for Non-rural LECs, CC Docket 97-160, Tenth Report and Order, FCC 99-0304, (Rel. Nov. 2, 1999) ("*USF Inputs Order*").

V. RESULTS OF APPLYING HM 5.2A TO QWEST

Q. WHAT INPUTS HAVE BEEN ADJUSTED TO REFLECT QWEST CUSTOMERS IN ARIZONA?

A. The HAI Model uses Arizona specific customer location data, terrain data, and switch locations. In addition, I used the following inputs specific to Qwest in Arizona.

1) Qwest's year 2000, Wire Center Specific Line Counts downloaded from Qwest's web site.[16]

2) End of Year 2000 ARMIS expense and network usage data.

3) Switching Investments. These data are based on prices adopted by the FCC in the *USF Inputs Order*. The inputs reflect Qwest's specific proportion of host and remote switches. The switching investments include the costs of software necessary for vertical features. The model also sizes switches with the necessary capacity to account for usage of features. As a result, the cost of features is already being recovered in the switching unbundled network elements.

4) An Arizona specific labor factor. This factor adjusts a specific proportion of certain investments to reflect Arizona specific labor rates.

5) State Prescribed depreciation lives and net salvage values.

[16] In order to keep to keep the model non-proprietary, I relied on data available from Qwest's ICONN web site. These data contains by wire center current counts of residential and business lines. These data were used along with a non-proprietary data response Qwest provided to the FCC to create the wire center specific line counts used in the HAI Model.

6) Qwest specific cost of capital as identified in the testimony of Mr. Weiss and listed below.

Cost of Capital	
Cost of Debt	7.39%
Percent Debt	47.57%
Cost of Equity	11.62%
Cost of Capital	9.61%

7) Arizona specific tax rate.

8) The monthly cost of local number portability (HIP Section 5.5.10) is set to $0.43, consistent with the FCC's finding for Qwest in the *USF Inputs Order.*

Q. PLEASE PROVIDE AN OVERVIEW OF THE OUTPUTS OF THE HM 5.2A EXPENSE MODULES.

A. The outputs of the Model appear in a set of spread-sheets produced by the expense module selected for a particular run by the user. There are different expense modules depending on whether the user selects results to be displayed by density zone, wire center, or individual customer cluster. Each also displays study area totals.

There are numerous worksheets produced by the expense modules; they contain many intermediate and final results of the Model's calculations and list various inputs to the Model. The sheets and their contents are too numerous for me to describe in detail here. However, there are four sheets of particular importance in the model runs I have made for this testimony. I refer to them by the names that appear on the Excel "tab" at the bottom of each sheet. The four sheets are as follows:

- Scenario Inputs: shows the entire list of changes to the user inputs, if any, that have been made by the user for the run in question.
- User Adjustable Inputs: Shows the values of the complete set of all 1,400+ user inputs, whether they have been changed or not. This sheet is less useful than the Scenario Input, but is still a good way of reviewing the entire set of input values used in case, for instance, the user does not have a copy of the Model Description or HIP that identifies each input and its default value.
- Unit Cost: appears as a worksheet in the density zone expense module showing the cost of each Unbundled Network Element by entity, as well as the number of lines by density zone.
- Investment Input: appears as a worksheet in the expense modules summarizing the network investment by category. In the case of the wire center expense module, the results are broken out by individual wire center, whose CLLI code is listed in Column A. Columns B through H show the number of lines in each customer category. Numerous columns then follow to show, first, the investments calculated by other modules and input to the expense module, and, second, the resulting costs calculated by the expense module. Of key interest are columns HA through HT, which show the UNE unit cost results. These columns contain information equivalent to that provided in the cost detail worksheet of the density zone expense module output.

Q. PLEASE DESCRIBE THE RESULTS PRESENTED IN EXHIBIT DKD-6.

A. Exhibit DKD-6 consists of two parts. Each provides results based on a run of the

Model that uses the Arizona default values for all the user inputs.

Part "a" of Exhibit DKD-6 contains the unit cost worksheet of the density zone expense module output, showing loop-related UNEs by density zone on page 1, and other switching and interoffice transport UNEs on page 2.[17] Part "b" contains the Investment Input worksheet of the wire center expense module output, limited to Columns A-H (line counts by wire center) and Columns HA-HT (UNE costs by wire center).

Back at the beginning of this testimony, I summarized the results presented in Exhibit DKD-6. The Expense Module produces many more worksheets than just the few shown in Exhibit DKD-6. Thus, a wealth of detail is available to the user.

Q. HOW DO BUILDING CABLE AND TERMINAL COSTS (ON-PREMISES WIRE) PRODUCED BY HM 5.2A COMPARE WITH THE CORRESPONDING SGAT VALUES[18]?

A. HM5.2a assumes that clusters having very high line densities and small areas contain high-rise buildings. In such cases, the Model replaces the normal distribution investment calculations with formulas that estimate investment in building riser cable and in indoor SAIs, or building terminals. Although these investments do not normally appear explicitly in the Model's results, I was able to extract them using a Distribution Module that was modified for this purpose. I applied the monthly cost factor computed by the Model to the building cable and

[17] The two parts of Exhibit DKD-6 have been reformatted to portray the results more clearly.

[18] Building cable, also known as on premises wire, is any wiring the ILEC owns or controls on the customer side of the MPOE terminal.

SAI investment produced by the modified Distribution Module to estimate the cost of these two items. The Model produces a cost of $0.2955 per pair per month, including the building terminal and the on-premises wire. This corresponds to the SGAT price of $1.24 per pair per month, including building terminal and wire.

Q. DO THE HM5.2A RESULTS PERTAIN TO A RANGE OF BUILDING SIZES OR ONLY LARGE OFFICE BUILDINGS?

A. The Model addresses a wide range of building sizes, in terms of the number of lines served. Even though the Model's internal calculations refer to "high rise" buildings, they apply as well to smaller buildings. The results I extracted from the workfile produced by the modified Distribution Module show a wide range.

Q. IN THE ARBITRATION PROCEEDING THE COMMISSION USED HM 2.2.2 WITH MODIFICATIONS TO DETERMINE THE CURRENT LOOP RATE. WHAT ARE THE RESULTS OF RUNNING HM 5.2A WITH THE COMMISSION'S ORDERED INPUTS FROM THE ARBITRATION?

A. The unbundled loop price using the Commission's inputs from the Arbitration is $15.15. The density zone and wire center results using the Commission's inputs from the Arbitration can be found on the CD-ROM as Exhibit DKD-7.

Q. WHAT INPUTS DID THE COMMISSION CHANGE IN ITS ARBITRATION ORDER?

A. The Commission made the following inputs **changes** to HM 2.2.2 in its Arbitration Order, Docket No. U-2428-96-417, dated January 30, 1998.

1) a weighted average cost of capital of 10.37%

2) State Prescribed depreciation rates

3) Corporate Overhead of 13%

4) Arizona specific tax rate of 39.7%

5) a forward looking network operations factor of 85%

6) a cable sheath mileage factor of 26.092

7) three lines per house in the distribution model

8) structure sharing for aerial, buried and underground of 50%

9) drop terminal investment of $70 per line

Q. WOULD IT BE APPROPRIATE FOR THE COMMISSION TO MAKE THESE CHANGES TO HM 5.2A?

A. No. The default run of the HM 5.2a, as adjusted for Arizona represents inputs appropriate for Qwest in Arizona. Below I discuss each of the Commission's input modifications and why the HM 5.2a defaults are more appropriate.

1) Cost of Capital

As discussed previously HM 5.2a currently uses an Arizona specific 9.61% cost of capital. This cost of capital was developed in the testimony of Mr. Weiss.

2) Depreciation Rates

As discussed previously HM 5.2a currently uses the Arizona State Prescribed depreciation rates and net salvage values.

3) Corporate Overhead

The current Corporate Overhead factor used in HM 5.2a is 10.4%. This overhead includes Executive and Planning accounts and General and Administrative

accounts. The table below compares Qwest's ARMIS data for the Corporate Overhead accounts, including adjustments identified in the testimony of Mr. Weiss, to Qwest's Operating Revenues.

Year	Corporate Overhead (1,000s)	Operating Revenues (1,000s)	Corporate Overhead Factor
1996	$134,931	$1,399,370	9.6%
1997	$166,584	$1,496,909	11.1%
1998	$195,105	$1,605,361	12.2%
1999	$169,994	$1,747,477	9.7%
2000	$173,345	$1,830,852	9.5%
Average			**10.4%**

The table demonstrates that the Corporate Overhead factor used in HM 5.2a is reasonable for Qwest in Arizona.

4) Arizona Tax Rate

The HM 5.2a uses a combined State and Federal Tax rate of 39.53%. This represents a Federal Rate of 35% and a State Tax of 6.968%. Accounting for the fact that State Taxes are deductible from Federal Taxes the effective rate for Arizona is 39.53%.

5) Network Operations Factor

The HM 5.2a uses a network operations factor of 50%. As explained in the HAI Inputs Portfolio, section 5.5.6 and Appendix D, this factor is applied to Qwest's Arizona actual Network Operations Expenses, in order to adjust these expenses for what is likely to occur on a forward-looking network. Because Qwest's actual Network Operations expenses are incurred on an antiquated network, Qwest's

forward looking Network Operations expenses are likely to be substantially less than they are today.

6) Cable Sheath Mileage Factor

In the Arbitration decision (U-3021-96-448 ET AL.; January 30, 1998; page 15) the Commission changed the cable sheath mileage factor in HM 2.2.2 in order to ensure that enough distribution plant was being estimated. This is no longer an issue in HM 5.2a. As is described previously in testimony, the model estimates plant based on the dispersion of actual customer locations which guarantees that enough distribution plant is being estimated.

7) Three Lines per household in distribution

The HAI Model uses a cable sizing factor of 75% in distribution plant. This results in an average actual fill factor of 48.8%, or slightly more than 2 lines per household.

Excess capacity is built into a network because the cost of digging up the network to add an extra line is greater than the cost of placing that line today. The decision of whether or not to build for growth should be based on whether it is cost effective to do so. The question faced by the planner should be: Will the revenues generated by future demand pay for the cost of placing excess facilities today? If the answer is "no," then it is better to wait to place the facilities. If the answer is "yes," then it is better to place the facilities today, and some cost savings will be achieved by placing facilities now. If a model were to properly account for growth, these cost savings should be realized in the model.

Traditional models build excess capacity for growth in the form of fill factors, but do not realize any of the cost savings resulting from growth. This in effect overstates the cost of the network. Consider the following example: It is projected that demand will be 146 lines in five years, while the current demand is 100 lines. The annual cost of building the network to handle eventual demand of 146 lines is $29,200 per year, which is $200 per line. Traditional models determine the cost per line by dividing the annual cost by demand in the first year. The following table tracks the flow of revenues and cost that would result using the traditional methodology. Keep in mind that cost, as calculated by TELRIC models, already includes a reasonable profit via the cost of capital which is applied to investments.

Traditional Methodology
(price per line = cost per line in year 1)

Year A	lines B	cost C	Cost per line D=C/B	revenue F=E×B	revenue (price) per line E	excess profit G=F-C	excess profit per line H=D-E
1	100	$29,200	$ 292	$ 29,200	$ 292	$ -	$ -
2	110	$29,200	$ 265	$ 32,120	$ 292	$ 2,920	$ 27
3	121	$29,200	$ 241	$ 35,332	$ 292	$ 6,132	$ 51
4	133	$29,200	$ 220	$ 38,836	$ 292	$ 9,636	$ 72
5	146	$29,200	$ 200	$ 42,632	$ 292	$13,432	$ 92
Total	610	$146,000	$239.34	$178,120	$292.00	$32,120	$ 52.66

As you can see, the traditional methodology results in an average annual excess profit per line (over the five year period) of $52.66. The next table illustrates the proper methodology.

Proper Growth Methodology (price per line = weighted average cost per line over 5 years)							
Year A	lines B	cost C	cost per line D=C/B	revenue F=E×B	revenue (price) per line E	excess profit G=F-C	excess profit per line H=D-E
1	100	$ 29,200	$ 292	$ 23,934	$ 239	$ (5,266)	$ (53)
2	110	$ 29,200	$ 265	$ 26,328	$ 239	$ (2,872)	$ (26)
3	121	$ 29,200	$ 241	$ 28,961	$ 239	$ (239)	$ (2)
4	133	$ 29,200	$ 220	$ 31,833	$ 239	$ 2,633	$ 20
5	146	$ 29,200	$ 200	$ 34,944	$ 239	$ 5,744	$ 39
Total	610	$146,000	$239.34	$146,000	$239.34	$ -	$ -

As can be seen, the appropriate annual price per line is $239.34, or $52.66 less than would result using the traditional methodology.[19]

A proper accounting of growth should lower cost, not increase it. Exhibit DKD-8 shows the theoretical basis as to why costs per line are lower when growth is properly taken into account. An interesting conclusion from this exhibit is that the per line cost savings from growth is largest when growth is high, interest rates are low, and the planning horizon is long. This matches what we would expect in the real world.

The FCC has concluded that "the fill factors selected for use in the federal mechanism generally should reflect current demand, and not reflect the industry practice of building distribution plant to meet "ultimate" demand."[20]

8) Structure Sharing

The Commission Ordered structure sharing percentages are similar, though

[19] The table does not take into account the time value of money. This was done for the sake of simplicity.

[20] *In the Mater of the Federal-State Joint Board on Universal Service,* Further Notice of Proposed Rule Making, CC Docket Nos. 96-45 and 97-160, FCC 99-120, (rel. May 28, 1999), ¶ 100.

account for slightly less sharing, than what is used inHM 5.2a. Appendix B of the HAI Inputs Portfolio discusses the opportunities an incumbent telephone company has to share the cost of telephone plant structure. Qwest has traditionally denied that opportunities exist to share structure costs. However, it is common practice for developers to dig trenches and place structure, free of charge, for Qwest and other utilities to place cable. Section 4 of Qwest's Exchange and Network Services Tariff[21] outline numerous opportunities for Qwest to collect construction and even material costs[22] from new customers. Section 4.4 B.2 states that the builder "will provide trench and backfill for the facilities and be responsible for those costs." Section 4.4 B.6 states that Qwest will provide facilities as not charge "as long as the cost does not exceed the Company determined cap, which shall equal the distribution and drop portion of the average exchange loop investment, times the number of lots in the development."

The pre-merger Qwest, then a competitive IXC, recognized the value of searching for opportunities to share structure. An article in the May 1998 *Wired* magazine[23] details pre-merger Qwest's view on structure sharing. The article details how Qwest built its interoffice network by laying fiber for itself, spare conduit for future use, and fiber for competitors.

> The trick for Qwest was to build the network with other people's money… Says Nacchio: "We raised enough money that way that we essentially built our network for free."

[21] Section 4 of Qwest's tariff is filed as Exhibit DKD I.
[22] The HAI Model does **not** apply structure sharing fractions to the cost of material.
[23] A copy of this article is included as Exhibit DKD J.

1 Firms in competitive markets find ways to minimize cost. There are multiple
2 opportunities to share structure and these should be reflected in a forward looking
3 cost model.

4 In addition to the standard structure sharing opportunities, the structure sharing
5 inputs can be used to reflect real world cost savings that current model's don't
6 currently reflect. For one, different parts of the network overlap with each other.
7 Distribution cable, feeder cable and interoffice cable often can easily share some
8 of the same structure. The HAI Model currently has inputs to account for the
9 overlap between the feeder network and the interoffice network, but does not
10 account for overlap between distribution and feeder.

11 Another sharing opportunity that exists is the placement of excess facilities for
12 future use.[24] Cost models estimate total cost and divide these costs by current
13 demand. Any growth that occurs using spare capacity in the network today, is in
14 essence free – the costs are already being recovered by current demand.

15 Because competitive firms seek out opportunities to reduce costs; developers pay
16 for the structure costs of new facilities; Qwest, by tariff, requires consumers to
17 pay for facilities that exceed certain costs; the network between feeder and
18 distribution, in large part, overlap; and spare capacity can be used to generate
19 future revenues, I believe the sharing assumptions presently used in the HAI
20 Model represent an upper bound on the likely costs that Qwest would occur going
21 forward.

[24] This was discussed earlier. If fill factors are set appropriately then sharing fractions should not include adjustments for the sharing of facilities between the future and the present.

9) Drop Terminal Investment

The HAI Model currently has a drop terminal investment, including splice, of $42.50 per line for buried drops and $32.00 per line for aerial drops. These values were based on vendor price quotes. These values are similar to values used by the FCC in its Synthesis Model for a 6 pair drop terminal. The equivalent FCC values are $39.26 per line for a buried drop and $24.00 for an aerial drop.

Q. ON PAGE 9 AND 10 OF THE DIRECT TESTIMONY OF MR. BUCKLEY, HE USES RESULTS FROM THE HM 5.0A MODEL IN AN ATTEMPT TO VERIFY RESULTS FROM LOOPMOD. DO YOU HAVE ANY COMMENTS ON HIS MANIPULATION OF HM 5.0A?

A. Yes. The HAI Model, like properly functioning model, is sensitive to changes in key inputs. Mr. Buckley substantially changed key inputs in HM 5.0a and as expected obtained a vastly different output. It's important to note that Mr. Buckley changed inputs in the HM 5.0a to reflect the overstated inputs of LoopMod. For example, Mr. Buckley made changes to the sharing, corporate overhead and network operations factor that were in excess of the changes recommended by this Commission in the arbitration. The testimony of Mr. Weiss demonstrates that Qwest's Integrated Cost Model ("ICM") vastly overstates the cost of unbundled network elements, thus it should be no surprise than when these inputs are placed into another cost model it raises those cost estimates dramatically. It is also important to note that Mr. Buckley is using an older version of the HAI Model than what is being filed with my testimony here.

It should also not be surprising that Qwest's ICM come close to reproducing Qwest's embedded costs as well as BCPM, another model, produced and sponsored by Qwest.

VI. DEAVERAGING

Q. PLEASE SUMMARIZE AT&T'S DEAVERAGING PROPOSAL IN THIS DOCKET.

A. The deaveraged rates, contained in exhibit DKD-11, are based on the wire center cost results of HM 5.2a. These results were entered into a deaveraging optimization program that seeks to find the most cost based distribution of wire centers into three deaveraged zones. This methodology is consistent with the Commission's finding in the geographic deaveraging case where the Commission expressed the desire to move from the current retail based zones to more cost based zones.[25]

Q. WHAT IS THE BENEFIT OF PROPERLY DEAVERAGED LOOP RATES?

A. UNE prices that most closely reflect their underlying cost will best facilitate efficient competition by sending the appropriate signals to the marketplace and allow competitors to make economically efficient decisions on where and how to compete.

UNE prices that are set below cost could create uneconomic incentives for competitors to purchase UNEs rather than deploy their own network, even where

[25] Docket No. T-00000A-00-0194, July 25, 2000, page 6.

1 the competitor is the low-cost producer. UNE prices that are set above cost could
2 create uneconomic incentives for competitors to build facilities, even if the
3 competitor is not the most efficient provider. In addition, since significant sunk
4 costs exist for a competitor attempting to provide service over its own facilities,
5 UNE prices that are set above costs can also severely limit entry into a market.

6 Since the cost of some UNEs varies significantly in different geographic areas of
7 the state, these differences should be reflected through the development of cost
8 based deaveraged prices.

9 **Q. HOW SHOULD PROPER COST-BASED ZONES BE DEFINED?**

10 A. While there are a variety of different methodologies for defining zones for
11 deaveraging, the most practical way to deaverage is to combine areas with similar
12 costs into zones. The best way to do this is to group wire centers with similar
13 costs into cost-based zones.[26] This method is consistent with the findings of the
14 Commission in its geographic deaveraging docket.

15 **Q. WHAT ARE THE MECHANICS BEHIND CALCULATING THE**
16 **DEAVERAGED UNBUNDLED LOOP COST?**

17 A. First, the Commission should determine the unbundled loop cost by wire center. I
18 have used the HAI Model, version 5.2a.

19 Second, these data should be sorted by cost so that wire centers can be grouped
20 according to similarities in cost into wire center cost-based zones.

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[26] As competition develops, further deaveraging will inevitably be necessary. The state and type of competition will help the Commission determine future methods of deaveraging.

Exhibit DKD-11 provides wire center loop cost estimates for Qwest. This exhibit also contains proposed deaveraged loop zones and costs. These costs are calculated both before and after the sale of exchanges.

Third, wire centers with similar costs should be grouped into zones. In order to group wire centers into cost-based zones, I present a three-zone proposal.

The results are summarized in the table below:

Summary of 3 Zone Deaveraging Proposal for Qwest in Arizona						
Before the Sale of Exchanges						
Zone	**Distribution Cost**	**NID Cost**	**Concentrator Cost**	**Feeder Cost**	**Loop Cost**	**% of Total Lines**
1	$3.31	$0.44	$2.78	$0.80	$7.34	68.1%
2	$6.64	$0.46	$2.98	$1.15	$11.23	24.6%
3	$21.40	$0.47	$6.04	$4.16	$32.06	7.3%
Average	**$5.46**	**$0.45**	**$3.07**	**$1.13**	$10.11	
After the Sale of Exchanges						
Zone						
1	$3.31	$0.44	$2.78	$0.80	$7.34	63.50%
2	$6.37	$0.46	$2.90	$1.17	$10.91	24.91%
3	$18.19	$0.48	$4.78	$3.14	$26.59	11.58%
Average	**$4.77**	**$0.45**	**$2.91**	**$1.01**	**$9.14**	

Q. HOW WERE THE ZONES DETERMINED IN ABOVE PROPOSAL?

A. The zones were determined by running a deaveraging optimization program. This program searches for the set of wire center assignments to zones that is the most reflective of cost.

Q. WHAT IS THE PURPOSE OF THE DEAVERAGING OPTIMIZATION PROGRAM?

A. The purpose of the deaveraging optimization program is to find the appropriate assignment of wire centers to zones that creates deaveraged rates that most closely represent their underlying cost.

1 In order to establish wire center UNE zones that reflect their underlying cost, wire
2 centers with similar costs should be grouped together. The question that remains
3 in this process is the level at which to distinguish between zones.

4 In Washington, the Commission grouped wire centers, according to their cost,
5 into five zones. In order to determine the break-points in cost between zones, the
6 Commission looked for jumps in cost, or "natural" breaks in cost, between wire
7 centers.[27] In Minnesota, the Commission grouped wire centers, according to their
8 cost, into four zones. In order to determine the break-points in cost between
9 zones, the Commission sought to place an equal percentage of customers in each
10 zone.[28]

11 The attractiveness of looking for natural breaks, or targeting a certain percentage
12 of customers in each zone, is that it allows an objective methodology to be
13 applied to establish zones. Qwest's criticism of the methodology of grouping
14 similar cost wire centers together is that the demarcation point between zones is
15 poorly defined. Qwest raises concerns that a CLEC doing business in an
16 exchange near the border between two zones may try to manipulate the break
17 point in order to advantage its short term business plans.

18 In response to this Qwest criticism, and to establish wire center zones that are

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[27] This methodology, using three zones, was also supported by the Oregon staff in the deaveraging case in Oregon.

[28] The staff of the Arizona Commission proposed a similar methodology in the Arizona deaveraging case. However, instead of placing an equal percentage of the customers in each zone, the staff proposed three zones, using five dollar increments to define the cut off between zones. The Minnesota Commission later changed their methodology. They still grouped wire centers according to cost, but created zone boundaries based on where CLECs were currently purchasing loops.

most reflective of cost, AT&T has developed a deaveraging program that searches for the set of wire center zone assignments that minimizes the total deviation of costs within zones. The program is included on the CD-ROM as Exhibit DKD-12. Since the program minimizes the overall deviation of costs within each zone, the program produces the set of wire center zones that are *most* reflective of their underlying cost.

Q. HOW DOES THE DEAVERAGING OPTIMIZATION PROGRAM WORK?

A. The following simple example illustrates how the program determines zones. Suppose we want to create two zones from three wire centers. For simplification, assume each wire center has the same number of lines. Those wire centers have the following costs:

wire center A -- $15

wire center B -- $25

wire center C -- $45

There are three possibilities for putting these three wire centers into two zones:

	Zone 1	**Zone 2**
Option 1	A and B	C
Option 2	A and C	B
Option 3	B and C	A

The next table demonstrates the calculations for these three options:

		Option 1			**Option 2**			**Option 3**		
WC	**Cost**	**Zone**	**Avg Cost**	**Deviation / Mean**	**Zone**	**Avg Cost**	**Deviation**	**Zone**	**Avg Cost**	**Deviation**
A	$15	1	$20	5 / 15	1	$30	15 / 15	2	$15	0
B	$25	1	$20	5 / 25	2	$20	0	1	$35	10 / 25
C	$45	2	$45	0	1	$30	15 / 45	1	$35	10 / 45
Average Deviation				**0.18**			**0.44**			**0.21**

Avg Cost – the average of the wire center costs assigned to the zone

Deviation / Mean – the positive difference between the wire center cost and average cost divided by the mean of that wire center

The option that produces the lowest average deviation is the set of zone definitions that is most reflective of cost, given the number of zones.[29]

Q. HOW DOES THE AT&T DEAVERAGING PROPOSAL COMPARE WITH THE QWEST DEAVERAGING PROPOSAL?

A. The methodology proposed by AT&T and Qwest for deaveraging unbundled loop rates in Arizona is similar. Both AT&T and Qwest propose to only deaverage the loop at this time. We both calculate loop cost at the wire center level and assign wire centers to deaveraged zones. We both assign wire centers to deaveraged zones on the basis of cost. There are two major differences between the AT&T and Qwest proposal. First, is the cost model that should be used to determine loop cost for deaveraging. AT&T recommends the use of the HAI Model, version 5.2a. The second difference is the methodology for assigning wire centers to cost based zones. Qwest determines the break points between zones "as follows: Zone 1, wire centers with costs $25.80 or less; Zone 2, wire centers with costs above $25.80 and up to $32.38; and Zone 3, wire centers with costs above $32.38."[30] During prior deaveraging cost dockets Qwest criticized this type of methodology for selecting zones as arbitrary. As a result AT&T designed the deaveraging

[29] The given number of zones is important, since the deaveraging proposal most reflective of cost would be to place each area with a distinct cost into a distinct zone.

[30] Direct Testimony of Teresa K. Million, March 15, 2001, page 38 lines 16-18 and page 39 line 1.

optimizer, which assigns wire centers to zones in a manner that seeks to limit the overall variance of cost within each zone.

VII. QWEST'S FORWARD-LOOKING ECONOMIC COSTS OF PROVIDING DS1, HDSL AND ADSL LOOPS

Q. PLEASE DESCRIBE HOW THE HAI XDSL ADJUNCT MODEL DEVELOPS QWEST'S COSTS FOR DS1, HDSL, AND ADSL LOOPS, BOTH CAPABLE AND EQUIPPED.

A. The HAI Adjunct Model is included on the CD-ROM as Exhibit DKD-12. The HAI Adjunct Model description is included as Exhibit DKD-14. Briefly, the model estimates Qwest's forward-looking economic costs of all components necessary to provide DS1 loops (using forward-looking HDSL technology), ADSL- and HDSL-capable loops, ADSL- and HDSL-equipped loops, and a complete ADSL and HDSL service. The latter adds switching, transport, and management systems to the equipped loop cost. The model considers both conventional and splitterless ("G.Lite") ADSL, and both four-wire and two-wire versions of HDSL; the latter is referred to in the industry as HDSL-2.

The model operates as an adjunct to HM 5.2a in that it uses certain cost and cost factor outputs produced by HM 5.2a as inputs to the calculation of xDSL results. It also requires a set of user-adjustable investment inputs for xDSL equipment.

The model assumes that two-wire loops capable of supporting ADSL and HDSL-2 are the same as the cost of two-wire loops estimated by the HAI Model. This treatment is based on the forward-looking nature of the basic loops; for instance, the limitation on analog copper loop length in the HAI Model means no load coils

or other conditioning are required. The cost of the four-wire loops needed by conventional HDSL is calculated as a multiple of the two-wire cost; the multiple is one of the user inputs to the adjunct model.

In the case of loops provisioned over DLC feeder, there are additional costs associated with common equipment required in the DLC Remote Terminal to support xDSL. These and the costs of equipping DS1 and xDSL circuits are added to the unbundled loop costs from the HM 5.2a-MA UNE results to produce DS1 loop costs and total xDSL costs.

The analysis requires a number of user inputs concerning the equipment and operational costs associated with xDSL equipment, and that these inputs are in many cases difficult to estimate due to their vendor-proprietary nature. The required inputs and the values we have assumed for them are shown in the HAI Adjunct Model Inputs Portfolio included as Exhibit DKD-14.

Q. PLEASE DESCRIBE THE DS1 AND XDSL COSTS PRODUCED BY THE HAI ADJUNCT MODEL.

A. The HAI Adjunct Model produces the following costs for network components related to DS1 and xDSL:

- "Average DS1, HDSL, HDSL-2 and ADSL-capable loops"

The average DS1 and ADSL, HDSL and HDSL-2-capable loop cost as computed by the study for all-copper and DLC-served loops. Since HDSL is a forward-looking technology by which DS1 circuits can be provisioned in Arizona, the HDSL-equipped loop therefore gives the underlying cost of DS1 circuits. On the other hand, an HDSL-capable loop is a unique offering and

its price differs from the price of a DS1 loop. Current full-rate HDSL transmission requires four-wire transmission, while HDSL-2 requires a single pair. HDSL2 equipment is becoming commercially available.

- "Additional voice network UNEs"

The average cost of the voice UNE platform minus the average loop cost, hence the cost of all voice UNEs other than the loop costs.

- "Splitter at NID"

Cost of the splitter required at the customer's premises for "conventional" ADSL service. In a forward-looking design, the splitter will be mounted in the customer's NID (Network Interface Device).

- "DSLAM/splitter or HDSL terminal unit"

For ADSL, the cost of the digital subscriber line access multiplexer (DSLAM) and the DSLAM-associated splitter that separates the ADSL data streams from the baseband analog voice signal at the wire center (for copper loops) or the digital loop carrier (DLC) remote terminal (RT) location (for DLC-served loops).

The DS1 and HDSL-capable loops include the cost of the HDSL terminal units (HTUs) at the customer and wire center ends of the connection. Note that both of these equipment items are "network" components; unlike ADSL, the customer-end terminal unit is owned, installed, and maintained by the service provider.

- "Dedicated transport for ADSL"

Dedicated transport cost derived from the DS-3 value computed by HM 5.2a. For ADSL, the study assumes that a DS-3 will be shared by many users through a packet-switching technology such as ATM.

- "Dedicated transport for HDSL"

Dedicated transport cost derived from the DS-1 value computed by HM 5.2a-MA This cost is not part of the HDSL loop cost per se, but is relevant if a CLEC desires to purchase dedicated interoffice transport of the HDSL signal in addition to the HDSL loop itself.

- "ATM edge switch port"

For ADSL-equipped loops, fast packet switching (typically ATM) and associated port cost per line. A CLEC may choose to obtain an end-to-end connection from the CLEC's customer's premises to the CLEC's ATM POP using an ILEC-provided fast packet switching service. These items represent the TELRIC of these functions.

- "Element manager"

Element manager (ADSL operational support system) monthly cost per line for ADSL service.

- "ATM core switching" (Optionally) (see ATM edge switch port)
- "Total DS1 and xDSL lines"

Total line count in each category for which the model computes costs.

- "Total DS1 and xDSL cost/line/month"

Total xDSL monthly cost per line consisting of all the preceding elements, including any optional ones as selected by the user. Note that the totals include dedicated transport, which is not part of the loop per se.

Q. PLEASE COMMENT ON THE SIGNIFICANCE OF THE HDSL COSTS ESTIMATED BY THE ADJUNCT MODEL.

A. Qwest is able to provision DS1 service to its customers using HDSL, rather than more conventional T1-carrier technology.[31] Thus, the results are an important benchmark in assessing the reasonableness of Qwest's prices for its DS1 service.

Q. PLEASE IDENTIFY THE FORWARD-LOOKING ECONOMIC COSTS FOR DSL AND XDSL LOOPS AS DEVELOPED BY THE HAI ADJUNCT MODEL.

A. The DS1 and xDSL loop costs developed by the Model are included in attached Exhibit DKD-11. The exhibit shows all of the elements associated with both xDSL-capable loops and xDSL-equipped loops, as well as the costs of the additional elements associated with xDSL services.

I have combined these elements in the following fashion to produce the cost of xDSL-capable loops, xDSL-equipped loops, and total xDSL service:

- ADSL-Capable Loop: average xDSL-capable loop + remote terminal upgrade (for DLC feeder) appearing in the columns labeled "ADSL" (or, equivalently the "G.Lite" column entries, which are the same).

[31] For unusually long loop lengths – those in excess of about 60,000 feet, HDSL is not the appropriate technology for providing DS1 service because HDSL signals would need to be regenerated too many times. However, the number of business loops of length greater than 60,000 feet in Arizona is presumably very small.

- HDSL-Capable Loop: average xDSL-capable loop appearing in the columns labeled "T1 (HDSL 4W)."
- HDSL-Equipped Loop: HDSL-Capable Loop + HDSL terminal unit appearing in the column labeled "T1 (HDSL 4W)."
- Additional Voice Network UNEs – the cost of the non-loop UNEs that are included in the platform cost.

With these definitions, the results in Exhibit DKD-15 can be summarized in the following table:

xDSL Costs

	G.lite		HDSL 4-Wire	
UNE Type	Copper Feeder	DLC Feeder	Copper Feeder	DLC Feeder
Capable Loop	$5.74	$11.90	$7.46	$15.47
Equipped Loop	N.A.	N.A.	$28.48	$36.50
Voice UNEs	$3.90	$3.90	N.A.	N.A.

Q. HOW DOES THE COST OF AN HDSL-EQUIPPED LOOP COMPARE TO THE QWEST PROPOSAL FOR A DS-1 (1.544 MBPS) LOOP?

A. The monthly cost of an HDSL-equipped loop estimated by the Adjunct Model is $28.48 for copper feeder and $36.50 for fiber (DLC) feeder. This leads to an average cost of $33.69 when weighted by the number of HDSL lines served by each type of feeder. By contrast, Qwest's proposal for a 1.544 Mbps link ranges from $89.89 in Zone 1 areas to $100.30 in Zone 3 areas[32].

[32] Mr. Weiss has made modifications to Qwest's DS1 cost calculations in his testimony. His adjustments produced a statewide average cost of $43.35, which is much closer to the number produced by the HAI xDSL Adjunct model.

VIII. CONCLUSION

Q. WHAT ARE YOUR RECOMMENDATIONS TO THE COMMISSION?

A. I recommend that the Commission adopt the HAI Model, version 5.2a, for the purpose of costing the unbundled network elements necessary for the provision of the UNE-platform. I also recommend the Commission use the HAI Model for the purpose of establishing cost based deaveraged zones for the unbundled loop.

The HAI Model is a precise, flexible tool that estimates the forward looking cost for Qwest to serve its customers in Arizona. The model relies on the location of actual customers in Arizona, as well as the location of Qwest switches. This, along with Arizona specific line counts and geographic information, allows the model to accurately estimate the cost to serve these customers.

In addition I recommend that the Commission establish prices for DSL services using The HAI XDSL Adjunct Model. Like the HAI Model, this model is open, flexible, and calculates Arizona specific costs for a variety of DSL services including a DS1 loop.

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes.

Wire Center	CLLI	Percent Residential Geocode
SUNRISE	AGFIAZSR	77.4%
ASHFORK	ASFKAZMA	0.0%
ARIZONA CITY	AZCYAZ03	7.1%
BUCKEYE	BCKYAZMA	67.7%
BISBEE	BISBAZMA	49.5%
BLACK CANYON	BLCNAZMA	0.0%
BENSON	BNSNAZMA	38.4%
SAINT DAVID	BNSNAZSD	0.0%
BEARDSLEY	BRDSAZMA	82.1%
CHANDLER MAIN	CHNDAZMA	74.7%
CHANDLER SOUTH	CHNDAZSO	97.0%
CHANDLER WEST	CHNDAZWE	83.4%
CHINO VALLEY	CHVYAZMA	40.3%
COOLIDGE	CLDGAZMA	56.5%
CAMP VERDE	CMVRAZMA	4.7%
RIMROCK	CMVRAZRR	45.0%
CIRCLE CITY	CRCYAZMA	40.2%
CORONADO	CRNDAZMA	90.9%
CASA GRANDE	CSGRAZMA	69.4%
COTTONWOOD-MAIN	CTWDAZMA	46.4%
COTTONWOOD-SOUTH	CTWDAZSO	86 4%
CAVE CREEK	CVCKAZMA	64.9%
DUDLEYVILLE	DDVLAZNM	26.2%
DOUGLAS	DGLSAZMA	62.6%
DEER VALLEY NORTH	DRVYAZNO	80.1%
ELOY	ELOYAZ01	45.1%
FLAGSTAFF EAST	FLGSAZEA	83.0%
FLAGSTAFF MAIN	FLGSAZMA	81.1%
FLAGSTAFF SOUTH	FLGSAZSO	82.2%
FLORENCE	FLRNAZMA	49.0%
FORT MCDOWELL	FTMDAZMA	91.4%
RIO VERDE	FTMDAZNO	49.3%
COLDWATER	GDYRAZCW	66.3%
GILA BEND	GLBNAZMA	0.1%
GLENDALE MAIN	GLDLAZMA	69.4%
GLOBE	GLOBAZMA	35.6%
GREEN VALLEY	GNVYAZMA	80.0%
GRAND CANYON	GRCNAZMA	0.0%
HIGLEY	HGLYAZMA	33.2%
QUEEN CREEK	HGLYAZQC	48.2%
HUMBOLDT	HMBLAZMA	37.4%
HAYDEN	HYDNAZMA	0.0%
JOSEPH CITY	JSCYAZMA	0 0%
KEARNY	KRNYAZMA	0.5%
LITCHFIELD PARK	LTPKAZMA	75.2%
MARANA WEST	MARNAZ02	64.1%
MAYER	MAYRAZMA	0.0%
GILBERT	MESAAZGI	76.7%
MESA	MESAAZMA	72.2%
MIAMI	MIAMAZMA	74.7%
MAMMOTH	MMTHAZMA	0.0%

Wire Center	CLLI	Percent Residential Geocode
NOGALES RIO RICO	NGLSAZ03	65.7%
NOGALES	NGLSAZMA	66.2%
NOGALES MIDWAY	NGLSAZMW	47.6%
NEW RIVER	NWRVAZMA	93.8%
ORACLE	ORCLAZMA	86.0%
PAGE	PAGEAZMA	0.0%
PHOENIX-FOOTHILLS	PHNXAZ81	98.0%
PHOENIX-BETHANY WEST	PHNXAZBW	75.0%
PHOENIX-CACTUS	PHNXAZCA	68.0%
PHOENIX-EAST	PHNXAZEA	65.7%
PHOENIX-GREENWAY	PHNXAZGR	80.9%
PHOENIX-LAVEEN	PHNXAZLV	43.9%
PHOENIX-MAIN	PHNXAZMA	56.4%
PHOENIX-MID RIVERS	PHNXAZMR	84.6%
PHNX-MAYVALE CAP	PHNXAZMY	67.4%
PHOENIX-NORTHEAST	PHNXAZNE	80.6%
PHOENIX-NORTH	PHNXAZNO	72.4%
PHOENIX-NORTHWEST	PHNXAZNW	66.2%
PHOENIX-PECOS	PHNXAZPP	67.6%
PHNX PEORIA	PHNXAZPR	75.6%
PHNX SOUTHEAST CAP	PHNXAZSE	76.9%
PHOENIX-SOUTH	PHNXAZSO	77.6%
PHOENIX-SUNNYSLOPE	PHNXAZSY	80.9%
PHOENIX WEST CAP	PHNXAZWE	61.8%
PIMA	PIMAAZMA	4.2%
PINE	PINEAZMA	0.0%
PALOMINAS	PLMNAZMA	30.2%
PRESCOTT EAST	PRSCAZEA	96.9%
PRESCOTT MAIN	PRSCAZMA	78.0%
PINNACLE PEAK	PRVYAZPP	82.4%
PATOGONIA ELGIN	PTGNAZEL	0.0%
PATAGONIA	PTGNAZMA	0.0%
PAYSON	PYSNAZMA	70.0%
SCOTTSDALE MAIN	SCDLAZMA	83.3%
SHEA	SCDLAZSH	72.3%
THUNDERBIRD	SCDLAZTH	86.5%
SEDONA	SEDNAZMA	74.9%
SEDONA SOUTH	SEDNAZSO	97.1%
SAFFORD	SFFRAZMA	54.4%
SOMERTON	SMTNAZMA	13.9%
SAN MANUEL	SNMNAZMA	91.6%
SUPERIOR	SPRRAZMA	79.7%
SUPERSTITION EAST	SPRSAZEA	59.6%
SUPERSTITION MAIN	SPRSAZMA	84.0%
SUPERSTITION WEST	SPRSAZWE	85.4%
SIERRA VISTA MAIN	SRVSAZMA	56.1%
SIERRA VISTA NO	SRVSAZNO	50.0%
SIERRA VISTA SO	SRVSAZSO	81.0%
STANFIELD	STFDAZMA	30.2%
CATALINA	TCSNAZCA	77.6%
CORTARO	TCSNAZCO	76.2%

MARICOPA	MRCPAZMA	42.1%
MUNDS PARK	MSPKAZMA	3.7%

Wire Center	CLLI	Percent Residential Geocode
FLOWING WELLS	TCSNAZFW	74 0%
TUCSON MAIN	TCSNAZMA	62.0%
MOUNT LEMMON	TCSNAZML	0.0%
TUCSON NORTH-1A CAP	TCSNAZNO	82.6%
RINCON	TCSNAZRN	75.3%
TUCSON SOUTHEAST	TCSNAZSE	70.8%
TCSN SOUTH CAP	TCSNAZSO	62.9%
TUCSON SOUTHWEST	TCSNAZSW	70.0%
TANQUE VERDE	TCSNAZTV	76.0%
TUCSON WEST	TCSNAZWE	59.5%
TEMPE MAIN	TEMPAZMA	83.6%
MCCLINTOCK	TEMPAZMC	75 1%
TOLLESON	TLSNAZMA	57.1%
TOMBSTONE	TMBSAZMA	0.0%
TONTO CREEK	TNCKAZMA	0.0%
TUBAC	TUBCAZMA	14.8%
VAIL NORTH	VAILAZNO	16.1%
VAIL SOUTH	VAILAZSO	47.6%
WICKENBURG	WCBGAZMA	49.8%
WHITE TANKS	WHTKAZMA	83.1%
WHITLOW	WHTLAZMA	83.7%
WILLCOX	WLCXAZMA	25.7%
WILLIAMS	WLMSAZMA	40.8%
WELLTON	WLTNAZMA	18.9%
WINTERSBURG	WNBGAZ01	29.8%
WINSLOW	WNSLAZMA	57.6%
YARNELL	YRNLAZMA	0.0%
YUMA FORTUNA	YUMAAZFT	96.6%
YUMA	YUMAAZMA	69.6%
YUMA SOUTHEAST	YUMAAZSE	76.7%

TCSN CRAYCROFT	TCSNAZCR	73.4%
TUCSON EAST	TCSNAZEA	77.4%

DENSITY ZONES	
0 to 5	18%
5 to 100	61%
100 to 200	70%
200 to 650	80%
650 to 850	87%
850 to 2,550	85%
2,550 to 5,000	81%
5,000 to 10,000	76%
Over 10,000	71%
Average	77%

Actuals for 1999 ($000s)

	Investments	Expenses	Calculated or User-defined factor	User-defined factor	
Plant-Specific Operations Expenses					
TPIS - General Support					
2111 Land	$ 10,973	$ -	0.0276	0.0276	
2112 Motor Vehicles	$ 71,167	$ 1,649	0.0276	0.0276	
2113 Aircraft	$ 0	$ 11	0.0276	0.0276	
2114 Special Purpose Vehicles	$ 32,609	$ 839	0.0276	0.0276	
2115 Garage Work Equipment	$ 0	$ -	0.0276	0.0276	
2116 Other Work Equipment	$ 0	$ -	0.0276	0.0276	
2121 Buildings	$ 170,865	$ 37,085	0.0906	0.0906	Land & Bldg Exp Applied to Bldgs
2122 Furniture	$ 1,993	$ 5,039	0.0906	0.0906	
2123 Office Equipment	$ 12,897	$ 5,997	0.0906	0.0906	
2124 General Purpose Computers	$ 88,936	$ 41,417	0.0906	0.0906	
2110 Total Land & Support Assets	$ 389,440	$ 92,037	0.0528	0.0528	
TPIS - Central Office Switching					
2211 Analog Electronic Switching	$ 13,275	$ 5,011	0.0558	0.0558	
2212 Digital Electronic Switching	$ 985,074	$ 23,446	0.0558	0.0558	
2210 Total Central Office Switching	$ 998,349	$ 28,457	0.0485	0.0485	
2220 Operator Systems	$ 5,517	$ -	-		
TPIS - Central Office Transmission					
2231 Satellite & Earth Station Facilities					
2231 Other Radio Facilities					
2231 Radio Systems					
2232 Circuit Equipment	$ 1,442,053	$ 22,496	0.0200	0.0200	
2230 Total Central Office Transmission	$ 1,442,053	$ 22,496	0.0200	0.0200	
TPIS - Information Ong/Term					
2311 Station Apparatus	$ 31,984	$ 12,961	0.4052		
2321 Customer Premises Wiring	$ -		0.0000		
2341 Large Private Branch Exchange	$ -	$ -	0.0000		
2351 Public Telephone Terminal Equipment	$ -	$ -	0.0000		
2362 Other Terminal Equipment	$ 56,816	$ 11,339	0.1996		
2310 Total Information Ong/Term	$ 88,800	$ 24,300	0.2736		
TPIS - Cable & Wire Facilities					
2411 Poles	$ 48,178	$ 279	0.0219	0.0219	
2421 Aerial Cable	$ 182,563	$ 24,738	0.0669	0.0669	
2422 Underground Cable	$ 472,706	$ 10,618	0.0210	0.0210	
2423 Buried Cable	$ 1,381,560	$ 135,100	0.0446	0.0446	
2424 Submarine Cable					
2425 Deep Sea Cable					
2426 Intrabuilding Network Cable					
2431 Aerial Wire					
2441 Conduit Systems	$ 348,037	$ 1,886	0.0058	0.0058	
2410 Total Cable & Wire Facilities	$ 2,433,044	$ 172,621	0.0709		
240 Total TPIS (before amortizable assets)	$ 4,967,763	$ 339,911	0.0684		

Alternative Cable Maintenance Factors

Fiber	Copper
0.0073	0.0669
0.0084	0.0210
0.0061	0.0446

Plant Non-Specific Operations Expenses

	Expenses	Investment	Factor		
6512 Provisioning Expenses	$ 573	$ 4,967,763	0.0001		
6531 Power Expenses	$ 12,431	$ 4,967,763	0.0025	11.75%	all
6532 Network Administration	$ (256)	$ 4,967,763	-0.0001	-0.24%	switching, interoffice
6533 Testing	$ 26,390	$ 4,967,763	0.0053	24.94%	all
6534 Plant Operations Administration	$ 61,332	$ 4,967,763	0.0123	57.96%	all
6535 Engineering	$ 5,347	$ 4,967,763	0.0011	5.05%	all
6540 Access Expense					
6530 Total Network Operations Expenses (includes provisioning)	$ 105,817	$ 4,967,763	0.0213		

per line network operations		(=total ARMIS 6530/total lines)
total lines (from net. invest. inputs)		3,173,116
annual net ops per line	$	33.35

Network Support Factor Calculation

	Expenses	Cable & Wire Inv	Factor
6112 Motor Vehicles	$ 1,649		
6113 Aircraft	$ 11		
6114 Special Purpose Vehicles	$ 839		
6115 Garage Work Equipment	$ -		
6116 Other Work Equipment	$ -		

Aircraft & Special Purpose Vehicles	$ 2,488			$ 2,433,044	0.0010

Customer Operations Expenses

	Expenses			Net Revenues	Factor
6611 Product Management *	$ 28,904	$ 0.7591		$ 977,607	0.0296
6612 Sales *	$ 41,249	$ 1.0833		$ 977,607	0.0422
6613 Product Advertising	$ 13,391			$ 977,607	0.0137
6610 Total Marketing Expenses	$ 83,544				0.0855
6621 Call Completion Service	$ 3,372			$ 977,607	0.0034
6622 Number Services	$ 14,524	$ 0.3814		$ 977,607	0.0149
6623 Customer Services	$ 108,643	$ 2.8532		$ 977,607	0.1111
6620 Total Services Expenses	$ 126,539	$ 4.70			0.1294
Billing/bill inquiry (per line/month)	$ 1.22				
Directory listing (per line/month)	-				
700 Total Customer Operations Expenses	$ 210,083.00			$ 977,607	0.2149

0.2375

Corporate Operations Expenses

	Expenses	Revenues	Factor
6711 Executive	$ 19,739	$ 977,607	0.0202
6712 Planning	$ 989	$ 977,607	0.0010
6710 Total Executive & Planning	$ 20,728	$ 977,607	0.0212
6721 Accounting & Finance	$ 10,541	$ 977,607	0.0108
6722 External Relations	$ 19,637	$ 977,607	0.0201
6723 Human Resources	$ 12,306	$ 977,607	0.0126
6724 Information Management	$ 86,071	$ 977,607	0.0880
6725 Legal	$ 8,961	$ 977,607	0.0092
6726 Procurement	$ 3,427	$ 977,607	0.0035
6727 Research & Development	$ 13	$ 977,607	0.0000
6728 Other General & Administrative	$ 67,023	$ 977,607	0.0686
6720 Total General & Administrative	$ 207,979	$ 977,607	0.2127
710 Total Corporate Operations Expense	$ 228,707	$ 977,607	0.1040

0.2586

720 Total Operating Expenses $ 884,518
note: does not include dep/amort

49.61% Total Operations General Support Allocator
45.78% "Office Worker" General Support Allocator

Misc Expenses Calculation	2122 Furniture	2123 Office Equipment	2124 GP Computer	2112 Motor Vehicles	2121 Buildings	2115 Garage Work Equipment	2116 - Other Work Equipment
Investment	$ 1,993	$ 12,897	$ 88,936	$ 71,167	85432.5000	$ 0	$ 0
Investment/TPIS	0.000	0.003	0.018	0.014	0.0172	0.000	0.000
Expense	$ 5,039	$ 5,997	$ 41,417	$ 1,649	18542.5000	$ -	$ -
Expense Factor	2.528	0.465	0.466	0.023	0.2170	-	-
Model TPIS	$ 2,354,609	$ 2,354,609	$ 2,354,609	$ 2,354,609	2354608.8258	$ 2,354,609	$ 2,354,609
Calculated Investment	$ 945	$ 6,113	$ 42,154	$ 33,732	40493.0989	$ 0	$ 0
Calculated Expense	$ 2,388	$ 2,842	$ 19,631	$ 782	8788.7313	$ -	$ -
Subtotal ($s)	$ 15,403,755						
Total Misc Expense	$ 15,403,755						

Other Taxes & Uncollectibles Calculation

	Expenses		Net Revenues	Factor
7230 Operating State & Local Income Tax	$ 16,049		$ (88,423)	
7240 Operating Other Taxes	$ 73,908		$ (88,423)	0.0500
5300 Uncollectible Revenues	$ 27,912		$ 977,607	0.0286
retail				0.0224
wholesale				0.0009

Ratio of Net Plant to TPIS

TPIS	$	4,967,763
Net Plant	$	4,967,763
Ratio	$	1
Model Investment	$	-
Model % of Net Plant	$	-
Model % of TPIS		0%

COST OF NETWORK ELEMENTS

Arizona

Mountain Bell-Arizona

Loop elements	0-5 lines/sq mi	5-100 lines/sq mi	100-200 lines/sq mi	200-650 lines/sq mi	650-850 lines/sq mi	850-2550 lines/sq mi	2550-5000 lines/sq mi	5000-10000 lines/sq mi	>10000 lines/sq mi	Totals
NID										
Annual Cost	$ 241,095	$ 1,428,547	$ 483,323	$ 1,657,769	$ 576,289	$ 4,209,933	$ 5,419,264	$ 2,331,395	$ 795,565	$ 17,143,181
Unit Cost/month	0.48	0.48	0.47	0.47	0.45	0.47	0.45	0.42	0.36	0.45
Loop Distribution (DLC)										
Annual Cost	$ 27,882,062	$ 43,265,797	$ 5,847,557	$ 16,114,776	$ 5,548,495	$ 26,145,013	$ 28,653,149	$ 12,203,993	$ 2,440,666	$ 168,101,507
Unit Cost/month	57 44	16.39	7.39	6.24	6.15	3.87	3.49	3.41	2.41	6.23
Loop Distribution (non-DLC)										
Annual Cost	$ 201,622	$ 2,474,690	$ 1,452,856	$ 4,397,157	$ 1,428,187	$ 8,798,045	$ 12,332,274	$ 6,292,085	$ 2,285,526	$ 39,662,443
Unit Cost/month	10.76	7.26	6.23	4.81	3.87	3.93	3.23	3.15	1.93	3.57
Loop Distribution (all)										
Annual Cost	$ 28,083,685	$ 45,740,487	$ 7,300,413	$ 20,511,932	$ 6,976,682	$ 34,943,058	$ 40,985,423	$ 18,496,078	$ 4,726,192	$ 207,763,950
Unit Cost/month	55.70	15.35	7.13	5.86	5.49	3.88	3.41	3.32	2.15	5.46
Loop Concentration (DLC)										
Annual Cost	$ 8,260,370	$ 13,094,946	$ 3,207,722	$ 10,254,112	$ 3,545,676	$ 26,426,215	$ 31,806,577	$ 13,801,241	$ 3,789,037	$ 114,185,896
Unit Cost/month	17.02	4.96	4.05	3.97	3.93	3.91	3.88	3.85	3.74	4.24
Loop Concentration (non-DLC)										
Annual Cost	$ 5,065	$ 82,783	$ 58,287	$ 215,129	$ 84,990	$ 543,739	$ 946,775	$ 462,301	$ 220,082	$ 2,619,152
Unit Cost/month	0.27	0.24	0.25	0.24	0.23	0.24	0.25	0.23	0.19	0.24
Loop Concentration (all)										
Annual Cost	$ 8,265,436	$ 13,177,729	$ 3,266,010	$ 10,469,241	$ 3,630,666	$ 26,969,954	$ 32,753,352	$ 14,263,542	$ 4,009,119	$ 116,805,049
Unit Cost/month	16.39	4.42	3.19	2.99	2.86	3.00	2.72	2.56	1.82	3.07
Loop Feeder (DLC)										
Annual Cost	$ 8,591,554	$ 5,595,536	$ 450,494	$ 966,339	$ 438,843	$ 2,993,780	$ 3,928,473	$ 2,621,257	$ 804,386	$ 26,390,662
Unit Cost/month	17.70	2.12	0.57	0.37	0.49	0.44	0.48	0.73	0.79	0.98
Loop Feeder (non-DLC)										
Annual Cost	$ 40,472	$ 616,641	$ 482,145	$ 1,570,152	$ 610,092	$ 3,435,939	$ 5,664,798	$ 2,931,786	$ 1,203,400	$ 16,555,426
Unit Cost/month	2.16	1.81	2.07	1.72	1.65	1.54	1.48	1.47	1.02	1.49
Loop Feeder (all)										
Annual Cost	$ 8,632,026	$ 6,212,177	$ 932,638	$ 2,536,492	$ 1,048,935	$ 6,429,719	$ 9,593,271	$ 5,553,043	$ 2,007,786	$ 42,946,088
Unit Cost/month	17.12	2.08	0.91	0.73	0.82	0.71	0.80	1.00	0.91	1.13
Total Loop (DLC)										
Annual Cost	$ 44,966,119	$ 63,221,366	$ 9,879,094	$ 28,559,771	$ 9,942,121	$ 58,728,431	$ 68,084,426	$ 30,123,834	$ 7,400,964	$ 320,906,127
Unit Cost/month	92.63	23.95	12.49	11.05	11.02	8.69	8.30	8.41	7.30	11.90
Total Loop (non-DLC)										
Annual Cost	$ 256,123	$ 3,337,575	$ 2,103,290	$ 6,615,663	$ 2,290,451	$ 13,824,233	$ 20,666,885	$ 10,520,224	$ 4,137,697	$ 63,752,141
Unit Cost/month	13.66	9.79	9.02	7.24	6.21	6.18	5.40	5.27	3.49	5.74
Total Loop (all)										
Annual Cost	$ 45,222,242	$ 66,558,941	$ 11,982,384	$ 35,175,435	$ 12,232,573	$ 72,552,664	$ 88,751,311	$ 40,644,058	$ 11,538,661	$ 384,658,268
Unit Cost/month	89.70	22.33	11.70	10.06	9.62	8.07	7.38	7.29	5.25	10.10
Total lines	42,014	248,382	85,355	291,512	105,953	749,605	1,002,245	464,895	183,155	3,173,116
Total lines served by DLC	40,452	219,961	65,929	215,331	75,216	563,267	683,584	298,580	84,462	2,246,783

	Annual Cost	Units		Unit Cost		
End office switching	$ 107,029,446					
Line Port	32,108,834	2,959,791	switched lines	$ 0.90	per line/month	
Non-Line Port	74,920,612	62,141,633,323	actual minutes	$ 0.00121	per actual minute	(for rate per DEM, see "Cost detail" sheet)
Signaling network elements	$ 2,709,674					
Links	166,941	507	links	$ 27.45	per link per month	
STP	2,125,837	41,094,682,805	TCAP+ISUP msgs	$ 0.00005	per signaling message	
SCP	416,896	2,118,313,400	TCAP queries	$ 0.00020	per query	
Transport network elements						
Dedicated						
Sw+Sp Transport	$ 7,208,255	333,518	trunks	$ 1.80	per DS-0 equivalent per month	
Switched	2,597,706	120,193	trunks	$ 0.00018	per minute	
Special	4,610,549	213,325	trunks			
Transmission Terminal	14,946,393	333,518	trunks	$ 3.73	per DS-0 equivalent per month	
				$ 0.00037	per minute	
				$ 0.00055	total per minute	
Common						
Transport	$ 1,072,159	3,703,400,627	minutes	$ 0.00029	per minute per leg (ong or term)	
Transmission Terminal	1,581,413	3,703,400,627	minutes	$ 0.00042	per minute	
				$ 0.00071	total per minute	
Direct						
Transport	$ 3,842,984	16,120,464,725	minutes	$ 0.00024	per minute	
Transmission Terminal	6,965,238	16,120,464,725	minutes	$ 0.00043	per minute	
				$ 0.00067	total per minute	
Tandem switch	$ 1,732,606	3,322,868,975	minutes	$ 0.00052	per minute	
Operator systems	$ 5,762,649					
Public Telephones	$ 4,590,903					
Total (w/ Public)	$ 542,099,987					
Total cost of switched network elements (w/o Public)	$ 14.01	per line/month				

HAI Model Release 5.2a - Expense Module
Wire Center Level Calculations

clli	total lines	business lines	residential lines	special access lines	public lines	single line business lines	households
AGFIAZSR	35,788	3,294	31,959	468	67	187	29,495
ASFKAZMA	630	113	448	30	39	9	415
AZCYAZ03	1,405	62	1,329	11	3	4	1,232
BCKYAZMA	8,482	1,657	6,355	353	117	103	5,889
BISBAZMA	5,777	1,191	3,863	670	53	86	3,592
BLCNAZMA	1,794	210	1,441	124	19	16	1,342
BNSNAZMA	5,391	1,256	3,826	221	88	80	3,558
BNSNAZSD	1,083	98	966	11	8	7	894
BRDSAZMA	38,947	3,638	34,728	514	67	201	31,952
CHNDAZMA	67,545	12,583	52,098	2,456	408	811	48,029
CHNDAZSO	17,742	1,751	15,623	338	30	98	14,403
CHNDAZWE	44,578	14,980	26,251	3,002	345	847	24,128
CHVYAZMA	7,555	1,133	6,261	128	33	70	5,795
CLDGAZMA	5,650	1,074	4,183	344	49	69	3,899
CMVRAZMA	7,526	1,474	5,739	199	114	102	5,339
CMVRAZRR	1,522	92	1,414	13	3	10	1,309
CRCYAZMA	1,650	112	1,467	61	10	10	1,366
CRNDAZMA	11,544	1,079	10,203	233	29	67	9,407
CSGRAZMA	18,627	5,704	11,589	1,019	315	378	10,747
CTWDAZMA	13,394	3,700	9,066	501	127	250	8,412
CTWDAZSO	2,804	217	2,567	17	3	13	2,380
CVCKAZMA	19,621	3,558	15,492	505	66	204	14,323
DDVLAZNM	484	33	421	26	4	2	391
DGLSAZMA	8,655	1,962	6,027	501	165	146	5,617
DRVYAZNO	47,767	11,595	33,165	2,754	253	728	30,477
ELOYAZ01	6,159	1,047	4,599	253	260	90	4,291
FLGSAZEA	17,316	4,075	12,391	704	146	285	11,407
FLGSAZMA	34,731	15,075	15,406	3,629	621	827	14,271
FLGSAZSO	2,685	134	2,527	17	7	10	2,324
FLRNAZMA	5,358	868	3,481	610	399	83	3,231
FTMDAZMA	17,407	2,967	13,940	418	82	201	12,836
FTMDAZNO	2,355	163	2,178	11	3	9	2,019
GDYRAZCW	11,101	3,105	7,233	596	167	199	6,712
GLBNAZMA	1,187	305	710	121	51	24	660
GLDLAZMA	58,568	11,668	44,407	1,906	587	859	41,058
GLOBAZMA	8,890	2,263	5,817	679	131	159	5,388

HAI Model Release 5.2a - Expense Module
Wire Center Level Calculations

clli	total lines	business lines	residential lines	special access lines	public lines	single line business lines	households
GNVYAZMA	19,727	2,529	16,677	432	89	175	15,377
GRCNAZMA	2,987	977	993	864	153	79	912
HGLYAZMA	5,765	1,152	4,260	316	37	58	3,914
HGLYAZQC	5,829	814	4,786	199	30	55	4,432
HMBLAZMA	4,749	513	4,024	160	52	38	3,752
HYDNAZMA	926	186	632	99	9	14	587
JSCYAZMA	727	221	425	62	19	11	393
KRNYAZMA	1,395	245	1,070	69	11	18	987
LTPKAZMA	17,004	2,916	13,225	739	124	177	12,209
MARNAZ02	8,379	1,164	6,809	326	80	65	6,309
MAYRAZMA	1,296	-	1,296	-	-	-	1,199
MESAAZGI	68,756	16,337	49,315	2,822	282	1,039	45,337
MESAAZMA	107,614	32,444	67,467	6,688	1,015	2,355	62,339
MIAMAZMA	2,139	397	1,480	250	12	27	1,372
MMTHAZMA	891	113	739	29	10	8	687
MRCPAZMA	2,174	391	1,637	115	31	27	1,528
MSPKAZMA	2,641	117	2,472	36	16	8	2,255
NGLSAZ03	351	54	261	32	4	4	243
NGLSAZMA	6,732	1,978	3,455	1,168	131	150	3,220
NGLSAZMW	12,204	4,988	6,028	995	193	328	5,588
NWRVAZMA	5,331	956	4,179	153	43	55	3,858
ORCLAZMA	1,837	248	1,531	44	14	18	1,415
PAGEAZMA	5,742	1,937	3,091	573	141	132	2,835
PHNXAZ81	9,207	679	8,358	157	13	42	7,718
PHNXAZBW	17,258	1,629	15,233	356	40	91	13,981
PHNXAZCA	91,926	17,678	70,339	3,336	573	1,266	64,837
PHNXAZEA	43,203	19,186	15,250	7,983	784	1,362	14,173
PHNXAZGR	97,942	19,883	73,019	4,283	757	1,425	67,177
PHNXAZLV	2,860	469	2,293	83	15	35	2,113
PHNXAZMA	102,754	51,457	19,644	29,965	1,688	3,690	18,351
PHNXAZMR	57,770	8,516	47,615	1,407	232	570	43,969
PHNXAZMY	41,152	5,729	33,312	1,716	395	401	30,681
PHNXAZNE	76,966	31,199	37,831	7,393	543	2,398	35,094
PHNXAZNO	121,757	67,587	38,537	14,741	892	4,665	35,752
PHNXAZNW	58,804	13,002	41,865	3,334	603	1,058	38,747
PHNXAZPP	16,293	1,870	14,081	286	56	147	12,972

HAI Model Release 5.2a - Expense Module
Wire Center Level Calculations

clli	total lines	business lines	residential lines	special access lines	public lines	single line business lines	households
PHNXAZPR	46,168	8,367	36,172	1,298	331	501	33,254
PHNXAZSE	27,068	14,058	8,395	4,417	198	998	7,736
PHNXAZSO	32,345	8,335	21,001	2,576	433	583	19,482
PHNXAZSY	61,763	20,604	34,516	6,059	584	1,619	31,965
PHNXAZWE	46,151	19,341	20,731	4,929	1,150	1,455	19,254
PIMAAZMA	1,478	146	1,301	23	8	14	1,210
PINEAZMA	3,051	247	2,744	48	12	19	2,532
PLMNAZMA	843	101	739	-	3	6	689
PRSCAZEA	17,411	3,308	13,707	306	90	208	12,656
PRSCAZMA	42,646	13,580	26,743	1,945	378	808	24,740
PRVYAZPP	46,912	7,311	38,732	716	153	414	35,981
PTGNAZEL	1,173	218	922	28	5	15	853
PTGNAZMA	890	128	723	32	7	9	672
PYSNAZMA	13,924	3,388	9,936	479	121	220	9,209
SCDLAZMA	82,828	28,458	48,836	4,812	722	1,836	45,138
SCDLAZSH	46,505	9,088	35,435	1,811	171	573	32,740
SCDLAZTH	87,430	36,571	44,930	5,371	558	2,479	41,669
SEDNAZMA	15,177	6,222	8,294	525	136	331	7,695
SEDNAZSO	5,083	935	4,041	65	42	64	3,736
SFFRAZMA	12,270	3,643	7,944	537	146	233	7,355
SMTNAZMA	7,780	1,411	6,002	213	154	97	5,606
SNMNAZMA	2,027	382	1,444	174	27	27	1,324
SPRRAZMA	1,510	272	1,153	70	15	16	1,075
SPRSAZEA	30,843	3,413	26,709	490	231	217	24,821
SPRSAZMA	42,511	2,858	39,134	380	139	177	36,157
SPRSAZWE	89,551	13,367	73,245	2,427	512	868	67,532
SRVSAZMA	27,857	10,824	15,093	1,663	277	509	13,907
SRVSAZNO	2,312	255	1,991	51	15	21	1,843
SRVSAZSO	8,259	612	7,555	80	12	41	6,981
STFDAZMA	1,233	179	971	62	21	13	906
TCSNAZCA	30,001	4,468	24,609	816	108	298	22,794
TCSNAZCO	20,452	3,232	16,653	435	132	206	15,282
TCSNAZCR	42,964	12,787	26,271	3,502	404	950	24,298
TCSNAZEA	67,013	18,405	44,015	3,973	620	1,336	40,851
TCSNAZFW	37,204	10,367	24,308	2,124	405	733	22,580
TCSNAZMA	94,741	43,186	35,502	14,897	1,156	2,704	33,166

HAI Model Release 5.2a - Expense Module
Wire Center Level Calculations

clli	total lines	business lines	residential lines	special access lines	public lines	single line business lines	households
TCSNAZML	567	107	374	83	3	8	343
TCSNAZNO	51,839	9,210	40,738	1,661	230	609	37,514
TCSNAZRN	74,308	12,690	58,044	3,091	483	965	53,583
TCSNAZSE	10,067	1,434	7,862	491	280	116	7,249
TCSNAZSO	41,527	9,651	27,167	4,046	663	726	25,231
TCSNAZSW	19,402	1,305	17,562	421	114	100	16,233
TCSNAZTV	13,498	1,977	11,318	166	37	88	10,419
TCSNAZWE	6,142	297	5,780	47	18	21	5,313
TEMPAZMA	76,246	35,948	28,899	10,396	1,003	2,721	26,825
TEMPAZMC	92,175	31,062	55,531	5,048	534	1,943	51,136
TLSNAZMA	12,736	2,973	8,929	670	164	180	8,232
TMBSAZMA	1,267	279	952	25	11	19	888
TNCKAZMA	1,176	104	1,041	19	12	7	965
TUBCAZMA	2,566	376	2,120	51	19	25	1,962
VAILAZNO	1,419	110	1,263	44	2	5	1,161
VAILAZSO	2,794	215	2,488	76	15	14	2,293
WCBGAZMA	6,250	1,587	4,239	335	89	108	3,937
WHTKAZMA	2,383	294	1,945	62	82	25	1,798
WHTLAZMA	737	61	644	23	9	3	599
WLCXAZMA	4,523	1,245	2,855	355	68	82	2,648
WLMSAZMA	3,685	861	2,516	229	79	65	2,321
WLTNAZMA	2,390	380	1,913	59	38	26	1,774
WNBGAZ01	1,649	331	1,272	15	31	16	1,180
WNSLAZMA	5,223	1,349	3,239	416	219	108	3,005
YRNLAZMA	1,739	290	1,378	54	17	13	1,285
YUMAAZFT	13,610	1,009	12,370	109	122	72	11,475
YUMAAZMA	35,352	11,408	21,693	1,858	393	669	20,128
YUMAAZSE	25,666	7,430	16,298	1,487	451	493	15,066

	UNE Unit Costs										
clli	Distribution Unit Cost	NID Unit Cost	Concentrator Unit Cost	Feeder Unit Cost	EO Switching Line Port Unit Cost	EO Switching Usage Unit Cost	Signaling STP Unit Cost	Signaling SCP Unit Cost	Signaling Links Unit Cost	Dedicated Transport Unit Cost per DS0/mo	Dedicated Transport Unit Cost per min
AGFIAZSR	$ 3.17	$ 0.50	$ 3.54	$ 0.38	$ 0.75	$ 0.00106	$ 0.00005	$ 0.00021	$ 5.60	$ 1.06	$ 0.00011
ASFKAZMA	$ 65.83	$ 0.48	$ 12.62	$ 11.44	$ 5.19	$ 0.00755	$ 0.00009	$ 0.00023	$ 372.76	$ 133.29	$ 0.01327
AZCYAZ03	$ 42.71	$ 0.51	$ 10.70	$ 13.60	$ 2.80	$ 0.00403	$ 0.00007	$ 0.00022	$ 70.59	$ 21.72	$ 0.00216
BCKYAZMA	$ 17.50	$ 0.47	$ 4.43	$ 2.70	$ 1.08	$ 0.00149	$ 0.00005	$ 0.00020	$ 23.54	$ 6.95	$ 0.00069
BISBAZMA	$ 13.12	$ 0.45	$ 3.43	$ 2.84	$ 1.41	$ 0.00192	$ 0.00005	$ 0.00020	$ 19.52	$ 6.57	$ 0.00065
BLCNAZMA	$ 29.32	$ 0.48	$ 9.00	$ 5.22	$ 2.43	$ 0.00342	$ 0.00006	$ 0.00021	$ 73.21	$ 25.58	$ 0.00255
BNSNAZMA	$ 20.82	$ 0.47	$ 4.44	$ 6.05	$ 1.41	$ 0.00192	$ 0.00005	$ 0.00020	$ 27 18	$ 8.08	$ 0.00080
BNSNAZSD	$ 28.57	$ 0.50	$ 7.89	$ 5.53	$ 3.50	$ 0.00497	$ 0.00007	$ 0.00022	$ 170.82	$ 58.68	$ 0.00584
BRDSAZMA	$ 4.01	$ 0.50	$ 2.87	$ 0.66	$ 0.77	$ 0.00109	$ 0.00005	$ 0.00021	$ 5.03	$ 0.92	$ 0.00009
CHNDAZMA	$ 3.85	$ 0.48	$ 3.36	$ 0.70	$ 0.79	$ 0.00109	$ 0.00005	$ 0.00020	$ 3.93	$ 0.92	$ 0.00009
CHNDAZSO	$ 3.37	$ 0.50	$ 3.57	$ 0.18	$ 0.76	$ 0.00108	$ 0.00005	$ 0.00021	$ 8.19	$ 2.04	$ 0.00020
CHNDAZWE	$ 2.69	$ 0.44	$ 3.55	$ 0.70	$ 0.72	$ 0.00094	$ 0.00005	$ 0.00019	$ 2.15	$ 0.40	$ 0.00004
CHVYAZMA	$ 23.50	$ 0.49	$ 5.59	$ 3.48	$ 1.07	$ 0.00148	$ 0.00005	$ 0.00020	$ 26.49	$ 7.52	$ 0.00075
CLDGAZMA	$ 13.15	$ 0.47	$ 3.61	$ 2.15	$ 1.39	$ 0.00191	$ 0.00006	$ 0.00020	$ 18.67	$ 5.65091	$ 0.00056
CMVRAZMA	$ 14.28	$ 0.48	$ 2.69	$ 2.23	$ 1.20	$ 0.00166	$ 0.00005	$ 0.00020	$ 13.15	$ 3.70604	$ 0.00037
CMVRAZRR	$ 47.82	$ 0.50	$ 12.14	$ 23.30	$ 2.63	$ 0.00375	$ 0.00007	$ 0.00022	$ 95.67	$ 29.21984	$ 0.00291
CRCYAZMA	$ 32.02	$ 0.50	$ 7.91	$ 8.99	$ 2.52	$ 0.00361	$ 0.00007	$ 0.00022	$ 127 47	$ 43.63587	$ 0.00434
CRNDAZMA	$ 7.70	$ 0.50	$ 3.03	$ 1.65	$ 0.94	$ 0.00133	$ 0.00006	$ 0.00021	$ 17.30	$ 4.68268	$ 0.00047
CSGRAZMA	$ 8.41	$ 0.45	$ 3.16	$ 1.23	$ 0.83	$ 0.00110	$ 0.00005	$ 0.00020	$ 7.68	$ 1.84993	$ 0.00018
CTWDAZMA	$ 11.31	$ 0.46	$ 3.55	$ 1.22	$ 0.90	$ 0.00120	$ 0.00005	$ 0.00020	$ 9.93	$ 2.54535	$ 0.00025
CTWDAZSO	$ 8.37	$ 0.50	$ 3.72	$ 0.09	$ 1.67	$ 0.00236	$ 0.00006	$ 0.00021	$ 40.78	$ 14.66480	$ 0.00146
CVCKAZMA	$ 7.54	$ 0.48	$ 2.81	$ 0.91	$ 0.79	$ 0.00108	$ 0.00005	$ 0.00020	$ 9.42	$ 2.33799	$ 0.00023
DDVLAZNM	$ 41.12	$ 0.49	$ 7.64	$ 7.07	$ 6.64	$ 0.00951	$ 0.00009	$ 0.00022	$ 200.49	$ 73.13719	$ 0.00728
DGLSAZMA	$ 9.85	$ 0.46	$ 1.91	$ 2.61	$ 1.19	$ 0.00163	$ 0.00005	$ 0.00020	$ 27.70	$ 8.24188	$ 0.00082
DRVYAZNO	$ 3.75	$ 0.46	$ 2.72	$ 0.89	$ 0.76	$ 0.00102	$ 0.00005	$ 0.00020	$ 2.32	$ 0.40975	$ 0.00004
ELOYAZ01	$ 11.53	$ 0.48	$ 4.60	$ 2.48	$ 1.22	$ 0.00174	$ 0.00006	$ 0.00021	$ 17.53	$ 5.31971	$ 0.00053
FLGSAZEA	$ 9.60	$ 0.46	$ 2.92	$ 2.93	$ 0.88	$ 0.00119	$ 0.00005	$ 0.00020	$ 25.23	$ 6.09174	$ 0.00061
FLGSAZMA	$ 6.17	$ 0.41	$ 2.28	$ 1.85	$ 0.89	$ 0.00114	$ 0.00005	$ 0.00019	$ 1.79	$ 0.37582	$ 0.00004
FLGSAZSO	$ 7.83	$ 0.51	$ 1.37	$ 1.94	$ 1.89	$ 0.00271	$ 0.00006	$ 0.00021	$ 42.06	$ 14.95304	$ 0.00149
FLRNAZMA	$ 17.52	$ 0.46	$ 5.49	$ 5.75	$ 1.19	$ 0.00176	$ 0.00006	$ 0.00022	$ 14.80	$ 4.77807	$ 0.00048
FTMDAZMA	$ 6.99	$ 0.48	$ 2.00	$ 2.34	$ 0.90	$ 0.00123	$ 0.00005	$ 0.00020	$ 7.26	$ 1.72698	$ 0.00017
FTMDAZNO	$ 13.45	$ 0.50	$ 4.68	$ 4.05	$ 1.88	$ 0.00268	$ 0.00006	$ 0.00021	$ 41.22	$ 12.80295	$ 0.00127
GDYRAZCW	$ 6.25	$ 0.45	$ 2.78	$ 1.13	$ 1.00	$ 0.00135	$ 0.00005	$ 0.00020	$ 4.76	$ 1.29196	$ 0.00013
GLBNAZMA	$ 53.36	$ 0.44	$ 15.12	$ 10.43	$ 3.51	$ 0.00486	$ 0.00007	$ 0.00022	$ 271.09	$103.04941	$ 0.01026
GLDLAZMA	$ 3.44	$ 0.48	$ 2.84	$ 0.88	$ 0.85	$ 0.00116	$ 0.00005	$ 0.00020	$ 1.46	$ 0.35226	$ 0.00004
GLOBAZMA	$ 12.41	$ 0.45	$ 2.68	$ 2.52	$ 1.15	$ 0.00155	$ 0.00005	$ 0.00020	$ 34.56	$ 10.46245	$ 0.00104

	UNE Unit Costs											
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GNVYAZMA	$ 10.40	$ 0.49	$ 3.21	$ 2.30	$ 0.82	$ 0.00115	$ 0.00005	$ 0.00020	$ 16.68	$ 3.81642	$ 0.00038
GRCNAZMA	$ 72.60	$ 0.37	$ 75.52	$ 8.79	$ 2.01	$ 0.00270	$ 0.00006	$ 0.00020	$ 55.10	$ 25.29147	$ 0.00252
HGLYAZMA	$ 11.92	$ 0.46	$ 3.78	$ 0.52	$ 1.28	$ 0.00174	$ 0.00005	$ 0.00020	$ 14.66	$ 4.91590	$ 0.00049
HGLYAZQC	$ 17.71	$ 0.48	$ 5.34	$ 2.03	$ 1.25	$ 0.00174	$ 0.00006	$ 0.00020	$ 16.77	$ 5.17091	$ 0.00051
HMBLAZMA	$ 21.68	$ 0.49	$ 4.87	$ 4.28	$ 1.21	$ 0.00171	$ 0.00006	$ 0.00021	$ 21.95	$ 6.57687	$ 0.00065
HYDNAZMA	$ 19.45	$ 0.45	$ 9.33	$ 2.30	$ 3.91	$ 0.00533	$ 0.00007	$ 0.00021	$ 160.21	$ 64.08594	$ 0.00638
JSCYAZMA	$ 44.95	$ 0.44	$ 13.05	$ 6.87	$ 4.73	$ 0.00634	$ 0.00008	$ 0.00021	$ 294.84	$ 111.82714	$ 0.01113
KRNYAZMA	$ 32.74	$ 0.47	$ 7.93	$ 9.04	$ 2.92	$ 0.00403	$ 0.00007	$ 0.00021	$ 83.41	$ 26.60167	$ 0.00265
LTPKAZMA	$ 5.07	$ 0.48	$ 2.07	$ 0.79	$ 0.88	$ 0.00122	$ 0.00005	$ 0.00020	$ 7.12	$ 1.73528	$ 0.00017
MARNAZ02	$ 21.18	$ 0.48	$ 5.66	$ 3.36	$ 1.03	$ 0.00144	$ 0.00006	$ 0.00021	$ 20.10	$ 5.68376	$ 0.00057
MAYRAZMA	$ 42.72	$ 0.52	$ 8.39	$ 8.23	$ 2.98	$ 0.00433	$ 0.00007	$ 0.00023	$ 285.38	$ 95.66064	$ 0.00952
MESAAZGI	$ 4.04	$ 0.46	$ 2.81	$ 0.59	$ 0.81	$ 0.00109	$ 0.00005	$ 0.00020	$ 1.49	$ 0.35227	$ 0.00004
MESAAZMA	$ 5.09	$ 0.45	$ 3.21	$ 0.81	$ 0.95	$ 0.00126	$ 0.00005	$ 0.00019	$ 0.89	$ 0.24580	$ 0.00002
MIAMAZMA	$ 15.79	$ 0.45	$ 5.02	$ 3.39	$ 2.21	$ 0.00301	$ 0.00006	$ 0.00020	$ 30.09	$ 11.33852	$ 0.00113
MMTHAZMA	$ 61.37	$ 0.49	$ 14.06	$ 18.53	$ 3.77	$ 0.00530	$ 0.00008	$ 0.00022	$ 105.79	$ 33.83152	$ 0.00337
MRCPAZMA	$ 47.21	$ 0.47	$ 8.09	$ 6.30	$ 2.06	$ 0.00286	$ 0.00006	$ 0.00021	$ 70.07	$ 24.25729	$ 0.00242
MSPKAZMA	$ 6.84	$ 0.50	$ 3.73	$ 0.21	$ 1.75	$ 0.00252	$ 0.00006	$ 0.00022	$ 44.78	$ 16.18503	$ 0.00161
NGLSAZ03	$ 12.40	$ 0.46	$ 0.33	$ 1.69	$ 9.55	$ 0.01328	$ 0.00010	$ 0.00021	$ 29.47	$ 11.47503	$ 0.00114
NGLSAZMA	$ 14.02	$ 0.41	$ 3.42	$ 1.92	$ 1.32	$ 0.00174	$ 0.00005	$ 0.00019	$ 7.18	$ 2.42257	$ 0.00024
NGLSAZMW	$ 10.88	$ 0.42	$ 2.80	$ 1.15	$ 0.95	$ 0.00121	$ 0.00005	$ 0.00019	$ 21.97	$ 6.39223	$ 0.00064
NWRVAZMA	$ 19.44	$ 0.48	$ 4.44	$ 1.19	$ 1.31	$ 0.00181	$ 0.00006	$ 0.00020	$ 24.77	$ 7.95513	$ 0.00079
ORCLAZMA	$ 25.62	$ 0.49	$ 5.11	$ 5.26	$ 2.30	$ 0.00321	$ 0.00006	$ 0.00021	$ 68.33	$ 22.48814	$ 0.00224
PAGEAZMA	$ 10.87	$ 0.43	$ 3.94	$ 0.81	$ 1.35	$ 0.00178	$ 0.00005	$ 0.00020	$ 108.35	$ 39.43608	$ 0.00393
PHNXAZ81	$ 5.14	$ 0.50	$ 2.33	$ 1.25	$ 1.07	$ 0.00152	$ 0.00006	$ 0.00021	$ 5.37	$ 1.45122	$ 0.00014
PHNXAZBW	$ 3.77	$ 0.50	$ 3.10	$ 0.94	$ 0.81	$ 0.00115	$ 0.00005	$ 0.00021	$ 5.23	$ 1.24012	$ 0.00012
PHNXAZCA	$ 3.36	$ 0.47	$ 3.25	$ 0.92	$ 0.86	$ 0.00118	$ 0.00005	$ 0.00020	$ 1.22	$ 0.26989	$ 0.00003
PHNXAZEA	$ 3.13	$ 0.39	$ 2.44	$ 0.89	$ 0.83	$ 0.00103	$ 0.00005	$ 0.00018	$ 0.62	$ 0.13025	$ 0.00001
PHNXAZGR	$ 3.16	$ 0.47	$ 3.10	$ 0.91	$ 0.86	$ 0.00117	$ 0.00005	$ 0.00020	$ 1.18	$ 0.25929	$ 0.00003
PHNXAZLV	$ 16.64	$ 0.48	$ 4.20	$ 0.56	$ 1.67	$ 0.00230	$ 0.00006	$ 0.00020	$ 27.30	$ 9.61937	$ 0.00096
PHNXAZMA	$ 2.66	$ 0.32	$ 2.23	$ 0.76	$ 0.83	$ 0.00099	$ 0.00005	$ 0.00018	$ 1.56	$ 0.58140	$ 0.00006
PHNXAZMR	$ 3.22	$ 0.49	$ 2.88	$ 0.82	$ 0.85	$ 0.00118	$ 0.00005	$ 0.00020	$ 1.70	$ 0.40540	$ 0.00004
PHNXAZMY	$ 3.33	$ 0.48	$ 2.57	$ 0.83	$ 0.79	$ 0.00111	$ 0.00005	$ 0.00021	$ 2.63	$ 0.48374	$ 0.00005
PHNXAZNE	$ 2.88	$ 0.42	$ 2.52	$ 0.92	$ 0.82	$ 0.00105	$ 0.00005	$ 0.00019	$ 0.57	$ 0.14027	$ 0.00001
PHNXAZNO	$ 2.24	$ 0.38	$ 1.87	$ 0.95	$ 1.01	$ 0.00122	$ 0.00005	$ 0.00018	$ 0.40	$ 0.14386	$ 0.00001
PHNXAZNW	$ 3.22	$ 0.47	$ 2.50	$ 1.03	$ 0.88	$ 0.00120	$ 0.00005	$ 0.00020	$ 1.43	$ 0.35568	$ 0.00004
PHNXAZPP	$ 2.75	$ 0.49	$ 3.85	$ 0.68	$ 0.78	$ 0.00109	$ 0.00005	$ 0.00021	$ 4.09	$ 0.98313	$ 0.00010

	UNE Unit Costs																							
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PHNXAZPR	$	3.38	$	0.48	$	2.88	$	0.77	$	0.76	$	0.00104	$	0.00005	$	0.00020	$	2.60	$	0.45972	$	0.00005		
PHNXAZSE	$	3.12	$	0.38	$	1.80	$	1.23	$	0.83	$	0.00100	$	0.00005	$	0.00018	$	1.23	$	0.29994	$	0.00003		
PHNXAZSO	$	5.72	$	0.45	$	3.16	$	0.84	$	0.82	$	0.00111	$	0.00005	$	0.00020	$	1.72	$	0.36216	$	0.00004		
PHNXAZSY	$	3.24	$	0.43	$	2.83	$	0.85	$	0.86	$	0.00112	$	0.00005	$	0.00019	$	0.84	$	0.21898	$	0.00002		
PHNXAZWE	$	4.08	$	0.41	$	2.88	$	0.80	$	0.76	$	0.00098	$	0.00005	$	0.00019	$	1.04	$	0.28459	$	0.00003		
PIMAAZMA	$	39.58	$	0.50	$	9.86	$	11.82	$	2.71	$	0.00383	$	0.00007	$	0.00022	$	267.74	$	88.71191	$	0.00883		
PINEAZMA	$	19.55	$	0.50	$	5.44	$	2.36	$	1.58	$	0.00224	$	0.00006	$	0.00021	$	70.22	$	23.42286	$	0.00233		
PLMNAZMA	$	31.20	$	0.50	$	8.03	$	5.89	$	3.84	$	0.00539	$	0.00008	$	0.00022	$	264.17	$	92.07630	$	0.00917		
PRSCAZEA	$	6.88	$	0.48	$	2.30	$	1.02	$	0.86	$	0.00118	$	0.00005	$	0.00020	$	12.03	$	2.83412	$	0.00028		
PRSCAZMA	$	7.34	$	0.45	$	2.57	$	1.42	$	0.80	$	0.00106	$	0.00005	$	0.00019	$	5.82	$	1.06407	$	0.00011		
PRVYAZPP	$	4.05	$	0.49	$	3.09	$	0.41	$	0.73	$	0.00101	$	0.00005	$	0.00020	$	9.30	$	1.59996	$	0.00016		
PTGNAZEL	$	28.98	$	0.48	$	8.74	$	7.57	$	3.30	$	0.00453	$	0.00007	$	0.00021	$	136.11	$	46.16872	$	0.00460		
PTGNAZMA	$	98.65	$	0.48	$	19.96	$	44.52	$	3.78	$	0.00527	$	0.00008	$	0.00022	$	142.31	$	44.91010	$	0.00447		
PYSNAZMA	$	6.42	$	0.47	$	2.38	$	2.16	$	0.94	$	0.00127	$	0.00005	$	0.00020	$	15.40	$	3.89797	$	0.00039		
SCDLAZMA	$	3.09	$	0.44	$	2.38	$	0.94	$	0.96	$	0.00125	$	0.00005	$	0.00019	$	0.88	$	0.20375	$	0.00002		
SCDLAZSH	$	3.23	$	0.47	$	2.96	$	0.72	$	0.75	$	0.00102	$	0.00005	$	0.00020	$	3.21	$	0.56587	$	0.00006		
SCDLAZTH	$	3.22	$	0.43	$	3.19	$	0.59	$	0.88	$	0.00112	$	0.00005	$	0.00019	$	0.86	$	0.24989	$	0.00002		
SEDNAZMA	$	7.38	$	0.43	$	2.88	$	1.55	$	0.87	$	0.00112	$	0.00005	$	0.00019	$	6.85	$	1.70410	$	0.00017		
SEDNAZSO	$	8.12	$	0.48	$	2.04	$	1.43	$	1.46	$	0.00201	$	0.00006	$	0.00020	$	27.37	$	8.83404	$	0.00088		
SFFRAZMA	$	10.01	$	0.45	$	2.26	$	1.91	$	1.00	$	0.00133	$	0.00005	$	0.00020	$	20.89	$	5.48384	$	0.00055		
SMTNAZMA	$	13.61	$	0.48	$	3.54	$	1.21	$	1.13	$	0.00157	$	0.00006	$	0.00020	$	16.53	$	4.86527	$	0.00048		
SNMNAZMA	$	8.48	$	0.46	$	1.72	$	3.13	$	2.42	$	0.00333	$	0.00006	$	0.00021	$	26.15	$	9.29852	$	0.00093		
SPRRAZMA	$	11.25	$	0.47	$	4.31	$	2.71	$	2.74	$	0.00378	$	0.00007	$	0.00021	$	96.93	$	33.16057	$	0.00330		
SPRSAZEA	$	7.20	$	0.50	$	2.95	$	0.84	$	0.83	$	0.00118	$	0.00005	$	0.00021	$	10.28	$	2.04466	$	0.00020		
SPRSAZMA	$	3.47	$	0.51	$	3.01	$	0.58	$	0.76	$	0.00109	$	0.00005	$	0.00021	$	5.57	$	0.98219	$	0.00010		
SPRSAZWE	$	3.24	$	0.49	$	3.09	$	0.63	$	0.87	$	0.00121	$	0.00005	$	0.00020	$	1.75	$	0.39052	$	0.00004		
SRVSAZMA	$	5.55	$	0.43	$	2.70	$	0.89	$	0.89	$	0.00114	$	0.00005	$	0.00019	$	7.07	$	1.52287	$	0.00015		
SRVSAZNO	$	20.31	$	0.49	$	3.50	$	2.57	$	2.05	$	0.00289	$	0.00006	$	0.00021	$	68.26	$	23.34007	$	0.00232		
SRVSAZSO	$	13.99	$	0.50	$	4.66	$	2.05	$	1.02	$	0.00145	$	0.00006	$	0.00021	$	27.79	$	7.56529	$	0.00075		
STFDAZMA	$	39.78	$	0.48	$	8.09	$	7 13	$	3.24	$	0.00456	$	0.00007	$	0.00021	$	83.36	$	29.36859	$	0.00292		
TCSNAZCA	$	4.55	$	0.49	$	2.52	$	0.88	$	0.86	$	0.00120	$	0.00005	$	0.00020	$	4.66	$	0.94797	$	0.00009		
TCSNAZCO	$	4.46	$	0.48	$	2.40	$	1.26	$	0.82	$	0.00114	$	0.00005	$	0.00020	$	6.92	$	1.56705	$	0.00016		
TCSNAZCR	$	4.34	$	0.44	$	2.67	$	0.96	$	0.79	$	0.00104	$	0.00005	$	0.00019	$	2.18	$	0.41889	$	0.00004		
TCSNAZEA	$	3.68	$	0.45	$	2.79	$	0.96	$	0.83	$	0.00110	$	0.00005	$	0.00020	$	0.83	$	0.19861	$	0.00002		
TCSNAZFW	$	3.87	$	0.45	$	2.73	$	0.90	$	0.82	$	0.00110	$	0.00005	$	0.00020	$	1.98	$	0.39029	$	0.00004		
'TCSNAZMA	$	3.62	$	0.39	$	2.32	$	0.87	$	0.95	$	0.00118	$	0.00005	$	0.00018	$	6.39	$	2.03159	$	0.00020		

	UNE Unit Costs										
clli	Distribution Unit Cost	NID Unit Cost	Concentrator Unit Cost	Feeder Unit Cost	EO Switching Line Port Unit Cost	EO Switching Usage Unit Cost	Signaling STP Unit Cost	Signaling SCP Unit Cost	Signaling Links Unit Cost	Dedicated Transport Unit Cost per DS0/mo	Dedicated Transport Unit Cost per min
TCSNAZML	$ 12.01	$ 0.44	$ 11.73	$ 1.41	$ 6.32	$ 0.00859	$ 0.00008	$ 0.00021	$ 69.87	$ 29.37255	$ 0.00292
TCSNAZNO	$ 5.14	$ 0.48	$ 3.33	$ 0.67	$ 0.86	$ 0.00118	$ 0.00005	$ 0.00020	$ 2.71	$ 0.45252	$ 0.00005
TCSNAZRN	$ 5.02	$ 0.48	$ 3.15	$ 0.95	$ 0.78	$ 0.00107	$ 0.00005	$ 0.00020	$ 1.48	$ 0.34562	$ 0.00003
TCSNAZSE	$ 8.03	$ 0.48	$ 2.94	$ 1.03	$ 1.01	$ 0.00144	$ 0.00006	$ 0.00021	$ 8.65	$ 2.37689	$ 0.00024
TCSNAZSO	$ 5.09	$ 0.45	$ 3.08	$ 0.92	$ 0.78	$ 0.00106	$ 0.00005	$ 0.00020	$ 2.12	$ 0.41727	$ 0.00004
TCSNAZSW	$ 12.32	$ 0.50	$ 4.22	$ 1.68	$ 0.74	$ 0.00106	$ 0.00005	$ 0.00021	$ 5.05	$ 1.16384	$ 0.00012
TCSNAZTV	$ 7.54	$ 0.49	$ 2.32	$ 0.90	$ 0.92	$ 0.00127	$ 0.00005	$ 0.00020	$ 9.49	$ 2.50934	$ 0.00025
TCSNAZWE	$ 11.98	$ 0.51	$ 3.28	$ 1.21	$ 1.25	$ 0.00179	$ 0.00006	$ 0.00021	$ 11.95	$ 3.40193	$ 0.00034
TEMPAZMA	$ 2.83	$ 0.39	$ 2.88	$ 0.80	$ 0.81	$ 0.00101	$ 0.00005	$ 0.00018	$ 0.58	$ 0.14860	$ 0.00001
TEMPAZMC	$ 2.70	$ 0.44	$ 3.01	$ 0.68	$ 0.88	$ 0.00115	$ 0.00005	$ 0.00019	$ 0.99	$ 0.28037	$ 0.00003
TLSNAZMA	$ 5.71	$ 0.46	$ 2.64	$ 0.92	$ 0.95	$ 0.00128	$ 0.00005	$ 0.00020	$ 4.97	$ 1.31090	$ 0.00013
TMBSAZMA	$ 36.75	$ 0.47	$ 8.24	$ 4.90	$ 3.09	$ 0.00420	$ 0.00007	$ 0.00021	$ 208.45	$ 71.65687	$ 0.00713
TNCKAZMA	$ 38.58	$ 0.50	$ 8.14	$ 10.89	$ 3.27	$ 0.00467	$ 0.00007	$ 0.00022	$ 286.58	$ 97.65472	$ 0.00972
TUBCAZMA	$ 54.22	$ 0.48	$ 9.36	$ 10.77	$ 1.78	$ 0.00248	$ 0.00006	$ 0.00021	$ 95.65	$ 29.80212	$ 0.00297
VAILAZNO	$ 46.88	$ 0.49	$ 8.00	$ 11.41	$ 2.84	$ 0.00402	$ 0.00007	$ 0.00022	$ 102.66	$ 33.45716	$ 0.00333
VAILAZSO	$ 27 48	$ 0.49	$ 7.50	$ 7.90	$ 1.69	$ 0.00240	$ 0.00006	$ 0.00022	$ 112.65	$ 37 13284	$ 0.00370
WCBGAZMA	$ 19.79	$ 0.46	$ 3.75	$ 4.82	$ 1.33	$ 0.00180	$ 0.00005	$ 0.00020	$ 24.57	$ 7.27585	$ 0.00072
WHTKAZMA	$ 12.31	$ 0.49	$ 2.35	$ 1.81	$ 2.04	$ 0.00294	$ 0.00006	$ 0.00022	$ 36.79	$ 13.06749	$ 0.00130
WHTLAZMA	$ 38.88	$ 0.50	$ 6.84	$ 1.23	$ 4.44	$ 0.00636	$ 0.00008	$ 0.00022	$ 148.49	$ 55.07050	$ 0.00548
WLCXAZMA	$ 31.48	$ 0.44	$ 5.21	$ 9.31	$ 1.44	$ 0.00192	$ 0.00006	$ 0.00020	$ 57.86	$ 19.01960	$ 0.00189
WLMSAZMA	$ 28.24	$ 0.46	$ 4.83	$ 6.28	$ 1.62	$ 0.00222	$ 0.00006	$ 0.00021	$ 141.19	$ 48.33342	$ 0.00481
WLTNAZMA	$ 48.49	$ 0.48	$ 8.44	$ 14.38	$ 1.88	$ 0.00263	$ 0.00006	$ 0.00022	$ 431.44	$143.51578	$ 0.01429
WNBGAZ01	$ 67.84	$ 0.48	$ 12.06	$ 14.98	$ 2.47	$ 0.00341	$ 0.00007	$ 0.00022	$ 456.74	$150.82564	$ 0.01502
WNSLAZMA	$ 13.47	$ 0.45	$ 4.66	$ 2.23	$ 1.24	$ 0.00172	$ 0.00006	$ 0.00021	$ 48.92	$ 16.65417	$ 0.00166
YRNLAZMA	$ 61.33	$ 0.48	$ 11.62	$ 17.11	$ 2.41	$ 0.00334	$ 0.00006	$ 0.00021	$ 143.99	$ 45.84982	$ 0.00456
YUMAAZFT	$ 9.40	$ 0.51	$ 4.19	$ 0.39	$ 0.82	$ 0.00117	$ 0.00006	$ 0.00021	$ 12.63	$ 3.35998	$ 0.00033
YUMAAZMA	$ 6.42	$ 0.45	$ 3.85	$ 0.51	$ 0.76	$ 0.00100	$ 0.00005	$ 0.00019	$ 5.17	$ 1.02063	$ 0.00010
YUMAAZSE	$ 8.82	$ 0.45	$ 3.79	$ 1.11	$ 0.71	$ 0.00095	$ 0.00005	$ 0.00020	$ 5.30	$ 1.16631	$ 0.00012

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AGFIAZSR	$ 5.32	$ 0.00053	$ 0.00011	$ 0.00052	$ 0.00011	$ 0.00049	$ 0.00057	$ 0.14	$ 13.40
ASFKAZMA	$ 28.88	$ 0.00288	$ 0.02083	$ 0.00448	$ 0.01327	$ 0.00286	$ 0.00103	$ 3.82	$ 13.24
AZCYAZ03	$ 20.62	$ 0.00205	$ 0.00259	$ 0.00241	$ 0.00216	$ 0.00202	$ 0.00080	$ 0.64	$ 13.25
BCKYAZMA	$ 5.46	$ 0.00054	$ 0.00076	$ 0.00057	$ 0.00069	$ 0.00052	$ 0.00057	$ 0.22	$ 13.29
BISBAZMA	$ 4.39	$ 0.00044	$ 0.00072	$ 0.00047	$ 0.00065	$ 0.00043	$ 0.00056	$ 0.22	$ 13.30
BLCNAZMA	$ 11.48	$ 0.00114	$ 0.00300	$ 0.00132	$ 0.00255	$ 0.00113	$ 0.00074	$ 0.61	$ 13.26
BNSNAZMA	$ 6.83	$ 0.00068	$ 0.00089	$ 0.00073	$ 0.00080	$ 0.00066	$ 0.00059	$ 0.25	$ 13.27
BNSNAZSD	$ 23.58	$ 0.00235	$ 0.00732	$ 0.00290	$ 0.00584	$ 0.00231	$ 0.00088	$ 1.55	$ 13.25
BRDSAZMA	$ 5.19	$ 0.00052	$ 0.00010	$ 0.00051	$ 0.00009	$ 0.00048	$ 0.00057	$ 0.14	$ 13.39
CHNDAZMA	$ 4.18	$ 0.00042	$ 0.00010	$ 0.00041	$ 0.00009	$ 0.00039	$ 0.00054	$ 0.14	$ 13.38
CHNDAZSO	$ 5.74	$ 0.00057	$ 0.00022	$ 0.00057	$ 0.00020	$ 0.00054	$ 0.00058	$ 0.15	$ 13.39
CHNDAZWE	$ 3.43	$ 0.00034	$ 0.00004	$ 0.00034	$ 0.00004	$ 0.00032	$ 0.00052	$ 0.13	$ 13.40
CHVYAZMA	$ 7.07	$ 0.00070	$ 0.00081	$ 0.00073	$ 0.00075	$ 0.00067	$ 0.00057	$ 0.23	$ 13.27
CLDGAZMA	$ 5.93	$ 0.00059	$ 0.00062	$ 0.00063	$ 0.00056	$ 0.00057	$ 0.00059	$ 0.21	$ 13.30
CMVRAZMA	$ 6.48	$ 0.00064	$ 0.00041	$ 0.00068	$ 0.00037	$ 0.00062	$ 0.00058	$ 0.18	$ 13.30
CMVRAZRR	$ 19.47	$ 0.00194	$ 0.00342	$ 0.00224	$ 0.00291	$ 0.00190	$ 0.00077	$ 0.76	$ 13.24
CRCYAZMA	$ 14.81	$ 0.00147	$ 0.00519	$ 0.00173	$ 0.00434	$ 0.00145	$ 0.00077	$ 0.99	$ 13.25
CRNDAZMA	$ 5.99	$ 0.00060	$ 0.00050	$ 0.00060	$ 0.00047	$ 0.00056	$ 0.00058	$ 0.18	$ 13.33
CSGRAZMA	$ 4.16	$ 0.00041	$ 0.00020	$ 0.00043	$ 0.00018	$ 0.00039	$ 0.00054	$ 0.15	$ 13.33
CTWDAZMA	$ 4.71	$ 0.00047	$ 0.00027	$ 0.00048	$ 0.00025	$ 0.00044	$ 0.00055	$ 0.16	$ 13.32
CTWDAZSO	$ 13.29	$ 0.00132	$ 0.00165	$ 0.00145	$ 0.00146	$ 0.00128	$ 0.00071	$ 0.36	$ 13.31
CVCKAZMA	$ 5.10	$ 0.00051	$ 0.00025	$ 0.00051	$ 0.00023	$ 0.00048	$ 0.00056	$ 0.15	$ 13.35
DDVLAZNM	$ 30.72	$ 0.00306	$ 0.01171	$ 0.00489	$ 0.00728	$ 0.00304	$ 0.00119	$ 2.32	$ 13.24
DGLSAZMA	$ 4.98	$ 0.00050	$ 0.00090	$ 0.00052	$ 0.00082	$ 0.00048	$ 0.00057	$ 0.23	$ 13.31
DRVYAZNO	$ 3.63	$ 0.00036	$ 0.00004	$ 0.00036	$ 0.00004	$ 0.00034	$ 0.00053	$ 0.13	$ 13.40
ELOYAZ01	$ 6.43	$ 0.00064	$ 0.00061	$ 0.00071	$ 0.00053	$ 0.00062	$ 0.00061	$ 0.20	$ 13.30
FLGSAZEA	$ 4.83	$ 0.00048	$ 0.00065	$ 0.00049	$ 0.00061	$ 0.00046	$ 0.00055	$ 0.20	$ 13.32
FLGSAZMA	$ 3.01	$ 0.00030	$ 0.00004	$ 0.00031	$ 0.00004	$ 0.00029	$ 0.00050	$ 0.13	$ 13.36
FLGSAZSO	$ 13.77	$ 0.00137	$ 0.00169	$ 0.00151	$ 0.00149	$ 0.00133	$ 0.00071	$ 0.36	$ 13.31
FLRNAZMA	$ 4.60	$ 0.00046	$ 0.00058	$ 0.00054	$ 0.00048	$ 0.00045	$ 0.00062	$ 0.20	$ 13.28
FTMDAZMA	$ 5.41	$ 0.00054	$ 0.00018	$ 0.00054	$ 0.00017	$ 0.00051	$ 0.00056	$ 0.15	$ 13.34
FTMDAZNO	$ 15.09	$ 0.00150	$ 0.00145	$ 0.00166	$ 0.00127	$ 0.00146	$ 0.00071	$ 0.37	$ 13.28
GDYRAZCW	$ 4.54	$ 0.00045	$ 0.00014	$ 0.00047	$ 0.00013	$ 0.00043	$ 0.00056	$ 0.14	$ 13.35
GLBNAZMA	$ 14.01	$ 0.00140	$ 0.01327	$ 0.00179	$ 0.01026	$ 0.00138	$ 0.00084	$ 2.37	$ 13.24
GLDLAZMA	$ 4.42	$ 0.00044	$ 0.00004	$ 0.00044	$ 0.00004	$ 0.00041	$ 0.00055	$ 0.13	$ 13.39
GLOBAZMA	$ 4.60	$ 0.00046	$ 0.00114	$ 0.00048	$ 0.00104	$ 0.00044	$ 0.00055	$ 0.26	$ 13.30

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GNVYAZMA	$ 5.31	$ 0.00053	$ 0.00040	$ 0.00053	$ 0.00038	$ 0.00050	$ 0.00056	$ 0.17	$ 13.32
GRCNAZMA	$ 4.27	$ 0.00043	$ 0.00309	$ 0.00051	$ 0.00252	$ 0.00042	$ 0.00057	$ 0.48	$ 13.24
HGLYAZMA	$ 6.09	$ 0.00061	$ 0.00054	$ 0.00064	$ 0.00049	$ 0.00059	$ 0.00058	$ 0.19	$ 13.31
HGLYAZQC	$ 7.06	$ 0.00070	$ 0.00056	$ 0.00074	$ 0.00051	$ 0.00068	$ 0.00059	$ 0.20	$ 13.28
HMBLAZMA	$ 7.95	$ 0.00079	$ 0.00073	$ 0.00085	$ 0.00065	$ 0.00077	$ 0.00061	$ 0.23	$ 13.28
HYDNAZMA	$ 15.28	$ 0.00152	$ 0.00856	$ 0.00202	$ 0.00638	$ 0.00151	$ 0.00087	$ 1.67	$ 13.26
JSCYAZMA	$ 21.61	$ 0.00215	$ 0.01601	$ 0.00307	$ 0.01113	$ 0.00214	$ 0.00093	$ 3.20	$ 13.24
KRNYAZMA	$ 15.15	$ 0.00151	$ 0.00320	$ 0.00180	$ 0.00265	$ 0.00149	$ 0.00077	$ 0.76	$ 13.25
LTPKAZMA	$ 4.73	$ 0.00047	$ 0.00018	$ 0.00048	$ 0.00017	$ 0.00045	$ 0.00056	$ 0.15	$ 13.38
MARNAZ02	$ 5.68	$ 0.00057	$ 0.00062	$ 0.00059	$ 0.00057	$ 0.00054	$ 0.00057	$ 0.20	$ 13.28
MAYRAZMA	$ 25.76	$ 0.00256	$ 0.01135	$ 0.00300	$ 0.00952	$ 0.00252	$ 0.00084	$ 2.06	$ -
MESAAZGI	$ 4.09	$ 0.00041	$ 0.00004	$ 0.00041	$ 0.00004	$ 0.00038	$ 0.00054	$ 0.13	$ 13.39
MESAAZMA	$ 3.48	$ 0.00035	$ 0.00003	$ 0.00035	$ 0.00002	$ 0.00033	$ 0.00052	$ 0.13	$ 13.37
MIAMAZMA	$ 7.99	$ 0.00080	$ 0.00130	$ 0.00090	$ 0.00113	$ 0.00078	$ 0.00067	$ 0.32	$ 13.28
MMTHAZMA	$ 22.97	$ 0.00229	$ 0.00447	$ 0.00300	$ 0.00337	$ 0.00226	$ 0.00092	$ 1.12	$ 13.24
MRCPAZMA	$ 10.86	$ 0.00108	$ 0.00280	$ 0.00123	$ 0.00241	$ 0.00106	$ 0.00069	$ 0.56	$ 13.25
MSPKAZMA	$ 12.99	$ 0.00129	$ 0.00185	$ 0.00144	$ 0.00161	$ 0.00126	$ 0.00072	$ 0.38	$ 13.32
NGLSAZ03	$ 33.28	$ 0.00331	$ 0.00207	$ 0.00597	$ 0.00114	$ 0.00330	$ 0.00127	$ 0.62	$ 13.26
NGLSAZMA	$ 3.29	$ 0.00033	$ 0.00027	$ 0.00036	$ 0.00024	$ 0.00032	$ 0.00052	$ 0.16	$ 13.30
NGLSAZMW	$ 4.25	$ 0.00042	$ 0.00069	$ 0.00044	$ 0.00064	$ 0.00041	$ 0.00053	$ 0.20	$ 13.32
NWRVAZMA	$ 7.61	$ 0.00076	$ 0.00087	$ 0.00080	$ 0.00079	$ 0.00073	$ 0.00060	$ 0.24	$ 13.28
ORCLAZMA	$ 14.84	$ 0.00148	$ 0.00264	$ 0.00171	$ 0.00224	$ 0.00145	$ 0.00075	$ 0.58	$ 13.26
PAGEAZMA	$ 5.49	$ 0.00055	$ 0.00441	$ 0.00060	$ 0.00392	$ 0.00053	$ 0.00056	$ 0.61	$ 13.29
PHNXAZ81	$ 6.62	$ 0.00066	$ 0.00016	$ 0.00067	$ 0.00014	$ 0.00062	$ 0.00060	$ 0.15	$ 13.36
PHNXAZBW	$ 5.72	$ 0.00057	$ 0.00013	$ 0.00057	$ 0.00012	$ 0.00054	$ 0.00058	$ 0.14	$ 13.38
PHNXAZCA	$ 4.10	$ 0.00041	$ 0.00003	$ 0.00041	$ 0.00003	$ 0.00038	$ 0.00054	$ 0.13	$ 13.39
PHNXAZEA	$ 2.48	$ 0.00025	$ 0.00001	$ 0.00026	$ 0.00001	$ 0.00024	$ 0.00048	$ 0.13	$ 13.41
PHNXAZGR	$ 3.91	$ 0.00039	$ 0.00003	$ 0.00039	$ 0.00003	$ 0.00037	$ 0.00054	$ 0.13	$ 13.39
PHNXAZLV	$ 10.62	$ 0.00106	$ 0.00108	$ 0.00116	$ 0.00096	$ 0.00103	$ 0.00068	$ 0.29	$ 13.29
PHNXAZMA	$ 2.00	$ 0.00020	$ 0.00006	$ 0.00021	$ 0.00006	$ 0.00019	$ 0.00043	$ 0.13	$ 13.43
PHNXAZMR	$ 4.49	$ 0.00045	$ 0.00004	$ 0.00044	$ 0.00004	$ 0.00042	$ 0.00055	$ 0.13	$ 13.40
PHNXAZMY	$ 4.25	$ 0.00042	$ 0.00005	$ 0.00043	$ 0.00005	$ 0.00040	$ 0.00055	$ 0.13	$ 13.40
PHNXAZNE	$ 3.08	$ 0.00031	$ 0.00001	$ 0.00031	$ 0.00001	$ 0.00029	$ 0.00051	$ 0.13	$ 13.41
PHNXAZNO	$ 2.68	$ 0.00027	$ 0.00002	$ 0.00027	$ 0.00001	$ 0.00025	$ 0.00049	$ 0.13	$ 13.43
PHNXAZNW	$ 3.76	$ 0.00037	$ 0.00004	$ 0.00038	$ 0.00004	$ 0.00035	$ 0.00054	$ 0.13	$ 13.40
PHNXAZPP	$ 5.40	$ 0.00054	$ 0.00010	$ 0.00054	$ 0.00010	$ 0.00050	$ 0.00058	$ 0.14	$ 13.39

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PHNXAZPR	$ 4.52	$ 0.00045	$ 0.00005	$ 0.00045	$ 0.00005	$ 0.00042	$ 0.00055	$ 0.13	$ 13.40
PHNXAZSE	$ 2.59	$ 0.00026	$ 0.00003	$ 0.00026	$ 0.00003	$ 0.00025	$ 0.00048	$ 0.13	$ 13.42
PHNXAZSO	$ 3.54	$ 0.00035	$ 0.00004	$ 0.00036	$ 0.00004	$ 0.00034	$ 0.00053	$ 0.13	$ 13.36
PHNXAZSY	$ 3.11	$ 0.00031	$ 0.00002	$ 0.00031	$ 0.00002	$ 0.00030	$ 0.00051	$ 0.13	$ 13.40
PHNXAZWE	$ 3.10	$ 0.00031	$ 0.00003	$ 0.00032	$ 0.00003	$ 0.00030	$ 0.00051	$ 0.13	$ 13.39
PIMAAZMA	$ 20.21	$ 0.00201	$ 0.01054	$ 0.00236	$ 0.00883	$ 0.00198	$ 0.00078	$ 1.92	$ 13.25
PINEAZMA	$ 11.52	$ 0.00115	$ 0.00262	$ 0.00125	$ 0.00233	$ 0.00111	$ 0.00068	$ 0.49	$ 13.28
PLMNAZMA	$ 29.29	$ 0.00292	$ 0.01240	$ 0.00389	$ 0.00917	$ 0.00288	$ 0.00093	$ 2.61	$ 13.25
PRSCAZEA	$ 5.70	$ 0.00057	$ 0.00030	$ 0.00057	$ 0.00028	$ 0.00053	$ 0.00056	$ 0.16	$ 13.35
PRSCAZMA	$ 3.92	$ 0.00039	$ 0.00011	$ 0.00039	$ 0.00011	$ 0.00037	$ 0.00053	$ 0.14	$ 13.35
PRVYAZPP	$ 4.84	$ 0.00048	$ 0.00017	$ 0.00047	$ 0.00016	$ 0.00045	$ 0.00056	$ 0.14	$ 13.39
PTGNAZEL	$ 19.91	$ 0.00198	$ 0.00557	$ 0.00237	$ 0.00460	$ 0.00195	$ 0.00085	$ 1.19	$ 13.25
PTGNAZMA	$ 22.46	$ 0.00224	$ 0.00591	$ 0.00293	$ 0.00447	$ 0.00221	$ 0.00090	$ 1.45	$ 13.24
PYSNAZMA	$ 4.79	$ 0.00048	$ 0.00042	$ 0.00048	$ 0.00039	$ 0.00045	$ 0.00056	$ 0.17	$ 13.34
SCDLAZMA	$ 3.54	$ 0.00035	$ 0.00002	$ 0.00035	$ 0.00002	$ 0.00033	$ 0.00053	$ 0.13	$ 13.40
SCDLAZSH	$ 4.17	$ 0.00042	$ 0.00006	$ 0.00041	$ 0.00006	$ 0.00039	$ 0.00055	$ 0.13	$ 13.40
SCDLAZTH	$ 3.46	$ 0.00034	$ 0.00003	$ 0.00034	$ 0.00002	$ 0.00033	$ 0.00052	$ 0.13	$ 13.40
SEDNAZMA	$ 4.98	$ 0.00050	$ 0.00018	$ 0.00050	$ 0.00017	$ 0.00047	$ 0.00054	$ 0.15	$ 13.34
SEDNAZSO	$ 8.56	$ 0.00085	$ 0.00097	$ 0.00090	$ 0.00088	$ 0.00082	$ 0.00062	$ 0.26	$ 13.32
SFFRAZMA	$ 4.64	$ 0.00046	$ 0.00059	$ 0.00047	$ 0.00055	$ 0.00044	$ 0.00055	$ 0.20	$ 13.32
SMTNAZMA	$ 6.33	$ 0.00063	$ 0.00053	$ 0.00066	$ 0.00048	$ 0.00060	$ 0.00059	$ 0.19	$ 13.30
SNMNAZMA	$ 9.61	$ 0.00096	$ 0.00108	$ 0.00110	$ 0.00093	$ 0.00094	$ 0.00070	$ 0.30	$ 13.30
SPRRAZMA	$ 14.66	$ 0.00146	$ 0.00394	$ 0.00171	$ 0.00330	$ 0.00144	$ 0.00077	$ 0.80	$ 13.28
SPRSAZEA	$ 5.05	$ 0.00050	$ 0.00022	$ 0.00050	$ 0.00020	$ 0.00047	$ 0.00056	$ 0.15	$ 13.35
SPRSAZMA	$ 5.37	$ 0.00053	$ 0.00010	$ 0.00052	$ 0.00010	$ 0.00049	$ 0.00057	$ 0.14	$ 13.40
SPRSAZWE	$ 4.37	$ 0.00044	$ 0.00004	$ 0.00043	$ 0.00004	$ 0.00041	$ 0.00055	$ 0.13	$ 13.39
SRVSAZMA	$ 3.82	$ 0.00038	$ 0.00016	$ 0.00039	$ 0.00015	$ 0.00036	$ 0.00052	$ 0.15	$ 13.36
SRVSAZNO	$ 13.02	$ 0.00130	$ 0.00267	$ 0.00145	$ 0.00232	$ 0.00127	$ 0.00071	$ 0.54	$ 13.27
SRVSAZSO	$ 7 41	$ 0.00074	$ 0.00081	$ 0.00075	$ 0.00075	$ 0.00070	$ 0.00059	$ 0.23	$ 13.30
STFDAZMA	$ 16.50	$ 0.00164	$ 0.00361	$ 0.00200	$ 0.00292	$ 0.00162	$ 0.00083	$ 0.77	$ 13.25
TCSNAZCA	$ 4.58	$ 0.00046	$ 0.00010	$ 0.00045	$ 0.00009	$ 0.00043	$ 0.00055	$ 0.14	$ 13.38
TCSNAZCO	$ 5.26	$ 0.00052	$ 0.00017	$ 0.00052	$ 0.00016	$ 0.00049	$ 0.00057	$ 0.15	$ 13.38
TCSNAZCR	$ 3.51	$ 0.00035	$ 0.00004	$ 0.00036	$ 0.00004	$ 0.00033	$ 0.00052	$ 0.13	$ 13.38
TCSNAZEA	$ 3.64	$ 0.00036	$ 0.00002	$ 0.00037	$ 0.00002	$ 0.00034	$ 0.00053	$ 0.13	$ 13.39
TCSNAZFW	$ 3.84	$ 0.00038	$ 0.00004	$ 0.00039	$ 0.00004	$ 0.00036	$ 0.00053	$ 0.13	$ 13.39
TCSNAZMA	$ 2.48	$ 0.00025	$ 0.00022	$ 0.00025	$ 0.00020	$ 0.00024	$ 0.00048	$ 0.14	$ 13.39

clli	Dedicated Transmission Unit Cost per DS0/mo	Dedicated Transmission Unit Cost per min	Direct Transport Unit Cost per minute	Direct Transmission Unit Cost	Common Transport Unit Cost per minute per leg	Common Transmission Unit Cost per minute	Tandem Switching Unit Cost	Operator Total Cost/Line/Mo	Public Telephone Unit Cost
TCSNAZML	$ 19.13	$ 0.00190	$ 0.00464	$ 0.00300	$ 0.00292	$ 0.00189	$ 0.00100	$ 1.01	$ 13.26
TCSNAZNO	$ 4.27	$ 0.00043	$ 0.00005	$ 0.00042	$ 0.00005	$ 0.00040	$ 0.00054	$ 0.13	$ 13.37
TCSNAZRN	$ 4.06	$ 0.00040	$ 0.00004	$ 0.00040	$ 0.00003	$ 0.00038	$ 0.00054	$ 0.13	$ 13.37
TCSNAZSE	$ 5.01	$ 0.00050	$ 0.00026	$ 0.00053	$ 0.00024	$ 0.00048	$ 0.00058	$ 0.16	$ 13.33
TCSNAZSO	$ 3.30	$ 0.00033	$ 0.00004	$ 0.00034	$ 0.00004	$ 0.00031	$ 0.00052	$ 0.13	$ 13.37
TCSNAZSW	$ 5.44	$ 0.00054	$ 0.00012	$ 0.00054	$ 0.00012	$ 0.00051	$ 0.00056	$ 0.14	$ 13.31
TCSNAZTV	$ 5.97	$ 0.00059	$ 0.00027	$ 0.00059	$ 0.00025	$ 0.00056	$ 0.00057	$ 0.16	$ 13.35
TCSNAZWE	$ 8.80	$ 0.00088	$ 0.00037	$ 0.00091	$ 0.00034	$ 0.00083	$ 0.00062	$ 0.18	$ 13.31
TEMPAZMA	$ 2.64	$ 0.00026	$ 0.00002	$ 0.00027	$ 0.00001	$ 0.00025	$ 0.00049	$ 0.13	$ 13.41
TEMPAZMC	$ 3.61	$ 0.00036	$ 0.00003	$ 0.00036	$ 0.00003	$ 0.00034	$ 0.00053	$ 0.13	$ 13.41
TLSNAZMA	$ 4.94	$ 0.00049	$ 0.00014	$ 0.00051	$ 0.00013	$ 0.00047	$ 0.00056	$ 0.14	$ 13.36
TMBSAZMA	$ 19.31	$ 0.00192	$ 0.00857	$ 0.00227	$ 0.00713	$ 0.00189	$ 0.00082	$ 1.78	$ 13.25
TNCKAZMA	$ 23.38	$ 0.00233	$ 0.01192	$ 0.00282	$ 0.00972	$ 0.00230	$ 0.00088	$ 2.31	$ 13.25
TUBCAZMA	$ 12.20	$ 0.00121	$ 0.00341	$ 0.00136	$ 0.00297	$ 0.00118	$ 0.00068	$ 0.68	$ 13.25
VAILAZNO	$ 17.14	$ 0.00171	$ 0.00399	$ 0.00201	$ 0.00333	$ 0.00168	$ 0.00078	$ 0.87	$ 13.25
VAILAZSO	$ 12.01	$ 0.00120	$ 0.00418	$ 0.00132	$ 0.00370	$ 0.00117	$ 0.00068	$ 0.72	$ 13.26
WCBGAZMA	$ 5.80	$ 0.00058	$ 0.00080	$ 0.00061	$ 0.00072	$ 0.00056	$ 0.00057	$ 0.23	$ 13.28
WHTKAZMA	$ 12.31	$ 0.00123	$ 0.00154	$ 0.00142	$ 0.00130	$ 0.00120	$ 0.00073	$ 0.35	$ 13.29
WHTLAZMA	$ 26.15	$ 0.00260	$ 0.00784	$ 0.00369	$ 0.00548	$ 0.00258	$ 0.00100	$ 1.58	$ 13.25
WLCXAZMA	$ 6.38	$ 0.00064	$ 0.00212	$ 0.00069	$ 0.00189	$ 0.00062	$ 0.00058	$ 0.41	$ 13.26
WLMSAZMA	$ 8.25	$ 0.00082	$ 0.00547	$ 0.00091	$ 0.00481	$ 0.00080	$ 0.00062	$ 0.85	$ 13.26
WLTNAZMA	$ 15.39	$ 0.00153	$ 0.01651	$ 0.00174	$ 0.01429	$ 0.00150	$ 0.00069	$ 2.57	$ 13.24
WNBGAZ01	$ 20.72	$ 0.00206	$ 0.01795	$ 0.00242	$ 0.01502	$ 0.00203	$ 0.00076	$ 3.08	$ 13.24
WNSLAZMA	$ 5.81	$ 0.00058	$ 0.00192	$ 0.00065	$ 0.00166	$ 0.00056	$ 0.00060	$ 0.36	$ 13.29
YRNLAZMA	$ 14.64	$ 0.00146	$ 0.00536	$ 0.00168	$ 0.00456	$ 0.00143	$ 0.00074	$ 1.05	$ 13.24
YUMAAZFT	$ 6.31	$ 0.00063	$ 0.00036	$ 0.00063	$ 0.00033	$ 0.00059	$ 0.00058	$ 0.17	$ 13.33
YUMAAZMA	$ 3.77	$ 0.00038	$ 0.00011	$ 0.00038	$ 0.00010	$ 0.00036	$ 0.00053	$ 0.14	$ 13.35
YUMAAZSE	$ 3.99	$ 0.00040	$ 0.00013	$ 0.00041	$ 0.00012	$ 0.00038	$ 0.00053	$ 0.14	$ 13.33

Cost Adjustments for Future Demand

n is the planning horizon
P_L is the per line annual cost that must be recovered by the incumbent LEC.
L_0 is the demand for lines at time zero
L_n is the demand for lines at time n and this equals $L_0 \times e^{gn}$
e is the exponential function
g is the annual growth rate in lines
t is a variable representing time
r is the weighted cost of capital
C_{Ln} is the total annual cost of engineering distribution to handle the demand at time n, L_n.

The goal of this exercise is to determine the proper cost per line that must be recovered by the ILEC accounting for the growth in lines that will occur in the network.

In order for the ILEC to fully recover cost the present value of the ILECs "recovered cost per line", P_L, must equal the present value of the annual cost of the network. This can be represented by the formula (1) below.

We want to solve this equation for P_L.

(1) $$\int_0^n P_L \times L_0 \; e^{gt} \times e^{-rt} \, dt \quad = \quad \int_0^n C_{L_n} \times e^{-rt} \, dt$$

Equation (1) can be simplified to (2):

(2) $$P_L \times L_0 \times \int_0^n e^{-(r-g)t} \, dt \quad = \quad C_{L_n} \times \int_0^n e^{-rt} \, dt$$

Equation (2) can be solved to get (3):

(3) $$P_L \times L_0 \times \frac{-1}{(r-g)} \times e^{-(r-g)t} \Big|_0^n \quad = \quad C_{L_n} \times \frac{-1}{r} \times e^{-rt} \Big|_0^n$$

Equation (3) becomes (4):

(4) $$\frac{P_L \times L_0}{(r-g)} \times \left(1 - e^{-(r-g)n}\right) \quad = \quad \frac{C_{L_n}}{r} \times \left(1 - e^{-rn}\right)$$

And equation (4) can be solved for P_L which is represented in (5).

(5) $$P_L \quad = \quad \frac{(r-g)}{r} \times \frac{\left(1 - e^{-rn}\right)}{\left(1 - e^{-(r-g)n}\right)} \times \frac{C_{L_n}}{L_0}$$

This result tells us that the cost per line that must be recovered is a fraction of the total annual cost divided by the current demand. It can be noted that P_L decreases as g increases, r decreases, and n increases.

4. CONSTRUCTION CHARGES AND OTHER SPECIAL CHARGES

SUBJECT	PAGE
Construction on Public Highways or Other Easements	3
General	1
Other Construction or Conditions	10
Provisioning Agreement for Housing Developments	5
Rural Construction Charges (Additional)	4
Special Assemblies, Facilities and Finishes of Equipment	10
Special Service Arrangements	10
Temporary Construction	10

(D)

4. CONSTRUCTION CHARGES AND OTHER SPECIAL CHARGES

4.1 GENERAL

A. Reasonable rates and charges involve consideration of costs and the degree of risk associated with furnishing telephone service. Certain situations involve substantial extra cost or risk, e.g., the facilities required will be temporary; facilities are ordered in advance of actual customer demand for service; unusual costs are involved in furnishing the service or facilities; exchange service is ordered for areas where the telephone facilities are not available.

B. The provision of telephone service may require the payment of a construction, zone connection, facility or temporary development charge by the customer ordering telephone service or requesting facilities. This charge is in addition to the regular rates, nonrecurring and installation charges applicable for the exchange service provided. The Company may, at its discretion, modify requirements and charges pertaining to supporting structures which include, but are not limited to, pipes, conduits, poles, trenches, and backboards for the placement of telephone facilities in housing developments, commercial properties and business (C)
developments where an alternative facilities based service provider is available. (C)

C. Applicants requesting service at locations that have been served previously will not be assessed construction charges. Construction charges will be associated with the premises for which they were established rather than the customer. Credit for construction charges will not be transferred from one premises to another.

D. The Company shall not be required to provide facilities, at the request of a developer, within new areas of land development which meet any of the conditions listed in 4.4., following, unless an agreement is reached and a contract is signed.

E. Advance payments or deposits for exchange service, if required under the regulations contained in Section 2 of this Tariff, shall be paid at the time agreement is made between the applicant and the Company to provide such exchange service.

F. With approval of the Company, arrangements may be made for the payment of construction, and/or zone connection charges in monthly installments spread over a reasonable period, generally not to exceed one year. All unpaid installments become due upon termination of service.

G. With approval of the Company, a customer may furnish material, transportation, labor, board or lodging as all or part payment of the charge in lieu of cash.

H. The ownership of any pole line, circuit or other facilities provided wholly or in part at the expense of an applicant under this Tariff shall at all times be vested exclusively in the Company or another company with which the Company has a joint agreement.

4. CONSTRUCTION CHARGES AND OTHER SPECIAL CHARGES

4.1 GENERAL (Cont'd)

I. Except as otherwise provided herein, the terms and conditions in this Tariff contemplate that the type of construction required to provide the quantity and grade of telephone service involved will be determined by the Company. The customer will be required to pay the added costs involved when a different type of construction than that proposed by the Company is desired.

J. Where applicants are so located that it is necessary or desirable to use private and/or government right-of-way to furnish service, such applicants may be required to provide or pay the cost of providing such right-of-way in addition to any applicable charges.

K. All necessary construction will be undertaken at the discretion of the Company consistent with budgetary responsibilities and consideration for the impact on the general body of customers, but in no case more than six months after the request for service necessitating the construction. The Company bears all responsibility for informing customers on a timely basis of all conditions necessary to establish service.

L. Service station customers who request local exchange service will be classed as new applicants for the application of construction. New service station customers will be assessed the appropriate construction charges applicable at the point of connection. (C) (C)

M. When construction is required to serve a new applicant, the Company will take whatever steps necessary to determine all prospects who may desire to be served from the new construction or an extension. Only those prospects having signed a line extension contract will be included in the project. All applicants are grouped in a single project when there is no more than one mile of construction between successive applicants and the terrain makes it economically reasonable for the applicants. Separate projects are established whenever the construction between any two consecutive applicants exceeds one mile. Two or more projects are combined whenever this results in lower charges (or no increase in charges) for the applicants in the preceding project.

4. CONSTRUCTION CHARGES AND OTHER SPECIAL CHARGES

4.2 CONSTRUCTION ON PUBLIC HIGHWAYS OR OTHER EASEMENTS (D)

4. CONSTRUCTION CHARGES AND OTHER SPECIAL CHARGES

4.2 CONSTRUCTION ON PUBLIC HIGHWAYS OR OTHER EASEMENTS (Cont'd)

4.2.2 SPECIAL RURAL CONSTRUCTION CHARGES (C)

A. Special rural construction charges may apply as specified herein. (C)

1. Costs for existing facilities will be determined in the following manner:

   a. A Telephone Plant Index (TPI) translator, specific to the type and vintage year of plant involved, will be applied to the current construction costs for the existing circuit to calculate the original cost of the circuit.

   b. A depreciation factor, specific to the type and vintage year of plant involved, will be applied to the original cost determined in a., to calculate at net book cost, or original construction cost less accrued depreciation.

2. Additional construction charges will be determined as follows:

   a. Any additional construction charges to the rural customer will not exceed the customer's pro rata share of original construction costs, less accrued depreciation, on existing facilities, as determined in 1., preceding, plus the customer's pro rata share of the construction costs of new facilities, less a credit of the lesser of $3,000 or the sum of the aforementioned costs. (C)

4. CONSTRUCTION CHARGES AND OTHER SPECIAL CHARGES

4.4 PROVISIONING AGREEMENT FOR HOUSING DEVELOPMENTS (M) (C)

A. Description (N)

A Provisioning Agreement for Housing Developments (PAHD) is a contractual arrangement between the Company and the Developer/Builder for the provision of distribution facilities, including conduit for the service lateral trench within new areas of residential development.

B. Terms and Conditions

1. A PAHD is required where Developers/Builders plan to develop four or more lots. Less than four lots will be treated according to the terms set forth under other portions of this Section 4, if applicable.

2. The Developer/Builder will provide trench and backfill for the facilities and be responsible for those costs. In areas where the Company has trench and backfill agreements with other utilities, the Developer/Builder is responsible for the Company's trench and backfill cost.

3. To accommodate Developer/Builder coordination schedules, with the Company's approval, the Developer/Builder has the option of placing Company provided facilities in the trench.

4. The PAHD will include, but is not limited to: a description of the development; an addressed, recorded plat; trench and backfill specifications; easements; surface grade requirements; and coordination of inspection schedules.

5. If the Developer is not the Builder, the Builder or premises owner will be responsible for the provision of the trench including, at a minimum, one inch conduit with adequate pull string, for the service drop to the living unit.

6. The Company will provide the facilities at no charge to the Developer/Builder as long as the cost does not exceed the Company determined cap, which shall equal the distribution and drop portion of the average exchange loop investment, times the number of lots in the development. The Company may require payment by the Developer/Builder of all costs in excess of the cap prior to the start of any required construction.

7. Distribution facilities covered in the PAHD cannot be used for subsequent developments until they are covered by a new PAHD.

8. The PAHD may vary terms and conditions as appropriate to respond to developer needs in those developments where an alternative provider is available. (N)

[1] This page cancels the following: Pages 6 through 9, Release 1. (N)

(M) Material moved to Section 104.

4. CONSTRUCTION CHARGES AND OTHER SPECIAL CHARGES

4.5 SPECIAL SERVICE ARRANGEMENTS

4.5.1 SPECIAL ASSEMBLIES, FACILITIES AND FINISHES OF EQUIPMENT

Rates and charges in connection with special assemblies, special facilities and special finishes of equipment will be based on the costs involved in each individual case.

4.6 OTHER CONSTRUCTION OR CONDITIONS

A. Special Types of Construction

1. Where a special type of construction is desired by a customer, such as where underground construction is requested in locations where aerial construction would be regularly used, or where conditions imposed by the customer involved excessive costs, or where underground construction is legally required by ordinance, covenant, tract restriction or otherwise, the customer or customers served by such facilities or the tract developer shall be required to pay the difference between the cost of the underground or other special type of construction and the average cost of construction normally used by the Company.

2. Where existing aerial facilities are requested to be relocated underground in an area where the Company would not, except for such request, relocate its facilities underground, the Company may charge the cost of such relocation of the persons requesting the relocation of such facilities.

B. Temporary Construction

Where temporary construction is necessary to provide service, the applicant will be required to pay a construction charge equal to the estimated net cost of installing and removing the temporary construction.

4. CONSTRUCTION CHARGES AND OTHER SPECIAL CHARGES

4.6 OTHER CONSTRUCTION OR CONDITIONS (Cont'd)

C. Construction under Unusual Conditions

1. Construction required to provide service on a seasonal basis, or to provide foreign exchange service may be subject to construction charges provided for herein. (C)

2. Additional construction charges in these instances are billed in even multiples of $1.00; any fraction of $1.00 is disregarded.

3. Special construction charges will be applicable where, at the request of the customer, the Company constructs a greater quantity of facilities than that which the Company would otherwise construct or normally utilize.

D. Regrades in Rural Areas

Generally, construction charges will not apply for the addition of circuits or facilities required to provide better grades of service in rural areas where pole line facilities are in place. In unusual cases, where the cost of providing such facilities is excessive in relation to the anticipated revenue, construction charges may be applied, based on the circumstances in each case.

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Building the Future-Proof Telco

By David Diamond

Qwest will soon have more capacity than AT&T, MCI, Sprint, and WorldCom put together. And none of them saw the upstart coming.

As ambitious projects go, this one conjures images of the laying of the railroads, the 19th-century phenomenon that catapulted the United States from the slowpoke days of horses and sailing ships and canal barges into the Industrial Age. But Joseph Nacchio, CEO of Qwest Communications International, which is hurriedly sinking 16,285 route miles of fiber-optic cable into American soil in an effort to truly catapult the nation into the Information Age, prefers another historical metaphor.

"Let's say it's 1859. I come out of the hills of Pennsylvania. I tell you, 'Hey, guess what I just found? I've got this new source of energy. It's oil. And it's going to dramatically lower the cost of energy.' You look at me kind of cockeyed and say, 'Hey, what are you crazy? The coal guys - they've got the railroads, they've got the distribution, they've got the customers.' The last thing I can say to you is, 'Heck, don't worry about it. See all those horses out there crapping in the street? Sixty years from now there's going to be something called automobiles that will burn this stuff and 80 years from now these guys in Delaware will use it to make something called plastics.'"

OK, so the folks who discovered oil in Titusville, Pennsylvania, couldn't see that clearly into the future. But they did have a vision: They knew that in an energy-based economy, if you could change the price performance of energy, something big was bound to happen. Likewise, Nacchio predicts, "if we can change the price performance of bandwidth and long distance, if we can collapse distance and time, something big is going to happen. We're not going to be the guys that are going to design it,"he continues, "it's going to be all the complementary industries. It's going to be like an organic system. There are other folks that contribute to the ecology. We just take the one key element of the system - bandwidth - and push it dramatically."

Dramatically is the operative word here. From out of nowhere, Denver-based Qwest is becoming the fifth company to run a nationwide fiber-optic network, and the one with the most promise of meeting the country's postmillennial communications needs. Qwest's network, expected to be running full tilt by mid-1999, will be packet-switched and capable of handling both data and voice traffic. And, according to Nacchio, it could by next year be carrying as much as 80 percent of the Net's backbone over its fourth-generation fiber, even if competitors double their capacity. As early as next spring it will have more bandwidth than the networks of AT&T, Sprint, MCI, and WorldCom combined - with enough left over to carry all of today's IP traffic. In fact, the network could carry all of today's telecommunications traffic on four of its 48 fibers. Eventually, Qwest will be able to carry more than 2 trillion bits per second, compared with around 40 billion bits per second over the systems of today's brand-name telcos.

Already, the upstart company has come forward with the first application for its high-speed network: 7.5-cents-a-minute long distance service - over the Net - in nine US cities as of mid-March. Because of all the available bandwidth, the service doesn't suffer from the poor quality of compressed voice. Qwest's Q.talk, unlike other long distance Net offerings, doesn't have to squeeze voice from 64 kilobits to as low as 7 kilobits, so it eliminates latency problems such as stutters and lags.

Though the company still relies somewhat on the traditional circuit-switch method of telecommunications - where the entire call, pauses and all, is sent over dedicated lines between two parties - it's moving toward an entirely packet-switched network. With packet switching, a phone conversation is chopped into little packets and sent through to its destination. For maximum efficiency, packets are sent only when there are packets to send.

Qwest is operating under an if-you-build-it-they-will-come vision. Bandwidth restrictions, the company believes, have held back development of all manner of innovation. Now, the prospect of virtually endless throughput will free up the planet for a host of new applications in such areas as high-speed video and multimedia.

It's not everyone's view of the future. In fact, some critics envision a bandwidth glut. But in Nacchio's mind, that's the sort of reaction one might expect from coal barons dumbfounded at the sight of oil gurgling exuberantly out of new wells. "When AT&T, MCI, and Sprint were building fiber networks in the '80s," recalls Lewis Wilks, Qwest's president of business markets, who was at MCI at that time, "we all continually expressed a belief that we would never exhaust the supply. Suppliers have continually underestimated the demands of the market." David Yedwab, a telecom analyst and executive vice president at Eastern Management Group in Bedminster, New Jersey, adds, "At this point in time, network capacity is like the first corollary to Murphy's Law: Whatever capacity there is will be filled up by the time it takes to build it."

Meanwhile, the basic phone line hasn't improved materially over the last 15 years. Though computer clock speed has increased a thousandfold and dropped in price to one-tenth of what it was, phone lines have seen no capacity increase at twice the price. You can pay US$80 for an ISDN line and maybe be able to transmit at 1.5 Mbps. Even if you transmit via cable or digital subscriber line, it's still nowhere near the increase in the speed of, say, a 300-MHz Pentium II. "Qwest will give people the ability to interact as fast as they can compute," says Tom Friedberg, an industry analyst with Denver-based Janco Partners.

CEO Nacchio is a 26-year AT&T veteran who ran its two biggest businesses - consumer and business long distance. He's the fellow you should be thanking when you get paid to switch long distance carriers, a phenomenon he's credited with implementing. Nacchio was considered a possible successor to former chair Robert Allen, but he lost out in October 1996 when, in a surprise move, Chicago publishing executive John Walter was named AT&T president and heir apparent, though C. Michael Armstrong is now chair. Nacchio clearly is ready to take on his former employer, and even sounds as if he's dancing on a dinosaur.

Indeed, he makes an art form out of being blunt. "The retail long distance business in the US is an $85 billion business controlled by people who don't get it," he says, with characteristic Jersey-boy-does-good directness. "There are significant changes in demand and the cost of supply, and we're walking in with a low-cost position. An opportunity like this doesn't come along that often. When everybody was looking the other way, Qwest decided to build its own network. Qwest should never have been allowed to exist."

"I don't know where he comes up with that," snorts Frank Ianna, AT&T's executive vice president of network and computing services. "Anyone can deploy fiber, but that doesn't make a service that is functional and usable for mission-critical operations. Where's their track record?"

Nacchio's entrepreneurial bravado is eliciting a strong reaction over at MCI, too. "I see a lot of hype about the kind of fiber they're carrying the network on, but not about anything else," says Jack Wimmer, MCI's executive director of network technology and planning. "I mean, do they have consolidated billing for their business customers? The fundamental difference between carriers is not the fiber. The real difference is in the range of services they provide."

The fact is, while Qwest may be driving pretty strong to the hoop, by no means is it assured a slam-dunk. For one thing, Qwest faces the daunting task of convincing customers it can serve them better than its more powerful competitors. When AT&T recently announced plans to boost the capacity of its nearly 41,000 route miles of fiber, some skeptics suggested the company would have trouble meeting its plans to upgrade, if only because its cables are not uniform. But AT&T has an edge that is difficult to ignore: an installed base of customers that thrashes the competition. In its efforts to launch a communications revolution, Qwest must deal with the nagging fact that AT&T carries more than one-quarter of a billion calls per average business day.

Another potential problem involves POPs, the points of presence that connect Qwest's nationwide network and local exchanges. Qwest needs access to those switches, but they're owned by local exchange carriers like the Baby Bells, companies that have been reluctant to let a high-speed competitor come in and take away business they want themselves.

Qwest is not the only player pushing for local-switch access, which was assured under the Telecommunications Act of 1996. But while legislation opened up the long distance market to local carriers and vice versa, analyst Friedberg says local exchange carriers are using "bureaucracy and delay to slow the inevitable." Southwestern Bell, for example, has sued the federal government, challenging the constitutionality of the Telecom Act's efforts to spur competition. Thus far, it hasn't been a snag for Qwest, according to Wilks. "We've had no trouble getting connectivity," he says.

But the speed doesn't happen until Qwest has access to the last mile, the local routes. To that end, Wilks says, the company is working closely with the Baby Bells, cable companies, and all the major wireless companies to complete its network. Wilks considers Qwest's backbone a way for local carriers to leverage a host of new technologies, such as digital subscriber lines, cable modems, and high-speed Internet access.

The company made a big move toward overcoming these obstacles when, in March, it announced a planned $4.4 billion merger for stock with LCI International, the fast-growing long distance carrier. While the merger must be approved by shareholders and regulators - Qwest expects that to happen by the end of May - it could be the big edge the company needs. The combined entity will create the nation's fourth-largest long distance player, assuming the WorldCom-MCI deal goes through. "It gives Qwest a lot of traffic. It may be an inexpensive way of loading the network," says analyst Friedberg. "And there are some switching synergies." Other synergies, too. Friedberg views Nacchio and LCI chair and CEO H. Brian Thompson (an MCI alum) as "the black sheep of their former companies pushing to get revenge."

Among the benefits of the merger: Qwest, which gets to keep its name, inherits an instant sales force. For the business market alone that means Qwest will add 500 salespeople to its current 100-person business sales force. Thompson says LCI is the only company in the industry that can bill in one-second increments. And when it comes to local access, LCI has a local division - headed by former Justice Department antitrust chief Anne Bingaman - that resells local loops.

Meanwhile, nothing is slowing the construction of the Qwest network - except, perhaps, some bad weather.

Right now, an army of 1,500 latter-day railroaders is slaving to make the mammoth project a reality: 16,000 miles at an average 120 miles a week. The vast majority of the cable is being laid alongside existing railroad tracks, installed by four or more "rail plow" cars. A custom-designed 25-foot arm extends from those cars and digs up the earth 12 feet from the side of the tracks. It then lays in protective tubing - 2-inch-diameter high-density polyethylene conduit - and cables 4 feet below the surface.

Throughout America, hundreds of itinerant Qwesties are working on the network much the way their great-great-grandfathers might have worked on the railroad. Instead of tents and wood shacks, these guys live in Motel 6s or Airstreams equipped with 18-inch satellite dishes for pulling in hometown sports. As of the end of February, 10,000 rail miles - or 93 million feet of conduit and 8,000 miles of cable - has been installed. Rail plows have run through dried lava fields in New Mexico, through the 6-mile Moffat Tunnel in Colorado, and down river gorges in Oregon. There's one in Kentucky, one in New York's Amtrak tunnel, and one making its way through the pines of Georgia, digging up red clay along tracks that were instrumental in a rebel blockade during the Civil War.

Philip Anschutz, who owns more than 86 percent of Qwest - 55 percent of a combined Qwest-LCI - previously owned the Southern Pacific Railroad. When he sold the railroad to Union Pacific in 1996, he negotiated to buy the rights of way alongside the tracks of both railroads. Combined, they represent the cable route of a significant portion of the network. The rest of the cable is run along lines for which Qwest leases the right of way for up to 50 years, or along interstate highways, where it leases rights of way from transportation authorities for 20 or 25 years. Eighty-five percent of the Qwest network is strung along railroads.

Before selling his railway to Union Pacific, Anschutz spun off a corporate division named Southern Pacific Construction, which does cable repair and additional builds for big telecom carriers.

"We realized we could charge enough that we could afford to put some in for ourselves," says Nacchio. "When everybody was saying there's enough capacity, Phil made the bet."

In 1995, Qwest laid out its plans for a nationwide network, with connections into Mexico and later an intercontinental cable to Europe. At the time, the major telcos were focusing on other arenas. The Internet was just taking off. And there were some breakthroughs in the componentry of the long distance networks. For example, glass had moved to its fourth generation with Lucent Technologies's development of nonzero dispersion-shifted fiber. With its improved dispersion characteristics, you could send a signal between 50 and 60 miles before having to capture and regenerate it, compared with 30 miles using the old glass.

Today, the biggest thing working in Qwest's favor is undoubtedly the railroad itself, the monumental transportation infrastructure that was painfully laid from coast to coast by Chinese immigrants and raucous laborers. The new telco didn't have to go out and negotiate for as much as 6,400 miles of railroad right of way. "Other people can build fiber networks, but only Qwest has indefeasible railroad rights of way," says analyst Friedberg.

The trick for Qwest was to build the network with other people's money. Even with its railway advantage, the company estimated it would cost $2.4 billion to string the darn thing along prairies, into cities, down canyons, over purple mountains' majesty, et cetera. The company raised only $800 million in capital through senior debt and a June 1997 IPO. Why not raise the remainder by letting other telcos piggyback along - charge them to have their cable installed side by side with Qwest's?

The company lured in what Nacchio calls "anchor tenants" - telcos that have ponied up a total of $1.4 billion for Qwest to lay their cable alongside its own on some 13,000 miles of the network. Among the owners of what Qwest calls "dark fiber" are GTE, Frontier, and WorldCom. Says Nacchio: "We raised enough money that way that we essentially built our network for free."

But isn't he helping out his competitors? "Our business model would argue that we got more out of it than they did," he retorts. "We knew we'd compete with them sooner or later, but we needed their cash."

Qwest has its sights set on three markets. First, other carriers, whether they are large telcos like WorldCom, Baby Bells entering the long distance business, or Internet service providers. Qwest estimates there are 400 to 500 such carriers that could use its network. The second group comprises traditional US businesses looking for such advanced services as voice-over-IP and voice-and-data. The third market consists of regular consumers. Qwest has already made a move on other telcos' customers by offering a service known in the industry as "dial around." Customers in 30 or so US cities who want traditional long distance voice service dial a code (10056) and then the number they want. The call goes over Qwest's network and users get billed by their local phone company. Qwest charges 10 to 12 cents a minute for all domestic calls, 24 hours a day, seven days a week.

Creating an Internet backbone takes an amazing amount of coordination.

"I said I needed a backhoe and a forklift for Charlotte," barks Mike Smith, Qwest's rail-plow manager, into his cell phone. "But cancel it because we're going to Greensboro instead. But send the truck." It's afternoon on a colorless Georgia Tuesday and Smith is having maybe his 13th cell phone conversation of the day. A beefy Oklahoma rancher, he has orchestrated construction in about a dozen states before parking his Airstream in a funky trailer park in a small town amid pines and Confederate flags. He drives a white Ford Expedition bearing the Qwest logo from site to site along the northernmost reaches of the network's Atlanta-Tallahassee stretch. At his side is Burt Meiklejohn, railroad operations manager. A native of New Mexico who also has been all over the network, it's his job to coordinate the rail plow with railroads on which it leases rights of way. Meiklejohn, too, is on the heavy side, and is constantly joking with the more steadfast Smith. The two are like a married couple - or "virtual brothers," according to Meiklejohn, who provides a running commentary on Smith's driving habits, reminds him when to turn, and finishes his sentences.

The task at hand is the installation of thousands of miles of conduit. The next step will be to use compressors at "handhole" stations each mile along the route to pull the fiber through the conduit and connect the cable. The system allows for new line to be pulled through in the future, in case the technology improves or bandwidth needs escalate.

In fact, throughout the US, Qwest workers are laying two conduits. There's an orange one containing 48 of the company's own fiber-optic cables (each one as thick as a human hair), as well as 48 for other carriers. The second conduit is black and empty. It's there for future use.

"Ten years from now if there's a leapfrog in the glass, if there's another generation, we simply pull another cable or two without having to dig up the ground," says Nacchio.

Qwest's network - 3,700 miles of it is up and running - will be a bidirectional Sonet (synchronous optical network) ring. The bidirectional configuration means that if a fiber is cut, traffic can be rerouted in the other direction in 50 milliseconds. Self-healing is the term used in the industry. "Their technology is state of the art and low cost," says Christine Nairne, an

analyst with Hambrecht & Quist. Qwest will eventually be capable of transmitting data at 10 Gbps, although initially it is operating at 622 Mbps.

Each of the 48 fibers in Qwest's network can be divided into at least eight wavelengths - aka windows - and each wavelength has the potential of transmitting data at a rate of 10 Gbps. Qwest has already lit its second window and may be lighting up more if demand increases. "That's a lot of bandwidth we could bring online," says Nacchio. "What we're expecting is that two windows will produce the first billion dollars of revenue. We've got virtually unlimited capacity, without ever digging or pulling again."

In Georgia, the rail plow is ahead of schedule, digging up the red clay at a rate of three miles a day. One moment Smith and Meiklejohn are calculating how long it will take the man who restores the gravel portion near the track to catch up with the unexpectedly fast work of the plow. The next moment they're determining where the nine-car train can be pulled off the tracks so a scheduled freight can pass. The next moment they're dissing the work of the railroad's flag guys, whose job it is to mark various other utility lines that might pose impediments to the rail plow - blue flags indicate a water line, yellow a gas line, orange a phone line.

Somewhere south of Atlanta, an AT&T lineman watches while the rail-plow workers approach an orange-flagged AT&T fiber-optic cable. He looks on as the Qwesties determine whether to thread the line above or below their competitor's cable. Cutting AT&T's cable could be an expensive proposition for Qwest, which would have to compensate for the damage. Yes, without even trying, AT&T is out there making things difficult, like some giant obstacle created by nature centuries ago.

Nacchio makes it sound like ancient history as he rattles off when fiber-optic cables were sunk: early '80s MCI; mid '80s Sprint; AT&T and WorldCom between '88 and '90. "They're all underinvested in their core networks," he says. As for the merger of MCI and WorldCom, which is expected to be completed by the end of 1998 pending Justice Department approval, he has this to offer: "They're collecting antiquities. You put two old platforms together and you get one big old platform." The problem, as Nacchio sees it, is that the competitors are sitting on glass that's fully utilized - and they can't get at it. "The networks the telephone companies built in the '80s were based on the hypothesis that fiber-optic cable was so superior to coaxial cable or digital radio that you'd never need more fiber - the stuff was direct buried," he says. "You dug a trench 2 feet down, threw it in, covered it up, boom. Now you can't get at that glass. You can't pull it out.

"What happened over the last four or five years was the guys who controlled the long distance industry were smelling that the Telecommunications Act of 1996 was going the wrong way for them," he continues. "They essentially lost it - the Bells ran them down. And they went on a diversification strategy. They went into such complementary technologies and markets as global and wireless communication." They also stuck with the circuit- switch method, as opposed to moving into the more efficient packet switching.

Charles Fleckenstein, Sprint's manager of technology services, refuses to accept Nacchio's assertion that the long distance companies have too much invested in past-tense technology. There's exasperation in his voice when he retorts, "Glass is glass." Sprint, MCI, and AT&T are each embarking on ambitious plans to pump more light through their fiber-optic cables by using wave-division multiplexing technology, which Qwest is also employing. Multiplexing allows for multiple wavelengths of light on a single fiber-optic strand, which means more information can be moved down a line.

"Let me put it this way," says AT&T's Ianna. "Anybody could be out there with fiber. The key is turning that into a viable, useable service." In any case, AT&T invested $7 billion last year to get its network, which employs both packet- and circuit-switch technology, up to snuff. Ianna says he expects network traffic to grow by 60 percent next year.

Regardless, Nacchio sees no hope of any competitor even coming close to catching up. He's convinced that AT&T will not be effective in its announced strategy for adding bandwidth through Lucent's multiplexing technology. The trouble with AT&T's plans, according to Larry Seese, Qwest's executive vice president of network engineering and operations, is that its network lacks uniformity. "AT&T's is a mixture of very old glass. They won't be able to run 10 gigabits through the system."

Sprint, which gambled big on PCS wireless technology, is generally rumored to be up for sale - as such, a major capital project is the last thing it needs, say analysts. Instead of investing heavily in cable, it is improving its electronics via multiplexing and ATM switching. WorldCom and MCI, also in an upgrading frenzy, will gain capacity with WorldCom's running of fiber along sections of Qwest's network. And other networks, like Williams, IXC, and Metromedia Fiber, are in expansion mode, but they won't have the consistent uniform capacity that Qwest is creating with its cable.

"In telecom now, giving someone a four-year head start means you might as well not be there," boasts Nacchio. "I feel like an emerging oil baron."

"Joe is a great guy, but he might be exaggerating slightly," responds James Crowe, president and CEO of Level 3 Communications, which in January staked its own claim to the information revolution.

Level 3 came to life with the same leadership (Crowe) and the same financing (Omaha-based Peter Kiewit Sons) as did MSF Commu- nications, the local telecom phenom that went public in May 1993 and was acquired by WorldCom in 1996 for $14.3 billion. Level 3 will be investing as much as $3 billion in a network that differs significantly from Qwest's. Unlike its long-distance-only competitor, Level 3 will be an end-to-end network - it will own the last mile. But like Qwest, Level 3 will be an IP-only operation. Reasons Crowe: "Trying to be good at two things is a hard way to serve the Lord."

Crowe, who was chair of MSF, had been on Qwest's board until last November, and he wants to make it clear that he is a friend of Anschutz and Nacchio. Crowe sees room for both new companies. "This is not a zero-sum game for us," he insists. "And the match is not between Level 3 and Qwest. The real battle is carriers like Level 3 and Qwest versus the legacy guys. It's really an IP versus circuit-switch battle."

To the citizens of the Georgia towns along the cable route there is not much evidence that a mammoth project is under way. At railway crossings, when drivers look left or right they may catch a glimpse of a nine-car train digging up the earth, but it doesn't look any different than a track-repair operation. On roads that run alongside the rails, drivers can see places where the orange and black conduits peek out from the ground; those are places where the cable will be encased in steel pipe to protect it from a particular hazard. Or they might see a backhoe operator flattening out the ballast along the track after the rail plow has been through. None of it attracts much attention. Likewise, the dozen or so men working this site aren't making much of an impact on the communities. The crew members stay in their motels or Airstreams and eat at family-style chain restaurants, and when the rail plow is 50 or so miles down the line, they move to a new motel or trailer park and eat at the same restaurant chains.

Back in Denver, where the oversize blue Qwest logo now dominates the skyline, Nacchio has assembled a telecom dream team. The CEO himself was hired by Anschutz, following a clandestine meeting in a hangar at a Teterboro, New Jersey, airport. (Nacchio replaced the original CEO, Douglas Hansen, because the company needed a leader who could help the company raise money in the public markets.) Qwest's powerhouse lineup includes Seese, who was drafted from AT&T, where he ran its voice and data networks; Wilks, former president of GTE Communications; Anthony J. Broadman, who oversees fiber sales and held several senior positions at Sprint; Stephen M. Jacobsen, who's in charge of consumer markets and was a regional vice president with AT&T's consumer and small-business unit; and Nayel Shafei, who oversees product development and graduated from the MIT Media Lab. Get the picture?

"They are phenomenally impressive, both in their background and in their ability to articulate a vision of telecommunications services for the future," says Hambrecht & Quist's Nairne. "There's every indication that they have the team to do it." The company's 1997 revenue of $670 million represented more than a 200 percent increase over the previous year, and it generated earnings of $14.5 million. Nairne expects revenues will rise to nearly $1 billion in 1998.

"If you look at our mission statement, we talk about being able to transmit images the way telephone networks transmit voice," says Nacchio. By the middle of 1999 the network will encompass 125 US cities, as well as 14 Mexican markets and a handful of European cities. Q.talk, the company's voice-over-IP service, is a precursor to the converting of all systems to packet technology for voice and other applications.

Technology aside, Qwest does face the challenge of muscling its way into the nation's long distance consciousness. The proposed merger with LCI will obviously help - it will create a combined customer base of more than 2.3 million business and residential customers. Meanwhile, the company is embarking on a $50 million advertising effort aimed at business and consumers. Nacchio is Jersey confident. "Look, at AT&T we were swapping 200,000 customers a day with the other long distance carriers. That many would leave and that many would come back. Qwest can sneak in there," he says. The Yankee Group, however, puts the figure closer to 70,000.

Some telco watchers have suggested that what Nacchio is doing is merely creating a company that his larger competitors will be forced to buy. Nacchio himself denies there's a sale sign being hoisted over Qwest's big blue logo - though it would be Anschutz's call anyway. "There are people speculating that Qwest's network has been designed to be sold," says analyst Yedwab. "But in the interim it has been designed to be a very good business, and they've been hiring an awful lot of senior management talent you wouldn't hire if you were just building a business to sell."

Meanwhile, a nine-car rail-plow train is creeping along tracks in Georgia, installing the future at the deliberate speed of one mile an hour. As it plods forward, conduit unrolls from huge spools. The pipe is threaded through the plow arm, and at a slow and even pace, it's then installed into the trench that the plow arm's steel shank is steadily digging into the red clay.

Ray Holly, the hefty former crane operator who runs the rail plow, sits in a glassed-in cab, pushing levers and communicating via headset with the engineer who operates the 125-ton locomotive. A safety inspector named Billy Hitchcock stands in an open car, keeping track of the footage in a notebook. When he gets back to his motel room, he will transfer his work into a Pentium 233 laptop, and then transmit the information via fax modem to the engineers at the

Network Management Center in Denver.

Two young laborers from Montana walk beside the train, ready to jump into action if anything goes wrong. One munches on a piece of meat, which he describes as "Oklahoma white-tail deer." The other sucks on a piece of straw. The train pulls past fundamentalist churches and tarpaper shacks and convenience stores and subdivisions. The young men step over Miller bottles and corn chip bags.

The gathering dust conjures images of an earlier era, when the rails themselves were planted. And the men's Western attire further contributes to an eerie sense of déjà vu. It's as if they are living out some unexpected legacy. And Miller bottles and corn chip bags notwithstanding, there's something truly sweet about this little scene: the layering of one monumental infrastructure on another, the recycling of one era's visionary enterprise for another's. The laborers who laid the rails in the 1800s had no way of knowing their work would launch more than one revolution. But if Qwest's mammoth project succeeds - and there's no evidence yet that it won't - it would be nice to hear somebody give them some credit.

Contributing writer David Diamond (ddiamond@well.com) wrote "Whose Internet Is It, Anyway?" in Wired 6.04. He lives in Kentfield, California.

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Arizona -- Qwest Deaveraged Loop Cost
(utilizing HM 5.2a results)

For Sale	CLLI	Wire Center	Total Lines	Percent of Total	Total Loop Cost	NID	Distribution	Feeder	Concentration	Zone
0	PHNXAZNO	PHOENIX-NORTH	121,757	3.84%	$ 5.43	$0.38	$ 2.24	$ 0.95	$ 1.87	1
0	PHNXAZMA	PHOENIX-MAIN	102,754	3.24%	$ 5.98	$0.32	$ 2.66	$ 0.76	$ 2.23	1
0	PHNXAZSE	PHNX SOUTHEAST CAP	27,068	0.85%	$ 6.54	$0.38	$ 3.12	$ 1.23	$ 1.80	1
0	PHNXAZNE	PHOENIX-NORTHEAST	76,966	2.43%	$ 6.74	$0.42	$ 2.88	$ 0.92	$ 2.52	1
0	TEMPAZMC	MCCLINTOCK	92,175	2.90%	$ 6.84	$0.44	$ 2.70	$ 0.68	$ 3.01	1
0	PHNXAZEA	PHOENIX-EAST	43,203	1.36%	$ 6.85	$0.39	$ 3.13	$ 0.89	$ 2.44	1
0	SCDLAZMA	SCOTTSDALE MAIN	82,828	2.61%	$ 6.86	$0.44	$ 3.09	$ 0.94	$ 2.38	1
0	TEMPAZMA	TEMPE MAIN	76,246	2.40%	$ 6.90	$0.39	$ 2.83	$ 0.80	$ 2.88	1
0	TCSNAZMA	TUCSON MAIN	94,741	2.99%	$ 7.21	$0.39	$ 3.62	$ 0.87	$ 2.32	1
0	PHNXAZNW	PHOENIX-NORTHWEST	58,804	1.85%	$ 7.21	$0.47	$ 3.22	$ 1.03	$ 2.50	1
0	PHNXAZMY	PHNX-MAYVALE CAP	41,152	1.30%	$ 7.21	$0.48	$ 3.33	$ 0.83	$ 2.57	1
0	PHNXAZSY	PHOENIX-SUNNYSLOPE	61,763	1.95%	$ 7.36	$0.43	$ 3.24	$ 0.85	$ 2.83	1
0	CHNDAZWE	CHANDLER WEST	44,578	1.40%	$ 7.38	$0.44	$ 2.69	$ 0.70	$ 3.55	1
0	SCDLAZSH	SHEA	46,505	1.47%	$ 7.38	$0.47	$ 3.23	$ 0.72	$ 2.96	1
0	PHNXAZMR	PHOENIX-MID RIVERS	57,770	1.82%	$ 7.40	$0.49	$ 3.22	$ 0.82	$ 2.88	1
0	SCDLAZTH	THUNDERBIRD	87,430	2.76%	$ 7.43	$0.43	$ 3.22	$ 0.59	$ 3.19	1
0	SPRSAZWE	SUPERSTITION WEST	89,551	2.82%	$ 7.45	$0.49	$ 3.24	$ 0.63	$ 3.09	1
0	PHNXAZPR	PHNX PEORIA	46,168	1.45%	$ 7.51	$0.48	$ 3.38	$ 0.77	$ 2.88	1
0	SPRSAZMA	SUPERSTITION MAIN	42,511	1.34%	$ 7.56	$0.51	$ 3.47	$ 0.58	$ 3.01	1
0	AGFIAZSR	SUNRISE	35,788	1.13%	$ 7.59	$0.50	$ 3.17	$ 0.38	$ 3.54	1
0	CHNDAZSO	CHANDLER SOUTH	17,742	0.56%	$ 7.62	$0.50	$ 3.37	$ 0.18	$ 3.57	1
0	PHNXAZGR	PHOENIX-GREENWAY	97,942	3.09%	$ 7.64	$0.47	$ 3.16	$ 0.91	$ 3.10	1
0	GLDLAZMA	GLENDALE MAIN	58,568	1.85%	$ 7.64	$0.48	$ 3.44	$ 0.88	$ 2.84	1
0	PHNXAZPP	PHOENIX-PECOS	16,293	0.51%	$ 7.78	$0.49	$ 2.75	$ 0.68	$ 3.85	1
0	DRVYAZNO	DEER VALLEY NORTH	47,767	1.51%	$ 7.82	$0.46	$ 3.75	$ 0.89	$ 2.72	1
0	TCSNAZEA	TUCSON EAST	67,013	2.11%	$ 7.88	$0.45	$ 3.68	$ 0.96	$ 2.79	1
0	MESAAZGI	GILBERT	68,756	2.17%	$ 7.91	$0.46	$ 4.04	$ 0.59	$ 2.81	1
0	TCSNAZFW	FLOWING WELLS	37,204	1.17%	$ 7.96	$0.45	$ 3.87	$ 0.90	$ 2.73	1
0	PHNXAZCA	PHOENIX-CACTUS	91,926	2.90%	$ 8.00	$0.47	$ 3.36	$ 0.92	$ 3.25	1

For Sale	CLLI	Wire Center	Total Lines	Percent of Total	Total Loop Cost	NID	Distribution	Feeder	Concentration	Zone
0	BRDSAZMA	BEARDSLEY	38,947	1.23%	$ 8.03	$0.50	$ 4.01	$ 0.66	$ 2.87	1
0	PRVYAZPP	PINNACLE PEAK	46,912	1.48%	$ 8.04	$0.49	$ 4.05	$ 0.41	$ 3.09	1
0	PHNXAZWE	PHOENIX WEST CAP	46,151	1.45%	$ 8.18	$0.41	$ 4.08	$ 0.80	$ 2.88	1
0	PHNXAZBW	PHOENIX-BETHANY WEST	17,258	0.54%	$ 8.31	$0.50	$ 3.77	$ 0.94	$ 3.10	1
0	CHNDAZMA	CHANDLER MAIN	67,545	2.13%	$ 8.39	$0.48	$ 3.85	$ 0.70	$ 3.36	1
0	TCSNAZCR	TCSN CRAYCROFT	42,964	1.35%	$ 8.42	$0.44	$ 4.34	$ 0.96	$ 2.67	1
0	LTPKAZMA	LITCHFIELD PARK	17,004	0.54%	$ 8.42	$0.48	$ 5.07	$ 0.79	$ 2.07	1
0	TCSNAZCA	CATALINA	30,001	0.95%	$ 8.43	$0.49	$ 4.55	$ 0.88	$ 2.52	1
0	TCSNAZCO	CORTARO	20,452	0.64%	$ 8.60	$0.48	$ 4.46	$ 1.26	$ 2.40	1
0	PHNXAZ81	PHOENIX-FOOTHILLS	9,207	0.29%	$ 9.22	$0.50	$ 5.14	$ 1.25	$ 2.33	2
0	TCSNAZSO	TCSN SOUTH CAP	41,527	1.31%	$ 9.54	$0.45	$ 5.09	$ 0.92	$ 3.08	2
0	MESAAZMA	MESA	107,614	3.39%	$ 9.56	$0.45	$ 5.09	$ 0.81	$ 3.21	2
0	SRVSAZMA	SIERRA VISTA MAIN	27,857	0.88%	$ 9.57	$0.43	$ 5.55	$ 0.89	$ 2.70	2
0	TCSNAZRN	RINCON	74,308	2.34%	$ 9.60	$0.48	$ 5.02	$ 0.95	$ 3.15	2
0	TCSNAZNO	TUCSON NORTH-1A CAP	51,839	1.63%	$ 9.61	$0.48	$ 5.14	$ 0.67	$ 3.33	2
0	TLSNAZMA	TOLLESON	12,736	0.40%	$ 9.74	$0.46	$ 5.71	$ 0.92	$ 2.64	2
0	PHNXAZSO	PHOENIX-SOUTH	32,345	1.02%	$ 10.17	$0.45	$ 5.72	$ 0.84	$ 3.16	2
0	GDYRAZCW	COLDWATER	11,101	0.35%	$ 10.61	$0.45	$ 6.25	$ 1.13	$ 2.78	2
0	PRSCAZEA	PRESCOTT EAST	17,411	0.55%	$ 10.68	$0.48	$ 6.88	$ 1.02	$ 2.30	2
0	FLGSAZMA	FLAGSTAFF MAIN	34,731	1.09%	$ 10.70	$0.41	$ 6.17	$ 1.85	$ 2.28	2
1	YUMAAZMA	YUMA	35,352	1.11%	$ 11.23	$0.45	$ 6.42	$ 0.51	$ 3.85	2
0	TCSNAZTV	TANQUE VERDE	13,498	0.43%	$ 11.25	$0.49	$ 7.54	$ 0.90	$ 2.32	2
0	MSPKAZMA	MUNDS PARK	2,641	0.08%	$ 11.28	$0.50	$ 6.84	$ 0.21	$ 3.73	2
0	PYSNAZMA	PAYSON	13,924	0.44%	$ 11.42	$0.47	$ 6.42	$ 2.16	$ 2.38	2
0	SPRSAZEA	SUPERSTITION EAST	30,843	0.97%	$ 11.49	$0.50	$ 7.20	$ 0.84	$ 2.95	2
0	FLGSAZSO	FLAGSTAFF SOUTH	2,685	0.08%	$ 11.65	$0.51	$ 7.83	$ 1.94	$ 1.37	2
0	CVCKAZMA	CAVE CREEK	19,621	0.62%	$ 11.74	$0.48	$ 7.54	$ 0.91	$ 2.81	2
0	PRSCAZMA	PRESCOTT MAIN	42,646	1.34%	$ 11.78	$0.45	$ 7.34	$ 1.42	$ 2.57	2
0	FTMDAZMA	FORT MCDOWELL	17,407	0.55%	$ 11.82	$0.48	$ 6.99	$ 2.34	$ 2.00	2
0	SEDNAZSO	SEDONA SOUTH	5,083	0.16%	$ 12.06	$0.48	$ 8.12	$ 1.43	$ 2.04	2
0	SEDNAZMA	SEDONA	15,177	0.48%	$ 12.24	$0.43	$ 7.38	$ 1.55	$ 2.88	2
0	TCSNAZSE	TUCSON SOUTHEAST	10,067	0.32%	$ 12.48	$0.48	$ 8.03	$ 1.03	$ 2.94	2
0	CTWDAZSO	COTTONWOOD-SOUTH	2,804	0.09%	$ 12.68	$0.50	$ 8.37	$ 0.09	$ 3.72	2
0	CRNDAZMA	CORONADO	11,544	0.36%	$ 12.88	$0.50	$ 7.70	$ 1.65	$ 3.03	2

For Sale	CLLI	Wire Center	Total Lines	Percent of Total	Total Loop Cost	NID	Distribution	Feeder	Concentration	Zone
0	CSGRAZMA	CASA GRANDE	18,627	0.59%	$ 13.25	$0.45	$ 8.41	$ 1.23	$ 3.16	2
0	SNMNAZMA	SAN MANUEL	2,027	0.06%	$ 13.79	$0.46	$ 8.48	$ 3.13	$ 1.72	2
1	YUMAAZSE	YUMA SOUTHEAST	25,666	0.81%	$ 14.17	$0.45	$ 8.82	$ 1.11	$ 3.79	2
1	YUMAAZFT	YUMA FORTUNA	13,610	0.43%	$ 14.48	$0.51	$ 9.40	$ 0.39	$ 4.19	2
1	SFFRAZMA	SAFFORD	12,270	0.39%	$ 14.62	$0.45	$ 10.01	$ 1.91	$ 2.26	2
1	DGLSAZMA	DOUGLAS	8,655	0.27%	$ 14.84	$0.46	$ 9.85	$ 2.61	$ 1.91	2
0	NGLSAZ03	NOGALES RIO RICO	351	0.01%	$ 14.89	$0.46	$ 12.40	$ 1.69	$ 0.33	2
0	NGLSAZMW	NOGALES MIDWAY	12,204	0.38%	$ 15.26	$0.42	$ 10.88	$ 1.15	$ 2.80	2
0	FLGSAZEA	FLAGSTAFF EAST	17,316	0.55%	$ 15.91	$0.46	$ 9.60	$ 2.93	$ 2.92	2
1	PAGEAZMA	PAGE	5,742	0.18%	$ 16.05	$0.43	$ 10.87	$ 0.81	$ 3.94	2
0	GNVYAZMA	GREEN VALLEY	19,727	0.62%	$ 16.40	$0.49	$ 10.40	$ 2.30	$ 3.21	2
0	CTWDAZMA	COTTONWOOD-MAIN	13,394	0.42%	$ 16.53	$0.46	$ 11.31	$ 1.22	$ 3.55	3
0	HGLYAZMA	HIGLEY	5,765	0.18%	$ 16.69	$0.46	$ 11.92	$ 0.52	$ 3.78	3
0	WHTKAZMA	WHITE TANKS	2,383	0.08%	$ 16.96	$0.49	$ 12.31	$ 1.81	$ 2.35	3
0	TCSNAZWE	TUCSON WEST	6,142	0.19%	$ 16.98	$0.51	$ 11.98	$ 1.21	$ 3.28	3
1	GLOBAZMA	GLOBE	8,890	0.28%	$ 18.06	$0.45	$ 12.41	$ 2.52	$ 2.68	3
0	TCSNAZSW	TUCSON SOUTHWEST	19,402	0.61%	$ 18.71	$0.50	$ 12.32	$ 1.68	$ 4.22	3
1	SPRRAZMA	SUPERIOR	1,510	0.05%	$ 18.75	$0.47	$ 11.25	$ 2.71	$ 4.31	3
1	SMTNAZMA	SOMERTON	7,780	0.25%	$ 18.84	$0.48	$ 13.61	$ 1.21	$ 3.54	3
0	ELOYAZ01	ELOY	6,159	0.19%	$ 19.09	$0.48	$ 11.53	$ 2.48	$ 4.60	3
0	CLDGAZMA	COOLIDGE	5,650	0.18%	$ 19.38	$0.47	$ 13.15	$ 2.15	$ 3.61	3
0	CMVRAZMA	CAMP VERDE	7,526	0.24%	$ 19.67	$0.48	$ 14.28	$ 2.23	$ 2.69	3
0	NGLSAZMA	NOGALES	6,732	0.21%	$ 19.78	$0.41	$ 14.02	$ 1.92	$ 3.42	3
1	BISBAZMA	BISBEE	5,777	0.18%	$ 19.84	$0.45	$ 13.12	$ 2.84	$ 3.43	3
1	WNSLAZMA	WINSLOW	5,223	0.16%	$ 20.81	$0.45	$ 13.47	$ 2.23	$ 4.66	3
0	SRVSAZSO	SIERRA VISTA SO	8,259	0.26%	$ 21.21	$0.50	$ 13.99	$ 2.05	$ 4.66	3
0	PHNXAZLV	PHOENIX-LAVEEN	2,860	0.09%	$ 21.87	$0.48	$ 16.64	$ 0.56	$ 4.20	3
0	FTMDAZNO	RIO VERDE	2,355	0.07%	$ 22.69	$0.50	$ 13.45	$ 4.05	$ 4.68	3
1	MIAMAZMA	MIAMI	2,139	0.07%	$ 24.65	$0.45	$ 15.79	$ 3.39	$ 5.02	3
0	BCKYAZMA	BUCKEYE	8,482	0.27%	$ 25.09	$0.47	$ 17.50	$ 2.70	$ 4.43	3
0	NWRVAZMA	NEW RIVER	5,331	0.17%	$ 25.55	$0.48	$ 19.44	$ 1.19	$ 4.44	3
0	HGLYAZQC	QUEEN CREEK	5,829	0.18%	$ 25.57	$0.48	$ 17.71	$ 2.03	$ 5.34	3
1	TCSNAZML	MOUNT LEMMON	567	0.02%	$ 25.57	$0.44	$ 12.01	$ 1.41	$ 11.73	3
0	SRVSAZNO	SIERRA VISTA NO	2,312	0.07%	$ 26.87	$0.49	$ 20.31	$ 2.57	$ 3.50	3

For Sale	CLLI	Wire Center	Total Lines	Percent of Total	Total Loop Cost	NID	Distribution	Feeder	Concentration	Zone
0	PINEAZMA	PINE	3,051	0.10%	$ 27.84	$0.50	$19.55	$ 2.36	$ 5.44	3
1	WCBGAZMA	WICKENBURG	6,250	0.20%	$ 28.82	$0.46	$19.79	$ 4.82	$ 3.75	3
0	FLRNAZMA	FLORENCE	5,358	0.17%	$ 29.22	$0.46	$17.52	$ 5.75	$ 5.49	3
0	MARNAZ02	MARANA WEST	8,379	0.26%	$ 30.68	$0.48	$21.18	$ 3.36	$ 5.66	3
0	HMBLAZMA	HUMBOLDT	4,749	0.15%	$ 31.31	$0.49	$21.68	$ 4.28	$ 4.87	3
1	HYDNAZMA	HAYDEN	926	0.03%	$ 31.53	$0.45	$19.45	$ 2.30	$ 9.33	3
1	BNSNAZMA	BENSON	5,391	0.17%	$ 31.77	$0.47	$20.82	$ 6.05	$ 4.44	3
0	CHVYAZMA	CHINO VALLEY	7,555	0.24%	$ 33.05	$0.49	$23.50	$ 3.48	$ 5.59	3
0	ORCLAZMA	ORACLE	1,837	0.06%	$ 36.48	$0.49	$25.62	$ 5.26	$ 5.11	3
1	WLMSAZMA	WILLIAMS	3,685	0.12%	$ 39.81	$0.46	$28.24	$ 6.28	$ 4.83	3
1	BNSNAZSD	SAINT DAVID	1,083	0.03%	$ 42.50	$0.50	$28.57	$ 5.53	$ 7.89	3
0	VAILAZSO	VAIL SOUTH	2,794	0.09%	$ 43.37	$0.49	$27.48	$ 7.90	$ 7.50	3
0	BLCNAZMA	BLACK CANYON	1,794	0.06%	$ 44.01	$0.48	$29.32	$ 5.22	$ 9.00	3
1	PLMNAZMA	PALOMINAS	843	0.03%	$ 45.61	$0.50	$31.20	$ 5.89	$ 8.03	3
1	PTGNAZEL	PATOGONIA ELGIN	1,173	0.04%	$ 45.76	$0.48	$28.98	$ 7.57	$ 8.74	3
1	WLCXAZMA	WILLCOX	4,523	0.14%	$ 46.45	$0.44	$31.48	$ 9.31	$ 5.21	3
1	WHTLAZMA	WHITLOW	737	0.02%	$ 47.44	$0.50	$38.88	$ 1.23	$ 6.84	3
1	CRCYAZMA	CIRCLE CITY	1,650	0.05%	$ 49.41	$0.50	$32.02	$ 8.99	$ 7.91	3
1	KRNYAZMA	KEARNY	1,395	0.04%	$ 50.18	$0.47	$32.74	$ 9.04	$ 7.93	3
1	TMBSAZMA	TOMBSTONE	1,267	0.04%	$ 50.37	$0.47	$36.75	$ 4.90	$ 8.24	3
1	STFDAZMA	STANFIELD	1,233	0.04%	$ 55.48	$0.48	$39.78	$ 7.13	$ 8.09	3
1	DDVLAZNM	DUDLEYVILLE	484	0.02%	$ 56.32	$0.49	$41.12	$ 7.07	$ 7.64	3
1	TNCKAZMA	TONTO CREEK	1,176	0.04%	$ 58.11	$0.50	$38.58	$10.89	$ 8.14	3
0	MAYRAZMA	MAYER	1,296	0.04%	$ 59.86	$0.52	$42.72	$ 8.23	$ 8.39	3
1	PIMAAZMA	PIMA	1,478	0.05%	$ 61.76	$0.50	$39.58	$11.82	$ 9.86	3
1	MRCPAZMA	MARICOPA	2,174	0.07%	$ 62.07	$0.47	$47.21	$ 6.30	$ 8.09	3
1	JSCYAZMA	JOSEPH CITY	727	0.02%	$ 65.31	$0.44	$44.95	$ 6.87	$ 13.05	3
0	VAILAZNO	VAIL NORTH	1,419	0.04%	$ 66.78	$0.49	$46.88	$11.41	$ 8.00	3
0	AZCYAZ03	ARIZONA CITY	1,405	0.04%	$ 67.53	$0.51	$42.71	$13.60	$ 10.70	3
1	WLTNAZMA	WELLTON	2,390	0.08%	$ 71.78	$0.48	$48.49	$14.38	$ 8.44	3
0	TUBCAZMA	TUBAC	2,566	0.08%	$ 74.83	$0.48	$54.22	$10.77	$ 9.36	3
1	GLBNAZMA	GILA BEND	1,187	0.04%	$ 79.36	$0.44	$53.36	$10.43	$ 15.12	3
0	CMVRAZRR	RIMROCK	1,522	0.05%	$ 83.76	$0.50	$47.82	$23.30	$ 12.14	3
1	ASFKAZMA	ASHFORK	630	0.02%	$ 90.37	$0.48	$65.83	$11.44	$ 12.62	3

For Sale	CLLI	Wire Center	Total Lines	Percent of Total	Total Loop Cost	NID	Distribution	Feeder	Concentration	Zone
1	YRNLAZMA	YARNELL	1,739	0.05%	$ 90.55	$0.48	$61.33	$17.11	$ 11.62	3
1	MMTHAZMA	MAMMOTH	891	0.03%	$ 94.45	$0.49	$61.37	$18.53	$ 14.06	3
0	WNBGAZ01	WINTERSBURG	1,649	0.05%	$ 95.36	$0.48	$67.84	$14.98	$ 12.06	3
1	GRCNAZMA	GRAND CANYON	2,987	0.09%	$157.28	$0.37	$72.60	$ 8.79	$ 75.52	3
1	PTGNAZMA	PATAGONIA	890	0.03%	$163.61	$0.48	$98.65	$44.52	$ 19.96	3

For Sale	CLLI	Wire Center	Total Lines	Percent of Total	Total Loop Cost	NID	Distribution	Feeder	Concentration	Zone
38	**Total (Before Sale of Exchanges)**		**3,173,116**		**$ 10.11**	**$ 0.45**	**$ 5.46**	**$ 1.13**	**$ 3.07**	
0	Zone 1 (38 Wire Centers)		2,160,203	68.1%	$ 7.34	$ 0.44	$ 3.31	$ 0.80	$ 2.78	
6	Zone 2 (36 Wire Centers)		780,163	24.6%	$ 11.23	$ 0.46	$ 6.64	$ 1.15	$ 2.98	
32	Zone 3 (62 Wire Centers)		232,750	7.3%	$ 32.06	$ 0.47	$ 21.40	$ 4.16	$ 6.04	
	Total (After Sale of Exchanges)		**2,993,026**		**$ 9.14**	**$ 0.45**	**$ 4.77**	**$ 1.01**	**$ 2.91**	
	Zone 1 (38 Wire Centers)		2,160,203	72.2%	$ 7.34	$ 0.44	$ 3.31	$ 0.80	$ 2.78	
	Zone 2 (30 Wire Centers)		678,868	22.7%	$ 10.91	$ 0.46	$ 6.37	$ 1.17	$ 2.90	
	Zone 3 (30 Wire Centers)		153,955	5.1%	$ 26.59	$ 0.48	$ 18.19	$ 3.14	$ 4.78	

Arizona

Mountain Bell-Arizona

Cost per line per month	ADSL		G.lite		T1 (HDSL 4W)		T1 (HDSL-2 2W)	
	copper	DLC	copper	DLC	copper	DLC	copper	DLC
average xDSL-capable loop	$ 5.74	$ 11.90	$ 5.74	$ 11.90	$ 7.46	$ 15.47	$ 5.74	$ 11.90
additional voice network UNEs	$ 3.90	$ 3.90	$ 3.90	$ 3.90				
splitter at NID	$ 0.82	$ 0.82						
remote terminal upgrade		$ 1.11		$ 1.11				
splitter at wire center	$ 0.97		$ 0.97					
DSLAM/CU or HDSL terminal unit	$ 8.07	$ 7.17	$ 8.07	$ 7.17	$ 21.02	$ 21.03	$ 24.48	$ 24.48
dedicated transport	$ 0.73	$ 0.73	$ 0.73	$ 0.73	$ 132.85	$ 132.85	$ 132.85	$ 132.85
ATM edge switch port	$ 0.06	$ 0.06	$ 0.06	$ 0.06				
element manager	$ 0.87	$ 0.87	$ 0.87	$ 0.87				
total xDSL lines	55,434	156,836	55,434	156,836	3,063	5,567	3,063	5,567
total xDSL cost/line/month	$ 21.16	$ 26.56	$ 20.34	$ 25.74	$ 161.33	$ 169.35	$ 163.07	$ 169.24

HAI xDSL Adjunct Model version R2
April 2, 2001

For use with HAI Model v. 5.2a

BEFORE THE ARIZONA CORPORATION COMMISSION

WILLIAM A. MUNDELL
Chairman
JAMES M. IRVIN
Commissioner
MARC SPITZER
Commissioner

IN THE MATTER OF INVESTIGATION INTO U S WEST COMMUNICATIONS, INC.'S COMPLIANCE WITH CERTAIN WHOLESALE PRICING REQUIREMENTS FOR UNBUNDLED NETWORK ELEMENTS AND RESALE DISCOUNTS	**DOCKET NO. T-00000A-00-0194** **NOTICE OF FILING SUMMARY TESTIMONY OF DOUGLAS DENNEY**

AT&T Communications of the Mountain States, Inc., WorldCom, Inc., and XO Arizona, Inc., hereby provides Notice of Filing the Non-Proprietary Version of the Summary Testimony of Douglas Denney. The Proprietary Version of the Summary Testimony of Douglas Denney will be provided to the Hearing Officers in accordance with the Procedural Order in this matter.

DATED this 24th day of July, 2001.

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EXHIBIT
AT&T/WorldCom
4 admitted

Summary of Douglas Denney
AT&T/WorldCom/XO
Docket No. T-00000A-00-0194, Phase II

Non-Proprietary Version

Overview

Unbundled Network Element ("UNE") prices that most closely reflect their underlying cost will best facilitate efficient competition by sending the appropriate signals to the marketplace and allow competitors to make economically efficient decisions on where and how to compete. Thus, in order to facilitate efficient competition, it is imperative that this Commission establishes appropriate UNE prices. The best tool available to the Commission to do this is the HAI Model.

The HAI Model has many advantages over Qwest's LoopMod. The HAI Model is non-proprietary. Any party in the state can run the model without signing special protective agreements. The inputs to the model are non-proprietary and well documented. The HAI Model is easy to run and its inputs easily adjusted for the purpose of running sensitivities or updating input values.

The HAI Model

The HAI Model, version 5.2a is a Total Long Run Incremental Cost ("TELRIC") cost model that can be used to estimate the Arizona specific unbundled network element costs associated with the loop, local switching, interoffice transport, interoffice signaling, and the total unbundled network element platform. The model is open, flexible, specific to Arizona, and incorporates multiple years of development and review.

Where has the HAI/Hatfield Model been used?

The table below lists the cost model used by each state in Qwest's region.

State	Model Used to Determine Cost
Arizona	HM 2.2.2
Colorado	Blended HM 2.2.2 and RLCAP
Idaho	HM 2.2.2
Iowa	HM 3.1
Minnesota	HM 5.0a
Montana	HM 2.2.2
Nebraska	HM 2.2.2
New Mexico	Blended HM 2.2.2 and RLCAP
North Dakota	HM 2.2.2
Oregon	RLCAP
South Dakota	RLCAP
Utah	Blended HM 5.0a and RLCAP
Washington	Blended HM 3.1, BCPM and RLCAP
Wyoming	RLCAP

RLCAP refers to any numerous previous versions of the current LoopMod, which is now part of Qwest's ICM.

How Does it work?

Customers are located by geocoding known customer locations. To the extent that geocoding information is not available, customer locations are surrogated by placing customers uniformly along livable roads in the census block where that customer is located.

Cluster Customers (group customer locations into natural groups)

There are over 2800 unique clusters for Qwest in Arizona. These represent groupings of customers that can be served most efficiently together in one distribution area.

Clusters are input to the model with the following information:

Location of cluster; size of cluster, mix of lines in cluster, types of structures within cluster, terrain characteristics of the cluster

Estimate Distribution Plant

Since the size of a cluster is known, along with the number and types of customer locations, distribution plant can be estimated to connect these customers together.

The model uses a right-angle routed Minimum Spanning Tree ("MST"). Advantages of this method are that it can take account groups of customers within a cluster and is used by the FCC in the FCC Synthesis Model. Disadvantages are that it can overestimate required distribution cable because the MST is not the minimum distance necessary, right-angled routing likely over estimates paths necessary to connect customers, the method of surrogating customers likely spreads these customers out further than they are in reality.

Estimate Feeder Plant

Once the model knows cluster location and size, the model can build feeder plant connecting the central office switch to each cluster.

Interoffice Plant

Interoffice plant connects the central office switches together based on the amount and type of traffic at each switch.

The Role of Inputs

The HAI Model utilizes over 1400 inputs. The definition of these inputs along with the support for using these inputs is contained in the HAI Inputs Portfolio.

Many of the inputs in the model vary by equipment sizes or the density of a cluster. Since the model is designed to clusters that are unique to Arizona the application of the inputs in the model produce results that are unique and specific to Arizona.

In addition, an Arizona specific tax rates, cost of capital and depreciation impact all of the results in the model.

Dr. Fitzsimmons' Input Changes

Dr. Fitzsimmons, a Qwest witness, changed a number of inputs in the HAI Model. Many of the input changes made by Dr. Fitzsimmons are nothing more than a substitution of the Qwest's model input values into HAI. Most of these inputs have been repeatedly rejected by both State Commissions and the FCC.

Some of the changes made by Dr. Fitzsimmons are discussed below.

Line Counts

The HAI Model uses wire center specific, publicly available line counts. These line counts were obtained from Qwest's web site and Qwest filings with the FCC. Qwest proposes replacing publicly available line counts with proprietary values that have the impact of lowering line counts and thus increases costs. This is inappropriate.

The best publicly available line count data should be used in estimating costs.

Structure Sharing

Qwest proposed values for structure sharing are well below what has been ordered previously by this Commission and above the values proposed by the FCC. The values proposed by Qwest should be rejected and the HAI defaults should be used.

Drop Length

Dr. Fitzsimmons relied upon a drop study performed by Qwest on embedded drop lengths to justify doubling the drop lengths in the HAI Model. Based on my review of the data this study can not be relied upon. It is my understanding that all apartment buildings and other multi-tenant buildings were removed from the sample. Lot type 1 observations totaled 5853. This represents a lot of approximately a 100 by 100 square feet, according to the Qwest survey

form. For this size, lot a drop of 71 feet would reach the center of the lot. A 142 foot drop would reach across the diagonal of the lot. However in Qwest's data for lot type 1, there were 2811 observations (48%) with drop lengths between 71 and 142 feet. There were 1321 observations (23%) with lengths between 143 and 399 feet. A drop length of 400 feet would wrap around the property. There were 112 observations (2%) with lengths greater than 400 feet. This apparent inconsistency between the data should call into question the engineers' ability to measure distances. The data suggests that the engineers performing this study had a difficult time measuring the drop lengths, the property size, or both.

Plant Mix

Caution should be taken when comparing ARMIS "sheath" miles with a cost model's "structure" miles. Sheath miles measure the miles of cable, while structure miles measure the miles of structure. If a one-mile structure route has two cables on it, this would count as two sheath miles. ARMIS report 43-08 reports sheath miles, thus caution should be taken when using this data to compare with data in the cost models.

The table below attempt to make this comparison with Copper distances from ARMIS and copper distribution distances from HAI.

Plant Mix Comparison			
	ARMIS 2000 (copper)	**HAI Distribution**	**Fitzsimmons Distribution**
Aerial	36.5%	28.9%	17.7%
Underground	3.9%	0.8%	10.1%
Buried	59.6%	70.4%	72.2%

Note: The aerial value includes aerial wire, aerial cable, and intrabuilding riser cable. For underground cable the amount of trench miles are reported. An allocation of this value is used to estimate underground structure percents. Buried contains the buried cable value.

The HAI inputs assume that most of the copper underground plant will be in feeder cable.

Though it is not the intent of the HAI Model to replicate Qwest's existing network, the table above demonstrates that the HAI Model does not over estimate aerial plant as Dr. Fitzsimmons implies.

Buried Placement Cost

The table below compares the buried placement cost per foot assumed by the HAI Model, the FCC Synthesis Model and Dr. Fitzsimmons. As can be seen,

the values assumed by Dr. Fitzsimmons are approximately 50% higher than the values assumed by either the HAI Model defaults or the FCC Synthesis Model defaults. The values proposed by Dr. Fitzsimmons should be rejected.

Buried Placement Input Comparison			
DZ	**HAI**	**FCC**	**Fitzsimmons**
0 – 5	$1.77	$ 0.77	Confidential
5 – 100	$1.77	$ 1.54	Confidential
100 – 200	$1.77	$ 3.24	Confidential
200 – 650	$1.93	$ 4.26	Confidential
650 – 850	$2.17	$ 5.20	Confidential
850 – 2550	$3.54	$ 5.51	Confidential
2550 – 5000	$4.27	$ 7.34	Confidential
5000 – 10000	$13.00	$ 9.02	Confidential
10000+	$45.00	$11.93	Confidential
Average	**$2.45**	**$2.75**	Confidential

Network Operations

Network Operations expense in the HAI Model is based on a fraction of Qwest's embedded values. The fraction of embedded values is meant to account for the fact that Network Operations on a forward-looking network is likely to be less than on an embedded network. The fraction of embedded values also is meant to account for the fact that some network operations expenses are likely associated with retail offerings and thus should not be included in a wholesale cost model. Appendix D of the HAI Inputs Portfolio describes the Network Operations reduction factor in more detail.

The table below shows the Network Operations factor assumed by the HAI Model, the Arizona Commission in the previous cost case, and Dr. Fitzsimmons in the HAI Model. These values are also calculated into their resulting dollar per line, per month values. Included in this comparison is the value assumed by the FCC in the FCC Synthesis Model (10th Report and Order, footnote 1218).

	HAI	**AZ Commission**	**FCC**	**Fitzsimmons**
Network Operations Factor	50%	85%		100%
Resulting $ per line, per month	$1.39	$2.36	$1.48	$2.78

Corporate Overhead

In my direct testimony I included a table comparing Qwest's historical corporate overhead, with adjustments recommended by Tom Weiss, to the value

assumed in the HAI Model. Qwest pointed out that I should have subtracted corporate overhead expense from operating revenues before calculating the corporate overhead factor. This criticism is legitimate and the table has been recalculated below.

Year	Corporate Overhead (1,000s)	Operating Revenues less Corporate Overhead (1,000s)	Corporate Overhead Factor
1996	$134,931	$1,264,439	10.7%
1997	$166,584	$1,330,325	12.5%
1998	$195,105	$1,410,256	13.8%
1999	$169,994	$1,577,483	10.8%
2000	$173,345	$1,657,507	10.5%
Average			**11.6%**
HAI Default			**10.4%**

The table still demonstrates that in the past two years Qwest's corporate overhead factor is similar to the default used in the HAI Model. In addition the average over the past five years is 1.4% lower than the value assumed by Dr. Fitzsimmons in the HAI Model.

In addition work done for filings at the FCC comparing corporate operations expenses across the Bell Holding Companies shows that Qwest consistently has the highest corporate operations percents. In addition the 10.4% assumed in the model is well higher than the 8.3% RBOC average and is thus a conservatively high estimate. Dr. Fitzsimmons proposed change should be rejected.

	1996	1997	1998	1999	2000
Bell South	11.7%	9.9%	7.0%	6.3%	6.0%
Qwest	13.3%	14.2%	14.8%	12.3%	15.1%
SWBT	10.9%	12.1%	9.5%	8.2%	6.8%
Verizon	13.1%	12.5%	12.4%	10.1%	9.1%
Total RBOC	**12.0%**	**12.1%**	**10.5%**	**8.9%**	**8.3%**

Fill Factors

Fill factors in the HAI Model are used to size equipment and cables in order to ensure a minimum percent of spare capacity. Fill factors can vary by equipment and cable. Besides fill factors the model sometimes assumes a fixed amount of spare capacity. An example of this is conduit. Examples of places where the HAI Model uses unique fill factors are distribution cable, remote terminals, feeder cable and switch ports. Because equipment and cable comes in

discrete sizes the resulting actual spare capacity is usually higher than the fill factor assumed by the model.

The fill factor of 94% discussed by Mr. Flemming regarded the switch port administrative fill. The 75% fill factor discussed in my direct testimony referred to distribution cable. Both values are used in the model.

Dr. Fitzsimmons did not change the default fill factors used by the HAI Model in his run of the HAI Model. The biggest difference in cable fill factors between AT&T and Qwest is regarding the amount of excess capacity to design in the distribution network. Qwest builds its distribution network to "ultimate" demand utilizing 2 pair or 3 pair per location depending on the density group. The HAI Model utilizes a minimum 75% spare capacity in all distribution cables. This results in an average actual fill of 48.8%.

The table below compares the distribution and feeder copper fill factors assumed by the HAI Model and the FCC Synthesis Model.

	HAI Model		**FCC Synthesis Model**	
DZ	**Distribution**	**Feeder**	**Distribution**	**Feeder**
0 – 5	75%	80%	50.0%	70.0%
5 – 100	75%	80%	55.0%	77.5%
100 – 200	75%	80%	55.0%	80.0%
200 – 650	75%	80%	60.0%	82.5%
650 – 850	75%	80%	70.0%	82.5%
850 – 2550	75%	80%	75.0%	82.5%
2550 – 5000	75%	80%	75.0%	82.5%
5000 – 10000	75%	80%	75.0%	82.5%
10000+	75%	80%	75.0%	82.5%

Deaveraging

UNE prices that most closely reflect their underlying cost will best facilitate efficient competition by sending the appropriate signals to the marketplace and allow competitors to make economically efficient decisions on where and how to compete.

UNE prices that are set below cost could create uneconomic incentives for competitors to purchase UNEs rather than deploy their own network, even where the competitor is the low-cost producer. UNE prices that are set above cost could create uneconomic incentives for competitors to build facilities, even if the competitor is not the most efficient provider. In addition, since significant sunk costs exist for a competitor attempting to provide service over its own facilities, UNE prices that are set above costs can also severely limit entry into a market.

Thus, the first and most important step in the deaveraging process is to properly estimate unbundled network element prices in geographically distinct areas within the state. I believe the HAI Model run I've sponsored with my testimony best estimates these geographically distinct UNE prices. There are two other HAI Model runs on the record, those produced by Mr. Dunkel and Dr. Fitzsimmons. The results produced by Mr. Dunkel are much more reasonable and incorporate a more reasonable set of inputs than those produced by Dr. Fitzsimmons. Ms. Million proposed deaveraged rates using Qwest's ICM. These results appear vastly overstated, compared to the results produced using HAI by any of the parties.

The next step in the deaveraging process is to determine the number zones. Since all cost models produce cost estimates by wire center, a unique zone could be assigned to each wire center. However, since tracking and verifying a large number of zones may be burdensome and costly to both CLECs and ILECs it is customary for wire centers with similar costs to be grouped together into a set number of zones. In this case all parties have proposed three zones. States in Qwest region have established three to five deaveraged zones.

The final step is to group wire centers with similar costs into zones. Since parties have incentives to place wire centers in particular zones in order to benefit their own business plans I've created a deaveraging program that mathematically searches for the wire center assignments to zones that minimizes the overall cost deviations between wire center prices and a zones average price. Since the goal of deaveraging is to allow UNE prices to more closely represent their underlying cost the method I've created best achieves this goal. Both Mr. Dunkel and myself have used this method to assign wire centers into zones. The differences in our zone assignments and zone prices are a result of the underlying cost values we are relying upon, not upon the methodology used to create zones.

Qwest's initial deaveraging proposal assigned wire centers to zones using arbitrary, Qwest defined, breaks between zones. Qwest's updated proposal is a mixture of arbitrary assignment and the deaveraging program. Qwest arbitrarily assigns the two lowest cost wire centers to zone one and then uses the deaveraging optimization program to determine the break point between zones two and three. If Qwest wishes to have fewer wire centers in a particular zone then Qwest should propose deaveraging to more than three zones. Zone one using the deaveraging program could be further subdivided in order to create a four or five zone proposal. Qwest has given no rationale for merely assigning the first two wire centers into zone one and thus their proposal should be rejected.

BEFORE THE ARIZONA CORPORATION COMMISSION

IN THE MATTER OF INVESTIGATION INTO QWEST CORPORATION'S COMPLIANCE WITH CERTAIN WHOLESALE PRICING REQUIREMENTS FOR UNBUNDLED NETWORK ELEMENTS AND RESALE DISCOUNTS	))))))))	DOCKET NO. T-00000A-00-0194

DIRECT TESTIMONY OF THOMAS H. WEISS

ON BEHALF OF THE JOINT CASE OF

AT&T COMMUNICATIONS OF THE MOUNTAIN STATES, INC.,

WORLDCOM, INC. AND XO ARIZONA, INC.

RE: QWEST COST MODELS IN GENERAL, RECURRING COST ANALYSES FOR DS1 AND DS3 CAPABLE LOOPS, UDIT AND SHARED TRANSPORT AND INPUTS AND ASSUMPTIONS TO THE AT&T/WORLDCOM NON-RECURRING COST MODEL

[PUBLIC VERSION]

MAY 16, 2001

EXHIBIT
AT/WorldCom
Admitted 7

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I. INTRODUCTION & WITNESS QUALIFICATIONS

Q. MR. WEISS, PLEASE STATE YOUR NAME AND BUSINESS ADDRESS FOR THE RECORD.

A. My name is Thomas H. Weiss. My business address is 205 E. Spring Street, Fuquay-Varina, NC, 27526.

Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?

A. I am employed by Weiss Consulting, Inc. ("Weiss Consulting") as both an engineer and President of Weiss Consulting.

Q. PLEASE BRIEFLY DESCRIBE YOUR EDUCATIONAL BACKGROUND.

A. In January of 1970, I received a Bachelor of Science degree in Electrical Engineering from North Carolina State University at Raleigh. In June of 1973, I earned a Master of Science degree in Business Management with emphasis in Finance and Micro Economics from the Duke University Graduate School of Business Administration (now the Fuqua School of Business).

Currently, I am a Registered Professional Engineer licensed to practice in Maryland and Missouri; a Member of the Institute of Electrical and Electronic Engineers ("IEEE"), Communications Society, Computer Society, Network Society; a Member of the National Society of Professional Engineers and the Maryland Society of Professional Engineers in both of the Private Practice Divisions.

In addition to my years in school as a student, I continue to participate in the academic field through my writing and participation in various university programs. For example, I am the author of *Public Utility Plant Investment*

1 *Decisions in the Face of Advancing Technology and Regulatory Policy Reform*,
2 Proceedings of the 27th Annual Regulatory Conference, Iowa State University,
3 Ames (1988), and I have been an invited speaker and panel member at the 1984
4 Public Utilities Conference, University of Georgia College of Business and at the
5 1988 Iowa State University Regulatory Conference. Similarly, I have served as a
6 member of the faculty at the 1989 United States Telephone Association
7 ("USTA") Advanced Management Workshop sponsored by the University of
8 Kansas at Lawrence.

9 **Q. PLEASE BRIEFLY DESCRIBE YOUR WORK-RELATED EXPERIENCE.**

10 A. I am a Registered Professional Engineer with over thirty-two years of experience
11 in the communications industry. Generally, my employment experience includes
12 eight years in engineering and financial management positions with a domestic
13 telecommunications utilities and over twenty-four years as an engineering and
14 economic consultant to federal and state governments, private businesses, and
15 other groups.

16 My consulting practice has focused on the telecommunications industry
17 principally related to technology, management and regulatory issues. In
18 particular, I have extensive experience analyzing the prices charged for service by
19 domestic telecommunications utilities, including the former Regional Bell
20 Operating Companies ("RBOCs"), GTE Telephone Operating Companies (now
21 Verizon), Interexchange Carriers ("IXCs") and various independent telephone
22 companies.

1 From January 1970, when I completed my engineering education, until June 1978
2 I was employed by General Telephone Company of the Southeast, a local
3 exchange operating company owned by GTE Corporation. Greater detail of the
4 management positions, among my other work experience, is contained in **Exhibit**
5 **THW-1**, my curriculum vita.

6 Briefly, my consulting practice began in 1978 where I was employed as Senior
7 Consultant with Hess & Lim, Inc. ("H&L"), a public utility consulting firm
8 headquartered in Greenbelt, MD. In 1986, I became Vice President of Baker G.
9 Clay & Associates, Inc. ("Baker"), a public utility consulting firm located in
10 Annapolis, MD. At both H&L and Baker, I provided technical and economic
11 consulting services to federal and state governments, to businesses in their
12 capacity as consumers of telecommunications services and others in similar
13 utility-based areas. Finally, in June of 1994, I founded Weiss Consulting, which
14 provides technical, management and economic telecommunications consulting
15 services to federal and state governments, to businesses in their capacities as
16 providers and other groups.

17 **Q. HAVE YOU ANY OTHER PROFESSIONAL EXPERIENCE THAT**
18 **WOULD BEAR ON THE ISSUES AND TOPICS ABOUT WHICH YOU**
19 **TESTIFY HERE?**

20 A. Yes. My recent experience includes direct line responsibility for management of
21 an operating telephone company in New England. Beginning in October 1997
22 and continuing through July 2000, in addition to other consulting engagements, I

1 was employed in a management consulting capacity with an independent
2 telephone company that found itself in some difficulty with regulators. I was
3 engaged by the company as a management consultant with the title as Vice
4 President - Operations Research, to devote approximately 1,000 hours of my time
5 annually to assist the company's management in rectifying its problems. My
6 duties involved activities that were designed to improve the company's
7 performance with respect to the full range of the company's operations including:
8 engineering, finance and accounting, tariffs and customer billing, business office
9 and customer contact, assignment and repair, inside and outside plant operations
10 and administration, regulatory interaction, and other operational responsibilities.

11 **Q. HAVE YOU EVER TESTIFIED AS AN EXPERT WITNESS BEFORE,**
12 **MR. WEISS?**

13 A. Yes, I have.

14 **Q. WOULD YOU BRIEFLY DESCRIBE THAT EXPERIENCE.**

15 A. I have presented expert testimony on communications engineering matters in both
16 federal and state courts, and I have testified in over one hundred and thirty-five
17 proceedings before public utility regulators in twenty-six states and the District of
18 Columbia. I also have testified on economic and regulatory issues before the
19 Federal Energy Regulatory Commission.

20 **Q. HAVE YOU TESTIFIED PREVIOUSLY BEFORE THE ARIZONA**
21 **CORPORATION COMMISSION ("ACC")?**

22 A. No, I have not.

1 **Q. ARE YOU FAMILIAR WITH ACC DOCKET NO. T-00000A-00-0194,**
2 **HERE IN ARIZONA?**
3 A. Yes I am. I have reviewed the testimony filed by Qwest witnesses, their cost
4 studies and the Qwest discovery responses to AT&T's requests. I have also
5 reviewed the Qwest responses to discovery requests initiated by the Commission
6 Staff.

7 **II. PURPOSE OF THE TESTIMONY**

8 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS**
9 **PROCEEDING?**
10 A. As outlined by Mr. Hydock, my testimony serves two general purposes. First, on
11 behalf of AT&T Communications of the Mountain States, Inc. ("AT&T"),
12 WorldCom, Inc. and XO Arizona, Inc., I have examined Qwest's cost studies
13 related to recurring and non-recurring charges, and—based upon that
14 examination—I will respond to Qwest's witness, Ms. Million, regarding her
15 assertions that Qwest's cost estimates are allegedly Total Element Long Run
16 Incremental Cost ("TELRIC") compliant and that the resultant prices Qwest
17 proposes are purportedly correct.[1]

18 Second, I examine the administrative and technical assumptions that are used in
19 the AT&T/WorldCom Non Recurring Cost Model ("NRCM"). Although
20 Mr. Lathrop explains this model in detail, I will address the validity of the
21 assumptions here.

[1] Direct Testimony of Theresa K. Million at pp. 3-8.

1 **Q. PLEASE DEFINE WHAT YOU MEAN BY RECURRING AND NON-**
2 **RECURRING CHARGES.**
3 A. Recurring costs are the ongoing costs associated with providing a service. In
4 contrast, non-recurring costs are the one-time costs that are incurred at the time a
5 customer establishes, disconnects or changes service.

6 **Q. DO QWEST'S RECURRING AND NON-RECURRING COST**
7 **COMPUTATIONS COMPLY WITH THE RULES AND/OR PRINCIPLES**
8 **ESTABLISHED BY THE FCC FOR DETERMINING THE TELRIC OF**
9 **INTERCONNECTION AND UNBUNDLED NETWORK ELEMENTS.**

10 A. No. Qwest's recurring and non-recurring cost calculations are NOT compliant
11 with the FCC's TELRIC rules[2] or principles.[3]

12 **III. EXECUTIVE SUMMARY**

13 **Q. BEFORE WE DISCUSS YOUR EXAMINATION OF THE RECURRING**
14 **AND NON-RECURRING COST STUDIES, PLEASE SUMMARIZE YOUR**
15 **CONCLUSIONS REGARDING THE TWO GENERAL PURPOSES OF**
16 **YOUR TESTIMONY.**
17 A. Certainly. Turning to the first area and Qwest's recurring charges, I examined
18 Qwest's proposed annual charge factors used throughout its recurring costs
19 analyses; the network architecture and basic equipment investment costs assumed

---

[2] *See generally*, 47 C.F.R. § 51.501 *et seq.*
[3] *In the Matter of Implementation of the Local Competition Provisions in the Telecommunications Act of 1996 Interconnection between Local Exchange Carriers and Commercial Mobile Radio Service Providers*, First Report and Order, CC Docket Nos. 96-98 & 95-185, FCC 96-325 (Rel. August 8, 1996) at ¶¶ 618-839 [hereinafter "*Local Competition Order*"].

by Qwest in its analyses of the recurring cost to provide certain network elements; and the loading factors and fill factors used to develop the incremental investment costs that form the basis for Qwest's recurring cost analyses. The results of my analyses of these cost factors applies to all elements at issue in this docket. Nevertheless, in this testimony I will offer specific examples of recurring rate proposals only for the following network elements:

- DS1 Capable Loops (all zones);
- DS3 Capable Loops (all zones);
- Unbundled Direct Interoffice Transport ("UDIT,") for DS0, DS1, DS3, OC3 and OC12 multiplex arrangements; and
- Shared Transport.[4]

From this analysis, I have determined Qwest's recurring cost proposals in this case are overstated by approximately 125% relative to my own findings concerning the recurring costs of all interconnection and unbundled network elements.

With respect to the non-recurring costs, I reviewed Qwest's alleged work time, and the probabilities used to develop non-recurring costs that are attributable to making network elements available for use by Competitive Local Exchange Carriers ("CLECs") and Qwest's non-recurring charges ("NRCs") developed from those activities. From this review, I conclude generally that Qwest's proposals for the costs of non-recurring activities are overstated by between 50% and 70% relative to the true forward-looking costs of processing and completing

[4] A separate piece of testimony examines Qwest's recurring rate proposals regarding analog UNE loops. The factor analysis I have prepared here also applies to Qwest's UNE loop pricing proposal.

1 CLECs' requests for interconnection and unbundled network elements.

2 **Q. WHAT HAVE YOU DETERMINED WITH RESPECT TO THE**
3 **ADMINISTRATIVE/TECHNICAL ASSUMPTIONS USED IN THE**
4 **AT&T/WORLDCOM NRC MODEL?**

5 A. Unlike Qwest's model of non-recurring charges, the AT&T/WorldCom NRC
6 Model ("NRCM") assumes that the incumbent carrier's network embodies
7 forward-looking technology. That is, the NRCM assumes the existence of a
8 network that supports all products and services that the ILEC provides given that
9 the network was configured to perform its functions at least cost; this necessarily
10 assumes that, where possible, connections can be made between the ILEC and the
11 CLEC without the need for manual intervention. Further, unlike Qwest's model,
12 NRCM assumes an efficient electronic ordering interface between the CLEC and
13 the ILEC, with the interface capable of conducting front-end edits that minimize
14 ordering errors; it assumes that relevant databases are relatively free of error to
15 minimize the probability that CLEC's orders placed with the ILEC will be
16 handled manually (manual processing causes delay in completion). In general,
17 then, I find the AT&T/WorldCom NRCM to be superior to Qwest's model.

18 **IV. TOTAL ELEMENT LONG RUN INCREMENTAL COST PRICING**

19 **Q. WHAT IS "TOTAL ELEMENT LONG RUN INCREMENTAL COST" AS**
20 **YOU EMPLOY THAT TERM?**

21 A. By enacting the Telecommunications Act of 1996 ("Act"), Congress entrusted the
22 Federal Communications Commission ("FCC") with the responsibility of
23 establishing rules that would implement the pro-competitive policy embodied in

1 the Act.[5] Pursuant to that responsibility, in April 1996 the FCC opened CC
2 Docket No. 96-98 to establish and adopt national rules that would secure the full
3 benefits of competition in the local telecommunications market.

4 In its first substantive order in that docket,[6] the FCC concluded that, pursuant to
5 §§ 251 and 252 of the Act, prices that incumbent local exchange carriers
6 ("ILECs") would charge to competitive LECs ("CLECs") for interconnection and
7 unbundled network elements should be set at forward-looking long run economic
8 cost of the network element, including a reasonable allocation of forward-looking
9 joint and common costs. The FCC's costing and pricing rules can be found at 47
10 C.F.R. § 51.501 *et seq.*

11 It is within these rules that the FCC defines TELRIC. And that definition is the
12 one I employ. It states that the forward-looking long run economic cost of an
13 element is equal to the sum of: (1) the "total element long run incremental cost of
14 the element" and (2) "a reasonable allocation of forward-looking common
15 costs."[7]

16 The "total element long run incremental cost" component has become known
17 industry-wide by the acronym "TELRIC," which the FCC defines more
18 specifically to be:

19 The forward-looking cost over the long run of the total quantity of
20 facilities and functions that are directly attributable to, or
21 reasonably identifiable as incremental to, such element, calculated

[5] 47 U.S.C. § 251(d)(1).
[6] *See* fn. 5, *Local Competition Order*, above.
[7] 47 C.F.R. § 51.505(a).

taking as a given the incumbent LEC's provision of other elements.[8]

Q. WHAT ARE FORWARD-LOOKING COMMON COSTS?

A. The FCC further defines forward-looking common costs as "economic costs efficiently incurred in providing a group of elements or services (which may include all elements or services provided by the incumbent LEC) that cannot be attributed directly to individual elements or services."[9]

Q. PLEASE SUMMARIZE THE FUNDAMENTAL TELRIC PRINCIPLES THAT APPLY IN THIS PROCEEDING.

A. According to the FCC, TELRIC pricing involves six (6) fundamental concepts:[10]

(1) forward-looking costs per unit of an element equals the forward-looking economic cost of the element divided by a reasonable projection of the sum of the total number of units of the element that the ILEC is likely to provide to requesting carriers and the number of units of the element that the ILEC is likely to use in offering its own services;

(2) forward-looking cost should be measured based on the use of the most efficient telecommunications technology currently available and the lowest cost configuration of the network, given the existing location of the ILEC's wire centers;

(3) forward-looking cost should reflect the forward-looking cost of capital;

(4) forward-looking cost should reflect economic depreciation rates;

(5) allocations of common costs shall not exceed the stand-alone costs associated with the element;[11] and

---

[8] *Id.* at § 51.505(b).
[9] *Id.* at § 51.505(c).
[10] *Id.* at § 51.505(b) & (c).
[11] "Stand-alone costs" are the total forward-looking costs, including corporate costs, that would be incurred to produce a given element if that element were provided by an efficient firm that produced nothing but the given element. 47 C.F.R. § 51.505(c)(2).

1 (6) the sum of the allocation of forward-looking common costs
2 for all elements and services shall equal the total forward-looking
3 common costs (exclusive of retail costs)[12] attributable to operating
4 the ILEC's total network.

5 Furthermore, the FCC's local interconnection rules specifically prohibit
6 development of network element forward-looking long run economic costs that
7 reflect: embedded costs,[13] retail costs,[14] opportunity costs,[15] and revenues to
8 subsidize other services.[16]

9 **V. QWEST'S COST ANALYSES GENERALLY**

10 **Q. HAVE YOU EXAMINED THE ASSUMPTIONS, METHODS AND**
11 **PROCEDURES USED BY QWEST TO DEVELOP ITS PRICES?**

12 A. Yes I have, and I have discovered several flaws that reveal that Qwest's failure to
13 employ FCC TELRIC principals.

14 **Q. PLEASE BRIEFLY DESCRIBE THE FLAWS THAT YOU HAVE**
15 **DISCOVERED IN QWEST'S COST ANALYSES.**

16 A. Qwest's cost analyses fail on several counts to conform to the FCC's pricing
17 rules; briefly there are six fundamental problems. They are:

---

[12] "Retail costs" include the costs of marketing, billing, collection, and other costs associated with offering retail telecommunications services to subscribers that are not telecommunications carriers. 47 C.F.R. § 51.505(d)(2).

[13] "Embedded costs" are costs that the ILEC incurred in the past and that are recorded in the ILEC's books of accounts. 47 C.F.R. § 51.505(d)(1).

[14] *See* fn. 9, above. Examples of "retail costs" include costs recorded in USOA (Uniform System of Accounts) accounts numbered 6611 (product management), 6612 (sales), 6613 (product advertising) 6621 (call completion services), 6622 (number services), 6623 (customer services); and portions of costs recorded in USOA accounts 6121-6124 (general support expenses), 6711, 6712, 6721-6728 (corporate operations expenses) and 5301 (uncollectible revenue). 47 C.F.R. § 51.609.

[15] "Opportunity costs" include revenues that the ILEC would have received for the sale of services, in the absence of competition from carriers that purchase network elements. 47 C.F.R. § 51.505(d)(3).

[16] "Revenue to subsidize other services" includes revenue associated with elements or service offerings other than the element for which a rate is being established; for example, revenue from universal service subsidies. 47 C.F.R. § 51.505(d)(4).

(1) Contrary to the provisions of 47 C.F.R. § 51.505(b)(2), Qwest's cost analyses do not reflect its forward-looking cost of capital.

(2) Contrary to the provisions of 47 C.F.R. § 51.505(c)(2)(i), Qwest does not allocate common costs to network elements in such a manner as to ensure that such costs do not exceed the stand-alone costs associated with the element.

(3) Contrary to the provisions of 47 C.F.R. § 51.505(c)(2)(ii), Qwest does not allocate common costs to network elements in such a manner as to ensure that such costs do not exceed the total forward-looking common costs attributable to operating Qwest's total network in Arizona.

(4) Contrary to the provisions of 47 C.F.R. § 51.505(d)(1) and (2), Qwest's cost analyses do reflect embedded costs and costs properly attributable only to retail operations.

(5) Contrary to the provisions of 47 C.F.R. § 51.511, Qwest computes network element unit costs under the assumption that network elements are used only by CLECs.

(6) Contrary to the provisions of 47 C.F.R. § 51.505(b)(1), Qwest's cost analyses do not reflect the most efficient technology currently available and the lowest cost configuration of its network.

Q. IN ORDER TO DETERMINE THE PRICE OF ANY GIVEN UNE OR SERVICE, QWEST MUST IDENTIFY ALL THE COST COMPONENTS NEEDED TO PROVIDE THE UNE OR SERVICE. WHAT TYPES OF COST COMPONENTS GO INTO DETERMINING A PRICE GENERALLY?

A. Generally, Qwest must determine the investment of equipment, material and labor for the service or element; it must determine the operating expenses; and it must determine the common overhead expenses. Obviously, these steps must be broken down into greater granularity, but they do reflect the general method for

1 determining recurring costs. My examination of Qwest's general cost analysis
2 focused primarily on: (a) "cost/expense factors," (b) the assignment or allocation
3 of those costs and expenses, (c) "investment," (d) the "black box" problem,[17] and
4 (e) "fill factors and loading." In general, I found Qwest's analyses to be flawed as
5 I will describe in greater detail below.

6 **Q. YOU'VE BROADLY DIVIDED THE FLAWS IN QWEST'S ANALYSIS**
7 **INTO COST/EXPENSE FACTORS AND INVESTMENTS. PLEASE**
8 **DEFINE WHAT YOU MEAN BY COST/EXPENSE FACTORS AND**
9 **INVESTMENT AND THEN LET'S DISCUSS EACH SEPARATELY.**

10 A. By "cost or expense factors," I mean those factors that are used traditionally in
11 cost studies to convert related investment levels to operating costs. By
12 investment, I'm generally referring to the incremental investment in the
13 equipment and support assets used by Qwest to provide interconnection and
14 unbundled network elements to CLECs.

15 **1. Cost Factors**

16 **Q. BEGINNING WITH COST FACTORS, ARE YOU CONCERNED WITH**
17 **ANY IN PARTICULAR?**

18 A. Yes; I am concerned with Qwest's capital cost factors primarily because the cost
19 of invested capital reflected in Qwest's proposed capital cost factors is greatly
20 overstated.

[17] The 'black box problem" refers to the characteristics of Qwest's cost models that makes it difficult (and, in some cases, impossible) for an analyst to critically evaluate the computational logic behind the assumptions and algorithms used to produce the model results.

Q. WHAT IS THE COST OF INVESTED CAPITAL THAT IS REFLECTED IN QWEST'S COST STUDIES?

A. I understand that the overall weighted cost of invested capital reflected in Qwest's cost studies is 10.37%.[18] The weighted cost of capital is used in cost studies as the means to attribute capital carrying costs to individual investments.

Q. WHAT CAPITAL STRUCTURE AND MARGINAL COSTS OF CAPITAL ARE REFLECTED IN THE 10.37 PERCENT OVERALL COST OF CAPITAL USED IN QWEST'S COST STUDIES?

A. According to Qwest witness Teresa K. Million, the 10.37 % overall cost of invested capital used in the Qwest's cost studies reflects "the Arizona Commission's decision in the prior cost docket (Docket No. U-3021-96-448 et al.) regarding cost of money."[19] Dated on January 30, 1998, Decision No. 60635 in Docket No. U-3021-96-448 et al., shows that the Commission approved a capital structure consisting of 38.30 percent debt and 61.70 percent common equity; the marginal costs of debt and equity approved by the Commission were 7.09 percent and 12.40 percent, respectively.[20]

Q. DO YOU AGREE THAT 10.37 % IS THE APPROPRIATE FORWARD-LOOKING OVERALL WEIGHTED COST OF INVESTED CAPITAL THAT SHOULD BE USED TO SET THE PRICES OF INTERCONNECTION AND UNBUNDLED NETWORK ELEMENTS IN THIS CASE?

---

[18] Direct Testimony of Teresa K. Million, page 35, lines 5, 6.
[19] *Id.*, lines 3-6.

1 A. No. First, while Ms. Million implies that the 10.37 percent represents the
2 Commission's prescribed overall cost of capital for Qwest, she also observes that
3 "Qwest believes that a forward-looking cost of money is appropriate for use in
4 TELRIC studies."[21] I agree with Qwest that TELRIC studies should reflect a
5 forward-looking cost of capital. However, I do not agree that the10.37 percent
6 constitutes any sort of proxy for Qwest's overall forward-looking capital cost.
7 Furthermore, I do not accept Ms. Million's assertion that the 10.37 percent
8 represents the Commission's prescribed cost of capital.

9 **Q. WHY DO YOU DISAGREE WITH MS. MILLION'S ASSERTION THAT**
10 **THE 10.37 PERCENT REPRESENTS THE COMMISSION'S**
11 **"PRESCRIBED" OVERALL COST OF CAPITAL FOR QWEST?**

12 A. As observed by Ms. Million, the 10.37 percent is taken directly from ACC
13 Decision No. 60635 in Docket No. U-3021-96-448 et al., which dates to
14 January 30, 1998. Since January 1998, however, the ACC has taken at least one
15 other opportunity, in Docket No. T-01051B-99-0105 et al., to review Qwest's cost
16 of capital. In that case, the Commission accepted a modified Settlement
17 Agreement between Qwest and the Commission Staff, with respect to which the
18 "reasonable return on the fair value" of Qwest's rate base was stipulated to be
19 9.61 percent.[22] Thus, the 10.37 percent cost of capital advocated by Ms. Million

[20] Decision No. 60635 in ACC Docket No. U-3021-96-448 et al., page 8.
[21] Direct Testimony of Teresa K. Million, pages 34-35.
[22] At page 9 of ACC Decision No. 63487 in Docket No. T-01051B-99-0105 (dated March 30, 2001) approving the modified settlement, the ACC accepted a 9.61 percent overall cost of capital for Qwest in Arizona.

1 for use in Qwest's cost studies is not the Commission's latest "prescribed" overall
2 cost of capital for Qwest in Arizona.

3 **Q. IS IT YOUR OPINION THAT THE 9.61 PERCENT CONSTITUTES A**
4 **REASONABLE PROXY FOR THE OVERALL FORWARD-LOOKING**
5 **COST OF CAPITAL FOR QWEST IN ARIZONA?**

6 A. Yes. The 9.61 percent was grounded in ACC Staff's recommended 47.57 percent
7 debt ratio, and marginal costs of 7.39 percent[23] for debt. Given these factors and
8 an equity cost of 11.62 percent results in a 9.61 percent overall cost of capital.
9 The Commission accepted that capital structure and debt cost in its Decision
10 No. 63487, dated on March 30, 2001 – only some six weeks ago. In order to help
11 ensure a fair playing field between ILECs and CLECs so as to encourage the
12 transition to a competitive market for local exchange telecommunications
13 products and services, it is important that the costs that for CLECs incur for
14 access to the ILECs' networks reflect the same forward-looking capital costs as
15 the Commission finds for use by Qwest in setting prices for its products and
16 services in the retail environment. Thus, for that reason and to avoid "protracted
17 debate over the appropriate cost of money"[24] and to ensure compliance with the
18 FCC's TELRIC paradigm, the cost of capital to be reflected in Qwest's Arizona
19 cost studies should be as shown in Table No. 1, below:

[23] Testimony of S. G. Hill on behalf of ACC Staff in ACC Docket No. T-01051B-00-0369.
[24] Direct Testimony of Teresa K. Million, page 35, line 2.

Table No. 1
Recommended Cost of Capital

Capital Component	Ratio	Marginal Cost	Weighted Cost
Debt	0.4757	0.0739	0.0352
Common Equity	0.5243	0.1162	0.0609
Totals	1.0000		0.0961

Q. HAVE YOU REVIEWED THE COMPANY'S PROPOSALS RELATIVE TO OTHER CAPITAL COST FACTORS SUCH AS DEPRECIATION AND FEDERAL AND STATE INCOME TAX RATES?

A. Yes. According to Ms. Million, Qwest has computed its capital cost factors using plant service lives that this Commission has prescribed for use in Arizona.[25] I examined Qwest's claim by reviewing Qwest's response to AT&T requests for information and this Commission's latest decision related to Qwest depreciation rates (Decision No. 62507 in Docket No. T-01051B-97-0689). I found that the depreciation factors used in Qwest's cost studies reflect the Commission's findings. Accordingly, I believe that Ms. Million's representations regarding the depreciation-related components of capital costs are accurate and I do not quarrel with Qwest's depreciation-related input to its cost studies in this case.

Qwest assumes a marginal federal income tax rate of 35 % and a marginal state income tax rate of 7.2% for Arizona. The federal income tax rate used by Qwest is consistent with the currently effective corporate marginal rate of 35%. The 7.2% state income tax rate is slightly high relative to the recently effective

[25] Direct Testimony of Teresa K. Million, pp. 35, 36, and Qwest's response to ATT Information Request No. 3-113.

1 corporate marginal rate of 6.96% for Arizona.[26] Because the difference between
2 the assumed and actual current marginal state income tax rates is not significant, I
3 do not adjust the capital component of Qwest's proposed charge factors to reflect
4 the difference.

5 **Q. HAVE YOU PREPARED AN EXHIBIT THAT SHOWS THE CAPITAL**
6 **COST COMPONENT OF THE CHARGE FACTORS TO REFLECT**
7 **YOUR RECOMMENDATIONS?**

8 A. Yes. At **Exhibit THW-2** (two pages), I show the USOA account-by-account
9 results obtained by running the Company's CAPCOST Model[27] using Qwest's
10 proposed capital cost factors (page 1) and my capital cost recommendations
11 described above (page 2). The capital cost factors that I recommend to the
12 Commission appear at lines 1 through 33 under Column (h) on page 2 of
13 Exhibit THW-2.

14 **2. Expense Factors**

15 **a. In General**

16 **Q. LET'S TURN TO EXPENSE FACTORS. WHAT PRIMARY PROBLEM**
17 **HAVE YOU IDENTIFIED?**

18 A. The expense factors improperly inflate the cost of interconnection and UNEs and
19 employ embedded costs contrary to the FCC's rules.

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[26] State of Arizona, Department of Commerce, General Tax Information.
[27] The CAPCOST Model is found on the Compact Disk (CD) provided with the Direct Testimony of Teresa K. Million, on the directory route designated as: PHASEII Models\ ICM\ Capcost.xls and Capinput.xls.

1 **Q. WHAT IS YOUR UNDERSTANDING OF QWEST'S EXPENSE FACTORS**
2 **USED TO COMPUTE RECURRING COSTS IN THIS CASE?**

3 A. Qwest uses an MS Excel spreadsheet computer model, designated as the
4 "Expense Factors Module" to compute annual expense factors that are used to
5 produce estimates of the annual expense costs associated with the provision of
6 local interconnection and unbundled network elements.[28] The model develops a
7 series of several factors that—when applied to incremental investments in local
8 interconnection, unbundled network elements or expenses associated with these
9 products—yield estimates of the annual expense costs[29] of producing the
10 products. In the model, investment-related factors are divided into three
11 categories: (a) maintenance, (b) right-to-use fees and (c) ad valorem (property)
12 taxes.

13 **Q. HOW DOES THE EXPENSE FACTORS MODULE WORK?**

14 A. The Expense Factors Module develops so-called expense-related factors to
15 estimate the level of expenses that would apply to the various local
16 interconnection and unbundled network elements at issue here. These factors are
17 developed on three levels: (a) directly assigned, (b) directly attributed and
18 (c) common.

19 Qwest develops the directly assigned expense factors as a function of the sum of
20 all the investment-related factors (e.g., capital costs, maintenance, ad valorem and

[28] The Expense Factors Module can be found on the Compact Disk (CD) provided with the Direct Testimony of Teresa K. Million, on the directory route designated as: PHASEII Models\ ICM\ Expense Factors Module.xls.
[29] As distinguished from annual capital costs that are developed with the CAPCOST model.

taxes). Expenses included in the directly-assigned category include product management, sales, product advertising, and business fees.

The directly-attributed expense factors are developed as a function of the sum of investment-related and directly assigned expenses. Examples of expenses included in the directly attributed category are network operations expenses, network support expenses, accounting expenses, human relations expenses, and so forth.

Finally, common expense factors are developed as a function of the sum of investment-related expenses, directly assigned expenses and directly attributable expenses. Included in the common expenses category are common overhead costs such executive expenses, planning, legal and so on.

The Expense Factors Module produces a single ad valorem tax factor as a function of gross plant investment for application equally to all relevant forms of USOA plant investments; another single factor, applicable only to switching equipment investment, is produced as a function of switching equipment investment to estimate the annual costs of switch right-to-use fees. The model develops a unique investment-based maintenance factor for each class of plant represented by the USOA plant asset accounts.

The principal inputs to the Expense Module include book costs reported in Qwest's Arizona monthly MR2 (investment) report and MR5 (expense) report. Inputs also include means to adjust MR2 and MR5 data to remove clearly irrelevant costs from the expense factors (e.g., expense costs that are to be recovered in non-recurring charges) and to express expenses and investments at

current levels (e.g., Telephone Plant Indices ("TPIs"), and current cost to book cost ("CC/BC") ratios).

Q. CAN YOU SUMMARIZE, MORE SPECIFICALLY, HOW THE VARIOUS EXPENSE COST FACTORS ARE DEVELOPED IN THE EXPENSE MODULE SOFTWARE MODEL?

A. Yes. While detailed descriptions of Expense Module computations are contained in the "Expense Factors Module - TELRIC User Manual" included as an MS Word file on the CD provided with the Direct Testimony of Ms. Million,[30] my brief description of the process follows.

First, as the foregoing explanation indicates, the maintenance factor is a plant investment-related factor. It therefore must be capable of being applied directly to incremental plant investment amounts in order to produce logically meaningful estimates of the maintenance costs associated with the products at issue here. Accordingly, the maintenance factor for any given category of plant investment is developed by dividing Qwest's booked expenses as reported in the MR5 report for the plant category by Qwest's MR2 booked investment for that same category of plant. The same basic approach is used by the Expense Module to develop the right-to-use fees factor and the ad-valorem tax factor.

For example, if the expenses of maintaining switching equipment are reported on the MR5 report as $1.0 million for a given twelve month period, and the level of

[30] File designated "Expense00V2.pdf" on the directory route designated as: PHASEII Models\ ICM\ Documents.

investment in switching equipment at the close of the twelve month period was $20.0 million, then the maintenance factor for switching equipment would be reported as 5 percent ($1.0 million divided by $20.0 million). This simple example assumes that neither the MR2 investment level nor the MR5 expense level were adjusted in any way. In fact, however, the Expense Module allows adjustments to both investments and expenses -- e.g., to remove investment and expense costs associated with non-jurisdictional services (such as voice messaging), or to reflect projected changes in both investment and expense levels from, for example, implementation of improved technology, increases in employee wages, salaries and benefits, and the like.

As observed earlier, the factors for the directly-assigned category of expenses are computed as a function of the sum of investment-related costs and directly assigned costs. Accordingly, the directly assigned expense factors are computed by dividing the appropriate directly assigned expense from the MR2 by the sum of the investment-related costs that pertain to the directly assigned expense. For example, if the total investment in plant was $200 million, the capital cost factor for plant investment was 13%, and the sum of all maintenance costs associated with the $200 million of plant was $6.0 million, then the investment-related cost of plant would be $32.0 million ($6.0 million in maintenance plus $26.0 million of capital costs). If the product management cost for Qwest totaled $2.6 million, then the product management factor would be computed as 10% ($2.6 million divided by $26 million). In the Expense Module, all directly assigned expenses are developed in this same basic way.

The factors for directly attributed expenses are developed in much the same way as the direct and directly assigned cost factors are developed except that the denominator of the directly attributed cost factors is the sum of the directly assigned costs plus business fees.

The common cost factors are developed as the respective common cost expense (e.g., executive, planning, etc.) divided by the sum of the numerator and the denominator for the directly attributed expense factor.

Q. HOW DOES QWEST USE THESE EXPENSE FACTORS TO ESTIMATE THE RECURRING COSTS OF PRODUCING LOCAL INTERCONNECTION AND UNBUNDLED NETWORK ELEMENTS?

A. In addition to the other software models, discussed above, Qwest has developed a third model, designated as the Wholesale Cost Program.[31] The Wholesale Cost Program accepts the output results from the CAPCOST model and the Expense Module and applies those results to the incremental investments input to the Wholesale Cost Model from separate engineering models that relate to the various products at issue in this case. In short, the Wholesale Cost Model is simply a MS Excel spreadsheet program that multiplies the cost factors by incremental investment amounts to produce recurring monthly costs for the products at issue here.

[31] The Wholesale Cost Program (formerly known as WINPC3) can be found on the Compact Disk (CD) provided with the Direct Testimony of Teresa K. Million, on the directory route designated as: Phase II Models\Wholesale Cost Program.

1 **Q. CAN THE RESULTS PRODUCED BY QWEST'S COST FACTOR**
2 **MODELS BE RELIED UPON FOR USE IN DEVELOPING RECURRING**
3 **COSTS OF LOCAL INTERCONNECTION AND NETWORK**
4 **ELEMENTS?**
5 A. No. In fact, I believe that Qwest's expense cost factor proposals here represent a
6 rather bold and not so transparent attempt on Qwest's part to artificially inflate the
7 prices for local interconnection and unbundled network elements with the
8 objective being to require CLECs to bear costs that Qwest rightfully incurs to
9 administer its retail market. In effect, Qwest is attempting to have CLECs pay a
10 portion of the costs of retail operations that Qwest itself undertakes in order for
11 Qwest to compete with the CLECs in the retail market.
12 As to the mechanics behind Qwest's Expense Factor module, my review did not
13 reveal any major faults in the mathematical logic. I found the model to include
14 means to properly adjust cost factor results as necessary to conform TELRIC
15 studies to the FCC's requirements. However, this does NOT mean that I agree
16 with the results produced by the model.
17 **Q. IF YOU AGREE WITH THE MATHEMATICS, WHAT IS IT THAT**
18 **CAUSES YOU TO DISAGREE WITH THE RESULTS PRODUCED BY**
19 **THE MODEL?**
20 A. Contrary to the requirements of 47 C.F.R. § 51.505(d)(1), the Expense Factor
21 Module produces its outputs based largely on embedded costs. Accordingly, I
22 disagree with certain of the assumed inputs to the model, especially as the results
23 produced by the model would be used in the process of setting prices for local

interconnection and unbundled network elements in this case. I adjust certain of the inputs to the Expense Factor Module to bring the outputs more in line with the FCC rule that prohibits the development of TELRIC prices based on embedded costs.

Q. HOW WOULD YOU RECOMMEND THE ARIZONA COMMISSION ADJUST THESE OUTPUTS?

A. As I discussed earlier, Qwest's proposed capital cost factors are severely overstated and I have adjusted them downward as shown at page 2 of Exhibit THW-2. The directly assigned and directly attributable expense factors from the Expense Factor Module change inversely to changes in the capital cost factors; thus, the directly assigned and directly attributable expense factors increase moderately when my recommended capital cost factors are reflected in the results produced by the Expense Factor module.

The Expense Factor module includes means to adjust the expense factors to reflect improvements in Qwest's productivity. The Company's proposed expense factors reflect annual productivity improvements of 5.0%. Given the level of savings promised due to synergies from the merger between Qwest and USWC, I recommend that additional productivity improvements at the rate of 6.85% annually be reflected in Qwest's expense factors.

Finally, through the Wholesale Cost Model, Qwest's proposed expense factors are applied to incremental product investments without considering whether the product represented by those investments gives rise to the costs represented by the factors. Qwest assigns costs to local interconnection and unbundled network

elements when such costs are NOT applicable to them. In this connection, I refer specifically to product management expenses, sales expenses, network operations expenses, uncollectible revenue, planning expenses, research and development expenses, and other general and administrative expenses. Consistent with the FCC rules, discussed in detail below, for purposes of my analysis of Qwest's incremental costs, I have set the factors that pertain to these costs at zero. **Exhibit THW-3**, in three pages, summarizes my recommended cost factors for use in defining the incremental cost of interconnection and unbundled network elements in this case.

b. FCC Requirements

Q. YOU REFERRED TO SEVERAL CATEGORIES OF EXPENSES FOR WHICH QWEST WRONGLY ASSIGNS/ALLOCATES COST TO LOCAL INTERCONNECTION AND UNBUNDLED NETWORK ELEMENTS. WHY IS QWEST WRONG IN MAKING THESE ASSIGNMENTS OR ALLOCATIONS?

A. First, as I indicated earlier, in many cases the costs that Qwest assigns/allocates are simply not applicable to local interconnection and unbundled network elements. I discuss those in more detail later. Equally important is the FCC's own requirements for testing whether a given category of expense should be assigned or allocated to local interconnection and unbundled network elements. Basically, for an expense to be included in the cost of local interconnection and unbundled network elements, the FCC requires that the ILEC demonstrate to state

1 regulators that the expense or some defined portion of it could be avoided if local
2 interconnection and network elements were not offered to CLECs.

3 In further defining the "forward-looking economic cost" standard, the FCC
4 clarified the standard by listing factors that "shall *not* be considered in a
5 calculation of the forward-looking economic cost of an element."[32] "Retail costs"
6 are cited in the list, and they are defined as "the costs of marketing, billing,
7 collection, and other costs associated with offering retail telecommunications
8 services to subscribers who are not telecommunications carriers, described in 47
9 C.F.R. § 51.609."[33] Section 51.609(c) refers to expenses that ILECs can avoid
10 when they offer services for resale to requesting carriers -- product management,
11 sales, product advertising, call completion services, customer services; and
12 portions of general support expenses, corporate operations expenses, and
13 uncollectible revenues.

14 Section 51.609(d) allows such costs to be included in the calculation of the
15 forward-looking economic cost of an element "only to the extent that the
16 incumbent LEC proves to the state commission that specific costs in these
17 accounts will be incurred and are not avoidable with respect to services sold at
18 wholesale, or that specific costs in these accounts are not included in retail prices
19 of resold services." Thus, the FCC requires that the forward-looking economic
20 cost of local interconnection and unbundled network elements NOT reflect
21 expenses of product management, sales, product advertising, call completion

[32] 47 C.F.R. § 51.505(d)(emphasis added).
[33] *Id.* at § 51.505(2).

1 services customer services, and a portion of general support expenses, corporate
2 operations expenses, and uncollectible revenues. The FCC does, however, allow
3 such expenses to be reflected in the forward-looking economic costs of local
4 interconnection and unbundled network elements if the ILEC proves to the state
5 commission that some amount of such costs rightly should be included.

6 **Q. DOES QWEST INCLUDE THESE EXPENSES IN THE COSTS THAT IT**
7 **PROPOSES FOR THE LOCAL INTERCONNECTION AND**
8 **UNBUNDLED NETWORK ELEMENTS?**

9 A. Yes. In fact, my review of the Qwest results reported out of the Expense Module
10 clearly shows that it is assigning or allocating a share of virtually every category
11 of expense recorded on its books of account. That is, Qwest's expense
12 assignment/allocation procedures amount essentially to a traditional fully
13 distributed (embedded) approach to the problem of defining incremental costs in
14 this case.

15 **Q. HAS QWEST MADE ANY ATTEMPT TO DEMONSTRATE THAT SUCH**
16 **EXPENSES SHOULD BE INCLUDED IN THE FORWARD-LOOKING**
17 **ECONOMIC COST OF LOCAL INTERCONNECTION AND**
18 **UNBUNDLED NETWORK ELEMENTS?**

19 A. No.

20 **c. Inadequate Productivity Adjustment**

21 **Q. SETTING ASIDE FOR A MOMENT THE INAPPROPRIATE EXPENSE**
22 **FACTORS WE HAVE JUST DISCUSSED, ARE THERE OTHER**

ADJUSTMENTS THAT QWEST HAS NEGLECTED TO MAKE TO ITS EXPENSES?

A. Yes, Qwest has failed to adjust expenses to reflect any cost productivity gains resulting from its recent merger. I believe an adjustment of 6.85 % is appropriate.

Q. PLEASE EXPLAIN THE BASIS FOR YOUR PROPOSED 6.85 % ADJUSTMENT TO THE EXPENSE FACTORS TO RECOGNIZE ADDITIONAL PRODUCTIVITY IMPROVEMENTS FROM THE MERGER.

A. First, I should explain that the results produced by Qwest's run of the Expense Module incorporate a [redacted] expense cost productivity gain annually. In its response to AT&T Data Request No. 3-115, Qwest reveals that the [redacted] productivity gain is based on the so-called "X" factor used by the FCC in its price cap performance reviews. That gain is consistent with the general level of productivity gains throughout the economy stemming, in large part, from routine deployment of current technology. I do not quarrel with Qwest on that adjustment as far as its goes.

In documents that pertain to its merger with USWC, Qwest has indicated that, in addition to advantages expected from both entities' deployment of advanced network and broadband technology, the merger will enable the surviving entity to capitalize on synergies that will enhance its ability to compete effectively at the top tier of the industry.[34] Specifically, Qwest projected operating expense savings

[34] Qwest/USWC Joint Proxy Statement/Prospectus, page I-17.

1 from the merger primarily in three areas: (a) avoided network operating
2 expenses; (b) reduced sales, general and administrative expenses; and (c) reduced
3 information and operating systems expenses.

4 Qwest projected these expense savings to total between $4.3 billion and $4.5
5 billion over the period 2000-2005[35] -- an average annual savings of approximately
6 $730 million due to the merger. In 1999, Qwest operating expenses, exclusive of
7 depreciation, totaled $3.17 billion; USWC operating expenses (depreciation
8 excluded) totaled $7.48 billion.[36] Thus, the average annual merger-related
9 operating expense saving ($730 million) constitute approximately 6.85% of the
10 total $10.65 billion ($7.48 billion plus $3.17 billion) combined annual pre-merger
11 operating expenses.

12 **d. Specific Examples of Improper Allocation and Assignment of**
13 **Expenses**

14 **Q. IN ADDITION TO THE MERGER SAVINGS, ARE THERE OTHER**
15 **PROBLEMS ASSOCIATED WITH QWEST'S EXPENSE ANALYSIS?**

16 A. Yes, Qwest's assignment of product management costs to CLECs is problematic.

17 **Q. WHY ARE QWEST'S EFFORTS TO ASSIGN PRODUCT**
18 **MANAGEMENT COSTS TO LOCAL INTERCONNECTION AND**
19 **UNBUNDLED NETWORK ELEMENTS PROBLEMATIC?**

20 A. They are problematic because these are expenses Qwest incurs to compete; they

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[35] *Id.* at page II-16.
[36] Qwest 1999 Annual Report to Shareholders, page 26; USWC 1999 Annual Report to Shareholders, page F-2.

are not expenses related to wholesale service. Part 32 of the FCC's rules (the USOA) defines Product Management expenses as follows:

> 32.6611 Product Management -- This account shall include costs incurred in performing administrative activities related to marketing products and services. This includes competitive analysis, product and service identification and specification, test market planning, demand forecasting, product life cycle analysis, pricing analysis, and identification and establishment of distribution channels.[37]

Clearly, Product Management expenses are expenses Qwest incurs to compete and market its retail services; they are not related to Qwest's wholesale services.[38] It is manifestly unfair and a barrier to competition to expect CLECs to pay for Qwest's retail marketing and competitive efforts. Therefore, product management expenses should not be components of charges assessed to CLECs for interconnection and unbundled network elements.

ILECs perform competitive analysis relative to products and services that they may provide in competition with CLECs at the retail level, but such analyses do not and, indeed, they should not be conducted by Qwest for products that it makes available to competitors. Furthermore, the CLECs themselves will conduct such research and market analysis from their own perspective on the retail market. In addition to the cost of their own product research and market analysis, the CLECs should not also be burdened with having to pay a share of Qwest's costs of market research and analysis, especially when the results of Qwest's efforts would accrue

[37] 47 C.F.R. § 32.6611.
[38] Costs of regulatory filings are accounted-for in USOA Account No. 6722, External Relations. *See e.g.* 47 C.F.R.§ 32.6722.

1 to the CLECs' detriment.

2 **Q. IN ADDITION TO PRODUCT MANAGEMENT COSTS, ARE THERE**
3 **OTHER EXPENSES THAT QWEST HAS WRONGLY ATTRIBUTED TO**
4 **CLECS?**

5 A. Yes, Qwest's assignment of sales costs are also inappropriate.

6 **Q. WHY DO YOU REJECT QWEST'S EFFORTS TO ASSIGN SALES**
7 **COSTS TO LOCAL INTERCONNECTION AND UNBUNDLED**
8 **NETWORK ELEMENTS?**

9 A. Again, most sales costs are associated with retail sales, not wholesale service.
10 Part 32 of the FCC's rules (the USOA) defines Sales expenses as follows:

11 > 32.6612 Sales -- This account shall include costs incurred in
12 > selling products and services. This includes determination of
13 > individual customers needs, development and presentation of
14 > customer proposals, sales order preparation and handling, and
15 > preparation of sales records.[39]

16 As the USOA description reveals, sales expenses are substantially recurring in
17 nature and applicable to retail services where actual sales activity is routinely
18 conducted by the incumbent. Sales expenses do not relate to local interconnection
19 and unbundled network elements that are provided to CLECs. Therefore, they
20 should not be components of charges assessed to CLECs for interconnection and
21 unbundled network elements.

22 ILECs primarily engage sales activity relative to products and services that they
23 may provide in competition with CLECs at the retail level, generally these

[39] 47 C.F.R. § 32.6612.

activities are not undertaken by Qwest for wholesale products that it makes available to competitors.

In addition to the cost of their own sales efforts, the CLECs should not also be burdened with having to pay a share of Qwest's costs of retail sales, especially when the results of Qwest's retail sales efforts would not benefit CLECs.

Q. OTHER THAN PRODUCT MANAGEMENT EXPENSES AND SALES EXPENSE, ARE THERE OTHER EXPENSES THAT QWEST IMPROPERLY SHIFTS TO CLECS?

A. Yes, there are more. I also reject Qwest's assignment of certain network operations costs to CLECs.

Q. WHY DO YOU REJECT QWEST'S ASSIGNMENT OF CERTAIN NETWORK OPERATIONS COSTS TO LOCAL INTERCONNECTION AND UNBUNDLED NETWORK ELEMENTS?

A. Network administration, for example, does not require Qwest to monitor CLEC dedicated interconnection trunks, and CLECs should not be paying for such monitoring. Part 32 of the FCC's rules (the USOA) defines Network Operations expenses, Account No. 6530, as summarizing the contents of Accounts 6531 through 6535. In this case, Qwest's Network Operations expense factor includes costs associated only with Accounts 6532, 6534 and 6535.[40] The USOA defines charges to Accounts 6632, 6634 and 6635 as follows:

[40] Thus, Qwest properly does not appear to be attempting to assign power expenses (6531) or testing expenses (6533) in the cost factors which it applies to investments associated with interconnection and unbundled network elements in this case.

> 32.6532 Network Administration Expense -- This account shall include costs incurred in network administration. This includes such activities as controlling traffic flow, administering traffic measuring and monitoring devices, assigning equipment and load balancing, collecting and summarizing traffic data, administering trunking, and assigning interoffice facilities and circuit layout work.[41]

> 32.6634 Plant Operations Administration Expense -- This account shall include costs incurred in the general administration of plant operations. This includes supervising plant operations; planning, coordinating and monitoring plant operations and performing staff work such as developing methods and procedures, preparing and conducting training (except on-the-job training) and coordinating safety programs.[42]

> 32.6635 Engineering Expense -- This account shall include costs incurred in the general engineering of the telecommunications plant which are not chargeable to an undertaking or project. This includes developing input to the fundamental planning process, performing preliminary work or advance planning in connection with potential undertakings, and performing special studies of an engineering nature.[43]

As the USOA description shows for Account No. 6532, the costs charged to that account relate principally to network traffic administration -- functions that pertain only to traffic-sensitive components of the network. Local interconnection and unbundled network elements typically are not traffic-sensitive for the most part and, therefore, they do not cause a need for, nor do they benefit from traffic administration activity. Accordingly, charges for local interconnection and unbundled network elements should not be designed to recover costs that include charges to Account No. 6532.

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[41] 47 C.F.R. § 32.6532; Qwest appears to have adjusted the factor related to Account No. 6532 to remove the costs associated with non-recurring functions.
[42] 47 C.F.R. § 32.6634.
[43] 47 C.F.R. § 32.6635.

1 Charges to Account No. 6534 should not be included in the expense factors that
2 pertain to local interconnection and unbundled network elements because the cost
3 of the plant administration activities that are charged to that account do not
4 benefit local interconnection and unbundled network elements. Furthermore, the
5 CLECs themselves must conduct such activities with respect to their own
6 operations and the costs of those CLEC activities must be recovered in the prices
7 that CLECs charge at retail for the services they provide in competition with
8 Qwest. If the price that Qwest charges to CLECs for network elements includes
9 Qwest's plant administrative expenses, then the CLECs' costs for local
10 interconnection and unbundled network elements will unfairly reflect a double
11 helping of plant administration costs. Accordingly, the expense factors that are
12 used to determine costs of local interconnection and unbundled network elements
13 must not reflect plant administration costs from USOA Account No. 6534.

14 Costs charged to Account No. 6635, Engineering Expense, involve general
15 network planning and studies related to general network planning. Typically, the
16 costs charged to this account pertain to studies of a specific engineering problem,
17 such as locating a wire center. In general, such activities involve facilities on the
18 public switched network and not facilities such as unbundled network elements.
19 Where engineering studies are undertaken with respect to local interconnection
20 and unbundled network elements provided to CLECs, Qwest proposes to charge
21 the CLEC directly for the cost to conduct such studies. Accordingly, the expense
22 factors that are used to determine costs of local interconnection and unbundled

1 network elements must not reflect engineering expenses from USOA Account
2 No. 6535.

3 **Q. ARE THERE OTHER EXPENSES THAT HAVE BEEN INCORRECTLY**
4 **ATTRIBUTED TO CLECS?**

5 A. Yes; in addition to what we have discussed, Qwest should not assign the cost of
6 uncollectibles to CLECs.

7 **Q. WHY DO YOU REJECT QWEST'S ASSIGNMENT OF THE COST OF**
8 **UNCOLLECTIBLE REVENUES TO LOCAL INTERCONNECTION AND**
9 **UNBUNDLED NETWORK ELEMENTS?**

10 A. According to Qwest's Expense Module run, carrier access uncollectible revenue
11 represent about [redacted] of total directly assigned and directly
12 attributable expenses. The apparent basis of Qwest's claim to charge local
13 interconnection and unbundled network elements with the costs of uncollectible
14 revenue is that some interstate and intrastate carrier access revenues are
15 "uncollectible," and therefore it is reasonable to expect that revenue from local
16 interconnection and unbundled network elements will likewise be "uncollectible."
17 While I would agree that some amount of uncollectible revenue may result from
18 Qwest's interaction with local exchange competitors, I do not agree that all local
19 carriers should insure Qwest against those lost revenues. To the extent that Qwest
20 experiences failure to collect revenue to which it is entitled from CLECs, it must
21 take the matter up with the offending CLECs and execute the appropriate
22 remedies related to those carriers. Qwest must not be allowed to increase the cost

1 to compete for good corporate CLEC citizens to insulate it against those who fail
2 to pay.

3 **Q. ARE THERE YET OTHER EXPENSES THAT SHOULD NOT BE**
4 **ASSIGNED TO CLECS?**

5 A. Yes; the final three I'd like to discuss are planning expenses; research and
6 development expenses; and general administration expenses.

7 **Q. WHY DO YOU REJECT THE ASSIGNMENT OF PLANNING EXPENSES**
8 **TO LOCAL INTERCONNECTION AND UNBUNDLED NETWORK**
9 **ELEMENTS?**

10 A. Primarily because planning expense is incurred for retail, not wholesale, services.
11 Part 32 of the FCC's rules (the USOA) defines Planning Expenses as follows:

12 32.6712 Planning -- This account shall include costs incurred in
13 developing and evaluating long-term courses of action for the
14 future operations of the company. This includes performing
15 corporate organization and integrated long-range planning,
16 including management studies, options and contingency plans, and
17 economic strategic analysis.[44]

18 Again, planning expenses pertain to retail services provided over the public
19 switched network and not to interconnection and unbundled network elements.
20 Therefore, planning expenses should not be components of charges assessed to
21 CLECs for interconnection and unbundled network elements.

22 ILECs engage in planning activity relative to products and services that they do
23 provide in competition with CLECs at the retail level, but such analyses are not

[44] 47 C.F.R. § 32.6712.

and, indeed, should not be conducted by the Company for products that it makes available to competitors. The CLECs themselves will develop their own network plans from their own perspective on the retail market. In addition to the costs of their own network planning, the CLECs should not also be burdened with having to pay a share of the costs of the Qwest's planning activities, especially when the results of the Company's efforts would accrue to the CLECs' detriment.

Q. WHY DO YOU REJECT QWEST'S EFFORTS TO ASSIGN RESEARCH AND DEVELOPMENT EXPENSES?

A. On need look no further that the USOA definition of Research and Development expenses to see that they pertain only to the development of new or improved knowledge, products, or processes. In no case do the charges at issue in this case pertain to any item of equipment, configuration of equipment, operation system or administration system that involves research and development of the kind described in the USOA for Account No. 6727. Part 32 of the FCC's rules (the USOA) defines research and development expenses as follows:

> 32.6727 Research and Development -- (a) This account shall include costs incurred in making planned search or critical investigation aimed at discovery of new knowledge. It also includes translating research findings into a plan or design for a new product or process or for a significant improvement in an existing product or process, whether intended for sale or use. (b) This excludes making routine alterations to existing products, processes, and other ongoing operations even though those alterations may represent improvements.[45]

[45] 47 C.F.R. § 32.6727.

All charges at issue in this case stem from the deployment of existing equipment, existing network configurations, and existing operation and administration systems that represent proven technology that is currently in place and functioning in the Company's existing network. Accordingly, there is no reason to burden local interconnection and unbundled network elements with any amount of responsibility for research and development costs.

Q. FINALLY, WHY DO YOU REJECT QWEST'S ASSIGNMENT OF OTHER GENERAL AND ADMINISTRATIVE EXPENSES TO LOCAL INTERCONNECTION AND UNBUNDLED NETWORK ELEMENTS?

A. These are strictly expenses that Qwest incurs for its own benefit. Part 32 of the FCC's rules (the USOA) defines Other General and Administrative Expenses as follows:

> 32.6728 Other General and Administrative -- This account shall include costs incurred in performing general administrative activities not directly charged to the user, and not provided for in other accounts. This includes provisional general reference libraries, food services (e.g., cafeterias, lunch rooms and vending facilities), archives, general security investigative services, operating official private branch exchanges in the conduct of the business, and telecommunications and mail services. Also included are payments in settlement of accident and damage claims, insurance premiums for protection against loss and damages, direct benefits payments to or on behalf of retired and separated employees, accident and sickness disability payments, supplemental payments to employees while in government service, death payments, and other miscellaneous costs of a corporate nature. This account excludes the cost of office services, which are to be included in the accounts appropriate for the activities supported.[46]

[46] 47 C.F.R. § 32.6728.

1 Other General and Administrative expenses are a classic example of the expenses
2 to which the FCC refers at §§ 51.505 and 51.609 of its rules. These are expenses
3 that would not change whether or not Qwest offered CLECs access to local
4 interconnection or unbundled network elements. Accordingly, no amount of
5 Other General and Administrative expenses should be assigned/allocated to the
6 cost of local interconnection and unbundled network elements.

7 **3. Investment Issues**

8 **a. General**

9 **Q. WE HAVE JUST DISCUSSED THE FLAWS IN QWEST'S ANALYSIS**
10 **ASSOCIATED WITH COST AND EXPENSE FACTORS. YOU**
11 **MENTIONED THAT YOU ALSO HAVE CONCERNS ABOUT QWEST'S**
12 **INVESTMENT ANALYSIS. PLEASE DESCRIBE WHAT THOSE**
13 **CONCERNS ARE.**

14 A. I am concerned that Qwest's proprietary computer models do not allow the
15 Commission or anyone else to truly examine the validity of the incremental
16 investment costs they generate. That is a fundamental problem that impacts all
17 the incremental investment costs, and I will describe that by way of example
18 using the material investment costs.

19 **Q. PLEASE EXPLAIN YOUR UNDERSTANDING OF HOW QWEST**
20 **DEVELOPS ITS PROPOSED INCREMENTAL INVESTMENT COSTS.**

21 A. Mathematically, Qwest multiplies the cost factors by the incremental investment
22 costs to determine its interconnection and UNE costs. To determine the

1 incremental costs Qwest uses a series of proprietary computer models to develop
2 its proposals for incremental investment costs. Each model is designed to reflect
3 the characteristic of the various elements for which investment costs are to be
4 computed. For example, the Qwest model for DS1 capable loops considers six
5 different DS1 loop architectures (i.e., circuit designs) and it reflects the cost of
6 material, labor and other resources that Qwest believes are necessary to make
7 DS1 capable loops available to CLECs; a completely different model, based on a
8 single DS3 loop architecture, is used to develop Qwest's version of the cost to
9 make DS3 capable loops available to CLECs; and so on.

10 While each model is quite different from the others in terms of their individual
11 constructions, all models are common in that they assume incremental material
12 costs and "Fill Factors" and then apply "Total Investment Factors" to the
13 "grossed-up"[47] investment costs to compute the amount of investment to which
14 the cost factors are applied to compute monthly costs. Thus, the key elements in
15 the process of defining incremental investment costs are: (1) determine
16 equipment material costs: (2) apply fill factors; and (3) apply loadings. The
17 process of computing the monthly costs of interconnection and unbundled
18 network elements is carried out in the Qwest proprietary software program known
19 as the Wholesale Cost Model (formerly known as WINPC3).

[47] The phrase "grossed-up" is meant to describe the investment model process, discussed later, that loads material investment costs for spare and otherwise unused capacity.

1 **Q. WITH THAT UNDERSTANDING, PLEASE DESCRIBE YOUR**
2 **CONCERNS USING THE MATERIAL INVESTMENT EXAMPLE YOU**
3 **MENTIONED EARLIER.**
4 A. According to Ms. Million, Qwest used "current market prices to determine the
5 costs of equipment and materials" used in its cost studies.[48] Without more, Qwest
6 expects the Commission and everyone else to take it on faith that incremental
7 material price estimates are actual and appropriate current market prices.
8 **Q. WERE YOU ABLE TO VERIFY THE ACCURACY OF QWEST'S**
9 **MATERIAL PRICE ESTIMATES?**
10 A. No. Through AT&T, I requested copies of the source documents behind the
11 material price estimates used by Qwest. In response to all AT&T requests for
12 copies of the vendor material price information, Qwest simply stated that it would
13 investigate whether the requested documents would be released by the respective
14 vendors. As this written testimony is being prepared, Qwest has not responded to
15 AT&T's requests by providing actual copies of the vendor material price
16 documents that Qwest claims to be the source of the material prices used in its
17 cost studies.
18 **Q. DID YOU ATTEMPT TO VERIFY QWEST'S MATERIAL PRICE**
19 **ESTIMATES BY ANY OTHER MEANS?**
20 A. Yes. I did attempt to secure other information from Qwest that could have been
21 used to verify the Company's figures. Specifically, through AT&T, I requested

[48] Direct Testimony of Teresa K. Million, page 7, lines 1, 2.

1 copies of any equipment price documents used internally by Qwest to develop
2 service prices and/or planning studies. Also through AT&T, I requested copies of
3 pages from Qwest's Arizona Continuing Property Records ("CPR") that would
4 have reported material prices as they were actually charged to Qwest's Arizona
5 books of account; those same records would also have aided in testing the
6 accuracy of Qwest's material loadings. In response to both types of requests,
7 however, Qwest refused to provide the documents sought by AT&T, claiming that
8 they were not used in the development of the cost studies that it presented in the
9 instant case.

10 **Q. DOES THE LACK OF SUPPORTING INFORMATION SUCH AS YOU**
11 **HAVE REQUESTED FROM QWEST CALL INTO QUESTION THE**
12 **VERACITY OF THE MATERIAL COST ESTIMATES USED BY**
13 **QWEST?**

14 A. Yes, although I would prefer to render an opinion based upon examining the
15 requested material which should provide ample evidence of whether Qwest's
16 estimates are appropriate. In the event that Qwest does provide the information
17 that I need, I would ask the Commission to allow me to file supplemental direct
18 testimony that presents the results of my review and analysis of the information.
19 In the meantime, my preliminary findings as to the incremental costs of specific
20 interconnection and unbundled network elements are based upon Qwest's
21 unverifiable material costs. I have made no adjustment to Qwest's alleged
22 equipment and material prices.

1 **b. Fill Factors**

2 **Q. MR. WEISS, EARLIER YOU USED THE TERM "FILL FACTOR;" I'VE**
3 **ALSO HEARD THAT EXPRESSED AS "UTILIZATION FACTOR."**
4 **WHAT DOES "UTILIZATION (OR FILL) FACTOR" MEAN?**

5 A. "Utilization" or "Fill" is the term used in the telecommunications industry to
6 convey the degree to which the capacity of installed plant is actually used in
7 providing service.

8 **Q. WOULD YOU PROVIDE AN EXAMPLE OF TELEPHONE PLANT**
9 **UTILIZATION OR "FILL FACTOR"?**

10 A. Yes. Consider an optical carrier system with a digital bandwidth of 155 Mbps
11 (megabits per second), a/k/a OC3 multiplexing. The maximum total capacity of
12 the OC3 multiplex scheme is 2,016 voice grade equivalent circuits channels. If
13 1,700 voice grade channels of the maximum channels are assigned and carrying
14 traffic, the system is said to be operating at 84.33% of full capacity (1,700 divided
15 by 2,016) -- a utilization or fill factor of 0.8344.

16 **Q. HOW ARE FILL FACTORS USED IN COST STUDIES?**

17 A. Fill factors are used to "gross-up" plant costs by spreading the cost of unused
18 capacity in a system over the used capacity. For example, if a complete OC3
19 system, with the capacity to handle 2,016 voice grade equivalent circuits, is found
20 to cost, say, $40,000, the cost per unit of available capacity is said to be $20.00
21 per unit at 100% fill ($40,000 divided by 2,016). If the system actually serves
22 only 1,700 voice grade equivalent circuits, then the unit cost of the system is

$24.00 at 84.33% fill ($20.00 divided by 0.8433). The $24.00 cost per unit is said to be "grossed-up" to recognize fill.

Q. WHY WOULDN'T TELECOMMUNICATIONS PLANT BE USED TO FULL CAPACITY?

A. Generally, the capacity of the telephone network is provided to a level that recognizes three principal elements: (1) projected demand for circuits to actually carry intelligence, (2) allowance for uncertainty in demand forecasts, and (3) full plant capacity is not always available due to equipment failures or network problems. The capacity of the network is designed to recognize these elements; thus, the network always contains some amount of spare capacity. The cost of that spare capacity is loaded into the incremental costs of the products and services offered by the network through application of the fill factor as I described its use earlier.

Q. DO QWEST'S COST STUDIES INCORPORATE FILL FACTORS AND THEREBY RECOGNIZE THAT THE NETWORK MUST BE EQUIPPED WITH CAPACITY IN EXCESS OF DEMAND?

A. Yes. However, my review of Qwest's proposed utilization (fill) factors shows them to be very greatly understated. For example, Qwest's cost studies for DS1 capable loops reflect fill factors on the order of [redacted] for DS1 circuits derived from OC3 multiplexing.[49] That is, Qwest's cost analysis for a DS1 capable loop assumes that only [redacted] DS1s out of a total capacity of 84 DS1s can be utilized from

[49] OC3 has the capacity to offer bandwidth equivalent to 84 DS1s (each DS1 has the bandwidth equivalent to 24 voice-grade equivalent circuits).

1 the full bandwidth of an OC3 system. Similar fill factors apply throughout
2 Qwest's cost analyses. And as my example demonstrated, assuming lower
3 utilization gives rise to higher costs per unit.

4 **Q. WHAT IS YOUR UNDERSTANDING OF QWEST'S REASONING IN**
5 **BASING ITS INCREMENTAL COSTS ON SUCH LOW FILL FACTORS?**

6 A. Judging from the Company's workpapers, it appears that Qwest's analysts assume
7 that costs are to be developed on the basis of their internal estimates of fill levels
8 as they exist today with respect to individual serving locations. In this regard,
9 Qwest cost analyses are definitely at odds with the FCC rules.

10 **Q. SPECIFICALLY, TO WHICH FCC RULE DO YOU REFER?**

11 A. 47 C.F.R. § 51.505(b) requires that forward-looking costs per unit of an element
12 equals the forward-looking economic cost of the element divided by a reasonable
13 projection of the sum of the total number of units of the element that the ILEC is
14 likely to provide to requesting carriers <u>and</u> the number of units of the element that
15 the ILEC is likely to use in offering its own services. The key concept here is that
16 the costs of interconnection and UNEs must be determined using a reasonable
17 projection of the total number of units of an element that the ILEC produces,
18 including the units that the ILEC uses for its own purposes.

19 **Q. EMPLOYING A "REASONABLE PROJECTION," WHAT FILL FACTOR**
20 **SHOULD APPLY?**

21 A. I recommend that, in most cases, a forward-looking fill factor of 0.85 should
22 apply to the plant used to produce interconnection and UNEs in this case. In my

1 separate direct testimony addressing the Qwest Loop Mod 2 Model, I discuss
2 situations in which a lower fill factor should apply.

3 **Q. PLEASE EXPLAIN WHY YOU BELIEVE AN 85 % UTILIZATION**
4 **(FILL) FACTOR IS APPROPRIATE.**

5 A. My recommendation of 85% utilization (fill) reflects several factors. First, aside
6 from consideration of the future market, today's market for telecommunications
7 service demands deployment of optical/digital facilities. Thus, even those
8 services that are currently provided over metallic plant are migrating toward
9 optical digital technology. For example, the demand for Asymmetric Digital
10 Subscriber Line ("ADSL") service in the residential market is growing strongly
11 and pressure is building in that same market for deployment of high-bit-rate
12 Digital Subscriber Line ("HDSL") service. This same residential market
13 phenomenon is reflected in the business market but in the business market, the
14 phenomenon is more pronounced. In short, demand for digital service at the most
15 fundamental levels of the network is fueling demand for digital service at ever
16 higher levels in the digital hierarchy.

17 Second, one need look no further than Qwest's own cost studies in this case to see
18 that optical digital technology exhibits impressive economies of scale. Given this
19 fact, it is economically rational for the service providers (both Qwest and the
20 CLECs) to deploy lower cost current optical/digital technology. In fact, some
21 ILECs have made the conscious decision to deploy digital systems exclusively
22 throughout their networks, including that portion of the network known as the
23 loop or network access line. These ILECs even have specific objectives to

1 migrate existing metallic facilities to digital. In short, because of end-user
2 demand for and economies of scale exhibited by optical/digital technology, the
3 industry is moving rapidly and with conviction to optical/digital technology.

4 Coupled with this demand phenomenon and, in large part, because of it,
5 manufacturers of optical/digital equipment have designed their systems in a
6 modular fashion. They have also developed highly efficient means of shortening
7 the time interval between the event of a customer's order and delivery of the
8 ordered equipment. This means that ILEC and CLEC consumers of this
9 optical/digital technology have greater flexibility in their plant provisioning
10 processes. Qwest's own cost analyses reflect its decisions to move more
11 aggressively toward optical/digital technology.

12 In short, the time interval between when the need for new equipment is first
13 observed and the time when that plant is available for service is greatly shorter
14 than it has been in the past. As a result, both ILEC and CLEC consumers of this
15 modern equipment can engage in "Just-In-Time" ("JIT") plant provisioning
16 practices.[50] JIT practices enable ILEC and CLEC consumers to delay bringing
17 new optical/digital plant capacity on line until existing capacity is nearly 100
18 percent exhausted -- that is, until the fill factor on existing plant approaches 100
19 percent. So as to give Qwest the maximum benefit of any doubt with regard to its
20 own plant provisioning practices and their effect on fill factor, I do not propose
21 that a purely JIT-based objective fill factor be used to determine the incremental

[50] JIT provisioning minimizes capital carrying costs, transportation costs and equipment storage costs.

cost of optical/digital facilities in this case. Instead, I recommend use of the 85 percent reasonably achievable factor described earlier.

Q. WHY IS A PLANT UTILIZATION FACTOR OF 0.85 APPROPRIATE FOR USE IN FORWARD-LOOKING COST STUDIES THAT REFLECT THE DEPLOYMENT OF OPTICAL/DIGITAL TECHNOLOGY.

A. My recommendation of 0.85 reflects the average utilization of optical/digital plant based on: (1) the demand for optical/digital circuits; (2) plant capacity reinforcement trigger levels; and (3) manufacturers' ordering, delivery and installation intervals. In any individual case of optical/digital plant deployments, depending on that portion of the demand curve at which utilization is reviewed, one may observe lower utilization ratios and in other individual cases, higher utilization rates. On average, however, a utilization rate of 0.85 will apply to optical/digital plant deployments generally. I have prepared **Exhibit THW-4** to help explain why a utilization factor of 0.85 should apply to optical/digital plant.

Q. PLEASE EXPLAIN WHAT EXHIBIT THW-4 SHOWS.

A. Exhibit THW-4 is in three parts. At the top of the exhibit is a graph that depicts normal growth in demand for DS1 circuits plotted along with the OC3 capacity additions (i.e., groups of 84 DS1 units) that would be necessary to accommodate the demand growth. In the center of the exhibit, a table summarizes three items from the graph; they are: (1) the capacity and demand on the system at the beginning and end of each of the six periods; (2) the system utilization rates at the beginning and end of each period; and (3) the average utilization rates for each

period. A graph at the bottom one-third of the page shows the changes in utilization factors for the whole system over time.

The broad solid line on the graph at the top of Exhibit THW-4 shows the progression of demand for DS1 circuits on an OC3 based multiplex system. The graph shows DS1 circuit demand growing from a level of zero circuits to 559 circuits over time. The narrower line on that same graph shows the progression of capacity additions that are designed to meet the demand growth, given that capacity is planned and added to the system in sufficient time for the additions to be in service when demand reaches 95 % of existing capacity.

The graph shows that demand equals zero DS1 circuits at the origin when the capacity of the system equals 168 DS1 circuits (2 ea. OC3s); at this initial point, the system utilization factor is zero (table, row 4, column (B)). As the demand approaches 95% of the initial existing capacity of 168 DS1 circuits (table, row 5, column (B)), a new addition of 84 DS1 circuits is placed in service so as to bring the total available amount of DS1 capacity to 252 circuits; at that point, the utilization factor for the system drops from 95.24 percent (table, row 5, column (B)) to 63.49 % (table, row 4, column (C)). Demand growth continues until demand reaches 94.84 % of existing capacity (table, row 5, column (C)), when the addition of 84 more DS1 units causes system utilization to drop to 71.13% (table, row 4, column (D)). As demand growth continues and as capacity is added, the system utilization factor changes as shown at rows 4 and 5 of the table under columns (D) through (G).

1 **Q. WHAT DOES LINE 6 ON THE TABLE IN EXHIBIT THW-4 SHOW?**

2 A. Line 6 in the table on Exhibit THW-4 shows the average system utilization rate
3 for each period depicted in the example. The average utilization rate obviously
4 changes with time but it is always increasing and it approaches 85 percent within
5 two capacity addition cycles. Average utilization actually exceeds 85 percent
6 during the period in which the third capacity addition is consumed by increasing
7 demand (table, row 6, column (E)).

8 The graph at the bottom of Exhibit THW-4 depicts the instantaneous utilization
9 rates for the system as demand grows. Note from this graph that the utilization
10 rates drop significantly when new capacity is added but that each drop in
11 instantaneous utilization rate is smaller than the last one, with instantaneous
12 utilization tending to settle within a range of from 0.80 to 0.95 and at an average
13 somewhat above 0.88 (table, row 6, column (G)). My use of the 0.85 percent
14 average utilization rate for optical/digital systems is based upon this example
15 shown at Exhibit THW-4.

16 **Q. MR. WEISS, THE ANALYSIS YOU PRESENT IN EXHIBIT THW-4,**
17 **SEEMS TO INDICATE THAT UTILIZATION RATES RUN AS LOW AS**
18 **47 % IN THE EARLY GROWTH PERIODS. DOESN'T THAT SUPPORT**
19 **LOWER AVERAGE UTILIZATION RATES THAN THE 85 % THAT**
20 **YOU HAVE PROPOSED?**

21 A. No. First, the analysis depicted at Exhibit THW-4 begins with the assumption
22 that two OC3s (168 DS1s) are installed initially on the system when the demand

for DS1s is zero. In fact, only one OC3 (84 DS1s) could have been installed to meet the initial demand. That would have resulted in a higher utilization factor in the initial period and, thereby, increase the overall average utilization. It also would have shortened the period between the initial installation and the time when the overall utilization factor tends to stabilize in the 80 to 95% range. In short, the assumption that two OC3s are installed initially biases the analysis toward lower, not higher, overall average utilization rates. Given the rate of initial demand growth depicted on Exhibit THW-4, it would be prudent to install the capacity of two OC3s as opposed to only one, and that prudent action is reflected in the capacity growth figures used in the exhibit.

More important, however, is the fact that the analysis shown at Exhibit THW-4 is for only one system of many such systems that exist in an ILEC's network where optical/digital elements are used to meet the combined demands generated from both CLECs' and Qwest's own retail market.[51] Some of the systems are in the early stages of their development, exhibiting relatively low utilization rates, while others are well into maturity exhibiting utilization rates at or near 95%. As the graph at the bottom of Exhibit THW-4 shows, even a system in early stages of development approaches the 80-90% utilization range in short order. Thus, most optical/digital systems on an ILEC's network would exhibit utilization ratios in the 80-95% range and not the lower utilization rates that characterize totally new installations.

[51] As required by 47 C.F.R. § 51.505(b).

1 **c. Material Cost Loadings**

2 **Q. MR. WEISS, WHAT ARE MATERIAL COST LOADINGS?**

3 A. Material cost loadings are the means by which the analyst recognizes in the costs
4 of products and services certain non-material costs that are necessary to convert
5 material (equipment) items into products and services. Examples of material
6 loadings include installation labor and sales taxes

7 **Q. DO QWEST'S COST ESTIMATES INCLUDE LOADINGS?**

8 A. Yes, they do. Qwest's cost analyses reflect material loadings for a wide range of
9 non-material costs such as vendor labor, telephone company labor, testing, sales
10 taxes, power equipment, warehousing, transportation, and interest during
11 construction.

12 **Q. HOW ARE THESE MATERIAL LOADINGS REFLECTED IN QWEST'S**
13 **COST ANALYSES?**

14 A. Qwest has developed a basic mathematical expression that combines the material
15 loading elements described above into a set of "Total Investment Factors" or
16 "TIFs," which apply to material costs for hardwired central office equipment and
17 for plug-in equipment. Additionally, Qwest's TIF factors are differentiated
18 between equipment that requires warehousing before installation and equipment
19 that does not require warehousing and, within each of those categories, equipment
20 that requires central office power and that which does not. The principal
21 optical/digital TIF factors employed by Qwest are shown in the following table:

Table No. 2
Qwest Proposed Arizona TIF Factors[52]
Optical/Digital Equipment
[PROPRIETARY]

Ln. No.	Location (a)	Architecture (b)	Equipment (c)	
1	Central Office	SONET	Hardwire	[redacted]
2			Plug-in	
3		Digital CCT	Hardwire	
4			Plug-in	
5	Premises	SONET	Hardwire	
6			Plug-in	
7		Digital CCT	Hardwire	
8			Plug-in	

Q. HOW ARE THESE TIF FACTORS USED IN QWEST'S COST ANALYSES?

A. Qwest multiplies these factors by the investment cost in material to express incremental material investment costs allegedly as though they would appear in the plant asset accounts for Qwest's Arizona operations. For example, if the material cost of hardwire digital circuit equipment located on the customer's premises was, say, $1,000.00 per unit, then, according to Qwest, that unit would be shown in the Company's Arizona plant asset accounts at the installed cost of [redacted] from Column (d), line 7 in Table No. 2), an amount which includes approximately $128.90 (i.e., $1,000.00 times the difference between [redacted] shown at Column (e), line 7 on Table No. 2) to account for an allocation of warehouse space investment to the material cost of the equipment unit. From this description of the Qwest's TIFs, it

[52] Qwest CD provided with the Direct Testimony of Teresa K. Million, Directory designated "Phase II Models\ NAC models," file designated "DS1V0101ZONES CapFeederLoop.xls," worksheet designated "SONET FIBER MUX," columns M and N.

can be seen that Qwest's TIF factors can operate to increase substantially the incremental material investment in plant -- by over 100 percent in some cases.

Q. HAVE YOU BEEN ABLE TO ESTIMATE THE MAGNITUDE OF THE VARIOUS ELEMENTS OF THE TIF FACTOR?

A. Yes. The method used by Qwest to develop its TIF factors is very complex, embodying a lengthy mathematical expression and a series of calculations from which embedded cost information is extracted from the Qwest's system-wide and Arizona-specific books of accounts. However, in Table No. 3, which follows below, I show the general magnitude of each TIF component's contribution to Qwest's TIF for hardwired and plug-in digital circuit equipment.

Table No. 3
Selected Qwest Total Investment Factors (TIFs),
Digital Circuit Equipment, by Component[53]
[PROPRIETARY]

TIF Component	[redacted]
Material	
Vendor Labor	
Telephone Co. Labor	
Testing	
Sales Tax	
Power	
Warehousing	
Transportation	
IDC	
TOTALS	

Q. WHAT DOES THE INFORMATION IN TABLE NO. 3 DEMONSTRATE?

A. After having broken Qwest's TIF factors into their component parts, it becomes clear that certain components are improperly applied by Qwest or, if they are

[53] Qwest **PROPRIETARY** Response to AT&T 1-15.

1 properly reflected in the factor, they are severely overstated relative to my own
2 personal experience in the industry.

3 Qwest's TIF factors erroneously include an element that assigns an allowance for
4 funds used during construction, AFUDC, to each and every unit of material
5 investment involved in Qwest's cost studies. The FCC's USOA does not require
6 accrual of AFUDC on every investment involved in construction projects.
7 Specifically 47 C.F.R. § 32.2003, which defines total plant under construction
8 ("TPUC"), allows carriers an option in accounting for plant construction projects.
9 If a construction project is estimated to involve $100,000 or less in total
10 construction expenditures <u>or</u> if the project is estimated to be complete within two
11 months after construction commences, then charges may be made directly to the
12 Telephone Plant In Service ("TPIS") accounts and, thereby avoid the accrual of
13 AFUDC. In my experience, few, if any, projects of the type that would involve
14 the plant elements at issue in this case would require that charges be made to
15 TPUC prior to transfer to TPIS. Accordingly, Qwest's TIF factors should be
16 adjusted to remove the AFUDC component.

17 The "Warehouse" component of Qwest's TIF factors is also unnecessary given
18 the FCC's requirement that costs of interconnection and unbundled network
19 elements be based on a forward-looking approach. As I noted earlier in
20 connection with my discussion of fill factors, modern markets require that
21 unnecessary costs be avoided by both ILECs and CLECs and that avoidance
22 includes unnecessary activity in the construction process. In light of the modern,
23 forward-looking JIT means of equipment ordering and delivery, it is not necessary

for Qwest to "warehouse" much of the equipment that it uses to deliver local interconnection and unbundled network elements to CLECs or to itself. Accordingly, no warehousing component should be reflected in Qwest's TIF factors.

At about [redacted] of equipment material costs, the "Transportation" component[54] of Qwest's TIF factors is certainly high. The only support provided by Qwest for the transportation component of its TIFs is the Company's Annual Cost Factor Book,[55] a document which was provided by Qwest to AT&T only in response to an AT&T data request. In any event, under the forward-looking JIT means of equipment ordering and delivery, a transportation component, as Qwest defines it, is not necessary and should be eliminated from the TIF factors.

By far the most surprising elements of TIF are the vendor and telco labor components. At [redacted] of material cost, this component of TIF is way out of line with my direct experience with installation labor for equipment used to provide local interconnection and unbundled network elements. For such equipment, from telephone company CPR records I have directly observed, current ratios of installation labor costs to direct material costs range from a low of 0.10 to a high of 0.25. Thus, it is very difficult for me to understand how Qwest can consume installation labor at the rate of [redacted] of its direct material costs. I strongly

[54] The transportation component of the TIF covers the costs of handling, storing and transporting capital equipment within the Qwest system.
[55] A PROPRIETARY copy of Qwest's "Annual Cost Factor Book" was provided by Qwest in response to ATT 2-57. Tab No. 6 states the "Provisioning Factor" (which includes the transportation function) but does not explain or show its development.

1 recommend that the Commission limit the installation labor component of
2 Qwest's TIF factors with respect to the products at issue in this case to no more
3 than 20% of direct material costs.

4 Finally, to the best of my knowledge, Arizona does NOT assess sales taxes.
5 Accordingly, the Total Investment factors used by Qwest in its Arizona cost
6 studies should not include a sales tax component.

7 **Q. IF QWEST'S TIF FACTORS ARE ADJUSTED AS YOU RECOMMEND,**
8 **THEN WHAT RANGE OF TIF FACTORS SHOULD APPLY IN THIS**
9 **CASE?**

10 A. The range of TIF factors that result from my recommendations is from 1.14 to
11 1.34 for plug-in and hardwired equipment, respectively. To simplify the cost
12 study process, and to give Qwest the benefit of any doubt, I recommend that TIFs
13 of 1.34 and 1.14 be used for hardwire and plug-in plant, respectively, in the cost
14 studies applicable to all local interconnection and unbundled network elements in
15 this case.

16 **VI. SPECIFIC RECURRING COST ANALYSES**

17 **Q. HAVING DISCUSSED THE QWEST COST ANALYSIS GENERALLY,**
18 **WHICH QWEST'S RECURRING COST ANALYSES DID YOU**
19 **EVALUATE?**

20 A. As noted earlier, I conducted a detailed review of Qwest's studies for the
21 following local interconnection and unbundled network element proposals:

22 • DS1 Capable Loops;
23 • DS3 Capable Loops;

- Unbundled Dedicated Interoffice Transport; and
- Shared Transport.

Q. BEFORE WE DISCUSS THE SPECIFIC ELEMENTS, DO YOU HAVE ANY GENERAL OBSERVATIONS WITH RESPECT TO THE QWEST RECURRING COST ANALYSES?

A. Yes. Part of my work in fully evaluating these studies necessarily involves a review of Qwest's claimed cost of material used to provide the individual elements. To that end, through the discovery process, I sought information from Qwest that would have enabled me to determine whether its claimed material costs reflect the actual cost that it has paid most recently for its material. For example, I requested that Qwest provide copies of recent Continuing Property Record ("CPR") entries related to very specific plant elements for which costs are claimed in the Company's studies.[56] In every case, along with other rote legal objections, Qwest refused to provide the requested information on grounds that the requested information is not relevant since the requested documentation was not used in its own cost studies. The information sought is critical to examining the veracity of Qwest's alleged material costs regardless of whether Qwest employed that information in its own cost studies. Without this information the Commission cannot verify that Qwest's material costs are just and reasonable.

Q. IN LIGHT OF THE FACT THAT QWEST HAS FAILED TO PRODUCE RELEVANT INFORMATION, HAVE YOU ADJUSTED COSTS IN

[56] *See e.g.*, AT&T's Data Request No. 3-118 to Qwest addressing several specific items of plant for which CPR information is sought.

1 **RELATION TO YOUR RECOMMENDATION FOR THE RECURRING**
2 **COSTS OF THE SPECIFIC ELEMENTS YOU ANALYZED?**
3 A. As discussed above, throughout its cost studies, Qwest has used overstated cost
4 factors. In preparing my recommendations with respect to the costs of the
5 specific elements here, I have used the revised cost factors that appear in my
6 Exhibits THW-2 (capital cost factors) and Exhibit THW-3 (overall cost factors).
7 As I reviewed Qwest's studies, it became apparent that Qwest was basing its cost
8 findings on improper assumptions. I will discuss each of these instances as I
9 address the specific studies to which they apply.
10 **1. DS1 Capable Loops**
11 **Q. PLEASE DESCRIBE YOUR UNDERSTANDING OF THE APPROACH**
12 **THAT QWEST HAS TAKEN TO THE DEVELOPMENT OF ITS**
13 **CLAIMED INVESTMENT COSTS FOR DS1-CAPABLE LOOPS.**
14 A. Qwest has predicated its investment cost analysis on a weighted composite cost of
15 eight different loop architectures, two of which reflect access as being provided
16 exclusively over metallic cable (i.e., metallic cable from the main distributing
17 frame in the central office to the point of entry at end-user's premises). The
18 investment costs of the remaining six loop architectures are based on the more
19 current Fiber In The Loop ("FITL") architecture that incorporates optical/digital
20 multiplexing in the feeder portion of the loop and unshielded twisted metallic
21 cable pairs (UTP) for distribution. Qwest claims that its total weighted
22 investment cost per DS1-capable loops, including both the outside plant and the

central office and customer premises circuit equipment, is $[redacted] with the costs and weights of the various architectures as shown in the following table:

Table No. 4
Qwest-claimed DS1-capable Loop Investment Cost
[PRORPRIETARY]

Architecture	[redacted]
HDSL, Soneplex	
HDSL, Loop Extender	
SONET Fiber MUX	
SONET Fiber MUX (HDSL)	
SONET Fiber MUX/ORB	
Digital Pair Gain System	
Digital Pair Gain HDSL	
Asynchronous MUX	
TOTAL	

Having decided on the technologies to be reflected in its DS1-capable loop investment cost analyses, Qwest sets out to determine investment costs of single DS1-capable loops using each technology (see the column titled "Cost" in Table No. 4, above). This process involves a series of undertakings. First, Qwest identifies and defines its claimed OEM material cost of the common equipment and plug-in components employed to develop DS1-capable loops using each technology. The material costs are then broken down into the average incremental material costs for single DS1 units; for example, the material costs of individual OC3 add/drop multiplexers ("ADM") are broken down into DS1 increments by dividing the ADM material costs by 84 DS1s per OC3. Where appropriate, the incremental material costs are then adjusted to add the material costs of spare equipment units needed for maintenance purposes. Qwest then applies a utilization (or fill) factor to the incremental material costs in order to recognize what it deems to be the rate at which the common equipment capacity

1 involved in each architecture will be used to provide DS1-capable loops.[57] In
2 effect, application of the utilization factor assigns the full material cost of
3 common equipment to each DS1-capable loop. Finally, Qwest adjusts the
4 incremental material costs to account for the installation and other costs that are
5 necessary to add the equipment to its inventory of plant in service.[58] The product
6 of the process is a series of installed material investment cost results by
7 equipment component for each of the eight DS1-capable loop architectures
8 assumed by Qwest; the sums of the resulting investment costs, by equipment
9 component, are shown in Table No. 4 under the heading titled "Cost."

10 **Q. WHAT ARE YOUR FINDINGS WITH RESPECT TO QWEST'S**
11 **INVESTMENT COST OF DS1-CAPABLE LOOPS?**

12 A. I found that the assumed mix of DS1 capable loop architectures, reflected in
13 Qwest's investment cost analysis, is made up of Qwest's embedded mix (e.g.,
14 metallic and fiber feeder) of DS1 capable loops currently provisioned in Arizona.
15 I also found that Qwest has severely overstated the unit direct, in-plant investment
16 costs of UNEs by applying very low, unsubstantiated plant utilization rates and
17 very high Total In-plant Factors ("TIF"). For example, with respect to plant
18 utilization, Qwest assumes, without substantiation, that on average, only [redacted] DS1s
19 will be utilized out of the total capacity of 84 DS1s available from OC3

[57] For example, Qwest assumes that [redacted] of common ADM shelf equipment will be utilized in providing DS1-capable loops.
[58] Qwest uses a "Total Investment Factor" (TIF) to add installation and other costs to its incremental material investment costs. Known alternatively as "Total In-plant Factor," TIF is intended to recognize the costs of sales taxes on OEM purchases, telco engineering, and installation, etc.

multiplexing. That ratio represents an astoundingly low [redacted] ([redacted] divided by 84) utilization factor for DS1s derived from OC3s and, in effect, that assumption alone inflates the incremental direct DS1 capable loops by over [redacted]%. I have adjusted Qwest's proposed UNE plant utilization factors to better reflect forward-looking plant 85% utilization rates that would be experienced in a competitive market.

For TIF factors, Qwest inflates incremental direct material costs by as much as [redacted] times ([redacted] percent) to account for installation costs, sales taxes, etc. of certain optical/digital equipment (e.g., fiber distribution panels and digital signal cross connect frames). In effect, use of TIF factors at such levels as proposed by Qwest implies that the Company's cost simply to install digital electronic circuit equipment (exclusive of equipment costs) represents well over 100% of the direct material cost of the equipment alone. Therefore, I have adjusted Qwest's proposed incremental UNE investment costs to reflect the TIF factors that I discussed and explained earlier.

Q. HOW DID YOU DEVELOP YOUR RECOMMENDED INVESTMENTS WITH RESPECT TO DS1 CAPABLE LOOPS?

A. My recommendations are grounded in the same computer model that Qwest employed to develop its proposed incremental investments in DS1 capable loops (i.e., the DS1 Network Access Channel (NAC) model). I adjusted the investment loading factors to reflect my recommendations as described above. My findings for the investment in an average statewide DS1 capable loop as compared to those

advanced by Qwest for an average statewide DS1 capable loop are shown in Table No. 5, below:[59]

Table No. 5
DS1 Capable Loop Investment Comparison
Weighted Average Statewide Loop
[PROPRIETARY]

FRC	Description	[redacted]	Proposed Revised Investment	
			Category 1	Category 2
357C	CCT Digital	[redacted]	$ 217.15	0.00
257C	CCT Digital	[redacted]	1,538.07	0.00
1C	Poles	[redacted]	0.00	0.00
3C	Wire	[redacted]	0.00	0.00
4C	Conduit	[redacted]	193.51	0.00
5C	UG Metallic	[redacted]	85.96	0.00
35C	Buried Drop	[redacted]	0.00	0.00
42C	Aerial Drop	[redacted]	0.00	0.00
45C	Buried Met.	[redacted]	14.10	0.00
52C	Aerial Met	[redacted]	0.00	0.00
62C	Intrabldg.	[redacted]	0.00	0.00
85C	UG Fiber	[redacted]	48.92	0.00
845C	Buried Fiber	[redacted]	70.82	0.00
862C	Intrabldg.	[redacted]	1.02	0.00
	TOTALS	[redacted]	$2,169.55	$0.00

Q. HOW ARE YOUR PROPOSED INCREMENTAL DIRECT INVESTMENT COST RECOMMENDATIONS USED TO DEVELOP DS1-CAPABLE LOOP RATES?

A. My proposed incremental DS1-capable loop investments are input, by Field

[59] Table No. 5 is included here to show the relative impact of the proposed modifications to Qwest's investment analysis. Prices for DS1 capable Loops are actually developed for four zones and not on a statewide basis.

1 Reporting Code, to a spreadsheet I have prepared to emulate the function of
2 Qwest's Wholesale Cost Program ("WCP").[60] The spreadsheet coverts
3 incremental investments and cost factors to monthly costs in a substantially
4 simpler fashion than does the WCP and, equally important, it allows the reader to
5 observe directly how monthly costs are developed from incremental investment
6 amounts.

7 **Q SPECIFICALLY, WHAT ADJUSTMENTS DO YOU PROPOSE BE MADE**
8 **TO QWEST'S DS1-CAPABLE LOOP INVESTMENT COST ANALYSIS?**

9 A. I recommend that a forward-looking fill factor of 85% be used to compute the
10 cost of DS1 capable loops. Use of the 85 % utilization factor implies that 71
11 DS1s out of every 84 DS1s derived from OC3s will be used productively by
12 Qwest; this assumption compares to Qwest's assumption that only [redacted] DS1s of
13 every 84 DS1s derived from OC3 will be used productively.

14 Also as discussed earlier with respect to the TIF factor, I recommend that the cost
15 of DS1 capable loops be computed based on TIFs of 1.34 for hardwired
16 equipment and 1.14 for plug-in equipment.

17 **Q. HAVE YOU PREPARED AN EXHIBIT THAT SHOWS YOUR**
18 **RECOMMENDED PRICES FOR DS1 CAPABLE LOOPS BASED ON**
19 **YOUR FINDINGS AS DESCRIBED ABOVE?**

20 A. Yes. I prepared **Exhibit THW-5**. The Exhibit is in eight pages with two pages of

[60] The WCP is a very complex model designed to compute element costs, in a somewhat automated fashion, for all states in which Qwest operates.

computations pertaining to the cost of DS1 capable loops in each of the three zones (i.e., Zones 1 through 3), and the final two pages pertaining to the statewide average DS1 capable loop.

The monthly recurring cost of a statewide average DS1 capable loop is computed at pages 7 and 8 of Exhibit THW-5; the total cost is shown on page 2, on Line No. 85 under the column headed "TOTALS."[61] The incremental costs of the equipment used to provide DS1 capable loops is shown, by Field Reporting Code, at Line 1 on page 7;[62] the mathematical logic by which costs are computed is described for each cost factor in the column headed "Sources."

Q. PLEASE SUMMARIZE YOUR FINDINGS REGARDING THE MONTHLY RECURRING COSTS OF DS1 CAPABLE LOOPS.

A. At Table No. 6, I compare my recommended REVISED costs for DS1 capable loops from Exhibit THW-5 with the costs found by Qwest. On average, the costs that I find appropriate for DS1 capable loops in Arizona are approximately 56% lower than those proposed by Qwest. That is, relative to my findings, Qwest has overstated its cost of DS1 capable loops by over 100 percent.

Table No. 6
Monthly Recurring Costs - DS1 Capable Loops

DS1 Capable Loop	Qwest-proposed	Proposed Revised
Statewide Average	$92.18	$43.35
Zone 1	$89.89	$42.37
Zone 2	$90.46	$42.62
Zone 3	$100.30	$47.07

[61] Costs for other zones are computed on pages 3-10 as follows: pages 3-4, Zone 1; pages 5-6, Zone 2; and pages 7-8, Zone 3.
[62] The source of the Equipment Investment Costs shown on Line No. 1 is the Qwest DS1 NAC model that has been run using the engineering and economic factors described herein.

1 **2. DS3 Capable Loops**

2 **Q. LET'S TURN TO DS3 CAPABLE LOOPS, PLEASE DESCRIBE QWEST'S**

3 **CLAIMED INVESTMENT COSTS FOR DS3 CAPABLE LOOPS.**

4 A. Qwest's analysis of the cost of DS3 capable loops is based on a single multiplex

5 architecture -- back-to-back multiplexors at the serving wire center -- and optical

6 fiber optic facilities in three zones between the wire center and the customer's

7 premises. Qwest claims that its total weighted average investment cost per DS3

8 capable loop is [redacted], broken down by Field Reporting Code, as shown in

9 Table No. 7.

10 **Table No. 7**
11 **Qwest Proposed Material Investment - DS3 Capable Loops**
12 **Statewide Average**
13 **[PROPRIETARY]**

FRC	Description	[redacted]
357C	SWC Digital Crossconnect	
257C	Digital Circuit Equipment	
4C	Conduit	
85C	UG Fiber Cable	
845C	Buried Fiber Cable	
862C	Building Fiber	
	TOTAL	

14

15 **Q. WHAT ARE YOUR FINDINGS WITH RESPECT TO QWEST'S**

16 **APPROACH TO COMPUTING ITS INVESTMENT COST OF DS3**

17 **CAPABLE LOOPS?**

18 A. First, I remain concerned that Qwest is unwilling to respond to requests that seek

19 information regarding its cost of materials. Because of Qwest's refusal to

20 respond, at this time, I am unable to evaluate the accuracy of Qwest's claims with

21 respect to the cost of material. Accordingly, my analysis of the recurring costs of

Qwest's DS3 capable loops is grounded in Qwest's own estimates of its material costs. If Qwest does respond to material cost related information requests, then I would like the opportunity to file supplemental testimony to report my findings concerning Qwest's material cost estimates.

Qwest uses its DS3 NAC model to compute its proposed investment costs for DS3 capable loops. As with its other investment cost models, for DS3 capable loops Qwest has overstated its investment cost by using unreasonably low fill factors and severely overstated TIF factors. My analysis of the investment costs of Qwest's DS3 capable loops is grounded in the same DS3 NAC model employed by Qwest but my investment cost findings are based on my positions, addressed earlier, regarding fill and TIF factors.

Adjusting Qwest's material costs to reflect reasonable fill factors and TIFs yields incremental statewide average DS3 capable loop investment, by FRC as shown in Table No. 8.

Table No. 8
Revised Material Investment - DS3 Capable Loops
Statewide Average

FRC	Description	Amount
357C	SWC Digital Cross-connect	$1,560.51
257C	Digital Circuit Equipment	17,111.02
4C	Conduit	2,742.44
85C	UG Fiber Cable	1,910.14
845C	Buried Fiber Cable	3,030.05
862C	Building Fiber	52.91
	TOTAL	$26,407.07

Comparing the DS3 capable loop investment results reported out of Table No. 8

with those computed by Qwest from Table No. 7 reveals that Qwest has overstated its DS3 capable loop investment costs by approximately $17,000.00 or 64%.

Q. HOW ARE YOUR PROPOSED INCREMENTAL DIRECT INVESTMENT COST RECOMMENDATIONS USED TO DEVELOP DS3 CAPABLE LOOP RATES?

A. My proposed incremental DS3 capable loop investments are input, by Field Reporting Code, to the same spreadsheet model that I used to compute DS1 capable loop costs. The spreadsheets that apply to DS3 capable loops are contained in **Exhibit THW-6**, in eight (8) pages, with two (2) pages of computations pertaining to the cost of DS3 capable loops in each of the three (3) zones (i.e., Zones 1 through 3), and the final two (2) pages pertaining to the statewide average DS3 capable loop.

The monthly recurring cost of DS3 capable loops in Zone 1 is computed at pages 1 and 2 of Exhibit THW-6; the total cost is shown on page 2, on Line No. 85 under the column headed "TOTALS." The incremental costs of the equipment used to provide DS3 capable loops is shown, by Field Reporting Code, at Line 1 on page 1; the mathematical logic by which costs are computed is described for each cost factor in the column headed "Sources."

Q. PLEASE SUMMARIZE YOUR FINDINGS REGARDING THE MONTHLY RECURRING COSTS OF DS3 CAPABLE LOOPS.

A. At Table No. 9, I compare my recommended REVISED costs for DS3 capable

loops from Exhibit THW-6 with the costs found by Qwest. On average, the costs that I find appropriate for DS3 capable loops in Arizona are approximately 52 percent lower than those proposed by Qwest. That is, relative to my findings, Qwest has overstated its cost to provide DS3 capable loops by over 94 percent.

Table No. 9
Monthly Recurring Costs - DS3 Capable Loops

DS3 Capable Loop	Qwest-Proposed	REVISED
Statewide Average	$1,006.64	$516.73
Zone 1	$954.79	$479.23
Zone 2	$967.83	$490.19
Zone 3	$1,189.60	$648.11

3. Unbundled Direct Interoffice Transport ("UDIT")

Q. MR. WEISS, PLEASE EXPLAIN YOUR UNDERSTANDING OF UNBUNDLED DEDICATED INTEROFFICE TRANSPORT.

A. Unbundled Dedicated Interoffice Transport ("UDIT") is a transmission path between Qwest end offices, serving wire centers or tandem switches within the same Local Access and Transport Area ("LATA") in Arizona. A UDIT can also be used to provide a path between one CLEC in one Qwest wire center and a different CLEC in another Qwest wire center. UDIT is a distance-sensitive, flat rate, bandwidth specific transmission path designed to specific digital transport bandwidths in each Qwest wire center. UDIT is available in bandwidths ranging from DSO (64 Kbps) through OC192 (10 Gbps).

Q. PLEASE BRIEFLY EXPLAIN YOUR UNDERSTANDING OF QWEST'S APPROACH TO THE DEVELOPMENT OF ITS COST TO PROVIDE

THE UNBUNDLED DEDICATED INTEROFFICE TRANSPORT ELEMENT.

A. Qwest develops its proposed incremental investment cost for the UDIT elements with the aid of a computer model that it has designated as Transport Model Version 4 ("TM.V4"). TM.V4 develops fixed and variable (per mile) incremental investments associated with the UDIT elements. Investments from TM.V4 are input to a spreadsheet that applies cost factors to the incremental investments to produce monthly recurring costs for fixed and variable components of the UDIT elements.

Q. HAVE YOU REVIEWED THE TM.V4 MODEL IN AN EFFORT TO DETERMINE IF IT ADEQUATELY REFLECTS THE NETWORK ARCHITECTURE GENERALLY ASSOCIATED WITH THE PROVISION OF INTEROFFICE TRANSPORT?

A. Yes. However, in this regard, my review of TM.V4 was focused only on those portions of the model pertaining to DS0, DS1, DS3, OC3 and OC12 interoffice transport.

I found the TM.V4 model to accurately reflect the network architectures (i.e., back-to-back multiplexors) and associated equipment (facilities) typically employed by ILECs to provide interoffice OC3 and OC12 transport capacity on the network.

Q. DID YOU OBSERVE ANY PROBLEMS WITH QWEST'S APPLICATION OF THE TM.V4 MODEL AS IT RELATES TO THE DETERMINATION OF FIXED AND VARIABLE COSTS OF INTEROFFICE TRANSPORT?

1 A. Yes. As with nearly every other model used by Qwest to estimate its costs to
2 produce local interconnection and unbundled network elements in this case, I
3 found that TM.V4 model input variables were not specified so as to produce
4 reasonable estimates of Qwest's forward-looking fixed or variable costs. In this
5 regard, as before, I refer to Qwest's assumptions for TIF and Fill factors. Again,
6 due to Qwest's failure to respond to discovery requests for current material cost
7 information, I was not able to draw any conclusions regarding the veracity of
8 Qwest's assumed material costs.

9 **Q. WERE YOU ABLE TO CORRECT QWEST'S INPUTS TO THE TM.V4**
10 **MODEL SO AS TO ALLOW THE MODEL TO BETTER ESTIMATE**
11 **QWEST'S INVESTMENT COST TO PRODUCE UDIT ELEMENTS?**

12 A. Yes. With regard to DS0, DS1, DS3, OC3 and OC 12 UDIT elements, I was able
13 to modify Qwest's TM.V4 input assumptions for TIFs and Fill factors to conform
14 to my earlier recommendations with respect to those input variables. I did not
15 modify the material price inputs to TM.V4.

16 I then applied the modified TM.V4 model results to my version of the WCP to
17 determine monthly recurring fixed and variable costs for Qwest to produce the
18 DS0, DS1, DS3, OC3 and OC12 UDIT elements.

19 **Q. HAVE YOU PREPARED EXHIBITS THAT SHOW THE**
20 **DEVELOPMENT OF YOUR RECOMMENDATIONS FOR THE COSTS**
21 **OF DS0, DS1, DS3, OC3 AND OC12 UDIT?**

22 A. Exhibits THW-7 through THW-11 show the development of my recommended
23 costs for the fixed and variable components of Qwest's UDIT elements. My

findings are summarized and compared with Qwest's findings at Tables No. 12 through 16 below.

Table No. 12
Comparison of Fixed and Variable Costs
OC3 UDIT, by Mileage Band

OC3 Band	Qwest-Proposed		REVISED	
	Fixed	Variable	Fixed	Variable
0-8	$794.64	$252.46	$582.00	$170.97
8-25	$801.21	$67.90	$586.30	$47.12
25-50	$765.56	$92.37	$563.07	$61.62
50+	$788.37	$57.09	$577.92	$36.76

Table No. 13
Comparison of Fixed and Variable Costs
OC12 UDIT, by Mileage Band

OC12 Band	Qwest-Proposed		REVISED	
	Fixed	Variable	Fixed	Variable
0-8	$2,247.68	$87.64	$1,665.13	$54.45
8-25	$2,247.68	$85.54	$1,665.13	$56.69
25-50	$2,247.68	$98.38	$1,665.13	$61.35
50+	$2,247.68	$115.44	$1,665.13	$72.38

Table No. 14
Comparison of Fixed and Variable Costs
DS0 UDIT, by Mileage Band

OC3 Band	Qwest-Proposed		REVISED	
	Fixed	Variable	Fixed	Variable
0-8	$ 20.93	$ 0.14	$ 12.40	$ 0.06
8-25	$ 20.95	$ 0.12	$ 12.41	$ 0.06
25-50	$ 20.99	$ 0.13	$ 12.43	$ 0.05
50+	$ 20.94	$ 0.06	$ 12.41	$ 0.03

Table No. 15
Comparison of Fixed and Variable Costs
DS1 UDIT, by Mileage Band

OC12 Band	Qwest-Proposed		REVISED	
	Fixed	Variable	Fixed	Variable
0-8	$ 33.05	$ 1.56	$ 21.22	$ 0.86
8-25	$ 33.33	$ 1.26	$ 21.38	$ 0.70
25-50	$ 33.81	$ 2.28	$ 21.66	$ 1.27
50+	$ 33.78	$ 1.19	$ 21.64	$ 0.67

Table No. 16
Comparison of Fixed and Variable Costs
DS3 UDIT, by Mileage Band

OC3 Band	Qwest-Proposed		REVISED	
	Fixed	Variable	Fixed	Variable
0-8	$ 210.28	$ 65.55	$ 142.72	$ 42.03
8-25	$ 213.45	$ 20.30	$ 142.69	$ 13.70
25-50	$ 196.74	$ 25.43	$ 133.59	$ 16.22
50+	$ 207.61	$ 17.49	$ 140.93	$ 11.00

4. Shared Transport

Q. PLEASE EXPLAIN YOUR UNDERSTANDING OF THE SHARED INTEROFFICE TRANSPORT ELEMENT.

A. Shared Interoffice Transport is the usage of interoffice transport facilities shared by more than one carrier, including Qwest, between end offices, between end office switches and local or access tandem switches, and between tandem switches. The shared transport element is provided only with unbundled local switch ports and so-called Unbundled Network Element Platforms ("UNE-P"). Shared transport is provided on a usage-sensitive (per minute of use) basis.

The items of equipment and the facilities that are used to provide the shared transport element include tandem switching and the same equipment items and facilities that are used to provide the UDIT elements. Thus, the costs of shared transport are developed directly from the costs that apply to the switching and UDIT elements, except that, for shared transport, the costs of UDIT are combined and expressed on a usage-sensitive (per minute of use) basis.

Q. WHAT DO YOU UNDERSTAND TO BE THE COST OF SHARED INTEROFFICE TRANSPORT AS FOUND BY QWEST?

A. I understand that Qwest found the shared interoffice transport element to bear a

cost of $0.001573 per minute of use as shown at page 15 of Ms. Million's Exhibit TKM-1. In describing its shared transport cost study methodology,[63] Qwest indicates that shared transport investment costs are computed basically by converting the costs of dedicated transport elements into usage equivalent costs.

Q. WERE YOU ABLE TO EVALUATE QWEST'S APPROACH TO COMPUTING THE COST OF SHARED TRANSPORT SERVICE?

A. Yes. Qwest's cost study for shared transport minutes is based on an allocation of tandem switching investment in the amount of [redacted] per minute of use derived from the Switching Cost Model, and [redacted] per minute of transport facility investment derived from the Transport Module.[64] Qwest allocates land, building and general purpose computer costs to the switching and transport investments, bringing the total investment cost per shared transport minute to [redacted]. Using its Wholesale Cost Model, Qwest calculates the total recurring shared transport cost per minute to $0.001573, including the direct assignment of [redacted] per minute attributable to billing and collection activities.

Q. DO YOU SEE ANY PROBLEMS WITH QWEST'S APPROACH TO THE DEVELOPMENT OF ITS PROPOSED COST OF SHARED TRANSPORT?

A. Yes. First, in substantial part, Qwest's proposed cost of shared transport is grounded in results produced by its Switching Cost Model ("SCM"). I did not critically evaluate the SCM and, therefore, my findings as to the cost of shared

[63] Qwest CD, Study ID No. 4679.
[64] Qwest Arizona CD\ Phase II Cost Studies\4679 ICM Interconnection Cost Results\Arizona Interconnection Recurring Costs.xls, Tab titled "ST-Investment Cost Calculation."

1 transport are based on Qwest's switching investment costs ($0.002476 per minute
2 of use). I understand, however, that Mr. Chandler has critically evaluated the
3 SCM and, to the extent that Mr. Chandler's findings modify the SCM or the
4 results reduced by it, my recommended cost of shared transport should be
5 changed to reflect Mr. Chandler's findings.

6 Aside from any problems that may exist with the SCM and that would necessarily
7 be reflected in the shared transport cost study, I found Qwest's analysis of its
8 shared transport costs to substantially overstate costs in three ways: (a) it includes
9 a highly overstated increment of cost for billing and collection; (b) it uses
10 significantly overstated recurring cost factors; and (c) it overstates the investment
11 in transport facilities.

12 **Q. WHAT AMOUNT OF BILLING AND COLLECTION COST DOES**
13 **QWEST INCLUDE IN ITS COST OF SHARED TRANSPORT?**

14 A. Qwest's analysis of its cost of shared transport includes [redacted] per minute for
15 billing and collection. That factor alone accounts for over [redacted] percent of the sum
16 of all other costs included Qwest's proposed total cost of shared transport.

17 **Q. WHAT AMOUNT OF BILLING AND COLLECTION COSTS SHOULD**
18 **BE ALLOWED IN QWEST'S PROPOSED COST OF SHARED**
19 **TRANSPORT?**

20 A. In this case, Qwest has not presented any evidence to support its proposed
21 [redacted] per minute and Qwest should provide detailed support for any cost of
22 that magnitude ([redacted] percent of the sum of all other costs attributable by Qwest to
23 billing and collection). In other Qwest cost analyses, billing and collection

charges account for approximately [redacted] percent of all other costs attributable to the unbundled network element. I recommend that Qwest be limited to reflecting approximately that same amount for billing and collection costs in its shared transport cost studies.

Q. WHAT DO YOU MEAN WHEN YOU SAY THAT QWEST'S SHARED TRANSPORT STUDIES OVERSTATE COSTS BY USING SIGNIFICANTLY OVERSTATED RECURRING COST FACTORS?

A. As with all others of its cost studies that I have reviewed in connection with this docket, Qwest uses recurring cost factors that are significantly at odds with the FCC's TELRIC paradigm. Earlier, I explained in detail how Qwest's proposed cost factors are in error, and I recommended a complete set of revised factors for use in TELRIC studies as shown at Exhibit THW-3. Qwest's analysis of its cost to provide shared transport to CLECs should reflect the cost factors that I present at Exhibit THW-3.

Q. WHAT DO YOU MEAN WHEN YOU SAY THAT QWEST HAS OVERSTATED ITS INCREMENTAL INVESTMENT IN TRANSPORT FACILITIES WHEN COMPUTING ITS COST OF SHARED TRANSPORT?

A. The incremental transport investment amount used in Qwest's shared transport study is computed using results produced out of Qwest's Transport Model. The Transport Model computes the fixed and variable costs for the various types of facilities (OC3, OC12, etc.) used in Qwest's interoffice transport network, then

1 converts them to costs per Minute of Use ("MOU"). For example, the Transport
2 Model computes the total fixed and variable cost of OC3 transport between
3 tandem switches and subtending end offices ("EOs"), then converts that cost to
4 costs per MOU by making certain assumptions about the flow of traffic between
5 the tandems and EOs. As I explained previously in connection with my
6 discussion of UDIT costs, all of Qwest's calculations for transport facility
7 investments reflect understated fill factors and overstated total investment factors.
8 Because of these errors in specifying input values to the Transport Model, the
9 incremental transport investment costs per minute used in Qwest's shared
10 transport cost study are overstated.

11 **Q. HAVE YOU PREPARED A SHARED TRANSPORT COST ANALYSIS**
12 **THAT CORRECTS QWEST'S COST STUDY?**

13 A. Yes. My **Exhibit THW-12** shows my proposed cost for shared transport to be
14 $0.000074 per MOU (as compared to Qwest's proposed $0.001573 per minute).
15 Exhibit THW-12 reflects billing and collection charges computed in the same way
16 and using the same cost factor used in other network element cost studies; it also
17 reflects my recommended cost factors as shown in Exhibit THW-12. As to the
18 transport investment costs, I base my findings on the transport investment
19 amounts used by Qwest adjusted to reflect my findings regarding UDIT
20 investments, reflecting the fact that shared transport is provided with the same
21 facilities that are used to produce UDIT.

VII. NON-RECURRING CHARGES ("NRC")

Q. WHAT ARE THE CONCERNS THAT MUST BE ADDRESSED BY THE ANALYST IN MODELING NON-RECURRING COSTS FOR ILECS TO PROVIDE LOCAL INTERCONNECTION AND UNBUNDLED NETWORK ELEMENTS?

A. Above all, the cost model should apply TELRIC principles by assuming that the network is engineered using forward-looking technologies and efficient work processes.

Q. PLEASE DESCRIBE NON-RECURRING COSTS AS YOU UNDERSTAND THEM TO RELATE TO THIS DOCKET.

A. Non-recurring costs are one-time costs that are associated with the tasks and activities that would be performed by Qwest to provide new or changed services, local interconnection, and/or unbundled network elements to CLECs. As a general proposition, non-recurring costs occur whenever Qwest adds, removes or changes services, local interconnection and/or unbundled network elements for CLECs; they will occur for each future CLEC request for added, removed, or changed service, or request for local interconnections and/or unbundled network elements. Non-recurring costs are associated principally with pre-ordering, ordering and provision activities.

Q. PLEASE EXPLAIN WHAT YOU MEAN BY "PRE-ORDERING" ACTIVITY.

A. Pre-ordering is the process by which a CLEC interfaces with end-users to determine their needs and to gather the information necessary to enable the CLEC

1 to meet those needs. Examples of such information include services, if any, that
2 the end-user currently employs, the address at which the needs will be met, the
3 facilities available to provide the service requested by the end-user, etc.

4 **Q. WHAT IS "ORDERING" ACTIVITY?**

5 A. Ordering is the process by which a CLEC notifies Qwest that a particular service,
6 local interconnection arrangement, and/or unbundled network element is needed
7 to satisfy the requirements of a CLEC customer(s). Generally, on a forward-
8 looking basis, ordering is accomplished through the CLEC's generation of a Local
9 Service Request ("LSR") that is submitted to Qwest via an electronic interface
10 between Qwest and the CLEC; Qwest would respond to the LSR via the same
11 electronic interface.

12 **Q. WHAT IS "PROVISIONING"?**

13 A. Provisioning is the process by which Qwest, after receiving and affirmatively
14 acknowledging the CLEC's LSR, would perform the functions necessary to bring
15 the requested service, local interconnection arrangement, and/or unbundled
16 network element to the CLEC.

17 **Q. ARE ALL SERVICES, LOCAL INTERCONNECTION**
18 **ARRANGEMENTS, AND UNBUNDLED NETWORK ELEMENTS**
19 **PROVIDED IN THE SAME WAY?**

20 A. No. In general, provisioning processes are specific to two types of arrangements
21 applicable to services, local interconnection, and/or unbundled network elements
22 provided to CLECs: (1) designed services, such as DS1, DS3 capable loops, etc.;

and (2) non-designed arrangements, such a Plain Old Telephone Services (a/k/a "POTS").

Q. WHY DO THESE TWO DIFFERENT PROVISIONING ARRANGEMENTS EXIST?

A. Because substantially different activities and forms of activities apply to each. The "designed" arrangement necessarily employs resources that would not be required in the provision of non-designed arrangement. For example, for Qwest to make a simple unbundled 2-wire analog loop available to a CLEC does not require Qwest to undertake design activity, whereas, it may be necessary for Qwest to engage in design activity to make a DS3 capable loop available. Any properly developed study of the non-recurring costs to provide these elements to CLECs necessarily would recognize these differences.

Q. ARE THERE OTHER CONCERNS THAT SHOULD BE ADDRESSED IN THE PROPER DEVELOPMENT OF NON-RECURRING COSTS APPLICABLE TO THE PROVISION BY QWEST OF LOCAL INTERCONNECTION ARRANGEMENTS AND UNBUNDLED NETWORK ELEMENTS TO CLECS?

A. Yes. A properly conducted analysis of non-recurring costs should reflect Qwest-CLEC interactions in a wholesale environment, not a retail environment. The wholesale environment does not require the same type(s) of interaction(s) that characterize transactions between a Qwest Customer Service Representative ("CSR") and a Qwest end-user at the retail level. Unlike Qwest's interactions with customers in its retail market, CLECs will interact with Qwest on an

electronic basis through the Operations Support Systems ("OSS"). The cost to disconnect services, local interconnection arrangements and/or unbundled network elements should not be included in the cost of connecting them. To the extent that disconnection activity applies to a CLEC's facility provided by Qwest, the cost of that disconnection should be recovered when the disconnection occurs.

Any work activities/functions that are required for connections, disconnections, and changes should be reflected in the cost analysis as being performed using forward-looking techniques coupled with efficient processes and support systems. For example, some wire centers are staffed during the 24 hours of each day (fully-covered office), other wire centers are not. When a technician is dispatched to a wire center that is not fully-covered, the cost analysis should reflect that field technicians are capable of handling multiple tasks on a single trip to the field rather than as a separate trip for each LSR. Likewise, travel time to/from the field realistically should be spread over more than a single LSR per visit. Finally with regard to the activities of field personnel, the cost of their work should reflect that in a forward-looking and efficient model, field technicians communicate directly with the OSS rather than through manual arrangements that have characterized the past.

Any properly conducted analysis of non-recurring activity costs should be based on a network architecture that takes advantage of intelligent, processor controlled elements that can communicate over standard interfaces to the OSS systems in such manner that little or no manual intervention is required to conduct provisioning or maintenance functions. For example, the analysis should reflect

1 the use of Integrated Digital Loop Carrier ("IDLC") systems in the loop
2 network;[65] such systems enable mechanized (i.e., non-manual), lower cost
3 customer connections to the network.[66]

4 Finally, any properly conducted analysis of the cost associated with non-recurring
5 functions must not include allocations or assignments of any cost that cannot
6 reasonably be considered to arise specifically because of the requirement to effect
7 non-recurring functions.

8 **Q. PLEASE BRIEFLY DESCRIBE YOUR UNDERSTANDING OF THE**
9 **TECHNIQUES WHICH QWEST HAS EMPLOYED TO DEVELOP ITS**
10 **POSITIONS ON THE DIRECT COSTS ASSOCIATED WITH NON-**
11 **RECURRING CHARGES.**

12 A. Qwest estimates the units of time and other resources which it believes are
13 necessary to achieve installation of various UNEs; it estimates the unit cost of the
14 resources, then computes the product of the unit resources (time) requirements
15 and unit resource costs (loaded labor rates); it sums those products to yield its
16 estimates of the direct non-recurring costs for it to make individual UNEs
17 available for use by CLECs. Qwest then "loads" its direct out-of-pocket costs
18 using a wide range of factors, in effect, to assign other unrelated network costs to
19 the costs of non-recurring activities. Qwest contends that the results yielded by
20 this approach conform to TELRIC theory as espoused by the FCC as the means to

[65] DLC systems that comply with Generic Requirements document GR-303.
[66] Other benefits of IDLC include elimination of a Central Office Terminal ("COT") or an analog interface unit at the central office; additionally, unlike Universal Digital Loop Carrier ("UDLC"), IDLC interfaces do not require connections to the MDF in the central office.

1 estimate prices of UNEs for the purpose of effecting the transition to a
2 competitive local exchange telecommunications network.

3 Qwest's NRC cost studies identify functions and estimate unit labor resource
4 requirements basically at the work group level (e.g., at the level in the service
5 provisioning organizations where several individual functional activities can be
6 undertaken such as logging-in requests for service, order error correction, order
7 entry, responding to inquiries, etc.). Qwest's proposed NRCs include costs that
8 necessarily pertain to disconnection when service is terminated.

9 **Q. PLEASE DESCRIBE YOUR UNDERSTANDING OF QWEST'S**
10 **APPROACH TO THE DEVELOPMENT OF UNIT RESOURCE**
11 **REQUIREMENTS IN ITS STUDIES OF NRC COSTS.**

12 A. The principal resource at issue in NRC cost studies is labor. Qwest's estimates of
13 the amount of labor required to complete NRC-related activities are developed by
14 employees that Qwest refers to as subject matter experts ("SMEs"); the SMEs
15 provide single point estimates of the times required to perform NRC-related
16 activities. For Qwest's NRC cost studies, it is this nominal estimate from the
17 SME process that is multiplied by a labor rate to yield the direct cost for work
18 groups to complete the activities necessary to bring UNEs to CLECs.

19 **Q. DID YOU CRITICALLY REVIEW QWEST'S NRC COST STUDIES?**

20 A. Yes, I did.

21 **Q. WHAT ARE THE RESULTS OF YOUR REVIEW?**

22 A. Qwest's studies of its costs associated with non-recurring functions are flawed in
23 several respects as follows:

1 (1) Qwest's NRC cost study results improperly include costs of disconnecting
2 UNEs in the NRC proposed for establishing the UNE on behalf of CLECs;

3 (2) Qwest's claimed NRC costs wrongfully include costs of work activities
4 that are performed currently on a manual basis but which, on a forward-
5 looking basis, would be performed by an efficient OSS;

6 (3) Qwest's studies include some instances where unnecessary activities are
7 reflected in the costs;

8 (4) Qwest's NRC cost studies are predicated, in error, on minutely detailed
9 work activity listings which, as I noted above, form the work activity input
10 assumptions for which the Qwest's SMEs provide their time estimates;

11 (5) Qwest's studies improperly include "design" costs in the list of non-
12 recurring cost activities associated with virtually every LSR that embodies
13 installation work; and

14 (6) Qwest's studies improperly "load" direct out-of-pocket costs, in effect, to
15 assign such network costs as product management expenses, sales
16 expenses, etc.[67] to the non-recurring out-of-pocket costs.

17 **Q. WHAT ACTIONS MUST BE TAKEN TO CORRECT QWEST'S NRC**
18 **COST ANALYSES?**

19 A. To correct Qwest's non-recurring cost analyses would require a complete re-work

[67] In addition to product management expense and sales expenses, Qwest improperly loads its direct out-of-pocket costs of non-recurring activities with: business fees expenses, network operations expenses, network support expenses, general support expenses, general purpose computer expenses, uncollectibles, and intangible expenses.

of the Company's model. Accordingly, I do not recommend that the results from Qwest's model be used as the basis for non-recurring charges in this case. If the Qwest model would be considered by the Commission however, at a minimum, it should be corrected as follows:

First, to recognize that the costs of disconnecting UNE's are not properly recovered in the costs of providing UNEs to CLECs, I recommend removing Qwest's disconnection cost estimates from the Qwest cost model. This proposal and recommendation is consistent with sound cost recovery principles which require that costs be recovered as they are incurred.

As to UNE ordering and associated plant record functions, I recommend removing the costs of activities associated with these functions to recognize that such activities will not be performed manually, as the company's study assumes, but, rather in an automated fashion by Qwest's OSS system.

Also in Qwest's NRC studies, I observed several instances where the company's proposed costs includes activities in the nature of checking or verifying whether earlier work had been performed. Most such instances relate to activity that is performed in connection within the service ordering function where I recommend excluding costs of most such activities from the NRCs because the associated activities would be performed by the OSS system. However, the activities of the Service Delivery Implementation group (which occur toward the end of the service delivery process) include an activity described as "Verify Local Network

1 Operations (LNO) Circuit." At this late stage in the service delivery process
2 (where the Service Delivery Implementation group becomes involved) it is not
3 necessary to verify whether a circuit may or may not be available, or whether it is
4 the proper sort of circuit for the service being installed. That activity should be
5 covered much earlier in the service establishment process and it should be
6 maintained intact throughout the process.

7 I note that the studies generally break out work functions into a series of several
8 activities which, when accomplished, would complete the overall function. That
9 is, Qwest separates its NRC-related work requirements into a large number of
10 relatively simpler activities for which Qwest SMEs are expected to estimate time
11 requirements. The SME tends to view each one in the series of small activities as
12 being mutually exclusive and provides work time estimates on that basis rather
13 than estimating time requirements to perform the overall function. In effect, this
14 approach fails to consider that certain work activities can be performed in parallel
15 or in combination with other activities with the result being that the overall work
16 function can actually be performed in less time than that indicated by the sum of
17 the work times associated with individual activities. In Qwest's non-recurring cost
18 studies, the costs of ordering and provisioning functions frequently include costs
19 of "design" activities that would not be undertaken by Qwest. Other than for a
20 situation in which no facilities exist, I cannot envision a case where Qwest
21 "design" activity would be required to provide a simple 2-wire or 4-wire loop to a

1 CLEC.[68]

2 Qwest's analysis of non-recurring costs should be adjusted to eliminate any and
3 all "loadings" on direct costs for expenses that cannot reasonably be attributed to
4 the non-recurring functions. Included in this listing are Qwest–proposed loadings
5 for: product management expense, sales expenses, business fees expenses,
6 network operations expenses, network support expenses, general support
7 expenses, general purpose computer expenses, uncollectibles, and intangible
8 expenses. Costs in these categories are designed to be recovered in monthly
9 recurring charges. Costs associated with corporate overheads (e.g., the 67XX
10 series of accounts) are properly allocated to charges for non-recurring costs.

11 **Q. HAVE YOU ADJUSTED QWEST'S NRC COST STUDIES TO REFLECT**
12 **YOUR FINDINGS AND RECOMMENDATIONS TO THE**
13 **COMMISSION?**

14 A. No. I have not. Because Qwest's studies of non-recurring activities are so badly
15 flawed, I recommend that the Commission adopt the AT&T/WorldCom Non-
16 Recurring Cost Model ("NRCM") to determine the cost of nonrecurring activities.
17 Exhibit RL-2 to Mr. Lathrop's testimony contains the results obtained from the
18 NRCM using the network technical assumptions that I support and recommend.
19 **Exhibit THW-13** is a copy of the NRCM Technical Assumptions Binder. I am
20 responsible to explain all technical assumptions made in developing and running

[68] For the situation in which no facilities exist, the cost to add new facilities would be in the nature of capital expenditures and the cost of the associated "design" activity would be capitalized in the appropriate Qwest plant account(s). Such costs, therefore, would properly be recovered in monthly recurring charges.

1 the NRCM.

2 **VIII. MISCELLANEOUS ISSUES**

3 **Q. QWEST PROPOSES TO INCLUDE THE COSTS OF HOUSE AND RISER**
4 **CABLE IN THE RATES THAT IT PROPOSES FOR DISTRIBUTION**
5 **SUBLOOPS. DO YOU HAVE ANY COMMENTS FROM AN**
6 **ENGINEERING PERSPECTIVE WITH RESPECT TO THIS QWEST**
7 **PROPOSAL?**

8 A. First, I note that the FCC has required ILECs nationwide to provide CLECs with
9 unbundled access to subloops at whatever point in the loop such access may be
10 technically feasible. The FCC defines "technically feasible points" to "..include a
11 point near the customer premises, such as the point of interconnection between
12 the drop and the distribution cable, the NID or the MPOE." However, primarily
13 with respect to ILEC claims that any given technically feasible point may not
14 include space necessary to effect a CLEC's access to that point, the FCC found
15 that, when such questions arise, they are best settled by state commissions
16 because they can examine the incumbent's specific situation and determine
17 whether, in reality, it is technically feasible to unbundle the subloop where a
18 competing carrier requests.

19 From an engineering perspective, in virtually all cases where distribution
20 subloops enter a customer's premises, a readily-accessible point of demarcation
21 exists between the distribution subloop and the premises inside wire, house cable
22 or riser cable. Such a demarcation point is known variously as a NID (network
23 interface device), a terminal, a backboard, and MPOE (minimum pint of entry),

etc. Regardless of how the point is designated, in every case, it represents a "technically feasible point" of interconnection because the network can readily be opened at that point and interconnections can readily be made there.

From the FCC's perspective, the only remaining question of technical feasibility is whether sufficient space exists in the vicinity of the terminal reasonably to allow the interconnection. From an engineering perspective, virtually all points of demarcation between distribution subloops and inside wire, house cable or riser cable are located in spaces that would readily allow access for interconnection. Only in very rare instances is it possible that space around the terminal is insufficient to allow for interconnection. Only in such rare cases, should the Commission become involved.

Given the foregoing discussion, from an engineering perspective, the distribution subloop and the inside wire, house cable, or riser cable to which the distribution subloop is connected must both be considered as separate supplements of the loop and, therefore, priced as such.

IX. CONCLUSION

Q. DO YOU HAVE ANY CONCLUDING REMARKS?

A. Yes, if the Arizona Commission hopes to open the local telecommunications markets to robust competition, it must ensure that Qwest is offering interconnection and UNEs at just and reasonable rates. Qwest's studies, however, reveal that this is not the case. I, therefore, recommend that the Commission demand that Qwest truly comply with the TELRIC principals set out by the FCC,

1 and I offer the adjustments I've noted here in my testimony to correct

2 Qwest's rates.

3 **Q. DOES THIS CONCLUDE YOUR TESTIMONY?**

4 A. Yes it does.

STATEMENT OF EDUCATION AND EXPERIENCE FOR THOMAS H. WEISS, P.E.

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Weiss Consulting, Inc.
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Fuquay-Varina, North Carolina 27526

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GENERAL

Mr. Weiss is a Registered Professional Engineer with over 30 years of experience in the communications industry. His professional education includes a Bachelor of Science degree in electrical engineering and a Master of Science degree in business management with emphasis in finance and micro economics. His employment experience includes eight years in engineering and financial management positions with a major domestic telecommunications utility company; and twenty-two years as an engineering and economic consultant to federal and state governments, businesses, and consumer groups.

Mr. Weiss' consulting practice has focused on telecommunications technology and regulatory issues, principally as those issues impact the service provided by, and the prices charged for service by domestic telecommunications utilities, including the former regional Bell operating companies; the former GTE telephone operating companies; AT&T and other interexchange carriers; and various independent telephone companies. He has presented expert testimony, primarily on behalf of regulatory commission staffs, in over one-hundred and forty proceedings before the Federal Energy Regulatory Commission, and public utility regulators in twenty-seven states and the District of Columbia. In addition, Mr. Weiss has presented expert testimony on telecommunications system management and engineering issues before the United States District Court for the Northern District of Dallas and before the Washtenaw County (Michigan) Circuit Court.

WORK HISTORY

1994 - 2000 WEISS CONSULTING, INC.; President

Founded Weiss Consulting, Inc. in June 1994 to provide telecommunications technical and economic consulting services to federal and state governments, consumer groups, and to businesses in their capacity as consumers of telecommunications products and services.

1986 - 1994 BAKER G. CLAY & ASSOCIATES, INC.; Vice President

Provided technical and economic consulting services to federal and state governments, consumer groups, and to businesses in their capacity as consumers of telecommunications products and services; and electric, and natural gas transportation and distribution services in wholesale and retail markets.

1978 - 1986 HESS & LIM, INC.; Senior Consultant

Duties and responsibilities the same as those described for Baker G. Clay & Associates, Inc.

1970 - 1978 GENERAL TELEPHONE COMPANY OF THE SOUTHEAST;

1977 – 1978 Corporate Budgets and Results Manager responsible to the Vice President of Operations for development and administration of seven-state telephone company operating expense budget.

1975 - 1976 Revenues and Earnings Manager responsible to the Corporate Director of Revenues and Earnings for development and administration of rates, tariffs, and rate filings before the FCC and regulatory bodies in three state jurisdictions.

1973 - 1975 Alabama Division Engineering Manager responsible to the state Vice President for all company plant (land, buildings, inside and outside plant) engineering activity including plant design, capital budget development and administration, for the company's operations in the State of Alabama.

1970 - 1973 Supervising Plant Extension Engineer responsible to the General Plant Extension Engineer for development of capital investment deployment plans.

EDUCATION

Master of Science in Business Management, Duke University Graduate School of Business Administration (the Fuqua School of Business); Durham, NC; June 1973.

Bachelor of Science in Electrical Engineering, North Carolina State University at Raleigh; Raleigh, NC; 1970.

PROFESSIONAL

Registered Professional Engineer licensed to practice in Alabama, Maryland and Missouri.

Member, Institute of Electrical and Electronic Engineers (IEEE), Communications Society, Network Society, Computer Society.

Member, National and North Carolina Societies of Professional Engineers, Private Practice Division.

OTHER

Author, *Public Utility Plant Investment Decisions in the Face of Advancing Technology and Regulatory Policy Reform*, Proceedings of the 27th Regulatory Conference, Iowa State University, Ames (1988)

Invited speaker and panel member, 1988 Iowa State University Regulatory Conference.

Invited speaker and panel member, 1984 Public Utilities Conference, University of Georgia College of Business.

Faculty, 1989 United States Telephone Association (USTA) Advanced Management Workshop, University of Kansas at Lawrence.

QWEST COMMUNICATIONS -- ARIZONA
ACC Docket No. T00000A-00-0194
QWEST-PROPOSED CAPITAL COSTS , BY PLANT ACCOUNT
Source: Qwest Integrated Cost Model, CapCost Module
Testimony of Teresa K. Million

Depreciation determinants (lives, salvage values, cost or removal, survivor curve parameters, etc.) as ordered by the ACC in Decision No. 62507 (Qwest Response to ATT Request No. 3-113).

CONFIDENTIAL
SUBJECT TO PROTECTIVE ORDER

QWEST COMMUNICATIONS -- ARIZONA
ACC Docket No. T00000A-00-0194
PROPOSED ADJUSTED CAPITAL COSTS , BY PLANT ACCOUNT
Source: Qwest Integrated Cost Model, CapCost Module
Testimony of Thomas H. Weiss

Depreciation determinants (lives, salvage values, cost or removal, survivor curve parameters, etc.) as ordered by the ACC in Decision No. 62507 (Qwest Response to ATT Request No. 3-113).

CONFIDENTIAL
SUBJECT TO PROTECTIVE ORDER

QWEST COMMUNICATIONS -- COLORADO
Arizona Corporation Commission Docket No. T00000A-00-0194
Cost Factors, by USOA Account

Line No.	USOA Acct. No.	FRC	Description	Investment-Related					Directly Assigned			
				Depr.	Capital Cost COM	IT	Ad-Valorem Taxes	Maint.	Product Management	Sales	Product Advertising	Business Fees
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)
1	2111	20C	Land	0 0000	0.0917	0.0382	0.0136	0.0400	0.0000	0.0000	0.0000	0.0019
2	2112	164C	Motor Vehicles	0 1024	0.0450	0.0187	0.0136		0.0000	0.0000	0.0000	0.0019
3	2112	1364	Aircraft	N/A	N/A	N/A	N/A		0.0000	0.0000	0.0000	0.0019
4	2114	464C	Spec. Purpose Vehicles	0 0621	0.0558	0.0232	0.0136		0.0000	0.0000	0.0000	0.0019
5	2115	264C	Garage Work Equipment	0 0905	0.0538	0.0224	0.0136		0.0000	0.0000	0.0000	0.0019
6	2116	564C	Other Work Equipment	0 0791	0.0563	0.0235	0.0136		0.0000	0.0000	0.0000	0.0019
7	2121	110C	Buildings	0 0276	0.0701	0.0292	0.0136	0.0400	0.0000	0.0000	0.0000	0.0019
8	2122	161C	Furniture	0 1233	0.0466	0.0194	0.0136		0.0000	0.0000	0.0000	0.0019
9	2123	261C	Office Equipment	0 1533	0.0460	0.0199	0.0136		0.0000	0.0000	0.0000	0.0019
10	2124	361C	General Purpose Computers	0 1940	0.0453	0.0189	0.0136		0.0000	0.0000	0.0000	0.0019
11	2212	377C	Digital Switch	0 1042	0 0419	0.0175	0.0136	0.0238	0.0000	0.0000	0.0000	0.0019
12	2220	117C	Operator Systems	0 1091	0 0410	0 0170	0.0136	0.0364	0.0000	0.0000	0.0000	0.0019
13	2231	67C	Microwave Radio	0 0826	0.0486	0 0202	0 0136	0.0184	0.0000	0.0000	0.0000	0.0019
14	2232	157C	Digital Data System	0 1228	0 0437	0 0182	0 0136	0.0035	0.0000	0.0000	0.0000	0.0019
15	2232	257C	Digital Pair Gain Equipment	0 1082	0 0420	0 0175	0 0136	0 0118	0.0000	0.0000	0.0000	0.0019
16	2232	357C	Other Digital CCT Equipment	0 1082	0 0420	0 0175	0 0136	0 0182	0.0000	0.0000	0.0000	0.0019
17	2232	457C	Analog Pair Gain Equipment	0 1370	0 0417	0 0173	0 0136	0.0910	0.0000	0.0000	0.0000	0.0019
18	2232	57C	Other Analog CCT Equipment	0 1370	0 0417	0 0173	0 0136	0.1580	0.0000	0.0000	0.0000	0.0019
19	2351	188C	Public Telephone Equipment	0 0886	0 0583	0 0242	0.0136		0.0000	0.0000	0.0000	0.0019
20	2362	858C	Channel Term. Equipment	0 1353	0 0606	0 0252	0.0136	0.0579	0.0000	0.0000	0.0000	0.0019
21	2411	1C	Poles	0 0674	0 0500	0.0208	0.0136	0.0045	0.0000	0.0000	0.0000	0.0019
22	2421	52C	Metallic Aerial Cable	0.1137	0 0536	0 0223	0.0136	0.1158	0.0000	0.0000	0.0000	0.0019
23	2421	42C	Aerial Drop	0 1137	0.0536	0 0223	0.0136	0.1158	0.0000	0.0000	0.0000	0.0019
24	2421	852C	Fiber Aerial Cable	0 1015	0 0516	0.0215	0.0136	0.0144	0.0000	0.0000	0.0000	0.0019
25	2422	5C	Metallic U.G. Cable	0.0772	0.0546	0.0227	0.0136	0.0376	0.0000	0.0000	0.0000	0.0019
26	2422	85C	Fiber U.G. Cable	0.0900	0 0562	0.0234	0.0136	0.0153	0.0000	0.0000	0.0000	0.0019
27	2423	45C	Metallic Buried Cable	0.0944	0.0552	0.0230	0.0136	0.0845	0.0000	0.0000	0.0000	0.0019
28	2423	35C	Buried Drop	0.0944	0.0552	0.0230	0.0136	0.0845	0.0000	0.0000	0.0000	0.0019
29	2423	845C	Fiber Buried Cable	0.0662	0.0538	0.0224	0.0136	0.0139	0.0000	0.0000	0.0000	0.0019
30	2424	6C	Metallic Submarine Cable	0.0815	0.0580	0.0242	0.0136	0.0127	0.0000	0.0000	0.0000	0.0019
31	2424	86C	Fiber Submarine Cable	0.1267	0.0623	0.0259	0.0136	0.0127	0.0000	0.0000	0.0000	0.0019
32	2426	62C	Metallic Intrabuilding Cable	0.0598	0.0562	0.0234	0.0136	0.0642	0.0000	0.0000	0.0000	0.0019
33	2426	862C	Fiber Intrabuilding Cable	0.0990	0.0589	0.0245	0.0136	0.0200	0.0000	0.0000	0.0000	0.0019
34	2431	3C	Aerial Wire	0.1404	0.0755	0.0314	0.0136	0.0156	0.0000	0.0000	0.0000	0.0019
35	2441	4C	Conduit	0.0227	0.0581	0.0242	0.0136	0.0046	0.0000	0.0000	0.0000	0.0019

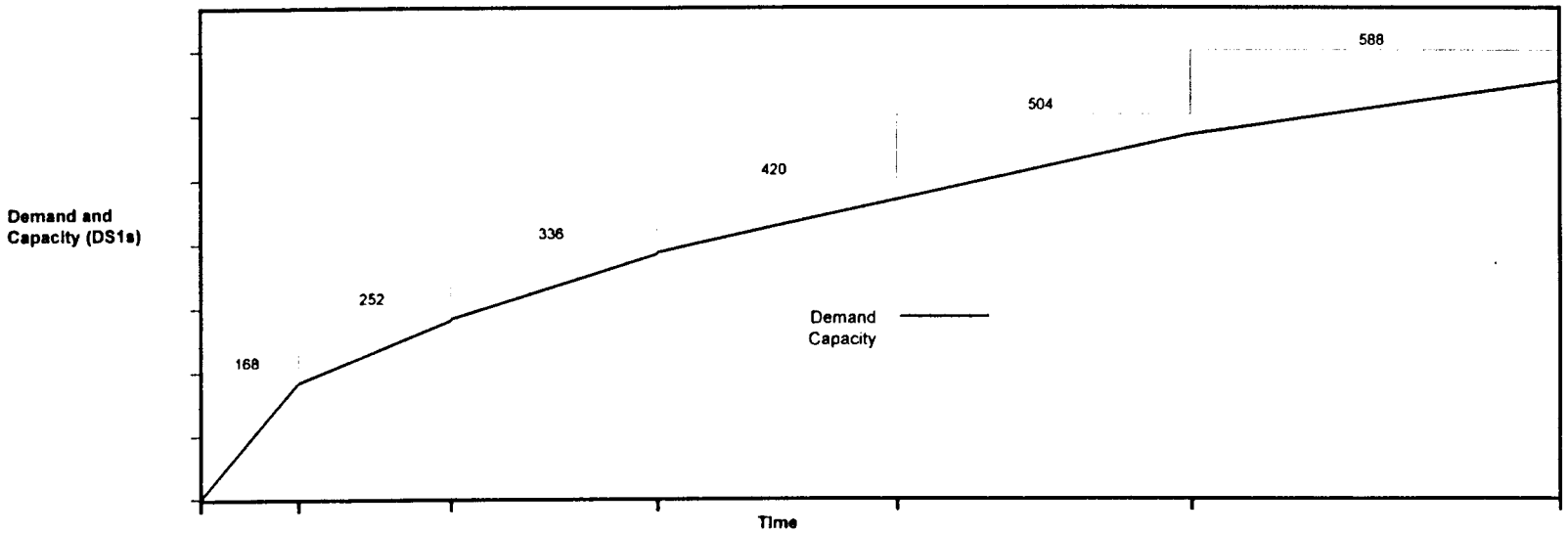
QWEST COMMUNICATIONS -- COLORADO
Arizona Corporation Commission Docket No. T00000A-
Cost Factors, by USOA Account

Line No.	USOA Acct. No.	FRC	Description	Directly Attributed								
				Network Operations	Network Support	General Support	Computers	Uncollectible	Accounting Finance	Human Resources	Information Management	Intangibles
(a)	(b)	(c)	(d)	(n)	(o)	(p)	(q)	(r)	(s)	(t)	(u)	(v)
1	2111	20C	Land	0.0000	0.0160	0.0815	0.0350	0.0000	0.0080	0.0078	0.0553	0.0026
2	2112	164C	Motor Vehicles	0.0000	0.0160	0.0815	0.0350	0.0000	0.0080	0.0078	0.0553	0.0026
3	2112	1364	Aircraft	0.0000	0.0160	0.0815	0.0350	0.0000	0.0080	0.0078	0.0553	0.0026
4	2114	464C	Spec. Purpose Vehicles	0.0000	0.0160	0.0815	0.0350	0.0000	0.0080	0.0078	0.0553	0.0026
5	2115	264C	Garage Work Equipment	0.0000	0.0160	0.0815	0.0350	0.0000	0.0080	0.0078	0.0553	0.0026
6	2116	564C	Other Work Equipment	0.0000	0.0160	0.0815	0.0350	0.0000	0.0080	0.0078	0.0553	0.0026
7	2121	110C	Buildings	0.0000	0.0160	0.0815	0.0350	0.0000	0.0080	0.0078	0.0553	0.0026
8	2122	161C	Furniture	0.0000	0.0160	0.0815	0.0350	0.0000	0.0080	0.0078	0.0553	0.0026
9	2123	261C	Office Equipment	0.0000	0.0160	0.0815	0.0350	0.0000	0.0080	0.0078	0.0553	0.0026
10	2124	361C	General Purpose Computers	0.0000	0.0160	0.0815	0.0350	0.0000	0.0080	0.0078	0.0553	0.0026
11	2212	377C	Digital Switch	0.0000	0.0160	0.0815	0.0350	0.0000	0.0080	0.0078	0.0553	0.0026
12	2220	117C	Operator Systems	0.0000	0.0160	0.0815	0.0350	0.0000	0.0080	0.0078	0.0553	0.0026
13	2231	67C	Microwave Radio	0.0000	0.0160	0.0815	0.0350	0.0000	0.0080	0.0078	0.0553	0.0026
14	2232	157C	Digital Data System	0.0000	0.0160	0.0815	0.0350	0.0000	0.0080	0.0078	0.0553	0.0026
15	2232	257C	Digital Pair Gain Equipment	0.0000	0.0160	0.0815	0.0350	0.0000	0.0080	0.0078	0.0553	0.0026
16	2232	357C	Other Digital CCT Equipment	0.0000	0.0160	0.0815	0.0350	0.0000	0.0080	0.0078	0.0553	0.0026
17	2232	457C	Analog Pair Gain Equipment	0.0000	0.0160	0.0815	0.0350	0.0000	0.0080	0.0078	0.0553	0.0026
18	2232	57C	Other Analog CCT Equipment	0.0000	0.0160	0.0815	0.0350	0.0000	0.0080	0.0078	0.0553	0.0026
19	2351	188C	Public Telephone Equipment	0.0000	0.0160	0.0815	0.0350	0.0000	0.0080	0.0078	0.0553	0.0026
20	2362	858C	Channel Term. Equipment	0.0000	0.0160	0.0815	0.0350	0.0000	0.0080	0.0078	0.0553	0.0026
21	2411	1C	Poles	0.0000	0.0160	0.0815	0.0350	0.0000	0.0080	0.0078	0.0553	0.0026
22	2421	52C	Metallic Aerial Cable	0.0000	0.0160	0.0815	0.0350	0.0000	0.0080	0.0078	0.0553	0.0026
23	2421	42C	Aerial Drop	0.0000	0.0160	0.0815	0.0350	0.0000	0.0080	0.0078	0.0553	0.0026
24	2421	852C	Fiber Aerial Cable	0.0000	0.0160	0.0815	0.0350	0.0000	0.0080	0.0078	0.0553	0.0026
25	2422	5C	Metallic U.G. Cable	0.0000	0.0160	0.0815	0.0350	0.0000	0.0080	0.0078	0.0553	0.0026
26	2422	85C	Fiber U.G. Cable	0.0000	0.0160	0.0815	0.0350	0.0000	0.0080	0.0078	0.0553	0.0026
27	2423	45C	Metallic Buried Cable	0.0000	0.0160	0.0815	0.0350	0.0000	0.0080	0.0078	0.0553	0.0026
28	2423	35C	Buried Drop	0.0000	0.0160	0.0815	0.0350	0.0000	0.0080	0.0078	0.0553	0.0026
29	2423	845C	Fiber Buried Cable	0.0000	0.0160	0.0815	0.0350	0.0000	0.0080	0.0078	0.0553	0.0026
30	2424	6C	Metallic Submarine Cable	0.0000	0.0160	0.0815	0.0350	0.0000	0.0080	0.0078	0.0553	0.0026
31	2424	86C	Fiber Submarine Cable	0.0000	0.0160	0.0815	0.0350	0.0000	0.0080	0.0078	0.0553	0.0026
32	2426	62C	Metallic Intrabuilding Cable	0.0000	0.0160	0.0815	0.0350	0.0000	0.0080	0.0078	0.0553	0.0026
33	2426	862C	Fiber Intrabuilding Cable	0.0000	0.0160	0.0815	0.0350	0.0000	0.0080	0.0078	0.0553	0.0026
34	2431	3C	Aerial Wire	0.0000	0.0160	0.0815	0.0350	0.0000	0.0080	0.0078	0.0553	0.0026
35	2441	4C	Conduit	0.0000	0.0160	0.0815	0.0350	0.0000	0.0080	0.0079	0.0553	0.0026

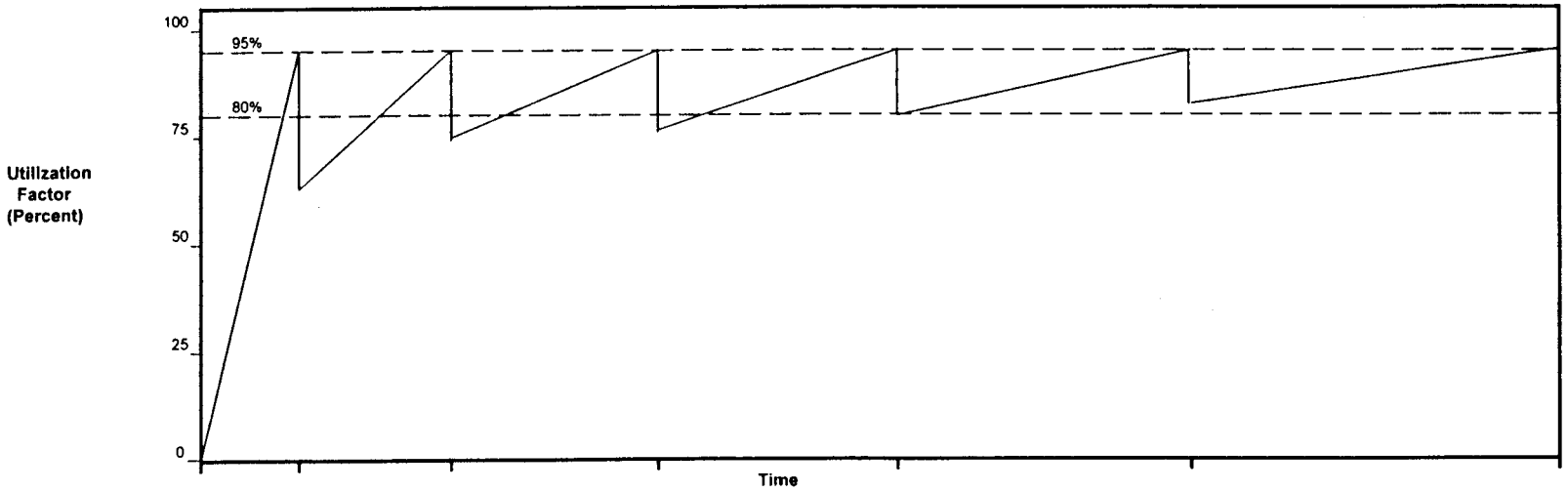
QWEST COMMUNICATIONS -- COLORADO
Arizona Corporation Commission Docket No. T00000A-
Cost Factors, by USOA Account

Line No.	USOA Acct. No.	FRC	Description	Common						
				Executive	Planning	External Relations	Legal	Procurement	R&D	Other G&A
(a)	(b)	(c)	(d)	(w)	(x)	(y)	(z)	(aa)	(ab)	(ac)
1	2111	20C	Land	0.0065	0.0000	0.0092	0.0060	0.0022	0.0000	0.0000
2	2112	164C	Motor Vehicles	0.0065	0.0000	0.0092	0.0060	0.0022	0.0000	0.0000
3	2112	1364	Aircraft	0.0065	0.0000	0.0092	0.0060	0.0022	0.0000	0.0000
4	2114	464C	Spec. Purpose Vehicles	0.0065	0.0000	0.0092	0.0060	0.0022	0.0000	0.0000
5	2115	264C	Garage Work Equipment	0.0065	0.0000	0.0092	0.0060	0.0022	0.0000	0.0000
6	2116	564C	Other Work Equipment	0.0065	0.0000	0.0092	0.0060	0.0022	0.0000	0.0000
7	2121	110C	Buildings	0.0065	0.0000	0.0092	0.0060	0.0022	0.0000	0.0000
8	2122	161C	Furniture	0.0065	0.0000	0.0092	0.0060	0.0022	0.0000	0.0000
9	2123	261C	Office Equipment	0.0065	0.0000	0.0092	0.0060	0.0022	0.0000	0.0000
10	2124	361C	General Purpose Computers	0.0065	0.0000	0.0092	0.0060	0.0022	0.0000	0.0000
11	2212	377C	Digital Switch	0.0065	0.0000	0.0092	0.0060	0.0022	0.0000	0.0000
12	2220	117C	Operator Systems	0.0065	0.0000	0.0092	0.0060	0.0022	0.0000	0.0000
13	2231	67C	Microwave Radio	0.0065	0.0000	0.0092	0.0060	0.0022	0.0000	0.0000
14	2232	157C	Digital Data System	0.0065	0.0000	0.0092	0.0060	0.0022	0.0000	0.0000
15	2232	257C	Digital Pair Gain Equipment	0.0065	0.0000	0.0092	0.0060	0.0022	0.0000	0.0000
16	2232	357C	Other Digital CCT Equipment	0.0065	0.0000	0.0092	0.0060	0.0022	0.0000	0.0000
17	2232	457C	Analog Pair Gain Equipment	0.0065	0.0000	0.0092	0.0060	0.0022	0.0000	0.0000
18	2232	57C	Other Analog CCT Equipment	0.0065	0.0000	0.0092	0.0060	0.0022	0.0000	0.0000
19	2351	188C	Public Telephone Equipment	0.0065	0.0000	0.0092	0.0060	0.0022	0.0000	0.0000
20	2362	858C	Channel Term. Equipment	0.0065	0.0000	0.0092	0.0060	0.0022	0.0000	0.0000
21	2411	1C	Poles	0.0065	0.0000	0.0092	0.0060	0.0022	0.0000	0.0000
22	2421	52C	Metallic Aerial Cable	0.0065	0.0000	0.0092	0.0060	0.0022	0.0000	0.0000
23	2421	42C	Aerial Drop	0.0065	0.0000	0.0092	0.0060	0.0022	0.0000	0.0000
24	2421	852C	Fiber Aerial Cable	0.0065	0.0000	0.0092	0.0060	0.0022	0.0000	0.0000
25	2422	5C	Metallic U.G. Cable	0.0065	0.0000	0.0092	0.0060	0.0022	0.0000	0.0000
26	2422	85C	Fiber U.G. Cable	0.0065	0.0000	0.0092	0.0060	0.0022	0.0000	0.0000
27	2423	45C	Metallic Buried Cable	0.0065	0.0000	0.0092	0.0060	0.0022	0.0000	0.0000
28	2423	35C	Buried Drop	0.0065	0.0000	0.0092	0.0060	0.0022	0.0000	0.0000
29	2423	845C	Fiber Buried Cable	0.0065	0.0000	0.0092	0.0060	0.0022	0.0000	0.0000
30	2424	6C	Metallic Submarine Cable	0.0065	0.0000	0.0092	0.0060	0.0022	0.0000	0.0000
31	2424	86C	Fiber Submarine Cable	0.0065	0.0000	0.0092	0.0060	0.0022	0.0000	0.0000
32	2426	62C	Metallic Intrabuilding Cable	0.0065	0.0000	0.0092	0.0060	0.0022	0.0000	0.0000
33	2426	862C	Fiber Intrabuilding Cable	0.0065	0.0000	0.0092	0.0060	0.0022	0.0000	0.0000
34	2431	3C	Aerial Wire	0.0065	0.0000	0.0092	0.0060	0.0022	0.0000	0.0000
35	2441	4C	Conduit	0.0065	0.0000	0.0092	0.0060	0.0022	0.0000	0.0000

OPTICAL/DIGITAL PLANT UTILIZATION FACTOR



	(A)	(B)	(C)	(D)	(E)	(F)	(G)
1	Capacity DS1s	168	252	336	420	504	588
2	Demand DS1s, Period Start	0	160	239	319	399	479
3	Demand DS1s Period End	160	239	319	399	479	559
4	Utilization Rate Period Start	0 0000	0 6349	0 7113	0 7595	0 7917	0.8146
5	Utilization Rate Period End	0 9524	0 9484	0 9494	0 9500	0 9504	0.9507
6	Utilization Rate Period Avg	0 4762	0 7917	0 8304	0 8548	0 8711	0 8827



QWEST CORPORATION
Arizona Corporation Commission Docket No. 00000A-00-0194

TELRIC -- Statewide Average DS1 Capable Loop

Ln. No.	Plant Account Description Account Number	Source	Circuit - Digital: Other 357C	Digital 257C	Premises 257CP	SONET 257CS	SONET Premises 257CSP	Poles 1C	C-Wire 3C	Conduit 4C	Outside Plant: Cable UG Metal. 5C	Drop Buried 35C	Drop Aerial 42C	Cable Bur. Metal. 45C	Cable Aer. Metal. 52C	Cable Bld. Metal. 62C	Cable UG Fiber 85C	Cable Bur. Fiber 845C	Cable Bld. Fiber 862C	TOTALS
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(n)	(o)	(p)	(q)	(r)	(s)	(t)
	INVESTMENT																			
1	Equipment		217.15	464.72	505.20	294.88	273.28	0.00	0.00	193.51	85.96	0.00	0.00	14.10	0.00	0.00	48.92	70.82	1.02	2,169.56
2	Bldg Loading Fact		0.0418	0.0418	0.0000	0.0418	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
3	Building	Ln 1 times Ln 2	9.08	19.43	0.00	12.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	40.83
4	Land Loading Fact		0.0036	0.0036	0.0000	0.0036	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
5	Land	Ln 1 times Ln 4	0.78	1.67	0.00	1.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.52
6	**Loaded Investment**	**Sum, Lns. 1, 3, 5**	**227.01**	**485.82**	**505.20**	**308.27**	**273.28**	**0.00**	**0.00**	**193.51**	**85.96**	**0.00**	**0.00**	**14.10**	**0.00**	**0.00**	**48.92**	**70.82**	**1.02**	**2,213.90**
	MONTHLY INVESTMENT-RELATED CHARGES, EQUIPMENT:																			
7	Avg Depr Factor		0.1082	0.1082	0.1082	0.1082	0.1082	0.0674	0.1404	0.0227	0.0772	0.0944	0.1137	0.0944	0.1137	0.0598	0.0906	0.0662	0.0990	
8	Avg Annual Depr	Ln 1 times Ln 7	23.50	50.28	54.66	31.91	29.57	0.00	0.00	4.39	6.64	0.00	0.00	1.33	0.00	0.00	4.40	4.69	0.10	
9	Avg Monthly Depr	Ln 8 divided by 12	1.96	4.19	4.56	2.66	2.46	0.00	0.00	0.37	0.55	0.00	0.00	0.11	0.00	0.00	0.37	0.39	0.01	17.62
10	Avg COM Factor		0.0420	0.0420	0.0420	0.0420	0.0420	0.0500	0.0755	0.0581	0.0546	0.0552	0.0536	0.0552	0.0536	0.0562	0.0562	0.0538	0.0589	
11	Avg Annual COM	Ln 1 times Ln 10	9.12	19.52	21.22	12.38	11.48	0.00	0.00	11.24	4.69	0.00	0.00	0.78	0.00	0.00	2.75	3.81	0.06	
12	Avg Monthly COM	Ln 11 divided by 12	0.76	1.63	1.77	1.03	0.96	0.00	0.00	0.94	0.39	0.00	0.00	0.06	0.00	0.00	0.23	0.32	0.01	8.09
13	Avg IT Factor		0.0175	0.0175	0.0175	0.0175	0.0175	0.0208	0.0314	0.0242	0.0227	0.0230	0.0223	0.0230	0.0223	0.0234	0.0234	0.0224	0.0245	
14	Avg Annual IT	Ln 1 times Ln 13	3.80	8.13	8.84	5.16	4.78	0.00	0.00	4.68	1.95	0.00	0.00	0.32	0.00	0.00	1.14	1.59	0.02	
15	Avg Monthly IT	Ln 14 divided by 12	0.32	0.68	0.74	0.43	0.40	0.00	0.00	0.39	0.16	0.00	0.00	0.03	0.00	0.00	0.10	0.13	0.00	3.37
16	Total Maint Factor		0.0182	0.0118	0.0118	0.0118	0.0118	0.0045	0.0156	0.0046	0.0376	0.0845	0.1158	0.0845	0.1158	0.0156	0.0376	0.0139	0.0200	
17	Total Annual Maint	Ln 1 times Ln 16	3.95	5.48	5.96	3.48	3.22	0.00	0.00	0.89	3.23	0.00	0.00	1.19	0.00	0.00	1.84	0.98	0.02	
18	Total Monthly Maint	Ln 17 divided by 12	0.33	0.46	0.50	0.29	0.27	0.00	0.00	0.07	0.27	0.00	0.00	0.10	0.00	0.00	0.15	0.08	0.00	2.52
19	Ad Valorem Tax Factor		0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	
20	Annual AV Taxes	Ln 1 times Ln 19	2.95	6.32	6.87	4.01	3.72	0.00	0.00	2.63	1.17	0.00	0.00	0.19	0.00	0.00	0.67	0.96	0.01	
21	Monthly AV Taxes	Ln 20 divided by 12	0.25	0.53	0.57	0.33	0.31	0.00	0.00	0.22	0.10	0.00	0.00	0.02	0.00	0.00	0.06	0.08	0.00	2.46
22	Tot Mo Inv Related Charge, Equip		3.81	7.48	8.13	4.75	4.40	0.00	0.00	1.99	1.47	0.00	0.00	0.32	0.00	0.00	0.90	1.00	0.02	34.08
	MONTHLY INVESTMENT-RELATED CHARGES, L&B LOADINGS:																			
23	Building Loading	Ln 3 above	9.08	19.43	0.00	12.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
24	Total AC Factor, Bldg		0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	
25	Bldg Annual Charge	Ln 23 times Ln 24	2.03	4.34	0.00	2.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
26	Bldg Monthly Charge	Ln 25 divided by 12	0.17	0.36	0.00	0.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.76
27	Land Loading	Ln 5, above	0.78	1.67	0.00	1.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
28	Total AC Factor, Land		0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	
29	Land Annual Charge	Ln 27 times Ln 28	0.17	0.37	0.00	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
30	Land Monthly Charge	Ln 29 divided by 12	0.01	0.03	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07
31	Total L&B Monthly Charge	Sum, Lns. 26, 30	0.18	0.39	0.00	0.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.82
	BILLING AND COLLECTION CHARGES:																			
32	Total Plant Investment Monthly Charges	Sum, Lns. 22 and 31	3.79	7.87	8.13	4.99	4.40	0.00	0.00	1.99	1.47	0.00	0.00	0.32	0.00	0.00	0.90	1.00	0.02	
33	B&C Factor		0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	
34	Total Monthly B&C Charge	Ln 32 times Ln 33	0.02	0.03	0.03	0.02	0.02	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.15
35	**TOTAL MONTHLY INV. RELATED CHARGES**	**Sum, Lns. 22, 31, 34**	**3.81**	**7.90**	**8.16**	**5.02**	**4.42**	**0.00**	**0.00**	**2.00**	**1.48**	**0.00**	**0.00**	**0.32**	**0.00**	**0.00**	**0.90**	**1.01**	**0.02**	**35.03**
	MONTHLY PRODUCT ADMINISTRATION RELATED CHARGES:																			
36	Direct Assigned Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
37	Direct Assigned Monthly Charges	Ln 35 times Ln 36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
38	Product Management Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
39	Product Management Monthly Charges	Ln 35 times Ln 38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
40	Sales Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
41	Monthly Sales Charges	Ln 35 times Ln 40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
42	Advertising Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
43	Monthly Advertising Charges	Ln 35 times Ln 42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
44	Business Fees (Other Taxes) Expense Factor		0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	
45	Monthly Business Fees Charges	n. 44 times Sum Lns. 37, 39, 41, 4	0.01	0.02	0.02	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07
46	Total Monthly Product Administration Charges	Sum, Lns. 37, 39, 41, 43, 45	0.01	0.02	0.02	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07

QWEST CORPORATION
Arizona Corporation Commission Docket No. 00000A-00-0194

TELRIC -- Statewide Average DS1 Capable Loop

Ln No	Plant Account Description Account Number	Source	Circuit - Digital: Other 357C	Digital 257C	Premises 257CP	SONET 257CS	SONET Premises 257CSP	Poles 1C	C-Wire 3C	Conduit 4C	Outside Plant: Cable UG Metal 5C	Drop Buried 35C	Drop Aerial 42C	Cable Bur. Metal 45C	Cable Aer. Metal 52C	Cable Bld. Metal 62C	Cable UG Fiber 85C	Cable Bur. Fiber 845C	Cable Bld. Fiber 862C	TOTALS
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(n)	(o)	(p)	(q)	(r)	(s)	(t)
47	TOTAL MO. "DIRECTLY ASSIGNED" CHGS.	Sum, Lns. 35, 46	3.82	7.92	8.18	5.03	4.42	0.00	0.00	2.00	1.48	0.00	0.00	0.32	0.00	0.00	0.91	1.01	0.02	35.10
	MONTHLY "NETWORK SUPPORT" EXPENSE:																			
48	Network Operations Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
49	Network Operations Monthly Charges	Ln 47 times Ln 48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
50	"Network Support" Expense Factor		0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	
51	Network Support" Monthly Charges	Ln 47 times Ln 50	0.06	0.13	0.13	0.08	0.07	0.00	0.00	0.03	0.02	0.00	0.00	0.01	0.00	0.00	0.01	0.02	0.00	0.56
52	Total Monthly Network Support Charges	Sum, Lns. 49, 51	0.06	0.13	0.13	0.08	0.07	0.00	0.00	0.03	0.02	0.00	0.00	0.01	0.00	0.00	0.01	0.02	0.00	0.56
53	TOTAL MONTHLY DIRECT + SUPPORT	Sum, Lns. 47, 52	3.88	8.05	8.31	5.11	4.50	0.00	0.00	2.03	1.51	0.00	0.00	0.33	0.00	0.00	0.92	1.03	0.02	35.66
	MONTHLY "DIRECTLY ATTRIBUTED" EXPENSES:																			
54	General Support Assets Expense Factor		0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	
55	General Support Assets Monthly Charges	Ln 47 times Ln 54	0.31	0.65	0.67	0.41	0.36	0.00	0.00	0.16	0.12	0.00	0.00	0.03	0.00	0.00	0.07	0.08	0.00	2.86
56	Gen Pur Computer Expense Factor		0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	
57	Gen Pur Computer Monthly Charges	Ln 47 times Ln 56	0.13	0.28	0.29	0.18	0.15	0.00	0.00	0.07	0.05	0.00	0.00	0.01	0.00	0.00	0.03	0.04	0.00	1.23
58	Uncollectible Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
59	Uncollectible Monthly Charges	Ln 47 times Ln 58	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
60	Accounting Expense Factor		0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	
61	Accounting Expense Monthly Charges	Ln 47 times Ln 60	0.03	0.06	0.07	0.04	0.04	0.00	0.00	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.28
62	Human Resources Expense Factor		0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	
63	Human Resources Monthly Charges	Ln 47 times Ln 62	0.03	0.06	0.06	0.04	0.03	0.00	0.00	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.27
64	Information Management Expense Factor		0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	
65	Information Management Monthly Charges	Ln 47 times Ln 64	0.21	0.44	0.45	0.28	0.24	0.00	0.00	0.11	0.08	0.00	0.00	0.02	0.00	0.00	0.05	0.06	0.00	1.94
66	Intangible Expense Factor		0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	
67	Intangible Expense Monthly Charges	Ln 47 times Ln 66	0.01	0.02	0.02	0.01	0.01	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09
68	Total Monthly "Directly Attributed" Expense Charges	Sum Lns. 55, 57, 59, 61, 63, 65, 67	0.73	1.51	1.56	0.96	0.84	0.00	0.00	0.38	0.28	0.00	0.00	0.08	0.00	0.00	0.17	0.16	0.00	6.68
69	TOTAL MONTHLY "DIRECT" CHARGES	Sum, Lns. 53, 69	4.60	9.55	9.87	6.06	5.34	0.00	0.00	2.41	1.79	0.00	0.00	0.39	0.00	0.00	1.09	1.22	0.02	42.34
	MONTHLY COMMON EXPENSES:																			
70	Executive Expense Factor		0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	
71	Executive Expense Monthly Charges	Ln 69 times Ln 70	0.03	0.06	0.06	0.04	0.03	0.00	0.00	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.28
72	Planning Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
73	Planning Expense Monthly Charges	Ln 69 times Ln 72	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
74	External Relations Expense Factor		0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	
75	External Relations Monthly Charges	Ln 69 times Ln 74	0.04	0.09	0.09	0.06	0.05	0.00	0.00	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.39
76	Legal Expense Factor		0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	
77	Legal Expense Monthly Charges	Ln 69 times Ln 76	0.03	0.06	0.06	0.04	0.03	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.25
78	Procurement Expense Factor		0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	
79	Procurement Expense Monthly Charges	Ln 69 times Ln 78	0.01	0.02	0.02	0.01	0.01	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09
80	Research and Development Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
81	R&D Expense Monthly Charges	Ln. 69 times Ln 80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
82	General Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
83	General Expense Monthly Charges	Ln 69 times Ln 82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
84	Total Monthly "Common" Expenses Charges	Sum, Lns. 71, 73, 75, 77, 79, 81, 83	0.11	0.23	0.24	0.15	0.13	0.00	0.00	0.06	0.04	0.00	0.00	0.01	0.00	0.00	0.03	0.03	0.00	1.01
85	TOTAL MONTHLY "TELRIC"	Sum, Lns. 69, 84	$4.71	$9.78	$10.10	$6.21	$5.47	$0.00	$0.00	$2.47	$1.83	$0.00	$0.00	$0.40	$0.00	$0.00	$1.12	$1.25	$0.02	$43.35

QWEST CORPORATION
Arizona Corporation Commission Docket No. 00000A-00-0194

TELRIC -- DS1 Capable Loop, Zone 1

Ln No. (a)	Plant Account Description Account Number (b)	Source (c)	Circuit - Digital: Other 357C (d)	Digital 257C (e)	Premises 257CP (f)	SONET 257CS (g)	SONET Premises 257CSP (h)	Outside Plant: Poles 1C (i)	C-Wire 3C (j)	Conduit 4C (k)	Cable UG Metal 5C (l)	Drop Buried 35C (m)	Drop Aerial 42C (n)	Cable Bur. Metal 45C (n)	Cable Aer. Metal 52C (o)	Cable Bld. Metal 62C (p)	Cable UG Fiber 85C (q)	Cable Bur. Fiber 845C (r)	Cable Bld. Fiber 862C (s)	TOTALS (t)
	INVESTMENT																			
1	Equipment		217.15	464.72	505.20	294.88	273.28	0.00	0.00	202.57	90.02	0.00	0.00	3.27	0.00	0.00	47.84	22.19	1.02	2,122.14
2	Bldg Loading Fact		0.0418	0.0418	0.0000	0.0418	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
3	Building	Ln 1 times Ln 2	9.08	19.43	0.00	12.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	40.83
4	Land Loading Fact		0.0036	0.0036	0.0000	0.0036	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
5	Land	Ln 1 times Ln 4	0.78	1.67	0.00	1.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.52
6	**Loaded Investment**	**Sum, Lns. 1, 3, 5**	**227.01**	**485.82**	**505.20**	**308.27**	**273.28**	**0.00**	**0.00**	**202.57**	**90.02**	**0.00**	**0.00**	**3.27**	**0.00**	**0.00**	**47.84**	**22.19**	**1.02**	**2,166.48**
	MONTHLY INVESTMENT-RELATED CHARGES, EQUIPMENT:																			
7	Avg Depr Factor		0.1082	0.1082	0.1082	0.1082	0.1082	0.0674	0.1404	0.0227	0.0772	0.0944	0.1137	0.0944	0.1137	0.0598	0.0900	0.0662	0.0990	
8	Avg Annual Depr	Ln 1 times Ln 7	23.50	50.28	54.66	31.91	29.57	0.00	0.00	4.60	6.95	0.00	0.00	0.31	0.00	0.00	4.31	1.47	0.10	
9	Avg Monthly Depr	Ln 8 divided by 12	1.96	4.19	4.56	2.66	2.46	0.00	0.00	0.38	0.58	0.00	0.00	0.03	0.00	0.00	0.36	0.12	0.01	17.30
10	Avg COM Factor		0.0420	0.0420	0.0420	0.0420	0.0420	0.0500	0.0755	0.0581	0.0546	0.0552	0.0536	0.0552	0.0536	0.0562	0.0562	0.0538	0.0589	
11	Avg Annual COM	Ln 1 times Ln 10	9.12	19.52	21.22	12.38	11.46	0.00	0.00	11.77	4.92	0.00	0.00	0.18	0.00	0.00	2.69	1.19	0.06	
12	Avg Monthly COM	Ln 11 divided by 12	0.76	1.63	1.77	1.03	0.96	0.00	0.00	0.98	0.41	0.00	0.00	0.02	0.00	0.00	0.22	0.10	0.01	7.88
13	Avg IT Factor		0.0175	0.0175	0.0175	0.0175	0.0175	0.0208	0.0314	0.0242	0.0227	0.0230	0.0223	0.0230	0.0223	0.0234	0.0234	0.0224	0.0245	
14	Avg Annual IT	Ln 1 times Ln 13	3.80	8.13	8.84	5.16	4.78	0.00	0.00	4.90	2.04	0.00	0.00	0.08	0.00	0.00	1.12	0.50	0.02	
15	Avg Monthly IT	Ln 14 divided by 12	0.32	0.68	0.74	0.43	0.40	0.00	0.00	0.41	0.17	0.00	0.00	0.01	0.00	0.00	0.09	0.04	0.00	3.28
16	Total Maint Factor		0.0182	0.0118	0.0118	0.0118	0.0118	0.0045	0.0156	0.0046	0.0376	0.0845	0.1158	0.0845	0.1158	0.0156	0.0376	0.0139	0.0200	
17	Total Annual Maint	Ln 1 times Ln 16	3.95	5.48	5.96	3.48	3.22	0.00	0.00	0.93	3.38	0.00	0.00	0.28	0.00	0.00	1.80	0.31	0.02	
18	Total Monthly Maint	Ln 17 divided by 12	0.33	0.46	0.50	0.29	0.27	0.00	0.00	0.08	0.28	0.00	0.00	0.02	0.00	0.00	0.15	0.03	0.00	2.40
19	Ad Valorem Tax Factor		0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	
20	Annual AV Taxes	Ln 1 times Ln 19	2.95	6.32	6.87	4.01	3.72	0.00	0.00	2.75	1.22	0.00	0.00	0.04	0.00	0.00	0.65	0.30	0.01	
21	Monthly AV Taxes	Ln 20 divided by 12	0.25	0.53	0.57	0.33	0.31	0.00	0.00	0.23	0.10	0.00	0.00	0.00	0.00	0.00	0.05	0.03	0.00	2.41
22	Tot Mo Inv Related Charge, Equip		3.81	7.48	8.13	4.75	4.40	0.00	0.00	2.08	1.54	0.00	0.00	0.07	0.00	0.00	0.88	0.31	0.02	33.27
	MONTHLY INVESTMENT-RELATED CHARGES, L&B LOADINGS																			
23	Building Loading	Ln 3 above	9.08	19.43	0.00	12.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
24	Total AC Factor, Bldg		0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	
25	Bldg Annual Charge	Ln 23 times Ln 24	2.03	4.34	0.00	2.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
26	Bldg Monthly Charge	Ln 25 divided by 12	0.17	0.36	0.00	0.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.76
27	Land Loading	Ln 5 above	0.78	1.67	0.00	1.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
28	Total AC Factor, Land		0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	
29	Land Annual Charge	Ln 27 times Ln 28	0.17	0.37	0.00	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
30	Land Monthly Charge	Ln 29 divided by 12	0.01	0.03	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07
31	Total L&B Monthly Charge	Sum, Lns 26, 30	0.18	0.39	0.00	0.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.82
	BILLING AND COLLECTION CHARGES:																			
32	Total Plant Investment Monthly Charges	Sum, Lns 22 and 31	3.79	7.87	8.13	4.99	4.40	0.00	0.00	2.08	1.54	0.00	0.00	0.07	0.00	0.00	0.88	0.31	0.02	
33	B&C Factor		0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	
34	Total Monthly B&C Charge	Ln 32 times Ln 33	0.02	0.03	0.03	0.02	0.02	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.15
35	**TOTAL MONTHLY INV. RELATED CHARGES**	**Sum, Lns. 22, 31, 34**	**3.81**	**7.90**	**8.16**	**5.02**	**4.42**	**0.00**	**0.00**	**2.09**	**1.55**	**0.00**	**0.00**	**0.07**	**0.00**	**0.00**	**0.88**	**0.32**	**0.02**	**34.24**
	MONTHLY PRODUCT ADMINISTRATION RELATED CHARGES:																			
36	Direct Assigned Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
37	Direct Assigned Monthly Charges	Ln 35 times Ln 36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
38	Product Management Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
39	Product Management Monthly Charges	Ln 35 times Ln 38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
40	Sales Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
41	Monthly Sales Charges	Ln 35 times Ln 40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
42	Advertising Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
43	Monthly Advertising Charges	Ln 35 times Ln 42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
44	Business Fees (Other Taxes) Expense Factor		0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	
45	Monthly Business Fees Charges	n. 44 times Sum Lns 37, 39, 41, 4	0.01	0.02	0.02	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07
46	Total Monthly Product Administration Charges	Sum, Lns 37, 39, 41, 43, 45	0.01	0.02	0.02	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07

QWEST CORPORATION
Arizona Corporation Commission Docket No. 00000A-00-0194

TELRIC -- DS1 Capable Loop, Zone 1

Ln No	Plant Account Description Account Number	Source	Circuit - Digital: Other 357C	Digital 257C	Premises 257CP	SONET 257CS	SONET Premises 257CSP	Poles 1C	C-Wire 3C	Conduit 4C	Outside Plant: Cable UG Metal 5C	Drop Buried 35C	Drop Aerial 42C	Cable Bur. Metal 45C	Cable Aer. Metal 52C	Cable Bld. Metal 62C	Cable UG Fiber 85C	Cable Bur. Fiber 845C	Cable Bld. Fiber 862C	TOTALS
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)	(s)	(t)	
47	TOTAL MO. "DIRECTLY ASSIGNED" CHGS.	Sum, Lns 35, 46	3.82	7.92	8.18	5.03	4.42	0.00	0.00	2.09	1.85	0.00	0.00	0.07	0.00	0.00	0.89	0.32	0.02	31.31
	MONTHLY "NETWORK SUPPORT" EXPENSE																			
48	Network Operations Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
49	Network Operations Monthly Charges	Ln 47 times Ln 48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
50	"Network Support" Expense Factor		0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	
51	"Network Support" Monthly Charges	Ln 47 times Ln 50	0.06	0.13	0.13	0.08	0.07	0.00	0.00	0.03	0.02	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.55
52	Total Monthly Network Support Charges	Sum, Lns 49, 51	0.06	0.13	0.13	0.08	0.07	0.00	0.00	0.03	0.02	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.55
53	TOTAL MONTHLY DIRECT + SUPPORT	Sum, Lns. 47, 52	3.88	8.05	8.31	5.11	4.50	0.00	0.00	2.13	1.88	0.00	0.00	0.08	0.00	0.00	0.90	0.32	0.02	34.86
	MONTHLY "DIRECTLY ATTRIBUTED" EXPENSES:																			
54	General Support Assets Expense Factor		0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	
55	General Support Assets Monthly Charges	Ln 47 times Ln 54	0.31	0.65	0.67	0.41	0.36	0.00	0.00	0.17	0.13	0.00	0.00	0.01	0.00	0.00	0.07	0.03	0.00	2.80
56	Gen. Pur. Computer Expense Factor		0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	
57	Gen. Pur. Computer Monthly Charges	Ln 47 times Ln 56	0.13	0.28	0.29	0.18	0.15	0.00	0.00	0.07	0.05	0.00	0.00	0.00	0.00	0.00	0.03	0.01	0.00	1.20
58	Uncollectible Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
59	Uncollectible Monthly Charges	Ln 47 times Ln 58	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
60	Accounting Expense Factor		0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	
61	Accounting Expense Monthly Charges	Ln 47 times Ln 60	0.03	0.06	0.07	0.04	0.04	0.00	0.00	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.27
62	Human Resources Expense Factor		0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	
63	Human Resources Monthly Charges	Ln 47 times Ln 62	0.03	0.06	0.06	0.04	0.03	0.00	0.00	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.27
64	Information Management Expense Factor		0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	
65	Information Management Monthly Charges	Ln 47 times Ln 64	0.21	0.44	0.45	0.28	0.24	0.00	0.00	0.12	0.09	0.00	0.00	0.00	0.00	0.00	0.05	0.02	0.00	1.90
66	Intangible Expense Factor		0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	
67	Intangible Expense Monthly Charges	Ln 47 times Ln 66	0.01	0.02	0.02	0.01	0.01	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09
68	Total Monthly "Directly Attributed" Expense Charges	Sum Lns 55, 57, 59, 61, 63, 65, 67	0.73	1.51	1.56	0.96	0.84	0.00	0.00	0.40	0.30	0.00	0.00	0.01	0.00	0.00	0.17	0.06	0.00	6.53
69	TOTAL MONTHLY "DIRECT" CHARGES	Sum, Lns. 53, 69	4.60	9.55	9.87	6.06	5.34	0.00	0.00	2.52	1.87	0.00	0.00	0.09	0.00	0.00	1.07	0.38	0.02	41.38
	MONTHLY COMMON EXPENSES:																			
70	Executive Expense Factor		0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	
71	Executive Expense Monthly Charges	Ln 69 times Ln 70	0.03	0.06	0.06	0.04	0.03	0.00	0.00	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.27
72	Planning Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
73	Planning Expense Monthly Charges	Ln 69 times Ln 72	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
74	External Relations Expense Factor		0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	
75	External Relations Monthly Charges	Ln 69 times Ln 74	0.04	0.09	0.09	0.06	0.05	0.00	0.00	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.38
76	Legal Expense Factor		0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	
77	Legal Expense Monthly Charges	Ln 69 times Ln 76	0.03	0.06	0.06	0.04	0.03	0.00	0.00	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.25
78	Procurement Expense Factor		0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	
79	Procurement Expense Monthly Charges	Ln. 69 times Ln. 78	0.01	0.02	0.02	0.01	0.01	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09
80	Research and Development Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
81	R&D Expense Monthly Charges	Ln. 69 times Ln. 80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
82	General Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
83	General Expense Monthly Charges	Ln 69 times Ln 82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
84	Total Monthly "Common" Expenses Charges	Sum, Lns. 71, 73, 75, 77, 79, 81, 83	0.11	0.23	0.24	0.15	0.13	0.00	0.00	0.06	0.04	0.00	0.00	0.00	0.00	0.00	0.03	0.01	0.00	0.99
85	**TOTAL MONTHLY "TELRIC"**	**Sum, Lns. 69, 84**	**$4.71**	**$9.78**	**$10.10**	**$6.21**	**$5.47**	**$0.00**	**$0.00**	**$2.58**	**$1.92**	**$0.00**	**$0.00**	**$0.09**	**$0.00**	**$0.00**	**$1.09**	**$0.39**	**$0.02**	**$42.37**

QWEST CORPORATION
Arizona Corporation Commission Docket No. 00000A-00-0194

TELRIC -- DS1 Capable Loop, Zone 2

Ln. No. (a)	Plant Account Description Account Number (b)	Source (c)	Circuit - Digital: Other 357C (d)	Digital 257C (e)	Premises 257CP (f)	SONET 257CS (g)	SONET Premises 257CSP (h)	Poles 1C (i)	C-Wire 3C (j)	Conduit 4C (k)	Outside Plant: Cable UG Metal 5C (l)	Drop Buried 35C (m)	Drop Aerial 42C (n)	Cable Bur. Metal 45C (n)	Cable Aer. Metal 52C (o)	Cable Bld. Metal 62C (p)	Cable UG Fiber 85C (q)	Cable Bur. Fiber 845C (r)	Cable Bld. Fiber 862C (s)	TOTALS (t)
	INVESTMENT																			
1	Equipment		217.15	464.72	505.20	294.88	273.28	0.00	0.00	197.81	87.90	0.00	0.00	7.54	0.00	0.00	47.64	35.59	1.02	2,132.73
2	Bldg Loading Fact		0.0418	0.0418	0.0000	0.0418	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
3	Building	Ln 1 times Ln 2	9.08	19.43	0.00	12.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	40.83
4	Land Loading Fact		0.0036	0.0036	0.0000	0.0036	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
5	Land	Ln 1 times Ln 4	0.78	1.67	0.00	1.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.52
6	**Loaded Investment**	**Sum, Lns. 1, 3, 5**	**227.01**	**485.82**	**505.20**	**308.27**	**273.28**	**0.00**	**0.00**	**197.81**	**87.90**	**0.00**	**0.00**	**7.54**	**0.00**	**0.00**	**47.64**	**35.59**	**1.02**	**2,177.07**
	MONTHLY INVESTMENT-RELATED CHARGES, EQUIPMENT:																			
7	Avg Depr Factor		0.1082	0.1082	0.1082	0.1082	0.1082	0.0674	0.1404	0.0227	0.0772	0.0944	0.1137	0.0944	0.1137	0.0598	0.0900	0.0662	0.0990	
8	Avg Annual Depr	Ln 1 times Ln 7	23.50	50.28	54.66	31.91	29.57	0.00	0.00	4.49	6.79	0.00	0.00	0.71	0.00	0.00	4.29	2.36	0.10	
9	Avg Monthly Depr	Ln 8 divided by 12	1.96	4.19	4.56	2.66	2.46	0.00	0.00	0.37	0.57	0.00	0.00	0.06	0.00	0.00	0.36	0.20	0.01	17.39
10	Avg COM Factor		0.0420	0.0420	0.0420	0.0420	0.0420	0.0500	0.0755	0.0581	0.0546	0.0552	0.0536	0.0552	0.0536	0.0562	0.0562	0.0538	0.0589	
11	Avg Annual COM	Ln 1 times Ln 10	9.12	19.52	21.22	12.38	11.48	0.00	0.00	11.49	4.80	0.00	0.00	0.42	0.00	0.00	2.68	1.91	0.06	
12	Avg Monthly COM	Ln 11 divided by 12	0.76	1.63	1.77	1.03	0.96	0.00	0.00	0.96	0.40	0.00	0.00	0.03	0.00	0.00	0.22	0.16	0.01	7.62
13	Avg IT Factor		0.0175	0.0175	0.0175	0.0175	0.0175	0.0208	0.0314	0.0242	0.0227	0.0230	0.0223	0.0230	0.0223	0.0234	0.0234	0.0224	0.0245	
14	Avg Annual IT	Ln 1 times Ln 13	3.80	8.13	8.84	5.16	4.78	0.00	0.00	4.79	2.00	0.00	0.00	0.17	0.00	0.00	1.11	0.80	0.02	
15	Avg Monthly IT	Ln 14 divided by 12	0.32	0.68	0.74	0.43	0.40	0.00	0.00	0.40	0.17	0.00	0.00	0.01	0.00	0.00	0.09	0.07	0.00	3.30
16	Total Maint Factor		0.0182	0.0118	0.0118	0.0118	0.0118	0.0045	0.0156	0.0046	0.0376	0.0845	0.1158	0.0845	0.1158	0.0156	0.0376	0.0139	0.0200	
17	Total Annual Maint	Ln 1 times Ln 16	3.95	5.48	5.96	3.48	3.22	0.00	0.00	0.91	3.31	0.00	0.00	0.64	0.00	0.00	1.79	0.49	0.02	
18	Total Monthly Maint	Ln 17 divided by 12	0.33	0.46	0.50	0.29	0.27	0.00	0.00	0.08	0.28	0.00	0.00	0.05	0.00	0.00	0.15	0.04	0.00	2.44
19	Ad Valorem Tax Factor		0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	
20	Annual AV Taxes	Ln 1 times Ln 19	2.95	6.32	6.87	4.01	3.72	0.00	0.00	2.69	1.20	0.00	0.00	0.10	0.00	0.00	0.65	0.48	0.01	
21	Monthly AV Taxes	Ln 20 divided by 12	0.25	0.53	0.57	0.33	0.31	0.00	0.00	0.22	0.10	0.00	0.00	0.01	0.00	0.00	0.05	0.04	0.00	2.42
22	Tot Mo Inv Related Charge, Equip		3.61	7.48	8.13	4.75	4.40	0.00	0.00	2.03	1.51	0.00	0.00	0.17	0.00	0.00	0.88	0.50	0.02	33.47
	MONTHLY INVESTMENT-RELATED CHARGES, L&B LOADINGS																			
23	Building Loading	Ln 3 above	9.08	19.43	0.00	12.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
24	Total AC Factor, Bldg		0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	
25	Bldg Annual Charge	Ln 23 times Ln 24	2.03	4.34	0.00	2.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
26	Bldg Monthly Charge	Ln 25 divided by 12	0.17	0.36	0.00	0.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.76
27	Land Loading	Ln 5 above	0.78	1.67	0.00	1.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
28	Total AC Factor, Land		0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	
29	Land Annual Charge	Ln 27 times Ln 28	0.17	0.37	0.00	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
30	Land Monthly Charge	Ln 29 divided by 12	0.01	0.03	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07
31	Total L&B Monthly Charge	Sum, Lns 26, 30	0.18	0.39	0.00	0.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.82
	BILLING AND COLLECTION CHARGES:																			
32	Total Plant Investment Monthly Charges	Sum, Lns 22 and 31	3.79	7.87	8.13	4.99	4.40	0.00	0.00	2.03	1.51	0.00	0.00	0.17	0.00	0.00	0.88	0.50	0.02	
33	B&C Factor		0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	
34	Total Monthly B&C Charge	Ln 32 times Ln 33	0.02	0.03	0.03	0.02	0.02	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.15
35	**TOTAL MONTHLY INV. RELATED CHARGES**	**Sum, Lns. 22, 31, 34**	**3.81**	**7.90**	**8.16**	**5.02**	**4.42**	**0.00**	**0.00**	**2.04**	**1.51**	**0.00**	**0.00**	**0.17**	**0.00**	**0.00**	**0.88**	**0.51**	**0.02**	**34.44**
	MONTHLY PRODUCT ADMINISTRATION RELATED CHARGES:																			
36	Direct Assigned Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
37	Direct Assigned Monthly Charges	Ln 35 times Ln 36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
38	Product Management Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
39	Product Management Monthly Charges	Ln 35 times Ln 38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
40	Sales Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
41	Monthly Sales Charges	Ln 35 times Ln 40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
42	Advertising Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
43	Monthly Advertising Charges	Ln 35 times Ln 42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
44	Business Fees (Other Taxes) Expense Factor		0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	
45	Monthly Business Fees Charges	n 44 times Sum Lns 37, 39, 41, 4	0.01	0.02	0.02	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07
46	Total Monthly Product Administration Charges	Sum, Lns 37, 39, 41, 43, 45	0.01	0.02	0.02	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07

QWEST CORPORATION
Arizona Corporation Commission Docket No 00000A-00-0194

TELRIC -- DS1 Capable Loop, Zone 2

Ln No	Plant Account Description Account Number	Source	Circuit - Digital: Other 357C	Digital 257C	Premises 257CP	SONET 257CS	SONET Premises 257CSP	Outside Plant: Poles 1C	C-Wire 3C	Conduit 4C	Cable UG Metal 5C	Drop Buried 35C	Drop Aerial 42C	Cable Bur. Metal 45C	Cable Aer. Metal 52C	Cable Bld. Metal 62C	Cable UG Fiber 85C	Cable Bur. Fiber 845C	Cable Bld. Fiber 862C	TOTALS
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(n)	(o)	(p)	(q)	(r)	(s)	(t)
47	TOTAL MO. "DIRECTLY ASSIGNED" CHGS.	Sum, Lns 35, 46	3.82	7.92	8.18	5.03	4.42	0.00	0.00	2.04	1.52	0.00	0.00	0.17	0.00	0.00	0.88	0.51	0.02	34.50
	MONTHLY "NETWORK SUPPORT" EXPENSE:																			
48	Network Operations Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
49	Network Operations Monthly Charges	Ln 47 times Ln 48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
50	"Network Support" Expense Factor		0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	
51	Network Support" Monthly Charges	Ln 47 times Ln 50	0.06	0.13	0.13	0.08	0.07	0.00	0.00	0.03	0.02	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.55
52	Total Monthly Network Support Charges	Sum, Lns 49, 51	0.06	0.13	0.13	0.08	0.07	0.00	0.00	0.03	0.02	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.55
53	TOTAL MONTHLY DIRECT + SUPPORT	Sum, Lns. 47, 52	3.88	8.05	8.31	5.11	4.50	0.00	0.00	2.08	1.54	0.00	0.00	0.17	0.00	0.00	0.90	0.52	0.02	35.06
	MONTHLY "DIRECTLY ATTRIBUTED" EXPENSES:																			
54	General Support Assets Expense Factor		0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	
55	General Support Assets Monthly Charges	Ln 47 times Ln 54	0.31	0.65	0.67	0.41	0.36	0.00	0.00	0.17	0.12	0.00	0.00	0.01	0.00	0.00	0.07	0.04	0.00	2.81
56	Gen Pur Computer Expense Factor		0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	
57	Gen Pur Computer Monthly Charges	Ln 47 times Ln 56	0.13	0.28	0.29	0.18	0.15	0.00	0.00	0.07	0.05	0.00	0.00	0.01	0.00	0.00	0.03	0.02	0.00	1.21
58	Uncollectible Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
59	Uncollectible Monthly Charges	Ln 47 times Ln 58	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
60	Accounting Expense Factor		0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	
61	Accounting Expense Monthly Charges	Ln 47 times Ln 60	0.03	0.06	0.07	0.04	0.04	0.00	0.00	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.28
62	Human Resources Expense Factor		0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	
63	Human Resources Monthly Charges	Ln 47 times Ln 62	0.03	0.06	0.06	0.04	0.03	0.00	0.00	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.27
64	Information Management Expense Factor		0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	
65	Information Management Monthly Charges	Ln 47 times Ln 64	0.21	0.44	0.45	0.28	0.24	0.00	0.00	0.11	0.08	0.00	0.00	0.01	0.00	0.00	0.05	0.03	0.00	1.91
66	Intangible Expense Factor		0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	
67	Intangible Expense Monthly Charges	Ln 47 times Ln 66	0.01	0.02	0.02	0.01	0.01	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09
68	Total Monthly "Directly Attributed" Expense Charges	Sum Lns 55, 57, 59, 61, 63, 65, 67	0.73	1.51	1.56	0.96	0.84	0.00	0.00	0.39	0.29	0.00	0.00	0.03	0.00	0.00	0.17	0.10	0.00	6.56
69	TOTAL MONTHLY "DIRECT" CHARGES	Sum, Lns. 53, 69	4.60	9.55	9.87	6.06	5.34	0.00	0.00	2.46	1.83	0.00	0.00	0.21	0.00	0.00	1.06	0.61	0.02	41.62
	MONTHLY COMMON EXPENSES:																			
70	Executive Expense Factor		0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	
71	Executive Expense Monthly Charges	Ln 69 times Ln 70	0.03	0.06	0.06	0.04	0.03	0.00	0.00	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.27
72	Planning Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
73	Planning Expense Monthly Charges	Ln 69 times Ln 72	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
74	External Relations Expense Factor		0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	
75	External Relations Monthly Charges	Ln 69 times Ln 74	0.04	0.09	0.09	0.06	0.05	0.00	0.00	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.38
76	Legal Expense Factor		0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	
77	Legal Expense Monthly Charges	Ln 69 times Ln 76	0.03	0.06	0.06	0.04	0.03	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.25
78	Procurement Expense Factor		0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	
79	Procurement Expense Monthly Charges	Ln 69 times Ln 78	0.01	0.02	0.02	0.01	0.01	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09
80	Research and Development Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
81	R&D Expense Monthly Charges	Ln 69 times Ln 80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
82	General Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
83	General Expense Monthly Charges	Ln 69 times Ln 82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
84	Total Monthly "Common" Expenses Charges	Sum, Lns 71, 73, 75, 77, 79, 81, 83	0.11	0.23	0.24	0.15	0.13	0.00	0.00	0.06	0.04	0.00	0.00	0.00	0.00	0.00	0.03	0.01	0.00	1.00
85	**TOTAL MONTHLY "TELRIC"**	**Sum, Lns. 69, 84**	**$4.71**	**$9.78**	**$10.10**	**$6.21**	**$5.47**	**$0.00**	**$0.00**	**$2.52**	**$1.87**	**$0.00**	**$0.00**	**$0.21**	**$0.00**	**$0.00**	**$1.09**	**$0.63**	**$0.02**	**$42.62**

QWEST CORPORATION
Arizona Corporation Commission Docket No. 00000A-00-0194

TELRIC -- DS1 Capable Loop, Zone 3

Ln No	Plant Account Description Account Number	Source	Circuit - Digital: Other 357C	Digital 257C	Premises 257CP	SONET 257CS	SONET Premises 257CSP	Poles 1C	C-Wire 3C	Conduit 4C	Outside Plant: Cable UG Metal. 5C	Drop Buried 35C	Drop Aerial 42C	Cable Bur. Metal. 45C	Cable Aer. Metal. 52C	Cable Bld. Metal. 62C	Cable UG Fiber 85C	Cable Bur. Fiber 845C	Cable Bld. Fiber 862C	TOTALS
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(n)	(o)	(p)	(q)	(r)	(s)	(t)
	INVESTMENT																			
1	Equipment		217.15	464.72	505.20	294.88	273.28	0.00	0.00	165.46	73.13	0.00	0.00	51.01	0.00	0.00	63.61	240.24	1.02	2,349.70
2	Bldg Loading Fact		0.0418	0.0418	0.0000	0.0418	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
3	Building	Ln 1 times Ln 2	9.08	19.43	0.00	12.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	40.83
4	Land Loading Fact		0.0036	0.0036	0.0000	0.0036	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
5	Land	Ln 1 times Ln 4	0.78	1.67	0.00	1.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.52
6	**Loaded Investment**	**Sum, Lns. 1, 3, 5**	**227.01**	**485.82**	**505.20**	**308.27**	**273.28**	**0.00**	**0.00**	**165.46**	**73.13**	**0.00**	**0.00**	**51.01**	**0.00**	**0.00**	**63.61**	**240.24**	**1.02**	**2,394.04**
	MONTHLY INVESTMENT-RELATED CHARGES, EQUIPMENT:																			
7	Avg Depr Factor		0.1082	0.1082	0.1082	0.1082	0.1082	0.0674	0.1404	0.0227	0.0772	0.0944	0.1137	0.0944	0.1137	0.0598	0.0900	0.0662	0.0990	
8	Avg Annual Depr	Ln 1 times Ln 7	23.50	50.28	54.66	31.91	29.57	0.00	0.00	3.76	5.65	0.00	0.00	4.82	0.00	0.00	5.72	15.90	0.10	
9	Avg Monthly Depr	Ln 8 divided by 12	1.96	4.19	4.56	2.66	2.46	0.00	0.00	0.31	0.47	0.00	0.00	0.40	0.00	0.00	0.48	1.33	0.01	18.82
10	Avg COM Factor		0.0420	0.0420	0.0420	0.0420	0.0420	0.0500	0.0755	0.0581	0.0546	0.0552	0.0536	0.0552	0.0536	0.0562	0.0562	0.0538	0.0589	
11	Avg Annual COM	Ln 1 times Ln 10	9.12	19.52	21.22	12.38	11.48	0.00	0.00	9.61	3.99	0.00	0.00	2.82	0.00	0.00	3.57	12.92	0.08	
12	Avg Monthly COM	Ln 11 divided by 12	0.76	1.63	1.77	1.03	0.96	0.00	0.00	0.80	0.33	0.00	0.00	0.23	0.00	0.00	0.30	1.08	0.01	8.89
13	Avg IT Factor		0.0175	0.0175	0.0175	0.0175	0.0175	0.0208	0.0314	0.0242	0.0227	0.0230	0.0223	0.0230	0.0223	0.0234	0.0234	0.0224	0.0245	
14	Avg Annual IT	Ln 1 times Ln 13	3.80	8.13	8.84	5.16	4.78	0.00	0.00	4.00	1.66	0.00	0.00	1.17	0.00	0.00	1.49	5.38	0.02	
15	Avg Monthly IT	Ln 14 divided by 12	0.32	0.68	0.74	0.43	0.40	0.00	0.00	0.33	0.14	0.00	0.00	0.10	0.00	0.00	0.12	0.45	0.00	3.70
16	Total Maint Factor		0.0182	0.0118	0.0118	0.0118	0.0118	0.0045	0.0156	0.0046	0.0376	0.0845	0.1158	0.0845	0.1158	0.0156	0.0376	0.0139	0.0200	
17	Total Annual Maint	Ln 1 times Ln 16	3.95	5.48	5.96	3.48	3.22	0.00	0.00	0.76	2.75	0.00	0.00	4.31	0.00	0.00	2.39	3.34	0.02	
18	Total Monthly Maint	Ln 17 divided by 12	0.33	0.46	0.50	0.29	0.27	0.00	0.00	0.06	0.23	0.00	0.00	0.36	0.00	0.00	0.20	0.28	0.00	2.97
19	Ad Valorem Tax Factor		0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	
20	Annual AV Taxes	Ln 1 times Ln 19	2.95	6.32	6.87	4.01	3.72	0.00	0.00	2.25	0.99	0.00	0.00	0.69	0.00	0.00	0.87	3.27	0.01	
21	Monthly AV Taxes	Ln 20 divided by 12	0.25	0.53	0.57	0.33	0.31	0.00	0.00	0.19	0.08	0.00	0.00	0.06	0.00	0.00	0.07	0.27	0.00	2.66
22	Tot Mo Inv Related Charge, Equip		3.81	7.48	8.13	4.75	4.40	0.00	0.00	1.70	1.25	0.00	0.00	1.15	0.00	0.00	1.17	3.40	0.02	37.05
	MONTHLY INVESTMENT-RELATED CHARGES, L&B LOADINGS:																			
23	Building Loading	Ln 3 above	9.08	19.43	0.00	12.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
24	Total AC Factor, Bldg		0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	
25	Bldg Annual Charge	Ln 23 times Ln 24	2.03	4.34	0.00	2.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
26	Bldg Monthly Charge	Ln 25 divided by 12	0.17	0.36	0.00	0.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.76
27	Land Loading	Ln 5 above	0.78	1.67	0.00	1.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
28	Total AC Factor, Land		0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	
29	Land Annual Charge	Ln 27 times Ln 28	0.17	0.37	0.00	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
30	Land Monthly Charge	Ln 29 divided by 12	0.01	0.03	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07
31	Total L&B Monthly Charge	Sum, Lns 26, 30	0.18	0.39	0.00	0.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.82
	BILLING AND COLLECTION CHARGES:																			
32	Total Plant Investment Monthly Charges	Sum, Lns 22 and 31	3.79	7.87	8.13	4.99	4.40	0.00	0.00	1.70	1.25	0.00	0.00	1.15	0.00	0.00	1.17	3.40	0.02	
33	B&C Factor		0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	
34	Total Monthly B&C Charge	Ln 32 times Ln 33	0.02	0.03	0.03	0.02	0.02	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.16
35	**TOTAL MONTHLY INV. RELATED CHARGES**	**Sum, Lns. 22, 31, 34**	**3.81**	**7.90**	**8.16**	**5.02**	**4.42**	**0.00**	**0.00**	**1.71**	**1.26**	**0.00**	**0.00**	**1.16**	**0.00**	**0.00**	**1.18**	**3.42**	**0.02**	**38.04**
	MONTHLY PRODUCT ADMINISTRATION RELATED CHARGES:																			
36	Direct Assigned Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
37	Direct Assigned Monthly Charges	Ln 35 times Ln 36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
38	Product Management Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
39	Product Management Monthly Charges	Ln 35 times Ln 38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
40	Sales Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
41	Monthly Sales Charges	Ln 35 times Ln. 40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
42	Advertising Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
43	Monthly Advertising Charges	Ln 35 times Ln 42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
44	Business Fees (Other Taxes) Expense Factor		0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	
45	Monthly Business Fees Charges	n 44 times Sum Lns. 37, 39, 41, 4	0.01	0.02	0.02	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.07
46	Total Monthly Product Administration Charges	Sum, Lns 37, 39, 41, 43, 45	0.01	0.02	0.02	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.07

QWEST CORPORATION
Arizona Corporation Commission Docket No. 00000A-00-0194

TELRIC -- DS1 Capable Loop, Zone 3

Ln No (a)	Plant Account Description Account Number (b)	Source (c)	Circuit - Digital: Other 357C (d)	Digital 257C (e)	Premises 257CP (f)	SONET 257CS (g)	SONET Premises 257CSP (h)	Poles 1C (i)	C-Wire 3C (j)	Conduit 4C (k)	Outside Plant: Cable UG Metal 5C (l)	Drop Buried 35C (m)	Drop Aerial 42C (n)	Cable Bur. Metal 45C (n)	Cable Aer. Metal 52C (o)	Cable Bld. Metal 62C (p)	Cable UG Fiber 85C (q)	Cable Bur. Fiber 845C (r)	Cable Bld. Fiber 862C (s)	TOTALS (t)
47	**TOTAL MO. "DIRECTLY ASSIGNED" CHGS.**	**Sum, Lns. 35, 46**	**3.82**	**7.92**	**8.18**	**5.03**	**4.42**	**0.00**	**0.00**	**1.71**	**1.26**	**0.00**	**0.00**	**1.16**	**0.00**	**0.00**	**1.18**	**3.42**	**0.02**	**38.11**
	MONTHLY "NETWORK SUPPORT" EXPENSE:																			
48	Network Operations Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
49	Network Operations Monthly Charges	Ln 47 times Ln 48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
50	"Network Support" Expense Factor		0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	
51	Network Support" Monthly Charges	Ln 47 times Ln 50	0.06	0.13	0.13	0.08	0.07	0.00	0.00	0.03	0.02	0.00	0.00	0.02	0.00	0.00	0.02	0.05	0.00	0.61
52	Total Monthly Network Support Charges	Sum, Lns. 49, 51	0.06	0.13	0.13	0.08	0.07	0.00	0.00	0.03	0.02	0.00	0.00	0.02	0.00	0.00	0.02	0.05	0.00	0.61
53	**TOTAL MONTHLY DIRECT + SUPPORT**	**Sum, Lns. 47, 52**	**3.88**	**8.05**	**8.31**	**5.11**	**4.50**	**0.00**	**0.00**	**1.74**	**1.28**	**0.00**	**0.00**	**1.18**	**0.00**	**0.00**	**1.20**	**3.48**	**0.02**	**38.72**
	MONTHLY "DIRECTLY ATTRIBUTED" EXPENSES:																			
54	General Support Assets Expense Factor		0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	
55	General Support Assets Monthly Charges	Ln 47 times Ln 54	0.31	0.65	0.67	0.41	0.38	0.00	0.00	0.14	0.10	0.00	0.00	0.09	0.00	0.00	0.10	0.28	0.00	3.11
56	Gen. Pur. Computer Expense Factor		0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	
57	Gen. Pur. Computer Monthly Charges	Ln 47 times Ln 56	0.13	0.28	0.29	0.18	0.15	0.00	0.00	0.06	0.04	0.00	0.00	0.04	0.00	0.00	0.04	0.12	0.00	1.33
58	Uncollectible Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
59	Uncollectible Monthly Charges	Ln 47 times Ln 58	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
60	Accounting Expense Factor		0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	
61	Accounting Expense Monthly Charges	Ln 47 times Ln 60	0.03	0.06	0.07	0.04	0.04	0.00	0.00	0.01	0.01	0.00	0.00	0.01	0.00	0.00	0.01	0.03	0.00	0.30
62	Human Resources Expense Factor		0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	
63	Human Resources Monthly Charges	Ln 47 times Ln 62	0.03	0.06	0.06	0.04	0.03	0.00	0.00	0.01	0.01	0.00	0.00	0.01	0.00	0.00	0.01	0.03	0.00	0.30
64	Information Management Expense Factor		0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	
65	Information Management Monthly Charges	Ln 47 times Ln 64	0.21	0.44	0.45	0.28	0.24	0.00	0.00	0.09	0.07	0.00	0.00	0.06	0.00	0.00	0.07	0.19	0.00	2.11
66	Intangible Expense Factor		0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	
67	Intangible Expense Monthly Charges	Ln 47 times Ln 66	0.01	0.02	0.02	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.10
68	Total Monthly "Directly Attributed" Expense Charges	Sum Lns. 55, 57, 59, 61, 63, 65, 67	0.73	1.51	1.58	0.96	0.84	0.00	0.00	0.33	0.24	0.00	0.00	0.22	0.00	0.00	0.22	0.65	0.00	7.25
69	**TOTAL MONTHLY "DIRECT" CHARGES**	**Sum, Lns. 53, 69**	**4.60**	**9.55**	**9.87**	**6.06**	**5.34**	**0.00**	**0.00**	**2.06**	**1.52**	**0.00**	**0.00**	**1.40**	**0.00**	**0.00**	**1.42**	**4.13**	**0.02**	**45.97**
	MONTHLY COMMON EXPENSES:																			
70	Executive Expense Factor		0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	
71	Executive Expense Monthly Charges	Ln 69 times Ln 70	0.03	0.06	0.06	0.04	0.03	0.00	0.00	0.01	0.01	0.00	0.00	0.01	0.00	0.00	0.01	0.03	0.00	0.30
72	Planning Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
73	Planning Expense Monthly Charges	Ln 69 times Ln 72	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
74	External Relations Expense Factor		0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	
75	External Relations Monthly Charges	Ln 69 times Ln 74	0.04	0.09	0.09	0.06	0.05	0.00	0.00	0.02	0.01	0.00	0.00	0.01	0.00	0.00	0.01	0.04	0.00	0.42
76	Legal Expense Factor		0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	
77	Legal Expense Monthly Charges	Ln 69 times Ln 76	0.03	0.06	0.06	0.04	0.03	0.00	0.00	0.01	0.01	0.00	0.00	0.01	0.00	0.00	0.01	0.02	0.00	0.28
78	Procurement Expense Factor		0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	
79	Procurement Expense Monthly Charges	Ln 69 times Ln 78	0.01	0.02	0.02	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.10
80	Research and Development Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
81	R&D Expense Monthly Charges	Ln. 69 times Ln 80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
82	General Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
83	General Expense Monthly Charges	Ln. 69 times Ln. 82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
84	Total Monthly "Common" Expenses Charges	Sum, Lns. 71, 73, 75, 77, 79, 81, 83	0.11	0.23	0.24	0.15	0.13	0.00	0.00	0.05	0.04	0.00	0.00	0.03	0.00	0.00	0.03	0.10	0.00	1.10
85	**TOTAL MONTHLY "TELRIC"**	**Sum, Lns. 69, 84**	**$4.71**	**$9.78**	**$10.10**	**$6.21**	**$5.47**	**$0.00**	**$0.00**	**$2.11**	**$1.56**	**$0.00**	**$0.00**	**$1.43**	**$0.00**	**$0.00**	**$1.45**	**$4.23**	**$0.02**	**$47.07**

QWEST CORPORATION
Arizona Corporation Commission Docket No. 00000A-00-0194

TELRIC -- Statewide Average DS3 Capable Loop

Ln No	Plant Account Description Account Number	Source	Circuit - Digital: Other 357C	Digital 257C	Premises 257CP	SONET 257CS	SONET Premises 257CSP	Poles 1C	C-Wire 3C	Conduit 4C	Outside Plant: Cable UG Metal 5C	Drop Buried 35C	Drop Aerial 42C	Cable Bur. Metal 45C	Cable Aer. Metal 52C	Cable Bld. Metal 62C	Cable UG Fiber 85C	Cable Bur. Fiber 845C	Cable Bld. Fiber 862C	TOTALS
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(n)	(o)	(p)	(q)	(r)	(s)	(t)
	INVESTMENT																			
1	Equipment		1,560.51	108.50	47.28	7,041.87	9,913.37	0.00	0.00	2,742.44	0.00	0.00	0.00	0.00	0.00	0.00	1,910.14	3,030.05	52.91	26,407.07
2	Bldg Loading Fact		0.0418	0.0418	0.0000	0.0418	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
3	Building	Ln 1 times Ln 2	65.23	4.54	0.00	294.35	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	364.11
4	Land Loading Fact		0.0036	0.0036	0.0000	0.0036	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
5	Land	Ln 1 times Ln 4	5.62	0.39	0.00	25.35	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	31.36
6	**Loaded Investment**	**Sum, Lns. 1, 3, 5**	**1,631.36**	**113.43**	**47.28**	**7,361.57**	**9,913.37**	**0.00**	**0.00**	**2,742.44**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**1,910.14**	**3,030.05**	**52.91**	**26,802.54**
	MONTHLY INVESTMENT-RELATED CHARGES, EQUIPMENT:																			
7	Avg Depr Factor		0.1082	0.1082	0.1082	0.1082	0.1082	0.0674	0.1404	0.0227	0.0772	0.0944	0.1137	0.0944	0.1137	0.0598	0.0900	0.0662	0.0990	
8	Avg Annual Depr	Ln 1 times Ln 7	166.85	11.74	5.12	761.93	1,072.63	0.00	0.00	62.25	0.00	0.00	0.00	0.00	0.00	0.00	171.91	200.59	5.24	
9	Avg Monthly Depr	Ln 8 divided by 12	14.07	0.98	0.43	63.49	89.39	0.00	0.00	5.19	0.00	0.00	0.00	0.00	0.00	0.00	14.33	16.72	0.44	205.02
10	Avg COM Factor		0.0420	0.0420	0.0420	0.0420	0.0420	0.0500	0.0755	0.0581	0.0546	0.0552	0.0536	0.0552	0.0536	0.0562	0.0562	0.0538	0.0589	
11	Avg Annual COM	Ln 1 times Ln 10	65.54	4.56	1.99	295.76	416.36	0.00	0.00	159.34	0.00	0.00	0.00	0.00	0.00	0.00	107.35	163.02	3.12	
12	Avg Monthly COM	Ln 11 divided by 12	5.46	0.38	0.17	24.65	34.70	0.00	0.00	13.28	0.00	0.00	0.00	0.00	0.00	0.00	8.95	13.58	0.26	101.42
13	Avg IT Factor		0.0175	0.0175	0.0175	0.0175	0.0175	0.0208	0.0314	0.0242	0.0227	0.0230	0.0223	0.0230	0.0223	0.0234	0.0234	0.0224	0.0246	
14	Avg Annual IT	Ln 1 times Ln 13	27.31	1.90	0.83	123.23	173.46	0.00	0.00	66.37	0.00	0.00	0.00	0.00	0.00	0.00	44.70	67.87	1.30	
15	Avg Monthly IT	Ln 14 divided by 12	2.28	0.16	0.07	10.27	14.46	0.00	0.00	5.53	0.00	0.00	0.00	0.00	0.00	0.00	3.72	5.66	0.11	42.25
16	Total Maint Factor		0.0182	0.0118	0.0118	0.0118	0.0118	0.0045	0.0156	0.0046	0.0376	0.0845	0.1158	0.0845	0.1158	0.0156	0.0376	0.0139	0.0200	
17	Total Annual Maint	Ln 1 times Ln 16	28.40	1.28	0.56	83.09	116.98	0.00	0.00	12.62	0.00	0.00	0.00	0.00	0.00	0.00	71.82	42.12	1.06	
18	Total Monthly Maint	Ln 17 divided by 12	2.37	0.11	0.05	6.92	9.75	0.00	0.00	1.05	0.00	0.00	0.00	0.00	0.00	0.00	5.99	3.51	0.09	29.83
19	Ad Valorem Tax Factor		0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	
20	Annual AV Taxes	Ln 1 times Ln 19	21.22	1.48	0.64	95.77	134.82	0.00	0.00	37.30	0.00	0.00	0.00	0.00	0.00	0.00	25.98	41.21	0.72	
21	Monthly AV Taxes	Ln 20 divided by 12	1.77	0.12	0.05	7.98	11.24	0.00	0.00	3.11	0.00	0.00	0.00	0.00	0.00	0.00	2.16	3.43	0.06	29.93
22	Tot Mo Inv Related Charge, Equip		25.94	1.75	0.76	113.32	159.52	0.00	0.00	28.18	0.00	0.00	0.00	0.00	0.00	0.00	35.15	42.90	0.95	408.44
	MONTHLY INVESTMENT-RELATED CHARGES, L&B LOADINGS																			
23	Building Loading	Ln 3 above	65.23	4.54	0.00	294.35	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
24	Total AC Factor, Bldg		0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	
25	Bldg Annual Charge	Ln 23 times Ln 24	14.56	1.01	0.00	65.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
26	Bldg Monthly Charge	Ln 25 divided by 12	1.21	0.08	0.00	5.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.77
27	Land Loading	Ln 5 above	5.62	0.39	0.00	25.35	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
28	Total AC Factor, Land		0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	
29	Land Annual Charge	Ln 27 times Ln 28	1.25	0.09	0.00	5.66	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
30	Land Monthly Charge	Ln 29 divided by 12	0.10	0.01	0.00	0.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.58
31	Total L&B Monthly Charge	Sum, Lns. 26, 30	1.32	0.09	0.00	5.95	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.36
	BILLING AND COLLECTION CHARGES:																			
32	Total Plant Investment Monthly Charges	Sum, Lns. 22 and 31	27.26	1.84	0.76	119.26	159.52	0.00	0.00	28.18	0.00	0.00	0.00	0.00	0.00	0.00	35.15	42.90	0.95	
33	B&C Factor		0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	
34	Total Monthly B&C Charge	Ln 32 times Ln 33	0.12	0.01	0.00	0.51	0.69	0.00	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.15	0.18	0.00	1.79
35	**TOTAL MONTHLY INV. RELATED CHARGES**	**Sum, Lns. 22, 31, 34**	**27.38**	**1.85**	**0.76**	**119.78**	**160.21**	**0.00**	**0.00**	**28.28**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**35.30**	**43.09**	**0.96**	**417.59**
	MONTHLY PRODUCT ADMINISTRATION RELATED CHARGES:																			
36	Direct Assigned Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
37	Direct Assigned Monthly Charges	Ln. 35 times Ln 36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
38	Product Management Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
39	Product Management Monthly Charges	Ln. 35 times Ln 38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
40	Sales Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
41	Monthly Sales Charges	Ln. 35 times Ln. 40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
42	Advertising Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
43	Monthly Advertising Charges	Ln. 35 times Ln. 42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
44	Business Fees (Other Taxes) Expense Factor		0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	
45	Monthly Business Fees Charges	n. 44 times Sum Lns. 37, 39, 41, 4	0.05	0.00	0.00	0.23	0.30	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.08	0.00	0.79
46	Total Monthly Product Administration Charges	Sum, Lns. 37, 39, 41, 43, 45	0.05	0.00	0.00	0.23	0.30	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.08	0.00	0.79

QWEST CORPORATION
Arizona Corporation Commission Docket No. 00000A-00-0194

TELRIC -- Statewide Average DS3 Capable Loop

Ln No.	Plant Account Description Account Number	Source	Circuit - Digital: Other 357C	Digital 257C	Premises 257CP	SONET 257CS	SONET Premises 257CSP	Outside Plant: Poles 1C	C-Wire 3C	Conduit 4C	Cable UG Metal 5C	Drop Buried 35C	Drop Aerial 42C	Cable Bur. Metal 45C	Cable Aer. Metal 52C	Cable Bld. Metal 62C	Cable UG Fiber 85C	Cable Bur. Fiber 845C	Cable Bld. Fiber 862C	TOTALS
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(n)	(o)	(p)	(q)	(r)	(s)	(t)
47	TOTAL MO. "DIRECTLY ASSIGNED" CHGS.	Sum, Lns. 35, 46	27.43	1.85	0.77	120.00	160.51	0.00	0.00	28.33	0.00	0.00	0.00	0.00	0.00	0.00	35.36	43.17	0.96	418.38
	MONTHLY "NETWORK SUPPORT" EXPENSE:																			
48	Network Operations Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
49	Network Operations Monthly Charges	Ln 47 times Ln 48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
50	"Network Support" Expense Factor		0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	
51	Network Support" Monthly Charges	Ln 47 times Ln 50	0.44	0.03	0.01	1.92	2.57	0.00	0.00	0.45	0.00	0.00	0.00	0.00	0.00	0.00	0.57	0.69	0.02	6.69
52	Total Monthly Network Support Charges	Sum, Lns 49, 51	0.44	0.03	0.01	1.92	2.57	0.00	0.00	0.45	0.00	0.00	0.00	0.00	0.00	0.00	0.57	0.69	0.02	6.69
53	TOTAL MONTHLY DIRECT + SUPPORT	Sum, Lns. 47, 52	27.87	1.88	0.78	121.92	163.08	0.00	0.00	28.78	0.00	0.00	0.00	0.00	0.00	0.00	35.93	43.86	0.97	425.08
	MONTHLY "DIRECTLY ATTRIBUTED" EXPENSES:																			
54	General Support Assets Expense Factor		0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	
55	General Support Assets Monthly Charges	Ln 47 times Ln 54	2.24	0.15	0.06	9.78	13.08	0.00	0.00	2.31	0.00	0.00	0.00	0.00	0.00	0.00	2.88	3.52	0.08	34.10
56	Gen Pur Computer Expense Factor		0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	
57	Gen Pur Computer Monthly Charges	Ln 47 times Ln 56	0.96	0.06	0.03	4.20	5.62	0.00	0.00	0.99	0.00	0.00	0.00	0.00	0.00	0.00	1.24	1.51	0.03	14.64
58	Uncollectible Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
59	Uncollectible Monthly Charges	Ln 47 times Ln 58	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
60	Accounting Expense Factor		0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	
61	Accounting Expense Monthly Charges	Ln 47 times Ln 60	0.22	0.01	0.01	0.96	1.28	0.00	0.00	0.23	0.00	0.00	0.00	0.00	0.00	0.00	0.28	0.35	0.01	3.35
62	Human Resources Expense Factor		0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	
63	Human Resources Monthly Charges	Ln 47 times Ln 62	0.21	0.01	0.01	0.94	1.25	0.00	0.00	0.22	0.00	0.00	0.00	0.00	0.00	0.00	0.28	0.34	0.01	3.26
64	Information Management Expense Factor		0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	
65	Information Management Monthly Charges	Ln 47 times Ln 64	1.52	0.10	0.04	6.64	8.86	0.00	0.00	1.57	0.00	0.00	0.00	0.00	0.00	0.00	1.96	2.39	0.05	23.14
66	Intangible Expense Factor		0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	
67	Intangible Expense Monthly Charges	Ln 47 times Ln 66	0.07	0.00	0.00	0.31	0.42	0.00	0.00	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.11	0.00	1.09
68	Total Monthly "Directly Attributed" Expense Charges	Sum Lns 55, 57, 59, 61 63, 65, 67	5.22	0.35	0.15	22.82	30.53	0.00	0.00	5.39	0.00	0.00	0.00	0.00	0.00	0.00	6.73	8.21	0.18	79.58
69	TOTAL MONTHLY "DIRECT" CHARGES	Sum, Lns. 53, 69	33.09	2.23	0.92	144.76	193.61	0.00	0.00	34.17	0.00	0.00	0.00	0.00	0.00	0.00	42.66	52.07	1.16	504.66
	MONTHLY COMMON EXPENSES:																			
70	Executive Expense Factor		0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	
71	Executive Expense Monthly Charges	Ln 69 times Ln 70	0.22	0.01	0.01	0.94	1.26	0.00	0.00	0.22	0.00	0.00	0.00	0.00	0.00	0.00	0.28	0.34	0.01	3.28
72	Planning Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
73	Planning Expense Monthly Charges	Ln 69 times Ln 72	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
74	External Relations Expense Factor		0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	
75	External Relations Monthly Charges	Ln 69 times Ln 74	0.30	0.02	0.01	1.33	1.78	0.00	0.00	0.31	0.00	0.00	0.00	0.00	0.00	0.00	0.39	0.48	0.01	4.64
76	Legal Expense Factor		0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	
77	Legal Expense Monthly Charges	Ln 69 times Ln 76	0.20	0.01	0.01	0.87	1.16	0.00	0.00	0.21	0.00	0.00	0.00	0.00	0.00	0.00	0.26	0.31	0.01	3.03
78	Procurement Expense Factor		0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	
79	Procurement Expense Monthly Charges	Ln 69 times Ln 78	0.07	0.00	0.00	0.32	0.43	0.00	0.00	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.11	0.00	1.11
80	Research and Development Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
81	R&D Expense Monthly Charges	Ln 69 times Ln 80	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02
82	General Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
83	General Expense Monthly Charges	Ln 69 times Ln 82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
84	Total Monthly "Common" Expenses Charges	um, Lns 71, 73, 75, 77, 79, 81, 83	0.79	0.05	0.02	3.48	4.63	0.00	0.00	0.82	0.00	0.00	0.00	0.00	0.00	0.00	1.02	1.25	0.03	12.08
85	TOTAL MONTHLY "TELRIC"	Sum, Lns. 69, 84	$33.88	$2.28	$0.95	$148.21	$198.25	$0.00	$0.00	$34.99	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$43.68	$53.31	$1.18	$516.73

QWEST CORPORATION
Arizona Corporation Commission Docket No. 00000A-00-0194

TELRIC -- DS3 Capable Loop, Zone 1

Ln No	Plant Account Description Account Number	Source	Other 357C	Digital 257C	Premises 257CP	SONET 257CS	SONET Premises 257CSP	Poles 1C	C-Wire 3C	Conduit 4C	Cable UG Metal 5C	Drop Buried 35C	Drop Aerial 42C	Cable Bur. Metal 45C	Cable Aer. Metal 52C	Cable Bld. Metal 62C	Cable UG Fiber 85C	Cable Bur. Fiber 845C	Cable Bld. Fiber 862C	TOTALS
			Circuit - Digital					Outside Plant												
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(n)	(o)	(p)	(q)	(r)	(s)	(t)
	INVESTMENT																			
1	Equipment		1 560 51	108 50	47 28	7 041 87	9,913 37	0 00	0 00	2,781 41	0 00	0 00	0.00	0 00	0.00	0.00	1,932.09	843 96	51.28	24,280 27
2	Bldg Loading Fact		0.0418	0 0418	0 0000	0 0418	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0.0000	0 0000	0 0000	0.0000	0 0000	0.0000	
3	Building	Ln 1 times Ln 2	65 23	4 54	0 00	294 35	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0.00	0 00	0.00	0.00	0.00	364.11
4	Land Loading Fact		0 0036	0 0036	0 0000	0 0036	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0.0000	0 0000	0 0000	0.0000	0 0000	0.0000	
5	Land	Ln 1 times Ln 4	5 62	0 39	0 00	25 35	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0.00	0 00	0.00	0.00	0.00	31.36
6	**Loaded Investment**	**Sum, Lns. 1, 3, 5**	**1,631.36**	**113.43**	**47.28**	**7,361.57**	**9,913.37**	**0.00**	**0.00**	**2,781.41**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**1,932.09**	**843.96**	**51.28**	**24,676.74**
	MONTHLY INVESTMENT-RELATED CHARGES, EQUIPMENT:																			
7	Avg Depr Factor		0.1082	0.1082	0.1082	0.1082	0.1082	0.0674	0.1404	0.0227	0.0772	0.0944	0.1137	0.0944	0.1137	0.0598	0.0900	0.0662	0.0990	
8	Avg Annual Depr	Ln 1 times Ln 7	168 85	11 74	5 12	761 93	1,072 63	0 00	0 00	63 14	0 00	0 00	0 00	0 00	0 00	0 00	173 89	55 87	5 08	
9	Avg Monthly Depr	Ln 8 divided by 12	14 07	0 98	0 43	63 49	89 39	0 00	0 00	5 26	0 00	0 00	0 00	0 00	0 00	0 00	14 49	4 66	0 42	193 19
10	Avg COM Factor		0.0420	0.0420	0.0420	0.0420	0.0420	0.0500	0.0755	0.0581	0.0546	0.0552	0.0536	0.0552	0.0536	0.0562	0.0562	0.0538	0.0589	
11	Avg Annual COM	Ln 1 times Ln 10	65 54	4 56	1 99	295 76	416 36	0 00	0 00	161 60	0 00	0 00	0 00	0 00	0 00	0 00	108 58	45 41	3 02	
12	Avg Monthly COM	Ln 11 divided by 12	5 46	0 38	0 17	24 65	34 70	0 00	0 00	13 47	0 00	0 00	0 00	0 00	0 00	0 00	9 05	3 78	0 25	91 90
13	Avg IT Factor		0.0175	0.0175	0.0175	0.0175	0.0175	0.0208	0.0314	0.0242	0.0227	0.0230	0.0223	0.0230	0.0223	0.0234	0.0234	0.0224	0.0245	
14	Avg Annual IT	Ln 1 times Ln 13	27 31	1 90	0 83	123 23	173 48	0 00	0 00	67 31	0 00	0 00	0 00	0 00	0 00	0 00	45 21	18 90	1 26	
15	Avg Monthly IT	Ln 14 divided by 12	2 28	0 16	0 07	10 27	14 46	0 00	0 00	5 61	0 00	0 00	0 00	0 00	0 00	0 00	3 77	1 58	0 10	38 29
16	Total Maint Factor		0.0182	0.0118	0.0118	0.0118	0.0118	0.0045	0.0156	0.0046	0.0376	0.0845	0.1158	0.0845	0.1158	0.0156	0.0376	0.0139	0.0200	
17	Total Annual Maint	Ln 1 times Ln 16	28 40	1 28	0 56	83 09	116 98	0 00	0 00	12 79	0 00	0 00	0 00	0 00	0 00	0 00	72 65	11 73	1 03	
18	Total Monthly Maint	Ln 17 divided by 12	2 37	0 11	0 05	6 92	9 75	0 00	0 00	1 07	0 00	0 00	0 00	0 00	0 00	0 00	6 05	0 98	0 09	27 38
19	Ad Valorem Tax Factor		0 0136	0 0136	0 0136	0 0136	0 0136	0 0136	0 0136	0 0136	0 0136	0 0136	0 0136	0 0136	0 0136	0 0136	0 0136	0 0136	0 0136	
20	Annual AV Taxes	Ln 1 times Ln 19	21 22	1 48	0 64	95 77	134 82	0 00	0 00	37 83	0 00	0 00	0 00	0 00	0 00	0 00	26 28	11 48	0 70	
21	Monthly AV Taxes	Ln 20 divided by 12	1 77	0 12	0 05	7 98	11 24	0 00	0 00	3 15	0 00	0 00	0 00	0 00	0 00	0 00	2 19	0 96	0 06	27 52
22	Tot Mo Inv Related Charge, Equip		25 94	1 75	0 76	113 32	159 52	0 00	0 00	28 56	0 00	0 00	0 00	0 00	0 00	0 00	35 55	11 95	0 92	378 27
	MONTHLY INVESTMENT-RELATED CHARGES, L&B LOADINGS																			
23	Building Loading	Ln 3 above	65 23	4 54	0 00	294 35	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	
24	Total AC Factor, Bldg		0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	
25	Bldg Annual Charge	Ln 23 times Ln 24	14 56	1 01	0 00	65 70	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	
26	Bldg Monthly Charge	Ln 25 divided by 12	1 21	0 08	0 00	5 47	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	6 77
27	Land Loading	Ln 5 above	5 62	0 39	0 00	25 35	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	
28	Total AC Factor, Land		0.2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	
29	Land Annual Charge	Ln 27 times Ln 28	1 25	0 09	0 00	5 66	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	
30	Land Monthly Charge	Ln 29 divided by 12	0 10	0 01	0 00	0 47	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 58
31	Total L&B Monthly Charge	Sum, Lns 26, 30	1 32	0 09	0 00	5 95	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	7 36
	BILLING AND COLLECTION CHARGES:																			
32	Total Plant Investment Monthly Charges	Sum, Lns 22 and 31	27 26	1 84	0 76	119 26	159 52	0 00	0 00	28.56	0 00	0 00	0 00	0 00	0 00	0 00	35.55	11 95	0 92	
33	B&C Factor		0.0043	0 0043	0 0043	0 0043	0 0043	0 0043	0 0043	0 0043	0 0043	0 0043	0 0043	0 0043	0 0043	0 0043	0 0043	0 0043	0 0043	
34	Total Monthly B&C Charge	Ln 32 times Ln 33	0 12	0 01	0 00	0 51	0 69	0 00	0 00	0 12	0 00	0 00	0 00	0 00	0 00	0 00	0 15	0 05	0 00	1 66
35	**TOTAL MONTHLY INV. RELATED CHARGES**	**Sum, Lns. 22, 31, 34**	**27.38**	**1.85**	**0.76**	**119.78**	**160.21**	**0.00**	**0.00**	**28.68**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**35.70**	**12.00**	**0.93**	**387.28**
	MONTHLY PRODUCT ADMINISTRATION RELATED CHARGES:																			
36	Direct Assigned Expense Factor		0.0000	0 0000	0.0000	0 0000	0 0000	0.0000	0 0000	0.0000	0 0000	0.0000	0 0000	0.0000	0 0000	0.0000	0.0000	0 0000	0.0000	0.0000
37	Direct Assigned Monthly Charges	Ln. 35 times Ln 36	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
38	Product Management Expense Factor		0.0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0.0000	
39	Product Management Monthly Charges	Ln 35 times Ln 38	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
40	Sales Expense Factor		0.0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	
41	Monthly Sales Charges	Ln 35 times Ln 40	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
42	Advertising Expense Factor		0.0000	0 0000	0.0000	0 0000	0 0000	0.0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0.0000	0 0000	0.0000	
43	Monthly Advertising Charges	Ln. 35 times Ln. 42	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
44	Business Fees (Other Taxes) Expense Factor		0.0019	0 0019	0 0019	0 0019	0 0019	0 0019	0 0019	0 0019	0 0019	0 0019	0 0019	0 0019	0 0019	0 0019	0.0019	0 0019	0.0019	
45	Monthly Business Fees Charges	n. 44 times Sum Lns 37, 39, 41, 4	0 05	0 00	0 00	0 23	0 30	0 00	0 00	0 05	0 00	0 00	0 00	0 00	0 00	0 00	0 07	0 02	0 00	0 74
46	Total Monthly Product Administration Charges	Sum, Lns 37, 39, 41, 43, 45	0.05	0 00	0 00	0 23	0 30	0 00	0 00	0 05	0 00	0 00	0 00	0 00	0 00	0 00	0 07	0 02	0 00	0 74

QWEST CORPORATION
Arizona Corporation Commission Docket No. 00000A-00-0194

TELRIC -- DS3 Capable Loop, Zone 1

Ln. No.	Plant Account Description Account Number	Source	Circuit - Digital: Other 357C	Digital 257C	Premises 257CP	SONET 257CS	SONET Premises 257CSP	Poles 1C	C-Wire 3C	Conduit 4C	Outside Plant: Cable UG Metal 5C	Drop Buried 35C	Drop Aerial 42C	Cable Bur. Metal 45C	Cable Aer. Metal 52C	Cable Bld. Metal 62C	Cable UG Fiber 85C	Cable Bur. Fiber 845C	Cable Bld. Fiber 862C	TOTALS
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(n)	(o)	(p)	(q)	(r)	(s)	(t)
47	TOTAL MO. "DIRECTLY ASSIGNED" CHGS.	Sum, Lns. 35, 46	27.43	1.85	0.77	120.00	160.51	0.00	0.00	28.73	0.00	0.00	0.00	0.00	0.00	0.00	35.77	12.02	0.93	388.02
	MONTHLY "NETWORK SUPPORT" EXPENSE:																			
48	Network Operations Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
49	Network Operations Monthly Charges	Ln 47 times Ln 48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
50	"Network Support" Expense Factor		0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	
51	Network Support" Monthly Charges	Ln 47 times Ln 50	0.44	0.03	0.01	1.92	2.57	0.00	0.00	0.46	0.00	0.00	0.00	0.00	0.00	0.00	0.57	0.19	0.01	6.21
52	Total Monthly Network Support Charges	Sum, Lns 49, 51	0.44	0.03	0.01	1.92	2.57	0.00	0.00	0.46	0.00	0.00	0.00	0.00	0.00	0.00	0.57	0.19	0.01	6.21
53	TOTAL MONTHLY DIRECT + SUPPORT	Sum, Lns. 47, 52	27.87	1.88	0.78	121.92	163.08	0.00	0.00	29.19	0.00	0.00	0.00	0.00	0.00	0.00	36.34	12.22	0.94	394.23
	MONTHLY "DIRECTLY ATTRIBUTED" EXPENSES:																			
54	General Support Assets Expense Factor		0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	
55	General Support Assets Monthly Charges	Ln 47 times Ln 54	2.24	0.15	0.06	9.78	13.08	0.00	0.00	2.34	0.00	0.00	0.00	0.00	0.00	0.00	2.92	0.98	0.08	31.62
56	Gen Pur Computer Expense Factor		0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	
57	Gen Pur Computer Monthly Charges	Ln 47 times Ln 56	0.96	0.06	0.03	4.20	5.62	0.00	0.00	1.01	0.00	0.00	0.00	0.00	0.00	0.00	1.25	0.42	0.03	13.58
58	Uncollectible Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
59	Uncollectible Monthly Charges	Ln 47 times Ln 58	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
60	Accounting Expense Factor		0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	
61	Accounting Expense Monthly Charges	Ln 47 times Ln 60	0.22	0.01	0.01	0.96	1.28	0.00	0.00	0.23	0.00	0.00	0.00	0.00	0.00	0.00	0.29	0.10	0.01	3.10
62	Human Resources Expense Factor		0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	
63	Human Resources Monthly Charges	Ln 47 times Ln 62	0.21	0.01	0.01	0.94	1.25	0.00	0.00	0.22	0.00	0.00	0.00	0.00	0.00	0.00	0.28	0.09	0.01	3.03
64	Information Management Expense Factor		0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	
65	Information Management Monthly Charges	Ln 47 times Ln 64	1.52	0.10	0.04	6.64	8.88	0.00	0.00	1.59	0.00	0.00	0.00	0.00	0.00	0.00	1.98	0.66	0.05	21.46
66	Intangible Expense Factor		0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	
67	Intangible Expense Monthly Charges	Ln 47 times Ln 66	0.07	0.00	0.00	0.31	0.42	0.00	0.00	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.03	0.00	1.01
68	Total Monthly "Directly Attributed" Expense Charges	Sum Lns. 55, 57, 59, 61 63, 65, 67	5.22	0.35	0.15	22.82	30.53	0.00	0.00	5.47	0.00	0.00	0.00	0.00	0.00	0.00	6.80	2.29	0.18	73.80
69	TOTAL MONTHLY "DIRECT" CHARGES	Sum, Lns. 53, 69	33.09	2.23	0.92	144.75	193.61	0.00	0.00	34.66	0.00	0.00	0.00	0.00	0.00	0.00	43.15	14.50	1.12	468.03
	MONTHLY COMMON EXPENSES:																			
70	Executive Expense Factor		0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	
71	Executive Expense Monthly Charges	Ln 69 times Ln 70	0.22	0.01	0.01	0.94	1.26	0.00	0.00	0.23	0.00	0.00	0.00	0.00	0.00	0.00	0.28	0.09	0.01	3.04
72	Planning Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
73	Planning Expense Monthly Charges	Ln 69 times Ln 72	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
74	External Relations Expense Factor		0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	
75	External Relations Monthly Charges	Ln 69 times Ln 74	0.30	0.02	0.01	1.33	1.78	0.00	0.00	0.32	0.00	0.00	0.00	0.00	0.00	0.00	0.40	0.13	0.01	4.31
76	Legal Expense Factor		0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	
77	Legal Expense Monthly Charges	Ln 69 times Ln 76	0.20	0.01	0.01	0.87	1.16	0.00	0.00	0.21	0.00	0.00	0.00	0.00	0.00	0.00	0.26	0.09	0.01	2.81
78	Procurement Expense Factor		0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	
79	Procurement Expense Monthly Charges	Ln 69 times Ln 78	0.07	0.00	0.00	0.32	0.43	0.00	0.00	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.03	0.00	1.03
80	Research and Development Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
81	R&D Expense Monthly Charges	Ln 69 times Ln 80	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02
82	General Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
83	General Expense Monthly Charges	Ln 69 times Ln 82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
84	Total Monthly "Common" Expenses Charges	um, Lns 71, 73, 75, 77, 79, 81, 83	0.79	0.05	0.02	3.46	4.63	0.00	0.00	0.83	0.00	0.00	0.00	0.00	0.00	0.00	1.03	0.35	0.03	11.20
85	TOTAL MONTHLY "TELRIC"	Sum, Lns. 69, 84	$33.88	$2.28	$0.95	$148.21	$198.25	$0.00	$0.00	$35.49	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$44.18	$14.85	$1.15	$479.23

QWEST CORPORATION
Arizona Corporation Commission Docket No. 00000A-00-0194

TELRIC -- DS3 Capable Loop, Zone 2

Ln No	Plant Account Description Account Number	Source	Circuit - Digital: Other 357C	Digital 257C	Premises 257CP	SONET 257CS	SONET Premises 257CSP	Poles 1C	C-Wire 3C	Conduit 4C	Outside Plant: Cable UG Metal 5C	Drop Buried 35C	Drop Aerial 42C	Cable Bur. Metal 45C	Cable Aer. Metal 52C	Cable Bld. Metal 62C	Cable UG Fiber 85C	Cable Bur. Fiber 845C	Cable Bld. Fiber 862C	TOTALS
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(n)	(o)	(p)	(q)	(r)	(s)	(t)
	INVESTMENT																			
1	Equipment		1,560.51	108.50	47.28	7,041.87	9,913.37	0.00	0.00	2,784.11	0.00	0.00	0.00	0.00	0.00	0.00	1,936.66	1,457.60	52.57	24,902.47
2	Bldg Loading Fact		0.0418	0.0418	0.0000	0.0418	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
3	Building	Ln 1 times Ln 2	65.23	4.54	0.00	294.35	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	364.11
4	Land Loading Fact		0.0036	0.0036	0.0000	0.0036	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
5	Land	Ln 1 times Ln 4	5.62	0.39	0.00	25.35	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	31.36
6	**Loaded Investment**	**Sum, Lns. 1, 3, 5**	**1,631.36**	**113.43**	**47.28**	**7,361.57**	**9,913.37**	**0.00**	**0.00**	**2,784.11**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**1,936.66**	**1,457.60**	**52.57**	**25,297.94**
	MONTHLY INVESTMENT-RELATED CHARGES, EQUIPMENT:																			
7	Avg Depr Factor		0.1082	0.1082	0.1082	0.1082	0.1082	0.0674	0.1404	0.0227	0.0772	0.0944	0.1137	0.0944	0.1137	0.0598	0.0906	0.0662	0.0990	
8	Avg Annual Depr	Ln 1 times Ln 7	168.85	11.74	5.12	761.93	1,072.63	0.00	0.00	63.20	0.00	0.00	0.00	0.00	0.00	0.00	174.30	96.49	5.20	
9	Avg Monthly Depr	Ln 8 divided by 12	14.07	0.98	0.43	63.49	89.39	0.00	0.00	5.27	0.00	0.00	0.00	0.00	0.00	0.00	14.52	8.04	0.43	196.82
10	Avg COM Factor		0.0420	0.0420	0.0420	0.0420	0.0420	0.0500	0.0755	0.0581	0.0546	0.0552	0.0536	0.0552	0.0536	0.0562	0.0562	0.0538	0.0589	
11	Avg Annual COM	Ln 1 times Ln 10	65.54	4.56	1.99	295.76	416.36	0.00	0.00	161.76	0.00	0.00	0.00	0.00	0.00	0.00	108.84	78.42	3.10	
12	Avg Monthly COM	Ln 11 divided by 12	5.46	0.38	0.17	24.65	34.70	0.00	0.00	13.48	0.00	0.00	0.00	0.00	0.00	0.00	9.07	6.53	0.26	94.69
13	Avg IT Factor		0.0175	0.0175	0.0175	0.0175	0.0175	0.0208	0.0314	0.0242	0.0227	0.0230	0.0223	0.0230	0.0223	0.0234	0.0234	0.0224	0.0246	
14	Avg Annual IT	Ln 1 times Ln 13	27.31	1.90	0.83	123.23	173.48	0.00	0.00	67.38	0.00	0.00	0.00	0.00	0.00	0.00	45.32	32.65	1.29	
15	Avg Monthly IT	Ln 14 divided by 12	2.28	0.16	0.07	10.27	14.46	0.00	0.00	5.61	0.00	0.00	0.00	0.00	0.00	0.00	3.78	2.72	0.11	39.45
16	Total Maint Factor		0.0182	0.0118	0.0118	0.0118	0.0118	0.0045	0.0156	0.0046	0.0376	0.0845	0.1158	0.0845	0.1158	0.0156	0.0376	0.0139	0.0200	
17	Total Annual Maint	Ln 1 times Ln 16	28.40	1.28	0.56	83.09	116.98	0.00	0.00	12.81	0.00	0.00	0.00	0.00	0.00	0.00	72.82	20.26	1.05	
18	Total Monthly Maint	Ln 17 divided by 12	2.37	0.11	0.05	6.92	9.75	0.00	0.00	1.07	0.00	0.00	0.00	0.00	0.00	0.00	6.07	1.69	0.09	28.10
19	Ad Valorem Tax Factor		0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	
20	Annual AV Taxes	Ln 1 times Ln 19	21.22	1.48	0.64	95.77	134.82	0.00	0.00	37.86	0.00	0.00	0.00	0.00	0.00	0.00	26.34	19.82	0.71	
21	Monthly AV Taxes	Ln 20 divided by 12	1.77	0.12	0.05	7.98	11.24	0.00	0.00	3.16	0.00	0.00	0.00	0.00	0.00	0.00	2.19	1.65	0.06	28.22
22	Tot Mo Inv Related Charge, Equip		25.94	1.75	0.76	113.32	159.52	0.00	0.00	28.58	0.00	0.00	0.00	0.00	0.00	0.00	35.63	20.64	0.95	387.09
	MONTHLY INVESTMENT-RELATED CHARGES, L&B LOADINGS:																			
23	Building Loading	Ln 3 above	65.23	4.54	0.00	294.35	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
24	Total AC Factor, Bldg		0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	
25	Bldg Annual Charge	Ln 23 times Ln 24	14.56	1.01	0.00	65.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
26	Bldg Monthly Charge	Ln 25 divided by 12	1.21	0.08	0.00	5.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.77
27	Land Loading	Ln 5 above	5.62	0.39	0.00	25.35	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
28	Total AC Factor, Land		0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	
29	Land Annual Charge	Ln 27 times Ln 28	1.25	0.09	0.00	5.66	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
30	Land Monthly Charge	Ln 29 divided by 12	0.10	0.01	0.00	0.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.58
31	Total L&B Monthly Charge	Sum, Lns 26, 30	1.32	0.09	0.00	5.95	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.36
	BILLING AND COLLECTION CHARGES:																			
32	Total Plant Investment Monthly Charges	Sum, Lns 22 and 31	27.26	1.84	0.76	119.26	159.52	0.00	0.00	28.58	0.00	0.00	0.00	0.00	0.00	0.00	35.63	20.64	0.95	
33	B&C Factor		0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	
34	Total Monthly B&C Charge	Ln 32 times Ln 33	0.12	0.01	0.00	0.51	0.69	0.00	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.15	0.09	0.00	1.70
35	**TOTAL MONTHLY INV. RELATED CHARGES**	**Sum, Lns. 22, 31, 34**	**27.38**	**1.85**	**0.76**	**119.78**	**160.21**	**0.00**	**0.00**	**28.71**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**35.79**	**20.73**	**0.95**	**396.14**
	MONTHLY PRODUCT ADMINISTRATION RELATED CHARGES:																			
36	Direct Assigned Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
37	Direct Assigned Monthly Charges	Ln. 35 times Ln 36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
38	Product Management Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
39	Product Management Monthly Charges	Ln. 35 times Ln 38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
40	Sales Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
41	Monthly Sales Charges	Ln. 35 times Ln. 40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
42	Advertising Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
43	Monthly Advertising Charges	Ln. 35 times Ln. 42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
44	Business Fees (Other Taxes) Expense Factor		0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	
45	Monthly Business Fees Charges	Ln. 44 times Sum Lns. 37, 39, 41, 4	0.05	0.00	0.00	0.23	0.30	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.04	0.00	0.75
46	Total Monthly Product Administration Charges	Sum, Lns. 37, 39, 41, 43, 45	0.05	0.00	0.00	0.23	0.30	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.04	0.00	0.75

QWEST CORPORATION
Arizona Corporation Commission Docket No. 00000A-00-0194

TELRIC -- DS3 Capable Loop, Zone 2

Ln. No. (a)	Plant Account Description Account Number (b)	Source (c)	Circuit - Digital: Other 357C (d)	Digital 257C (e)	Premises 257CP (f)	SONET 257CS (g)	SONET Premises 257CSP (h)	Outside Plant: Poles 1C (i)	C-Wire 3C (j)	Conduit 4C (k)	Cable UG Metal 5C (l)	Drop Buried 35C (m)	Drop Aerial 42C (n)	Cable Bur. Metal 45C (n)	Cable Aer. Metal 52C (o)	Cable Bld. Metal 62C (p)	Cable UG Fiber 85C (q)	Cable Bur. Fiber 845C (r)	Cable Bld. Fiber 862C (s)	TOTALS (t)
47	TOTAL MO. "DIRECTLY ASSIGNED" CHGS.	Sum, Lns. 35, 46	27.43	1.85	0.77	120.00	160.51	0.00	0.00	28.76	0.00	0.00	0.00	0.00	0.00	0.00	35.86	20.77	0.95	396.90
	MONTHLY "NETWORK SUPPORT" EXPENSE:																			
48	Network Operations Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
49	Network Operations Monthly Charges	Ln 47 times Ln 48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
50	"Network Support" Expense Factor		0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	
51	Network Support" Monthly Charges	Ln 47 times Ln 50	0.44	0.03	0.01	1.92	2.57	0.00	0.00	0.46	0.00	0.00	0.00	0.00	0.00	0.00	0.57	0.33	0.02	6.35
52	Total Monthly Network Support Charges	Sum, Lns. 49, 51	0.44	0.03	0.01	1.92	2.57	0.00	0.00	0.46	0.00	0.00	0.00	0.00	0.00	0.00	0.57	0.33	0.02	6.35
53	TOTAL MONTHLY DIRECT + SUPPORT	Sum, Lns. 47, 52	27.87	1.88	0.78	121.92	163.08	0.00	0.00	29.22	0.00	0.00	0.00	0.00	0.00	0.00	36.43	21.10	0.97	403.25
	MONTHLY "DIRECTLY ATTRIBUTED" EXPENSES:																			
54	General Support Assets Expense Factor		0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	
55	General Support Assets Monthly Charges	Ln 47 times Ln 54	2.24	0.15	0.06	9.78	13.08	0.00	0.00	2.34	0.00	0.00	0.00	0.00	0.00	0.00	2.92	1.69	0.08	32.35
56	Gen Pur Computer Expense Factor		0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	
57	Gen Pur Computer Monthly Charges	Ln 47 times Ln 56	0.96	0.06	0.03	4.20	5.62	0.00	0.00	1.01	0.00	0.00	0.00	0.00	0.00	0.00	1.25	0.73	0.03	13.89
58	Uncollectible Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
59	Uncollectible Monthly Charges	Ln 47 times Ln 58	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
60	Accounting Expense Factor		0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	
61	Accounting Expense Monthly Charges	Ln 47 times Ln 60	0.22	0.01	0.01	0.96	1.28	0.00	0.00	0.23	0.00	0.00	0.00	0.00	0.00	0.00	0.29	0.17	0.01	3.18
62	Human Resources Expense Factor		0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	
63	Human Resources Monthly Charges	Ln 47 times Ln 62	0.21	0.01	0.01	0.94	1.25	0.00	0.00	0.22	0.00	0.00	0.00	0.00	0.00	0.00	0.28	0.16	0.01	3.10
64	Information Management Expense Factor		0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	
65	Information Management Monthly Charges	Ln 47 times Ln 64	1.52	0.10	0.04	6.64	8.88	0.00	0.00	1.59	0.00	0.00	0.00	0.00	0.00	0.00	1.98	1.15	0.05	21.95
66	Intangible Expense Factor		0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	
67	Intangible Expense Monthly Charges	Ln 47 times Ln 66	0.07	0.00	0.00	0.31	0.42	0.00	0.00	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.05	0.00	1.03
68	Total Monthly "Directly Attributed" Expense Charges	Sum Lns. 55, 57, 59, 61, 63, 65, 67	5.22	0.35	0.15	22.82	30.53	0.00	0.00	5.47	0.00	0.00	0.00	0.00	0.00	0.00	6.82	3.95	0.18	75.49
69	TOTAL MONTHLY "DIRECT" CHARGES	Sum, Lns. 53, 69	33.09	2.23	0.92	144.76	193.61	0.00	0.00	34.69	0.00	0.00	0.00	0.00	0.00	0.00	43.25	25.05	1.18	478.74
	MONTHLY COMMON EXPENSES:																			
70	Executive Expense Factor		0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	
71	Executive Expense Monthly Charges	Ln 69 times Ln 70	0.22	0.01	0.01	0.94	1.26	0.00	0.00	0.23	0.00	0.00	0.00	0.00	0.00	0.00	0.28	0.16	0.01	3.11
72	Planning Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
73	Planning Expense Monthly Charges	Ln 69 times Ln 72	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
74	External Relations Expense Factor		0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	
75	External Relations Monthly Charges	Ln 69 times Ln 74	0.30	0.02	0.01	1.33	1.78	0.00	0.00	0.32	0.00	0.00	0.00	0.00	0.00	0.00	0.40	0.23	0.01	4.40
76	Legal Expense Factor		0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	
77	Legal Expense Monthly Charges	Ln 69 times Ln 76	0.20	0.01	0.01	0.87	1.16	0.00	0.00	0.21	0.00	0.00	0.00	0.00	0.00	0.00	0.26	0.15	0.01	2.87
78	Procurement Expense Factor		0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	
79	Procurement Expense Monthly Charges	Ln 69 times Ln 78	0.07	0.00	0.00	0.32	0.43	0.00	0.00	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.06	0.00	1.05
80	Research and Development Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
81	R&D Expense Monthly Charges	Ln. 69 times Ln 80	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02
82	General Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
83	General Expense Monthly Charges	Ln 69 times Ln 82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
84	Total Monthly "Common" Expenses Charges	um, Lns. 71, 73, 75, 77, 79, 81, 83	0.79	0.05	0.02	3.46	4.63	0.00	0.00	0.83	0.00	0.00	0.00	0.00	0.00	0.00	1.04	0.60	0.03	11.48
85	TOTAL MONTHLY "TELRIC"	Sum, Lns. 69, 84	$33.88	$2.28	$0.95	$148.21	$198.25	$0.00	$0.00	$35.52	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$44.28	$25.65	$1.18	$490.19

QWEST CORPORATION
Arizona Corporation Commission Docket No. 00000A-00-0194

TELRIC -- DS3 Capable Loop, Zone 3

Ln No	Plant Account Description Account Number	Source	Circuit - Digital: Other 357C	Digital 257C	Premises 257CP	SONET 257CS	SONET Premises 257CSP	Poles 1C	C-Wire 3C	Conduit 4C	Outside Plant: Cable UG Metal 5C	Drop Buried 35C	Drop Aerial 42C	Cable Bur Metal 45C	Cable Aer. Metal 52C	Cable Bld. Metal 62C	Cable UG Fiber 85C	Cable Bur. Fiber 845C	Cable Bld. Fiber 862C	TOTALS
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(n)	(o)	(p)	(q)	(r)	(s)	(t)
	INVESTMENT																			
1	Equipment		1 560 51	108 50	47 28	7 041 87	9 913 37	0 00	0 00	2 449 13	0 00	0 00	0.00	0.00	0.00	0 00	1,722.61	10,950 86	54.92	33,849.05
2	Bldg Loading Fact		0.0418	0 0418	0 0000	0 0418	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0.0000	0.0000	0.0000	0 0000	0.0000	
3	Building	Ln 1 times Ln 2	65 23	4 54	0 00	294 35	0 00	0 00	0 00	0 00	0 00	0 00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	364.11
4	Land Loading Fact		0.0036	0 0036	0 0000	0 0036	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0.0000	0.0000	0.0000	0 0000	0.0000	
5	Land	Ln 1 times Ln 4	5 62	0 39	0 00	25 35	0 00	0 00	0 00	0 00	0 00	0 00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	31.36
6	**Loaded Investment**	**Sum, Lns. 1, 3, 5**	**1,631.36**	**113.43**	**47.28**	**7,361 57**	**9,913.37**	**0.00**	**0.00**	**2,449.13**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**1,722.61**	**10,950.86**	**54.92**	**34,244.52**
	MONTHLY INVESTMENT-RELATED CHARGES, EQUIPMENT:																			
7	Avg Depr Factor		0.1082	0.1082	0.1082	0.1082	0.1082	0.0674	0.1404	0.0227	0.0772	0.0944	0.1137	0.0944	0.1137	0.0598	0.0900	0.0662	0.0990	
8	Avg Annual Depr	Ln 1 times Ln 7	188 85	11 74	5 12	761 93	1,072 63	0 00	0 00	55 60	0 00	0 00	0 00	0 00	0 00	0 00	155 03	724.95	5.44	
9	Avg Monthly Depr	Ln 8 divided by 12	14 07	0 98	0 43	63 49	89 39	0 00	0 00	4 63	0 00	0 00	0.00	0.00	0.00	0.00	12.92	60.41	0.45	246.77
10	Avg COM Factor		0.0420	0.0420	0.0420	0.0420	0.0420	0.0500	0.0755	0.0581	0.0546	0.0552	0.0536	0.0552	0.0536	0.0562	0.0562	0.0538	0.0589	
11	Avg Annual COM	Ln 1 times Ln 10	65 54	4 56	1 99	295 76	416 36	0 00	0 00	142 29	0 00	0 00	0.00	0.00	0.00	0.00	96 81	589.16	3.23	
12	Avg Monthly COM	Ln 11 divided by 12	5 46	0 38	0 17	24 65	34 70	0 00	0 00	11 86	0 00	0 00	0.00	0.00	0.00	0.00	8 07	49.10	0.27	134.64
13	Avg IT Factor		0.0175	0.0175	0.0175	0.0175	0.0175	0.0208	0.0314	0.0242	0.0227	0.0230	0.0223	0.0230	0.0223	0.0234	0.0234	0.0224	0.0245	
14	Avg Annual IT	Ln 1 times Ln 13	27 31	1 90	0 83	123 23	173 48	0 00	0 00	59 27	0 00	0 00	0.00	0.00	0.00	0.00	40 31	245.30	1.35	
15	Avg Monthly IT	Ln 14 divided by 12	2 28	0 16	0 07	10 27	14 46	0 00	0 00	4 94	0 00	0 00	0.00	0.00	0.00	0.00	3 36	20.44	0.11	56.08
16	Total Maint Factor		0.0182	0.0118	0.0118	0.0118	0.0118	0.0045	0.0156	0.0046	0.0376	0.0845	0.1158	0.0845	0.1158	0.0156	0.0376	0.0139	0.0200	
17	Total Annual Maint	Ln 1 times Ln 16	28 40	1 28	0 56	83 09	116 98	0 00	0 00	11 27	0 00	0 00	0.00	0.00	0.00	0.00	64 77	152 22	1 10	
18	Total Monthly Maint	Ln 17 divided by 12	2 37	0 11	0 05	6 92	9 75	0 00	0 00	0 94	0 00	0 00	0.00	0.00	0.00	0.00	5 40	12 68	0.09	38.31
19	Ad Valorem Tax Factor		0 0136	0 0136	0 0136	0 0136	0 0136	0 0136	0 0136	0 0136	0 0136	0 0136	0 0136	0 0136	0 0136	0 0136	0 0136	0 0136	0 0136	
20	Annual AV Taxes	Ln 1 times Ln 19	21 22	1 48	0 64	95 77	134 82	0 00	0 00	33 31	0 00	0 00	0.00	0.00	0.00	0.00	23 43	148 93	0 75	
21	Monthly AV Taxes	Ln 20 divided by 12	1 77	0 12	0 05	7 98	11 24	0 00	0 00	2 78	0 00	0 00	0.00	0.00	0.00	0.00	1 95	12 41	0.06	38 36
22	Tot Mo Inv Related Charge, Equip		25 94	1 75	0.76	113 32	159 52	0 00	0 00	25 14	0 00	0 00	0.00	0.00	0.00	0.00	31 70	155 05	0.99	514.18
	MONTHLY INVESTMENT-RELATED CHARGES, L&B LOADINGS																			
23	Building Loading	Ln 3 above	65 23	4 54	0 00	294 35	0 00	0 00	0 00	0 00	0 00	0 00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
24	Total AC Factor, Bldg		0.2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	
25	Bldg Annual Charge	Ln 23 times Ln 24	14 56	1 01	0 00	65 70	0 00	0 00	0 00	0 00	0 00	0 00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
26	Bldg Monthly Charge	Ln 25 divided by 12	1 21	0 08	0 00	5 47	0 00	0 00	0 00	0 00	0 00	0 00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.77
27	Land Loading	Ln 5 above	5 62	0 39	0 00	25 35	0 00	0 00	0 00	0 00	0 00	0 00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
28	Total AC Factor, Land		0.2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	
29	Land Annual Charge	Ln 27 times Ln 28	1 25	0 09	0 00	5 66	0 00	0 00	0 00	0 00	0 00	0 00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
30	Land Monthly Charge	Ln 29 divided by 12	0 10	0 01	0 00	0 47	0 00	0 00	0 00	0 00	0 00	0 00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.58
31	Total L&B Monthly Charge	Sum, Lns 26, 30	1 32	0 09	0 00	5 95	0 00	0 00	0 00	0 00	0 00	0 00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.36
	BILLING AND COLLECTION CHARGES:																			
32	Total Plant Investment Monthly Charges	Sum, Lns 22 and 31	27 26	1 84	0 76	119 26	159 52	0.00	0.00	25.14	0.00	0.00	0.00	0.00	0.00	0.00	31.70	155.05	0.99	
33	B&C Factor		0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	
34	Total Monthly B&C Charge	Ln 32 times Ln 33	0 12	0 01	0 00	0 51	0 69	0.00	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.67	0.00	2.24
35	**TOTAL MONTHLY INV. RELATED CHARGES**	**Sum, Lns. 22, 31, 34**	**27.38**	**1.85**	**0.76**	**119.78**	**160.21**	**0.00**	**0.00**	**25.25**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**31.83**	**155.71**	**0.99**	**523.76**
	MONTHLY PRODUCT ADMINISTRATION RELATED CHARGES:																			
36	Direct Assigned Expense Factor		0.0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
37	Direct Assigned Monthly Charges	Ln. 35 times Ln 36	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
38	Product Management Expense Factor		0.0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0.0000	0.0000	0.0000	0.0000	0.0000	
39	Product Management Monthly Charges	Ln 35 times Ln 38	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
40	Sales Expense Factor		0.0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0.0000	0.0000	0.0000	0.0000	0.0000	
41	Monthly Sales Charges	Ln. 35 times Ln. 40	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
42	Advertising Expense Factor		0.0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0.0000	0.0000	0.0000	0.0000	0.0000	
43	Monthly Advertising Charges	Ln. 35 times Ln. 42	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
44	Business Fees (Other Taxes) Expense Factor		0.0019	0 0019	0 0019	0 0019	0 0019	0 0019	0 0019	0 0019	0 0019	0 0019	0 0019	0 0019	0.0019	0.0019	0.0019	0.0019	0.0019	
45	Monthly Business Fees Charges	n. 44 times Sum Lns. 37, 39, 41, 4	0 05	0 00	0 00	0 23	0 30	0 00	0 00	0 05	0 00	0 00	0.00	0.00	0.00	0.00	0.06	0.30	0.00	1.00
46	Total Monthly Product Administration Charges	Sum, Lns. 37, 39, 41, 43, 45	0.05	0.00	0.00	0.23	0.30	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.30	0.00	1.00

QWEST CORPORATION
Arizona Corporation Commission Docket No. 00000A-00-0194

TELRIC -- DS3 Capable Loop, Zone 3

Ln No (a)	Plant Account Description Account Number (b)	Source (c)	Other 357C (d)	Digital 257C (e)	Premises 257CP (f)	SONET 257CS (g)	SONET Premises 257CSP (h)	Poles 1C (i)	C-Wire 3C (j)	Conduit 4C (k)	Cable UG Metal 5C (l)	Drop Buried 35C (m)	Drop Aerial 42C (n)	Cable Bur. Metal 45C (n)	Cable Aer. Metal 52C (o)	Cable Bld. Metal 62C (p)	Cable UG Fiber 85C (q)	Cable Bur. Fiber 845C (r)	Cable Bld. Fiber 862C (s)	TOTALS (t)
			Circuit - Digital					Outside Plant												
47	TOTAL MO. "DIRECTLY ASSIGNED" CHGS.	Sum, Lns. 35, 46	27.43	1.85	0.77	120.00	160.51	0.00	0.00	25.30	0.00	0.00	0.00	0.00	0.00	0.00	31.89	156.01	0.99	524.76
	MONTHLY "NETWORK SUPPORT" EXPENSE:																			
48	Network Operations Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
49	Network Operations Monthly Charges	Ln 47 times Ln 48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
50	"Network Support" Expense Factor		0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	
51	Network Support" Monthly Charges	Ln 47 times Ln 50	0.44	0.03	0.01	1.92	2.57	0.00	0.00	0.40	0.00	0.00	0.00	0.00	0.00	0.00	0.51	2.50	0.02	8.40
52	Total Monthly Network Support Charges	Sum, Lns 49, 51	0.44	0.03	0.01	1.92	2.57	0.00	0.00	0.40	0.00	0.00	0.00	0.00	0.00	0.00	0.51	2.50	0.02	8.40
53	TOTAL MONTHLY DIRECT + SUPPORT	Sum, Lns. 47, 52	27.87	1.88	0.78	121.92	163.08	0.00	0.00	25.71	0.00	0.00	0.00	0.00	0.00	0.00	32.40	158.51	1.01	533.15
	MONTHLY "DIRECTLY ATTRIBUTED" EXPENSES:																			
54	General Support Assets Expense Factor		0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	
55	General Support Assets Monthly Charges	Ln 47 times Ln 54	2.24	0.15	0.06	9.78	13.08	0.00	0.00	2.06	0.00	0.00	0.00	0.00	0.00	0.00	2.60	12.71	0.08	42.77
56	Gen Pur Computer Expense Factor		0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	
57	Gen Pur Computer Monthly Charges	Ln 47 times Ln 56	0.96	0.06	0.03	4.20	5.62	0.00	0.00	0.89	0.00	0.00	0.00	0.00	0.00	0.00	1.12	5.46	0.03	18.37
58	Uncollectible Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
59	Uncollectible Monthly Charges	Ln 47 times Ln 58	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
60	Accounting Expense Factor		0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	
61	Accounting Expense Monthly Charges	Ln 47 times Ln 60	0.22	0.01	0.01	0.98	1.28	0.00	0.00	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.26	1.25	0.01	4.20
62	Human Resources Expense Factor		0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	
63	Human Resources Monthly Charges	Ln 47 times Ln 62	0.21	0.01	0.01	0.94	1.25	0.00	0.00	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.25	1.22	0.01	4.09
64	Information Management Expense Factor		0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	
65	Information Management Monthly Charges	Ln 47 times Ln 64	1.52	0.10	0.04	6.64	8.88	0.00	0.00	1.40	0.00	0.00	0.00	0.00	0.00	0.00	1.76	8.63	0.06	29.02
66	Intangible Expense Factor		0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	
67	Intangible Expense Monthly Charges	Ln 47 times Ln 66	0.07	0.00	0.00	0.31	0.42	0.00	0.00	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.41	0.00	1.38
68	Total Monthly "Directly Attributed" Expense Charges	Sum Lns. 55, 57, 59, 61, 63, 65, 67	5.22	0.35	0.15	22.82	30.53	0.00	0.00	4.81	0.00	0.00	0.00	0.00	0.00	0.00	6.07	29.67	0.18	99.81
69	TOTAL MONTHLY "DIRECT" CHARGES	Sum, Lns. 53, 69	33.09	2.23	0.92	144.75	193.61	0.00	0.00	30.52	0.00	0.00	0.00	0.00	0.00	0.00	38.47	188.18	1.20	632.96
	MONTHLY COMMON EXPENSES:																			
70	Executive Expense Factor		0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	
71	Executive Expense Monthly Charges	Ln 69 times Ln 70	0.22	0.01	0.01	0.94	1.26	0.00	0.00	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.25	1.22	0.01	4.11
72	Planning Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
73	Planning Expense Monthly Charges	Ln 69 times Ln 72	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
74	External Relations Expense Factor		0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	
75	External Relations Monthly Charges	Ln 69 times Ln 74	0.30	0.02	0.01	1.33	1.78	0.00	0.00	0.28	0.00	0.00	0.00	0.00	0.00	0.00	0.35	1.73	0.01	5.82
76	Legal Expense Factor		0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	
77	Legal Expense Monthly Charges	Ln 69 times Ln 76	0.20	0.01	0.01	0.87	1.16	0.00	0.00	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.23	1.13	0.01	3.80
78	Procurement Expense Factor		0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	
79	Procurement Expense Monthly Charges	Ln 69 times Ln 78	0.07	0.00	0.00	0.32	0.43	0.00	0.00	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.41	0.00	1.39
80	Research and Development Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
81	R&D Expense Monthly Charges	Ln 69 times Ln 80	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.02
82	General Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
83	General Expense Monthly Charges	Ln 69 times Ln 82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
84	Total Monthly "Common" Expenses Charges	um, Lns 71, 73, 75, 77, 79, 81, 8	0.79	0.05	0.02	3.46	4.63	0.00	0.00	0.73	0.00	0.00	0.00	0.00	0.00	0.00	0.92	4.50	0.03	15.15
85	TOTAL MONTHLY "TELRIC"	Sum, Lns. 69, 84	$33.88	$2.28	$0.95	$148.21	$198.25	$0.00	$0.00	$31.25	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$39.39	$192.68	$1.23	$648.11

QWEST CORPORATION
Arizona Corporation Commission Docket No. 00000A-00-0194

TELRIC -- DS0 UDIT, 0-8 Miles -- FIXED COMPONENT

Ln. No. (a)	Plant Account Description Account Number (b)	Source (c)	Circuit - Digital: Other 357C (d)	Digital 257C (e)	Premises 257CP (f)	SONET 257CS (g)	SONET Premises 257CSP (h)	Outside Plant: Poles 1C (i)	C-Wire 3C (j)	Conduit 4C (k)	Cable UG Metal 5C (l)	Drop Buried 35C (m)	Drop Aerial 42C (n)	Cable Bur. Metal 45C (n)	Cable Aer. Metal 52C (o)	Cable Bld. Metal 82C (p)	Cable UG Fiber 85C (q)	Cable Bur. Fiber 845C (r)	Cable Bld. Fiber 862C (s)	TOTALS (t)
	INVESTMENT																			
1	Equipment		571.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	571.19
2	Bldg Loading Fact		0.0418	0.0418	0.0000	0.0418	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
3	Building	Ln 1 times Ln 2	23.88	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	23.88
4	Land Loading Fact		0.0036	0.0036	0.0000	0.0036	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
5	Land	Ln 1 times Ln 4	2.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.06
6	**Loaded Investment**	**Sum, Lns. 1, 3, 5**	**597.12**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**597.12**
	MONTHLY INVESTMENT-RELATED CHARGES, EQUIPMENT:																			
7	Avg Depr Factor		0.1082	0.1082	0.1082	0.1082	0.1082	0.0674	0.1404	0.0227	0.0772	0.0944	0.1137	0.0944	0.1137	0.0598	0.0900	0.0662	0.0990	
8	Avg Annual Depr	Ln 1 times Ln 7	61.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
9	Avg Monthly Depr	Ln 8 divided by 12	5.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.15
10	Avg COM Factor		0.0420	0.0420	0.0420	0.0420	0.0420	0.0500	0.0755	0.0581	0.0546	0.0552	0.0536	0.0552	0.0536	0.0562	0.0562	0.0538	0.0589	
11	Avg Annual COM	Ln 1 times Ln 10	23.99	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
12	Avg Monthly COM	Ln 11 divided by 12	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.00
13	Avg IT Factor		0.0175	0.0175	0.0175	0.0175	0.0175	0.0208	0.0314	0.0242	0.0227	0.0230	0.0223	0.0230	0.0223	0.0234	0.0234	0.0224	0.0246	
14	Avg Annual IT	Ln 1 times Ln 13	10.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
15	Avg Monthly IT	Ln 14 divided by 12	0.83	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.83
16	Total Maint Factor		0.0182	0.0118	0.0118	0.0118	0.0118	0.0045	0.0156	0.0046	0.0376	0.0845	0.1158	0.0845	0.1158	0.0156	0.0376	0.0139	0.0200	
17	Total Annual Maint	Ln 1 times Ln 16	10.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
18	Total Monthly Maint	Ln 17 divided by 12	0.87	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.87
19	Ad Valorem Tax Factor		0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	
20	Annual AV Taxes	Ln 1 times Ln 19	7.77	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
21	Monthly AV Taxes	Ln 20 divided by 12	0.65	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.65
22	Tot Mo Inv Related Charge, Equip		9.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.50
	MONTHLY INVESTMENT-RELATED CHARGES, L&B LOADINGS																			
23	Building Loading	Ln 3 above	23.88	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
24	Total AC Factor, Bldg		0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	
25	Bldg Annual Charge	Ln 23 times Ln 24	5.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
26	Bldg Monthly Charge	Ln 25 divided by 12	0.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.44
27	Land Loading	Ln 5 above	2.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
28	Total AC Factor, Land		0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	
29	Land Annual Charge	Ln 27 times Ln 28	0.46	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
30	Land Monthly Charge	Ln 29 divided by 12	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04
31	Total L&B Monthly Charge	Sum, Lns 26, 30	0.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.48
	BILLING AND COLLECTION CHARGES:																			
32	Total Plant Investment Monthly Charges	Sum, Lns 22 and 31	9.98	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
33	B&C Factor		0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	
34	Total Monthly B&C Charge	Ln 32 times Ln 33	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04
35	**TOTAL MONTHLY INV. RELATED CHARGES**	**Sum, Lns. 22, 31, 34**	**10.02**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**10.02**
	MONTHLY PRODUCT ADMINISTRATION RELATED CHARGES:																			
36	Direct Assigned Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
37	Direct Assigned Monthly Charges	Ln 35 times Ln 36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
38	Product Management Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
39	Product Management Monthly Charges	Ln 35 times Ln 38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
40	Sales Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
41	Monthly Sales Charges	Ln 35 times Ln 40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
42	Advertising Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
43	Monthly Advertising Charges	Ln 35 times Ln 42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
44	Business Fees (Other Taxes) Expense Factor		0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	
45	Monthly Business Fees Charges	Ln 44 times Sum Lns 37, 39, 41, 4	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02
46	Total Monthly Product Administration Charges	Sum, Lns 37, 39, 41, 43, 45	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02

QWEST CORPORATION
Arizona Corporation Commission Docket No. 00000A-00-0194

TELRIC -- DS0 UDIT, 0-8 Miles -- FIXED COMPONENT

Ln. No. (a)	Plant Account Description Account Number (b)	Source (c)	Circuit - Digital: Other 357C (d)	Digital 257C (e)	Premises 257CP (f)	SONET 257CS (g)	SONET Premises 257CSP (h)	Poles 1C (i)	C-Wire 3C (j)	Conduit 4C (k)	Outside Plant: Cable UG Metal 5C (l)	Drop Buried 35C (m)	Drop Aerial 42C (n)	Cable Bur. Metal 45C (n)	Cable Aer. Metal 52C (o)	Cable Bld. Metal 62C (p)	Cable UG Fiber 85C (q)	Cable Bur. Fiber 845C (r)	Cable Bld. Fiber 862C (s)	TOTALS (t)
47	TOTAL MO. "DIRECTLY ASSIGNED" CHGS.	Sum, Lns. 35, 46	10.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.04
	MONTHLY "NETWORK SUPPORT" EXPENSE:																			
48	Network Operations Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
49	Network Operations Monthly Charges	Ln 47 times Ln 48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
50	"Network Support" Expense Factor		0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	
51	Network Support" Monthly Charges	Ln 47 times Ln 50	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.16
52	Total Monthly Network Support Charges	Sum, Lns 48, 51	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.16
53	TOTAL MONTHLY DIRECT + SUPPORT	Sum, Lns. 47, 52	10.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.20
	MONTHLY "DIRECTLY ATTRIBUTED" EXPENSES:																			
54	General Support Assets Expense Factor		0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	
55	General Support Assets Monthly Charges	Ln 47 times Ln 54	0.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.82
56	Gen Pur Computer Expense Factor		0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	
57	Gen Pur Computer Monthly Charges	Ln 47 times Ln 56	0.35	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.35
58	Uncollectible Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
59	Uncollectible Monthly Charges	Ln 47 times Ln 58	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
60	Accounting Expense Factor		0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	
61	Accounting Expense Monthly Charges	Ln 47 times Ln 60	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.08
62	Human Resources Expense Factor		0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	
63	Human Resources Monthly Charges	Ln 47 times Ln 62	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.08
64	Information Management Expense Factor		0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	
65	Information Management Monthly Charges	Ln 47 times Ln 64	0.56	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.56
66	Intangible Expense Factor		0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	
67	Intangible Expense Monthly Charges	Ln 47 times Ln 66	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03
68	Total Monthly "Directly Attributed" Expense Charges	Sum Lns 55, 57, 59, 61, 63, 65, 67	1.91	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.91
69	TOTAL MONTHLY "DIRECT" CHARGES	Sum, Lns. 53, 69	12.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.11
	MONTHLY COMMON EXPENSES:																			
70	Executive Expense Factor		0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	
71	Executive Expense Monthly Charges	Ln 69 times Ln 70	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.08
72	Planning Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
73	Planning Expense Monthly Charges	Ln 69 times Ln 72	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
74	External Relations Expense Factor		0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	
75	External Relations Monthly Charges	Ln 69 times Ln 74	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.11
76	Legal Expense Factor		0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	
77	Legal Expense Monthly Charges	Ln 69 times Ln 76	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07
78	Procurement Expense Factor		0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	
79	Procurement Expense Monthly Charges	Ln 69 times Ln 78	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03
80	Research and Development Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
81	R&D Expense Monthly Charges	Ln 69 times Ln 80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
82	General Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
83	General Expense Monthly Charges	Ln 69 times Ln 82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
84	Total Monthly "Common" Expenses Charges	um, Lns 71, 73, 75, 77, 79, 81, 8	0.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.29
85	TOTAL MONTHLY "TELRIC"	Sum, Lns. 69, 84	$12.40	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$12.40

QWEST CORPORATION
Arizona Corporation Commission Docket No. 00000A-00-0194

TELRIC -- DS0 UDIT, 0-8 Miles -- VARIABLE COMPONENT

Ln. No.	Plant Account Description Account Number	Source	Circuit - Digital: Other 357C	Digital 257C	Premises 257CP	SONET 257CS	SONET Premises 257CSP	Poles 1C	C-Wire 3C	Conduit 4C	Outside Plant: Cable UG Metal 5C	Drop Buried 35C	Drop Aerial 42C	Cable Bur. Metal 45C	Cable Aer. Metal 52C	Cable Bld. Metal 62C	Cable UG Fiber 85C	Cable Bur. Fiber 845C	Cable Bld. Fiber 862C	TOTALS
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(n)	(o)	(p)	(q)	(r)	(s)	(t)
	INVESTMENT																			
1	Equipment		0.70	0.00	0.00	0.00	0.00	0.00	0.00	1.81	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.34	0.00	3.85
2	Bldg Loading Fact		0.0418	0.0418	0.0000	0.0418	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
3	Building	Ln 1 times Ln 2	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03
4	Land Loading Fact		0.0036	0.0036	0.0000	0.0036	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
5	Land	Ln 1 times Ln 4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	**Loaded Investment**	**Sum, Lns. 1, 3, 5**	**0.74**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**1.81**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**1.34**	**0.00**	**3.88**
	MONTHLY INVESTMENT-RELATED CHARGES, EQUIPMENT:																			
7	Avg Depr Factor		0.1082	0.1082	0.1082	0.1082	0.1082	0.0674	0.1404	0.0227	0.0772	0.0944	0.1137	0.0944	0.1137	0.0598	0.0900	0.0662	0.0990	
8	Avg Annual Depr	Ln 1 times Ln 7	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.00	
9	Avg Monthly Depr	Ln 8 divided by 12	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.02
10	Avg COM Factor		0.0420	0.0420	0.0420	0.0420	0.0420	0.0500	0.0755	0.0581	0.0546	0.0562	0.0536	0.0562	0.0536	0.0562	0.0562	0.0538	0.0589	
11	Avg Annual COM	Ln 1 times Ln 10	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.00	
12	Avg Monthly COM	Ln 11 divided by 12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.02
13	Avg IT Factor		0.0175	0.0175	0.0175	0.0175	0.0175	0.0208	0.0314	0.0242	0.0227	0.0230	0.0223	0.0230	0.0223	0.0234	0.0234	0.0224	0.0245	
14	Avg Annual IT	Ln 1 times Ln 13	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	
15	Avg Monthly IT	Ln 14 divided by 12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
16	Total Maint Factor		0.0182	0.0118	0.0118	0.0118	0.0118	0.0045	0.0156	0.0046	0.0376	0.0845	0.1158	0.0845	0.1158	0.0156	0.0376	0.0139	0.0200	
17	Total Annual Maint	Ln 1 times Ln 16	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	
18	Total Monthly Maint	Ln 17 divided by 12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
19	Ad Valorem Tax Factor		0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	
20	Annual AV Taxes	Ln 1 times Ln 19	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	
21	Monthly AV Taxes	Ln 20 divided by 12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
22	Tot Mo Inv Related Charge Equip		0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.05
	MONTHLY INVESTMENT-RELATED CHARGES, L&B LOADINGS																			
23	Building Loading	Ln 3 above	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
24	Total AC Factor Bldg		0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	
25	Bldg Annual Charge	Ln 23 times Ln 24	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
26	Bldg Monthly Charge	Ln 25 divided by 12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
27	Land Loading	Ln 5 above	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
28	Total AC Factor Land		0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	
29	Land Annual Charge	Ln 27 times Ln 28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
30	Land Monthly Charge	Ln 29 divided by 12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
31	Total L&B Monthly Charge	Sum Lns 26, 30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	BILLING AND COLLECTION CHARGES:																			
32	Total Plant Investment Monthly Charges	Sum, Lns 22 and 31	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	
33	B&C Factor		0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	
34	Total Monthly B&C Charge	Ln 32 times Ln 33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
35	**TOTAL MONTHLY INV. RELATED CHARGES**	**Sum, Lns. 22, 31, 34**	**0.01**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.02**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.02**	**0.00**	**0.05**
	MONTHLY PRODUCT ADMINISTRATION RELATED CHARGES:																			
36	Direct Assigned Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
37	Direct Assigned Monthly Charges	Ln 35 times Ln 36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
38	Product Management Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
39	Product Management Monthly Charges	Ln 35 times Ln 38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
40	Sales Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
41	Monthly Sales Charges	Ln 35 times Ln 40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
42	Advertising Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
43	Monthly Advertising Charges	Ln 35 times Ln 42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
44	Business Fees (Other Taxes) Expense Factor		0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	
45	Monthly Business Fees Charges	n 44 times Sum Lns 37, 39, 41, 4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
46	Total Monthly Product Administration Charges	Sum, Lns 37, 39, 41, 43, 45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

QWEST CORPORATION
Arizona Corporation Commission Docket No. 00000A-00-0194

TELRIC -- DS0 UDIT, 0-8 Miles -- VARIABLE COMPONENT

Ln No	Plant Account Description Account Number	Source	Circuit - Digital: Other 357C	Digital 257C	Premises 257CP	SONET 257CS	SONET Premises 257CSP	Poles 1C	C-Wire 3C	Conduit 4C	Outside Plant: Cable UG Metal 5C	Drop Buried 35C	Drop Aerial 42C	Cable Bur. Metal 45C	Cable Aer. Metal 52C	Cable Bld. Metal 62C	Cable UG Fiber 85C	Cable Bur. Fiber 845C	Cable Bld. Fiber 862C	TOTALS
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)	(s)	(t)	
47	TOTAL MO. "DIRECTLY ASSIGNED" CHGS.	Sum, Lns. 36, 46	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.05
	MONTHLY "NETWORK SUPPORT" EXPENSE:																			
48	Network Operations Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
49	Network Operations Monthly Charges	Ln 47 times Ln 48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
50	"Network Support" Expense Factor		0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	
51	Network Support" Monthly Charges	Ln 47 times Ln 50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
52	Total Monthly Network Support Charges	Sum, Lns. 49, 51	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
53	TOTAL MONTHLY DIRECT + SUPPORT	Sum, Lns. 47, 52	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.05
	MONTHLY "DIRECTLY ATTRIBUTED" EXPENSES:																			
54	General Support Assets Expense Factor		0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	
55	General Support Assets Monthly Charges	Ln 47 times Ln 54	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
56	Gen Pur Computer Expense Factor		0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	
57	Gen Pur Computer Monthly Charges	Ln 47 times Ln 56	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
58	Uncollectible Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
59	Uncollectible Monthly Charges	Ln 47 times Ln 58	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
60	Accounting Expense Factor		0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	
61	Accounting Expense Monthly Charges	Ln 47 times Ln 60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
62	Human Resources Expense Factor		0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	
63	Human Resources Monthly Charges	Ln 47 times Ln 62	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
64	Information Management Expense Factor		0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	
65	Information Management Monthly Charges	Ln 47 times Ln 64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
66	Intangible Expense Factor		0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	
67	Intangible Expense Monthly Charges	Ln 47 times Ln 66	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
68	Total Monthly "Directly Attributed" Expense Charges	Sum Lns. 55, 57, 59, 61, 63, 65, 67	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
69	TOTAL MONTHLY "DIRECT" CHARGES	Sum, Lns. 53, 69	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.06
	MONTHLY COMMON EXPENSES:																			
70	Executive Expense Factor		0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	
71	Executive Expense Monthly Charges	Ln 69 times Ln 70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
72	Planning Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
73	Planning Expense Monthly Charges	Ln 69 times Ln 72	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
74	External Relations Expense Factor		0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	
75	External Relations Monthly Charges	Ln 69 times Ln 74	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
76	Legal Expense Factor		0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	
77	Legal Expense Monthly Charges	Ln 69 times Ln. 76	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
78	Procurement Expense Factor		0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	
79	Procurement Expense Monthly Charges	Ln 69 times Ln 78	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
80	Research and Development Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
81	R&D Expense Monthly Charges	Ln 69 times Ln 80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
82	General Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
83	General Expense Monthly Charges	Ln 69 times Ln 82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
84	Total Monthly "Common" Expenses Charges	um, Lns. 71, 73, 75, 77, 79, 81, 8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
85	TOTAL MONTHLY "TELRIC"	Sum, Lns. 69, 84	$0.02	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.02	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.02	$0.00	$0.06

QWEST CORPORATION
Arizona Corporation Commission Docket No. 00000A-00-0194

TELRIC -- DS0 UDIT, 8-25 Miles -- FIXED COMPONENT

Ln No. (a)	Plant Account Description Account Number (b)	Source (c)	Circuit - Digital: Other 357C (d)	Digital 257C (e)	Premises 257CP (f)	SONET 257CS (g)	SONET Premises 257CSP (h)	Outside Plant: Poles 1C (i)	C-Wire 3C (j)	Conduit 4C (k)	Cable UG Metal 5C (l)	Drop Buried 35C (m)	Drop Aerial 42C (n)	Cable Bur. Metal 45C (n)	Cable Aer. Metal 52C (o)	Cable Bld. Metal 62C (p)	Cable UG Fiber 85C (q)	Cable Bur. Fiber 845C (r)	Cable Bld. Fiber 862C (s)	TOTALS (t)
	INVESTMENT																			
1	Equipment		571.77	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	571.77
2	Bldg Loading Fact		0.0418	0.0418	0.0000	0.0418	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
3	Building	Ln 1 times Ln 2	23.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	23.90
4	Land Loading Fact		0.0036	0.0036	0.0000	0.0036	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
5	Land	Ln 1 times Ln 4	2.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.06
6	**Loaded Investment**	**Sum, Lns. 1, 3, 5**	**597.73**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**597.73**
	MONTHLY INVESTMENT-RELATED CHARGES, EQUIPMENT:																			
7	Avg Depr Factor		0.1082	0.1082	0.1082	0.1082	0.1082	0.0674	0.1404	0.0227	0.0772	0.0944	0.1137	0.0944	0.1137	0.0598	0.0900	0.0662	0.0990	
8	Avg Annual Depr	Ln 1 times Ln 7	61.87	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
9	Avg Monthly Depr	Ln 8 divided by 12	5.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.16
10	Avg COM Factor		0.0420	0.0420	0.0420	0.0420	0.0420	0.0500	0.0755	0.0581	0.0546	0.0552	0.0536	0.0552	0.0536	0.0562	0.0562	0.0538	0.0589	
11	Avg Annual COM	Ln 1 times Ln 10	24.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
12	Avg Monthly COM	Ln 11 divided by 12	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.00
13	Avg IT Factor		0.0175	0.0175	0.0175	0.0175	0.0175	0.0208	0.0314	0.0242	0.0227	0.0230	0.0223	0.0230	0.0223	0.0234	0.0234	0.0224	0.0245	
14	Avg Annual IT	Ln 1 times Ln 13	10.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
15	Avg Monthly IT	Ln 14 divided by 12	0.83	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.83
16	Total Maint Factor		0.0182	0.0118	0.0118	0.0118	0.0118	0.0045	0.0156	0.0046	0.0376	0.0845	0.1158	0.0845	0.1158	0.0156	0.0376	0.0139	0.0200	
17	Total Annual Maint	Ln 1 times Ln 16	10.41	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
18	Total Monthly Maint	Ln 17 divided by 12	0.87	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.87
19	Ad Valorem Tax Factor		0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	
20	Annual AV Taxes	Ln 1 times Ln 19	7.78	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
21	Monthly AV Taxes	Ln 20 divided by 12	0.65	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.65
22	Tot Mo Inv Related Charge, Equip		9.51	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.51
	MONTHLY INVESTMENT-RELATED CHARGES, L&B LOADINGS																			
23	Building Loading	Ln 3 above	23.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
24	Total AC Factor, Bldg		0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	
25	Bldg Annual Charge	Ln 23 times Ln 24	5.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
26	Bldg Monthly Charge	Ln 25 divided by 12	0.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.44
27	Land Loading	Ln 5, above	2.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
28	Total AC Factor, Land		0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	
29	Land Annual Charge	Ln 27 times Ln 28	0.46	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
30	Land Monthly Charge	Ln 29 divided by 12	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04
31	Total L&B Monthly Charge	Sum, Lns 26 30	0.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.48
	BILLING AND COLLECTION CHARGES:																			
32	Total Plant Investment Monthly Charges	Sum Lns 22 and 31	9.99	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
33	B&C Factor		0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	
34	Total Monthly B&C Charge	Ln 32 times Ln 33	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04
35	**TOTAL MONTHLY INV. RELATED CHARGES**	**Sum, Lns. 22, 31, 34**	**10.03**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**10.03**
	MONTHLY PRODUCT ADMINISTRATION RELATED CHARGES:																			
36	Direct Assigned Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
37	Direct Assigned Monthly Charges	Ln 35 times Ln 36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
38	Product Management Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
39	Product Management Monthly Charges	Ln 35 times Ln 38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
40	Sales Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
41	Monthly Sales Charges	Ln 35 times Ln 40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
42	Advertising Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
43	Monthly Advertising Charges	Ln 35 times Ln 42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
44	Business Fees (Other Taxes) Expense Factor		0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	
45	Monthly Business Fees Charges	n. 44 times Sum Lns 37, 39, 41, 4	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02
46	Total Monthly Product Administration Charges	Sum, Lns. 37, 39, 41, 43, 45	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02

QWEST CORPORATION
Arizona Corporation Commission Docket No. 00000A-00-0194

TELRIC -- DS0 UDIT, 8-25 Miles -- FIXED COMPONENT

Ln No	Plant Account Description Account Number	Source	Circuit - Digital: Other 357C	Digital 257C	Premises 257CP	SONET 257CS	SONET Premises 257CSP	Poles 1C	C-Wire 3C	Conduit 4C	Outside Plant: Cable UG Metal 5C	Drop Buried 35C	Drop Aerial 42C	Cable Bur. Metal. 45C	Cable Aer. Metal. 52C	Cable Bld. Metal 62C	Cable UG Fiber 85C	Cable Bur. Fiber 845C	Cable Bld. Fiber 862C	TOTALS
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(n)	(o)	(p)	(q)	(r)	(s)	(t)
47	TOTAL MO. "DIRECTLY ASSIGNED" CHGS.	Sum, Lns. 35, 46	10.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.05
	MONTHLY "NETWORK SUPPORT" EXPENSE:																			
48	Network Operations Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
49	Network Operations Monthly Charges	Ln 47 times Ln 48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
50	"Network Support" Expense Factor		0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	
51	Network Support" Monthly Charges	Ln 47 times Ln 50	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.16
52	Total Monthly Network Support Charges	Sum, Lns. 49, 51	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.16
53	TOTAL MONTHLY DIRECT + SUPPORT	Sum, Lns. 47, 52	10.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.21
	MONTHLY "DIRECTLY ATTRIBUTED" EXPENSES:																			
54	General Support Assets Expense Factor		0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	
55	General Support Assets Monthly Charges	Ln 47 times Ln 54	0.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.82
56	Gen Pur Computer Expense Factor		0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	
57	Gen Pur Computer Monthly Charges	Ln 47 times Ln 56	0.35	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.35
58	Uncollectible Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
59	Uncollectible Monthly Charges	Ln 47 times Ln 58	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
60	Accounting Expense Factor		0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	
61	Accounting Expense Monthly Charges	Ln 47 times Ln 60	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.08
62	Human Resources Expense Factor		0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	
63	Human Resources Monthly Charges	Ln 47 times Ln 62	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.08
64	Information Management Expense Factor		0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	
65	Information Management Monthly Charges	Ln 47 times Ln 64	0.56	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.56
66	Intangible Expense Factor		0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	
67	Intangible Expense Monthly Charges	Ln 47 times Ln 66	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03
68	Total Monthly "Directly Attributed" Expense Charges	Sum Lns. 55, 57, 59, 61, 63, 65, 67	1.91	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.91
69	TOTAL MONTHLY "DIRECT" CHARGES	Sum, Lns. 53, 69	12.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.12
	MONTHLY COMMON EXPENSES:																			
70	Executive Expense Factor		0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	
71	Executive Expense Monthly Charges	Ln 69 times Ln 70	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.08
72	Planning Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
73	Planning Expense Monthly Charges	Ln 69 times Ln 72	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
74	External Relations Expense Factor		0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	
75	External Relations Monthly Charges	Ln 69 times Ln 74	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.11
76	Legal Expense Factor		0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	
77	Legal Expense Monthly Charges	Ln 69 times Ln 76	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07
78	Procurement Expense Factor		0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	
79	Procurement Expense Monthly Charges	Ln 69 times Ln 78	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03
80	Research and Development Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
81	R&D Expense Monthly Charges	Ln 69 times Ln 80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
82	General Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
83	General Expense Monthly Charges	Ln 69 times Ln 82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
84	Total Monthly "Common" Expenses Charges	um, Lns. 71, 73, 75, 77, 79, 81, 8	0.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.29
85	TOTAL MONTHLY "TELRIC"	Sum, Lns. 69, 84	$12.41	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$12.41

QWEST CORPORATION
Arizona Corporation Commission Docket No. 00000A-00-0194

TELRIC -- DS0 UDIT, 8-25 Miles -- VARIABLE COMPONENT

Ln No.	Plant Account Description Account Number	Source	Circuit - Digital: Other 357C	Digital 257C	Premises 257CP	SONET 257CS	SONET Premises 257CSP	Outside Plant: Poles 1C	C-Wire 3C	Conduit 4C	Cable UG Metal 5C	Drop Buried 35C	Drop Aerial 42C	Cable Bur. Metal 45C	Cable Aer. Metal 52C	Cable Bld. Metal 62C	Cable UG Fiber 85C	Cable Bur. Fiber 845C	Cable Bld. Fiber 862C	TOTALS
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(n)	(o)	(p)	(q)	(r)	(s)	(t)
	INVESTMENT																			
1	Equipment		0.55	0.00	0.00	0.00	0.00	0.00	0.00	1.56	0.00	0.00	0.00	0.00	0.00	0.00	1.15	0.04	0.00	3.30
2	Bldg Loading Fact		0.0418	0.0418	0.0000	0.0418	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
3	Building	Ln 1 times Ln 2	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02
4	Land Loading Fact		0.0036	0.0036	0.0000	0.0036	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
5	Land	Ln 1 times Ln 4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	**Loaded Investment**	**Sum, Lns. 1, 3, 5**	**0.57**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**1.56**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**1.15**	**0.04**	**0.00**	**3.32**
	MONTHLY INVESTMENT-RELATED CHARGES, EQUIPMENT:																			
7	Avg Depr Factor		0.1082	0.1082	0.1082	0.1082	0.1082	0.0674	0.1404	0.0227	0.0772	0.0944	0.1137	0.0944	0.1137	0.0598	0.0900	0.0662	0.0990	
8	Avg Annual Depr	Ln 1 times Ln 7	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.00	0.00	
9	Avg Monthly Depr	Ln 8 divided by 12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.02
10	Avg COM Factor		0.0420	0.0420	0.0420	0.0420	0.0420	0.0500	0.0755	0.0581	0.0546	0.0552	0.0536	0.0552	0.0536	0.0562	0.0562	0.0538	0.0589	
11	Avg Annual COM	Ln 1 times Ln 10	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.00	0.00	
12	Avg Monthly COM	Ln 11 divided by 12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.02
13	Avg IT Factor		0.0175	0.0175	0.0175	0.0175	0.0175	0.0208	0.0314	0.0242	0.0227	0.0230	0.0223	0.0230	0.0223	0.0234	0.0234	0.0224	0.0245	
14	Avg Annual IT	Ln 1 times Ln 13	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	
15	Avg Monthly IT	Ln 14 divided by 12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
16	Total Maint Factor		0.0182	0.0118	0.0118	0.0118	0.0118	0.0045	0.0156	0.0046	0.0376	0.0845	0.1158	0.0845	0.1158	0.0156	0.0376	0.0139	0.0200	
17	Total Annual Maint	Ln 1 times Ln 16	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	
18	Total Monthly Maint	Ln 17 divided by 12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
19	Ad Valorem Tax Factor		0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	
20	Annual AV Taxes	Ln 1 times Ln 19	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	
21	Monthly AV Taxes	Ln 20 divided by 12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
22	Tot Mo Inv Related Charge, Equip		0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.05
	MONTHLY INVESTMENT-RELATED CHARGES, L&B LOADINGS:																			
23	Building Loading	Ln 3 above	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
24	Total AC Factor, Bldg		0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	
25	Bldg Annual Charge	Ln 23 times Ln 24	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
26	Bldg Monthly Charge	Ln 25 divided by 12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
27	Land Loading	Ln 5 above	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
28	Total AC Factor, Land		0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	
29	Land Annual Charge	Ln 27 times Ln 28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
30	Land Monthly Charge	Ln 29 divided by 12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
31	Total L&B Monthly Charge	Sum, Lns 26, 30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	BILLING AND COLLECTION CHARGES:																			
32	Total Plant Investment Monthly Charges	Sum, Lns 22 and 31	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	
33	B&C Factor		0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	
34	Total Monthly B&C Charge	Ln 32 times Ln 33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
35	**TOTAL MONTHLY INV. RELATED CHARGES**	**Sum, Lns. 22, 31, 34**	**0.01**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.02**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.02**	**0.00**	**0.00**	**0.05**
	MONTHLY PRODUCT ADMINISTRATION RELATED CHARGES:																			
36	Direct Assigned Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
37	Direct Assigned Monthly Charges	Ln 35 times Ln 36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
38	Product Management Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
39	Product Management Monthly Charges	Ln 35 times Ln 38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
40	Sales Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
41	Monthly Sales Charges	Ln. 35 times Ln 40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
42	Advertising Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
43	Monthly Advertising Charges	Ln 35 times Ln 42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
44	Business Fees (Other Taxes) Expense Factor		0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	
45	Monthly Business Fees Charges	n. 44 times Sum Lns 37, 39, 41, 4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
46	Total Monthly Product Administration Charges	Sum, Lns 37, 39, 41, 43, 45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

QWEST CORPORATION
Arizona Corporation Commission Docket No. 00000A-00-0194

TELRIC -- DS0 UDIT, 8-25 Miles -- VARIABLE COMPONENT

Ln No	Plant Account Description Account Number	Source	Circuit - Digital: Other 357C	Digital 257C	Premises 257CP	SONET 257CS	SONET Premises 257CSP	Poles 1C	C-Wire 3C	Conduit 4C	Outside Plant: Cable UG Metal 5C	Drop Buried 35C	Drop Aerial 42C	Cable Bur. Metal 45C	Cable Aer. Metal 52C	Cable Bld. Metal 62C	Cable UG Fiber 85C	Cable Bur. Fiber 845C	Cable Bld. Fiber 862C	TOTALS
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(n)	(o)	(p)	(q)	(r)	(s)	(t)
47	TOTAL MO. "DIRECTLY ASSIGNED" CHGS.	Sum, Lns. 35, 46	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.05
	MONTHLY "NETWORK SUPPORT" EXPENSE:																			
48	Network Operations Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
49	Network Operations Monthly Charges	Ln 47 times Ln 48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
50	"Network Support" Expense Factor		0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	
51	Network Support" Monthly Charges	Ln 47 times Ln 50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
52	Total Monthly Network Support Charges	Sum, Lns. 49, 51	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
53	TOTAL MONTHLY DIRECT + SUPPORT	Sum, Lns. 47, 52	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.05
	MONTHLY "DIRECTLY ATTRIBUTED" EXPENSES:																			
54	General Support Assets Expense Factor		0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	
55	General Support Assets Monthly Charges	Ln 47 times Ln 54	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
56	Gen. Pur. Computer Expense Factor		0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	
57	Gen. Pur. Computer Monthly Charges	Ln 47 times Ln 56	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
58	Uncollectible Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
59	Uncollectible Monthly Charges	Ln 47 times Ln 58	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
60	Accounting Expense Factor		0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	
61	Accounting Expense Monthly Charges	Ln 47 times Ln 60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
62	Human Resources Expense Factor		0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	
63	Human Resources Monthly Charges	Ln 47 times Ln 62	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
64	Information Management Expense Factor		0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	
65	Information Management Monthly Charges	Ln 47 times Ln 64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
66	Intangible Expense Factor		0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	
67	Intangible Expense Monthly Charges	Ln 47 times Ln 66	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
68	Total Monthly "Directly Attributed" Expense Charges	Sum Lns. 55, 57, 59, 61, 63, 65, 67	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
69	TOTAL MONTHLY "DIRECT" CHARGES	Sum, Lns. 53, 69	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.06
	MONTHLY COMMON EXPENSES:																			
70	Executive Expense Factor		0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	
71	Executive Expense Monthly Charges	Ln 69 times Ln 70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
72	Planning Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
73	Planning Expense Monthly Charges	Ln 69 times Ln 72	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
74	External Relations Expense Factor		0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	
75	External Relations Monthly Charges	Ln 69 times Ln 74	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
76	Legal Expense Factor		0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	
77	Legal Expense Monthly Charges	Ln 69 times Ln 76	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
78	Procurement Expense Factor		0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	
79	Procurement Expense Monthly Charges	Ln 69 times Ln 78	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
80	Research and Development Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
81	R&D Expense Monthly Charges	Ln 69 times Ln 80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
82	General Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
83	General Expense Monthly Charges	Ln 69 times Ln 82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
84	Total Monthly "Common" Expenses Charges	um, Lns. 71, 73, 75, 77, 79, 81, 8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
85	TOTAL MONTHLY "TELRIC"	Sum, Lns. 69, 84	$0.01	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.02	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.03	$0.00	$0.00	$0.06

QWEST CORPORATION
Arizona Corporation Commission Docket No. 00000A-00-0194

TELRIC -- DS0 UDIT, 25-50 Miles -- FIXED COMPONENT

Ln. No.	Plant Account Description Account Number	Source	Circuit - Digital: Other 357C	Digital 257C	Premises 257CP	SONET 257CS	SONET Premises 257CSP	Poles 1C	C-Wire 3C	Conduit 4C	Outside Plant: Cable UG Metal. 5C	Drop Buried 35C	Drop Aerial 42C	Cable Bur. Metal 45C	Cable Aer. Metal. 52C	Cable Bld. Metal 62C	Cable UG Fiber 85C	Cable Bur. Fiber 845C	Cable Bld. Fiber 862C	TOTALS
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(n)	(o)	(p)	(q)	(r)	(s)	(t)
	INVESTMENT																			
1	Equipment		572.62	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	572.62
2	Bldg Loading Fact		0.0418	0.0418	0.0000	0.0418	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
3	Building	Ln 1 times Ln 2	23.94	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	23.94
4	Land Loading Fact		0.0036	0.0036	0.0000	0.0036	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
5	Land	Ln 1 times Ln 4	2.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.06
6	**Loaded Investment**	**Sum, Lns. 1, 3, 5**	**598.62**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**598.62**
	MONTHLY INVESTMENT-RELATED CHARGES, EQUIPMENT:																			
7	Avg Depr Factor		0.1082	0.1082	0.1082	0.1082	0.1082	0.0674	0.1404	0.0227	0.0772	0.0944	0.1137	0.0944	0.1137	0.0598	0.0900	0.0662	0.0990	
8	Avg Annual Depr	Ln 1 times Ln 7	61.96	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
9	Avg Monthly Depr	Ln 8 divided by 12	5.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.16
10	Avg COM Factor		0.0420	0.0420	0.0420	0.0420	0.0420	0.0500	0.0755	0.0581	0.0546	0.0562	0.0536	0.0552	0.0536	0.0562	0.0562	0.0538	0.0589	
11	Avg Annual COM	Ln 1 times Ln 10	24.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
12	Avg Monthly COM	Ln 11 divided by 12	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.00
13	Avg IT Factor		0.0175	0.0175	0.0175	0.0175	0.0175	0.0208	0.0314	0.0242	0.0227	0.0230	0.0223	0.0230	0.0223	0.0234	0.0234	0.0224	0.0246	
14	Avg Annual IT	Ln 1 times Ln 13	10.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
15	Avg Monthly IT	Ln 14 divided by 12	0.84	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.84
16	Total Maint Factor		0.0182	0.0118	0.0118	0.0118	0.0118	0.0045	0.0156	0.0046	0.0376	0.0845	0.1158	0.0845	0.1158	0.0156	0.0376	0.0139	0.0200	
17	Total Annual Maint	Ln 1 times Ln 16	10.42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
18	Total Monthly Maint	Ln 17 divided by 12	0.87	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.87
19	Ad Valorem Tax Factor		0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	
20	Annual AV Taxes	Ln 1 times Ln 19	7.79	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
21	Monthly AV Taxes	Ln 20 divided by 12	0.65	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.65
22	Tot Mo Inv Related Charge Equip		9.52	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.52
	MONTHLY INVESTMENT-RELATED CHARGES, L&B LOADINGS																			
23	Building Loading	Ln 3 above	23.94	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
24	Total AC Factor, Bldg		0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	
25	Bldg Annual Charge	Ln 23 times Ln 24	5.34	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
26	Bldg Monthly Charge	Ln 25 divided by 12	0.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.45
27	Land Loading	Ln 5 above	2.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
28	Total AC Factor, Land		0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	
29	Land Annual Charge	Ln 27 times Ln 28	0.46	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
30	Land Monthly Charge	Ln 29 divided by 12	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04
31	Total L&B Monthly Charge	Sum, Lns. 26, 30	0.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.48
	BILLING AND COLLECTION CHARGES:																			
32	Total Plant Investment Monthly Charges	Sum, Lns. 22 and 31	10.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
33	B&C Factor		0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	
34	Total Monthly B&C Charge	Ln 32 times Ln 33	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04
35	**TOTAL MONTHLY INV. RELATED CHARGES**	**Sum, Lns. 22, 31, 34**	**10.05**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**10.05**
	MONTHLY PRODUCT ADMINISTRATION RELATED CHARGES:																			
36	Direct Assigned Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
37	Direct Assigned Monthly Charges	Ln 35 times Ln 36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
38	Product Management Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
39	Product Management Monthly Charges	Ln 35 times Ln 38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
40	Sales Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
41	Monthly Sales Charges	Ln 35 times Ln 40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
42	Advertising Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
43	Monthly Advertising Charges	Ln 35 times Ln 42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
44	Business Fees (Other Taxes) Expense Factor		0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	
45	Monthly Business Fees Charges	n 44 times Sum Lns. 37, 39, 41, 4	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02
46	Total Monthly Product Administration Charges	Sum, Lns. 37, 39, 41, 43, 45	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02

QWEST CORPORATION
Arizona Corporation Commission Docket No. 00000A-00-0194

TELRIC -- DS0 UDIT, 25-50 Miles -- FIXED COMPONENT

Ln No	Plant Account Description Account Number	Source	Circuit - Digital								Outside Plant									
			Other 357C	Digital 257C	Premises 257CP	SONET 257CS	SONET Premises 257CSP	Poles 1C	C-Wire 3C	Conduit 4C	Cable UG Metal 5C	Drop Buried 35C	Drop Aerial 42C	Cable Bur. Metal 45C	Cable Aer. Metal 52C	Cable Bld. Metal 62C	Cable UG Fiber 85C	Cable Bur. Fiber 845C	Cable Bld. Fiber 862C	TOTALS
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(n)	(o)	(p)	(q)	(r)	(s)	(t)
47	TOTAL MO. "DIRECTLY ASSIGNED" CHGS	Sum, Lns. 35, 46	10.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.07
	MONTHLY "NETWORK SUPPORT" EXPENSE																			
48	Network Operations Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
49	Network Operations Monthly Charges	Ln 47 times Ln 48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
50	"Network Support" Expense Factor		0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	
51	Network Support" Monthly Charges	Ln 47 times Ln 50	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.16
52	Total Monthly Network Support Charges	Sum, Lns. 49, 51	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.16
53	TOTAL MONTHLY DIRECT + SUPPORT	Sum, Lns. 47, 52	10.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.23
	MONTHLY "DIRECTLY ATTRIBUTED" EXPENSES:																			
54	General Support Assets Expense Factor		0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	
55	General Support Assets Monthly Charges	Ln 47 times Ln 54	0.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.82
56	Gen. Pur. Computer Expense Factor		0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	
57	Gen. Pur. Computer Monthly Charges	Ln 47 times Ln 56	0.35	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.35
58	Uncollectible Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
59	Uncollectible Monthly Charges	Ln 47 times Ln 58	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
60	Accounting Expense Factor		0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	
61	Accounting Expense Monthly Charges	Ln 47 times Ln 60	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.08
62	Human Resources Expense Factor		0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	
63	Human Resources Monthly Charges	Ln 47 times Ln 62	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.08
64	Information Management Expense Factor		0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	
65	Information Management Monthly Charges	Ln 47 times Ln 64	0.56	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.56
66	Intangible Expense Factor		0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	
67	Intangible Expense Monthly Charges	Ln 47 times Ln 66	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03
68	Total Monthly "Directly Attributed" Expense Charges	Sum Lns. 55, 57, 59, 61 63, 65, 67	1.91	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.91
69	TOTAL MONTHLY "DIRECT" CHARGES	Sum, Lns. 53, 68	12.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.14
	MONTHLY COMMON EXPENSES:																			
70	Executive Expense Factor		0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	
71	Executive Expense Monthly Charges	Ln 69 times Ln 70	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.08
72	Planning Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
73	Planning Expense Monthly Charges	Ln 69 times Ln 72	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
74	External Relations Expense Factor		0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	
75	External Relations Monthly Charges	Ln 69 times Ln 74	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.11
76	Legal Expense Factor		0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	
77	Legal Expense Monthly Charges	Ln 69 times Ln 76	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07
78	Procurement Expense Factor		0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	
79	Procurement Expense Monthly Charges	Ln 69 times Ln 78	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03
80	Research and Development Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
81	R&D Expense Monthly Charges	Ln 69 times Ln 80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
82	General Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
83	General Expense Monthly Charges	Ln 69 times Ln 82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
84	Total Monthly "Common" Expenses Charges	um, Lns. 71, 73, 75, 77, 79, 81, 8	0.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.29
85	TOTAL MONTHLY "TELRIC"	Sum, Lns. 69, 84	$12.43	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$12.43

QWEST CORPORATION
Arizona Corporation Commission Docket No. 00000A-00-0194

TELRIC -- DS0 UDIT, 25-50 Miles -- VARIABLE COMPONENT

Ln. No. (a)	Plant Account Description Account Number (b)	Source (c)	Circuit - Digital: Other 357C (d)	Digital 257C (e)	Premises 257CP (f)	SONET 257CS (g)	SONET Premises 257CSP (h)	Poles 1C (i)	C-Wire 3C (j)	Conduit 4C (k)	Outside Plant: Cable UG Metal 5C (l)	Drop Buried 35C (m)	Drop Aerial 42C (n)	Cable Bur. Metal 45C (n)	Cable Aer. Metal 52C (o)	Cable Bld. Metal 62C (p)	Cable UG Fiber 85C (q)	Cable Bur. Fiber 845C (r)	Cable Bld. Fiber 862C (s)	TOTALS (t)
	INVESTMENT																			
1	Equipment		0.07	0.00	0.00	0.00	0.00	0.00	0.00	1.28	0.00	0.00	0.00	0.00	0.00	0.00	0.95	0.46	0.00	2.76
2	Bldg Loading Fact		0.0418	0.0418	0.0000	0.0418	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
3	Building	Ln 1 times Ln 2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	Land Loading Fact		0.0036	0.0036	0.0000	0.0036	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
5	Land	Ln 1 times Ln 4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	**Loaded Investment**	**Sum, Lns. 1, 3, 5**	**0.08**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**1.28**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.95**	**0.46**	**0.00**	**2.77**
	MONTHLY INVESTMENT-RELATED CHARGES, EQUIPMENT:																			
7	Avg Depr Factor		0.1082	0.1082	0.1082	0.1082	0.1082	0.0674	0.1404	0.0227	0.0772	0.0944	0.1137	0.0944	0.1137	0.0598	0.0900	0.0662	0.0990	
8	Avg Annual Depr	Ln 1 times Ln 7	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.03	0.00	
9	Avg Monthly Depr	Ln 8 divided by 12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.01
10	Avg COM Factor		0.0420	0.0420	0.0420	0.0420	0.0420	0.0500	0.0755	0.0581	0.0546	0.0552	0.0536	0.0552	0.0536	0.0562	0.0562	0.0538	0.0589	
11	Avg Annual COM	Ln 1 times Ln 10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.02	0.00	
12	Avg Monthly COM	Ln 11 divided by 12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
13	Avg IT Factor		0.0175	0.0175	0.0175	0.0175	0.0175	0.0208	0.0314	0.0242	0.0227	0.0230	0.0223	0.0230	0.0223	0.0234	0.0234	0.0224	0.0246	
14	Avg Annual IT	Ln 1 times Ln 13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.01	0.00	
15	Avg Monthly IT	Ln 14 divided by 12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
16	Total Maint Factor		0.0182	0.0118	0.0118	0.0118	0.0118	0.0045	0.0156	0.0046	0.0376	0.0845	0.1158	0.0845	0.1158	0.0156	0.0376	0.0139	0.0200	
17	Total Annual Maint	Ln 1 times Ln 16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.01	0.00	
18	Total Monthly Maint	Ln 17 divided by 12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
19	Ad Valorem Tax Factor		0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	
20	Annual AV Taxes	Ln 1 times Ln 19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	
21	Monthly AV Taxes	Ln 20 divided by 12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
22	Tot Mo Inv Related Charge, Equip		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.01	0.00	0.04
	MONTHLY INVESTMENT-RELATED CHARGES, L&B LOADINGS																			
23	Building Loading	Ln 3 above	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
24	Total AC Factor, Bldg		0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	
25	Bldg Annual Charge	Ln 23 times Ln 24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
26	Bldg Monthly Charge	Ln 25 divided by 12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
27	Land Loading	Ln 5 above	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
28	Total AC Factor, Land		0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	
29	Land Annual Charge	Ln 27 times Ln 28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
30	Land Monthly Charge	Ln 29 divided by 12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
31	Total L&B Monthly Charge	Sum, Lns 26, 30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	BILLING AND COLLECTION CHARGES:																			
32	Total Plant Investment Monthly Charges	Sum, Lns 22 and 31	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.01	0.00	
33	B&C Factor		0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	
34	Total Monthly B&C Charge	Ln 32 times Ln 33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
35	**TOTAL MONTHLY INV. RELATED CHARGES**	**Sum, Lns. 22, 31, 34**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.01**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.02**	**0.01**	**0.00**	**0.04**
	MONTHLY PRODUCT ADMINISTRATION RELATED CHARGES:																			
36	Direct Assigned Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
37	Direct Assigned Monthly Charges	Ln 35 times Ln 36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
38	Product Management Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
39	Product Management Monthly Charges	Ln 35 times Ln 38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
40	Sales Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
41	Monthly Sales Charges	Ln 35 times Ln 40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
42	Advertising Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
43	Monthly Advertising Charges	Ln 35 times Ln 42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
44	Business Fees (Other Taxes) Expense Factor		0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	
45	Monthly Business Fees Charges	n 44 times Sum Lns 37, 39, 41, 4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
46	Total Monthly Product Administration Charges	Sum, Lns 37, 39, 41, 43, 45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

QWEST CORPORATION
Arizona Corporation Commission Docket No. 00000A-00-0194

TELRIC -- DS0 UDIT, 25-50 Miles -- VARIABLE COMPONENT

Ln No	Plant Account Description Account Number	Source	Circuit - Digital: Other 357C	Digital 257C	Premises 257CP	SONET 257CS	SONET Premises 257CSP	Outside Plant: Poles 1C	C-Wire 3C	Conduit 4C	Cable UG Metal 5C	Drop Buried 35C	Drop Aerial 42C	Cable Bur. Metal 45C	Cable Aer. Metal 52C	Cable Bld. Metal 62C	Cable UG Fiber 85C	Cable Bur. Fiber 845C	Cable Bld. Fiber 862C	TOTALS
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(n)	(o)	(p)	(q)	(r)	(s)	(t)
47	TOTAL MO. "DIRECTLY ASSIGNED" CHGS.	Sum, Lns. 35, 46	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.01	0.00	0.04
	MONTHLY "NETWORK SUPPORT" EXPENSE																			
48	Network Operations Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
49	Network Operations Monthly Charges	Ln 47 times Ln 48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
50	"Network Support" Expense Factor		0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	
51	Network Support" Monthly Charges	Ln 47 times Ln 50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
52	Total Monthly Network Support Charges	Sum, Lns. 49, 51	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
53	TOTAL MONTHLY DIRECT + SUPPORT	Sum, Lns. 47, 52	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.01	0.00	0.04
	MONTHLY "DIRECTLY ATTRIBUTED" EXPENSES:																			
54	General Support Assets Expense Factor		0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	
55	General Support Assets Monthly Charges	Ln 47 times Ln 54	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
56	Gen Pur Computer Expense Factor		0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	
57	Gen Pur Computer Monthly Charges	Ln 47 times Ln 56	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
58	Uncollectible Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
59	Uncollectible Monthly Charges	Ln 47 times Ln 58	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
60	Accounting Expense Factor		0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	
61	Accounting Expense Monthly Charges	Ln 47 times Ln 60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
62	Human Resources Expense Factor		0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	
63	Human Resources Monthly Charges	Ln 47 times Ln 62	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
64	Information Management Expense Factor		0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	
65	Information Management Monthly Charges	Ln 47 times Ln 64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
66	Intangible Expense Factor		0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	
67	Intangible Expense Monthly Charges	Ln 47 times Ln 66	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
68	Total Monthly "Directly Attributed" Expense Charges	Sum Lns. 55, 57, 59, 61, 63, 65, 67	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
69	TOTAL MONTHLY "DIRECT" CHARGES	Sum, Lns. 53, 69	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.01	0.00	0.05
	MONTHLY COMMON EXPENSES:																			
70	Executive Expense Factor		0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	
71	Executive Expense Monthly Charges	Ln 69 times Ln 70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
72	Planning Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
73	Planning Expense Monthly Charges	Ln 69 times Ln 72	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
74	External Relations Expense Factor		0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	
75	External Relations Monthly Charges	Ln 69 times Ln 74	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
76	Legal Expense Factor		0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	
77	Legal Expense Monthly Charges	Ln 69 times Ln 76	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
78	Procurement Expense Factor		0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	
79	Procurement Expense Monthly Charges	Ln 69 times Ln 78	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
80	Research and Development Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
81	R&D Expense Monthly Charges	Ln 69 times Ln 80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
82	General Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
83	General Expense Monthly Charges	Ln 69 times Ln 82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
84	Total Monthly "Common" Expenses Charges	um, Lns. 71, 73, 75, 77, 79, 81, 8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
85	TOTAL MONTHLY "TELRIC"	Sum, Lns. 69, 84	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.02	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.02	$0.01	$0.00	$0.05

QWEST CORPORATION
Arizona Corporation Commission Docket No. 00000A-00-0194

TELRIC -- DS0 UDIT, OVER 50 Miles -- FIXED COMPONENT

Ln. No.	Plant Account Description Account Number	Source	Circuit - Digital: Other 357C	Digital 257C	Premises 257CP	SONET 257CS	SONET Premises 257CSP	Outside Plant: Poles 1C	C-Wire 3C	Conduit 4C	Cable UG Metal 5C	Drop Buried 35C	Drop Aerial 42C	Cable Bur. Metal 45C	Cable Aer. Metal 52C	Cable Bld. Metal 62C	Cable UG Fiber 85C	Cable Bur. Fiber 845C	Cable Bld. Fiber 862C	TOTALS
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(n)	(o)	(p)	(q)	(r)	(s)	(t)
	INVESTMENT																			
1	Equipment		571.58	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	571.58
2	Bldg Loading Fact		0.0418	0.0418	0.0000	0.0418	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
3	Building	Ln 1 times Ln 2	23.89	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	23.89
4	Land Loading Fact		0.0036	0.0036	0.0000	0.0036	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
5	Land	Ln 1 times Ln 4	2.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.06
6	**Loaded Investment**	**Sum, Lns. 1, 3, 5**	**597.53**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**597.53**
	MONTHLY INVESTMENT-RELATED CHARGES, EQUIPMENT:																			
7	Avg Depr Factor		0.1082	0.1082	0.1082	0.1082	0.1082	0.0674	0.1404	0.0227	0.0772	0.0944	0.1137	0.0944	0.1137	0.0598	0.0900	0.0662	0.0990	
8	Avg Annual Depr	Ln 1 times Ln 7	61.84	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
9	Avg Monthly Depr	Ln 8 divided by 12	5.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.15
10	Avg COM Factor		0.0420	0.0420	0.0420	0.0420	0.0420	0.0500	0.0755	0.0581	0.0546	0.0552	0.0536	0.0552	0.0536	0.0562	0.0562	0.0538	0.0589	
11	Avg Annual COM	Ln 1 times Ln 10	24.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
12	Avg Monthly COM	Ln 11 divided by 12	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.00
13	Avg IT Factor		0.0175	0.0175	0.0175	0.0175	0.0175	0.0208	0.0314	0.0242	0.0227	0.0230	0.0223	0.0230	0.0223	0.0234	0.0234	0.0224	0.0245	
14	Avg Annual IT	Ln 1 times Ln 13	10.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
15	Avg Monthly IT	Ln 14 divided by 12	0.83	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.83
16	Total Maint Factor		0.0182	0.0118	0.0118	0.0118	0.0118	0.0045	0.0156	0.0046	0.0374	0.0845	0.1158	0.0845	0.1158	0.0156	0.0376	0.0139	0.0200	
17	Total Annual Maint	Ln 1 times Ln 16	10.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
18	Total Monthly Maint	Ln 17 divided by 12	0.87	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.87
19	Ad Valorem Tax Factor		0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	
20	Annual AV Taxes	Ln 1 times Ln 19	7.77	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
21	Monthly AV Taxes	Ln 20 divided by 12	0.65	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.65
22	Tot Mo Inv Related Charge, Equip		9.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.50
	MONTHLY INVESTMENT-RELATED CHARGES, L&B LOADINGS																			
23	Building Loading	Ln 3 above	23.89	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
24	Total AC Factor, Bldg		0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	
25	Bldg Annual Charge	Ln 23 times Ln 24	5.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
26	Bldg Monthly Charge	Ln 25 divided by 12	0.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.44
27	Land Loading	Ln 5 above	2.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
28	Total AC Factor, Land		0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	
29	Land Annual Charge	Ln 27 times Ln 28	0.46	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
30	Land Monthly Charge	Ln 29 divided by 12	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04
31	Total L&B Monthly Charge	Sum, Lns. 26, 30	0.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.48
	BILLING AND COLLECTION CHARGES:																			
32	Total Plant Investment Monthly Charges	Sum, Lns. 22 and 31	9.99	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
33	B&C Factor		0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	
34	Total Monthly B&C Charge	Ln 32 times Ln 33	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04
35	**TOTAL MONTHLY INV. RELATED CHARGES**	**Sum, Lns. 22, 31, 34**	**10.03**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**10.03**
	MONTHLY PRODUCT ADMINISTRATION RELATED CHARGES:																			
36	Direct Assigned Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
37	Direct Assigned Monthly Charges	Ln. 35 times Ln 36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
38	Product Management Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
39	Product Management Monthly Charges	Ln 35 times Ln 38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
40	Sales Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
41	Monthly Sales Charges	Ln 35 times Ln 40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
42	Advertising Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
43	Monthly Advertising Charges	Ln. 35 times Ln 42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
44	Business Fees (Other Taxes) Expense Factor		0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	
45	Monthly Business Fees Charges	n. 44 times Sum Lns. 37, 39, 41, 4	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02
46	Total Monthly Product Administration Charges	Sum, Lns. 37, 39, 41, 43, 45	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02

QWEST CORPORATION
Arizona Corporation Commission Docket No. 00000A-00-0194

TELRIC -- DS0 UDIT. OVER 50 Miles -- FIXED COMPONENT

Ln No	Plant Account Description Account Number	Source	Circuit - Digital: Other 357C	Digital 257C	Premises 257CP	SONET 257CS	SONET Premises 257CSP	Poles 1C	C-Wire 3C	Conduit 4C	Outside Plant: Cable UG Metal 5C	Drop Buried 35C	Drop Aerial 42C	Cable Bur. Metal 45C	Cable Aer. Metal 52C	Cable Bld. Metal 62C	Cable UG Fiber 85C	Cable Bur. Fiber 845C	Cable Bld. Fiber 862C	TOTALS
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(n)	(o)	(p)	(q)	(r)	(s)	(t)
47	TOTAL MO. "DIRECTLY ASSIGNED" CHGS.	Sum, Lns. 35, 46	10.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.05
	MONTHLY "NETWORK SUPPORT" EXPENSE:																			
48	Network Operations Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
49	Network Operations Monthly Charges	Ln 47 times Ln 48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
50	"Network Support" Expense Factor		0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	
51	Network Support" Monthly Charges	Ln 47 times Ln 50	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.16
52	Total Monthly Network Support Charges	Sum, Lns. 49, 51	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.16
53	TOTAL MONTHLY DIRECT + SUPPORT	Sum, Lns. 47, 52	10.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.21
	MONTHLY "DIRECTLY ATTRIBUTED" EXPENSES:																			
54	General Support Assets Expense Factor		0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	
55	General Support Assets Monthly Charges	Ln 47 times Ln 54	0.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.82
56	Gen Pur Computer Expense Factor		0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	
57	Gen Pur Computer Monthly Charges	Ln 47 times Ln 56	0.35	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.35
58	Uncollectible Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
59	Uncollectible Monthly Charges	Ln 47 times Ln 58	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
60	Accounting Expense Factor		0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	
61	Accounting Expense Monthly Charges	Ln 47 times Ln 60	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.08
62	Human Resources Expense Factor		0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	
63	Human Resources Monthly Charges	Ln 47 times Ln 62	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.08
64	Information Management Expense Factor		0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	
65	Information Management Monthly Charges	Ln 47 times Ln 64	0.56	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.56
66	Intangible Expense Factor		0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	
67	Intangible Expense Monthly Charges	Ln 47 times Ln 66	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03
68	Total Monthly "Directly Attributed" Expense Charges	Sum Lns. 55, 57, 59, 61, 63, 65, 67	1.91	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.91
69	TOTAL MONTHLY "DIRECT" CHARGES	Sum, Lns. 53, 69	12.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.12
	MONTHLY COMMON EXPENSES:																			
70	Executive Expense Factor		0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	
71	Executive Expense Monthly Charges	Ln 69 times Ln 70	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.08
72	Planning Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
73	Planning Expense Monthly Charges	Ln 69 times Ln 72	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
74	External Relations Expense Factor		0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	
75	External Relations Monthly Charges	Ln 69 times Ln 74	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.11
76	Legal Expense Factor		0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	
77	Legal Expense Monthly Charges	Ln 69 times Ln 76	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07
78	Procurement Expense Factor		0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	
79	Procurement Expense Monthly Charges	Ln 69 times Ln 78	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03
80	Research and Development Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
81	R&D Expense Monthly Charges	Ln 69 times Ln 80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
82	General Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
83	General Expense Monthly Charges	Ln 69 times Ln 82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
84	Total Monthly "Common" Expenses Charges	um, Lns. 71, 73, 75, 77, 79, 81, 8	0.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.29
85	TOTAL MONTHLY "TELRIC"	Sum, Lns. 69, 84	$12.41	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$12.41

QWEST CORPORATION
Arizona Corporation Commission Docket No. 00000A-00-0194

TELRIC -- DS0 UDIT, OVER 50 Miles -- VARIABLE COMPONENT

Ln No.	Plant Account Description Account Number	Source	Circuit - Digital: Other 357C	Digital 257C	Premises 257CP	SONET 257CS	SONET Premises 257CSP	Poles 1C	C-Wire 3C	Conduit 4C	Outside Plant: Cable UG Metal 5C	Drop Buried 35C	Drop Aerial 42C	Cable Bur. Metal 45C	Cable Aer. Metal 52C	Cable Bld. Metal 82C	Cable UG Fiber 85C	Cable Bur. Fiber 845C	Cable Bld. Fiber 862C	TOTALS
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)	(s)	(t)
	INVESTMENT																			
1	Equipment		0.34	0.00	0.00	0.00	0.00	0.00	0.00	0.71	0.00	0.00	0.00	0.00	0.00	0.00	0.53	0.02	0.00	1.60
2	Bldg Loading Fact		0.0418	0.0418	0.0000	0.0418	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
3	Building	Ln 1 times Ln 2	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
4	Land Loading Fact		0.0036	0.0036	0.0000	0.0036	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
5	Land	Ln 1 times Ln 4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	**Loaded Investment**	**Sum, Lns. 1, 3, 5**	**0.36**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.71**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.53**	**0.02**	**0.00**	**1.62**
	MONTHLY INVESTMENT RELATED CHARGES, EQUIPMENT:																			
7	Avg Depr Factor		0.1082	0.1082	0.1082	0.1082	0.1082	0.0674	0.1404	0.0227	0.0772	0.0944	0.1137	0.0944	0.1137	0.0598	0.0900	0.0662	0.0990	
8	Avg Annual Depr	Ln 1 times Ln 7	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.00	
9	Avg Monthly Depr	Ln 8 divided by 12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
10	Avg COM Factor		0.0420	0.0420	0.0420	0.0420	0.0420	0.0500	0.0755	0.0581	0.0546	0.0552	0.0536	0.0552	0.0536	0.0562	0.0562	0.0538	0.0589	
11	Avg Annual COM	Ln 1 times Ln 10	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	
12	Avg Monthly COM	Ln 11 divided by 12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
13	Avg IT Factor		0.0175	0.0175	0.0175	0.0175	0.0175	0.0208	0.0314	0.0242	0.0227	0.0230	0.0223	0.0230	0.0223	0.0234	0.0234	0.0224	0.0245	
14	Avg Annual IT	Ln 1 times Ln 13	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	
15	Avg Monthly IT	Ln 14 divided by 12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16	Total Maint Factor		0.0182	0.0118	0.0118	0.0118	0.0118	0.0045	0.0156	0.0046	0.0376	0.0845	0.1158	0.0845	0.1158	0.0156	0.0376	0.0139	0.0200	
17	Total Annual Maint	Ln 1 times Ln 16	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	
18	Total Monthly Maint	Ln 17 divided by 12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
19	Ad Valorem Tax Factor		0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	
20	Annual AV Taxes	Ln 1 times Ln 19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	
21	Monthly AV Taxes	Ln 20 divided by 12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
22	Tot Mo Inv Related Charge, Equip		0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.02
	MONTHLY INVESTMENT RELATED CHARGES, L&B LOADINGS																			
23	Building Loading	Ln 3 above	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
24	Total AC Factor, Bldg		0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	
25	Bldg Annual Charge	Ln 23 times Ln 24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
26	Bldg Monthly Charge	Ln 25 divided by 12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
27	Land Loading	Ln 5 above	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
28	Total AC Factor, Land		0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	
29	Land Annual Charge	Ln 27 times Ln 28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
30	Land Monthly Charge	Ln 29 divided by 12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
31	Total L&B Monthly Charge	Sum, Lns 26, 30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	BILLING AND COLLECTION CHARGES:																			
32	Total Plant Investment Monthly Charges	Sum, Lns 22 and 31	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	
33	B&C Factor		0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	
34	Total Monthly B&C Charge	Ln 32 times Ln 33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
35	**TOTAL MONTHLY INV. RELATED CHARGES**	**Sum, Lns. 22, 31, 34**	**0.01**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.01**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.01**	**0.00**	**0.00**	**0.02**
	MONTHLY PRODUCT ADMINISTRATION RELATED CHARGES:																			
36	Direct Assigned Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
37	Direct Assigned Monthly Charges	Ln 35 times Ln 36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
38	Product Management Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
39	Product Management Monthly Charges	Ln 35 times Ln 38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
40	Sales Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
41	Monthly Sales Charges	Ln 35 times Ln 40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
42	Advertising Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
43	Monthly Advertising Charges	Ln 35 times Ln 42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
44	Business Fees (Other Taxes) Expense Factor		0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	
45	Monthly Business Fees Charges	n 44 times Sum Lns 37, 39, 41, 4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
46	Total Monthly Product Administration Charges	Sum, Lns 37, 39, 41, 43, 45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

QWEST CORPORATION
Arizona Corporation Commission Docket No. 00000A-00-0194

TELRIC -- DS0 UDIT, OVER 50 Miles -- VARIABLE COMPONENT

Ln No	Plant Account Description Account Number	Source	Circuit - Digital: Other 357C	Digital 257C	Premises 257CP	SONET 257CS	SONET Premises 257CSP	Poles 1C	C-Wire 3C	Conduit 4C	Outside Plant: Cable UG Metal 5C	Drop Buried 35C	Drop Aerial 42C	Cable Bur. Metal 45C	Cable Aer. Metal 52C	Cable Bld. Metal 62C	Cable UG Fiber 85C	Cable Bur. Fiber 845C	Cable Bld. Fiber 862C	TOTALS
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(n)	(o)	(p)	(q)	(r)	(s)	(t)
47	TOTAL MO. "DIRECTLY ASSIGNED" CHGS.	Sum, Lns. 38, 46	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.02
	MONTHLY "NETWORK SUPPORT" EXPENSE:																			
48	Network Operations Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
49	Network Operations Monthly Charges	Ln 47 times Ln 48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
50	"Network Support" Expense Factor		0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	
51	"Network Support" Monthly Charges	Ln 47 times Ln 50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
52	Total Monthly Network Support Charges	Sum, Lns. 49, 51	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
53	TOTAL MONTHLY DIRECT + SUPPORT	Sum, Lns. 47, 52	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.02
	MONTHLY "DIRECTLY ATTRIBUTED" EXPENSES:																			
54	General Support Assets Expense Factor		0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	
55	General Support Assets Monthly Charges	Ln 47 times Ln 54	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
56	Gen. Pur. Computer Expense Factor		0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	
57	Gen. Pur. Computer Monthly Charges	Ln 47 times Ln 56	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
58	Uncollectible Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
59	Uncollectible Monthly Charges	Ln 47 times Ln 58	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
60	Accounting Expense Factor		0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	
61	Accounting Expense Monthly Charges	Ln 47 times Ln 60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
62	Human Resources Expense Factor		0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	
63	Human Resources Monthly Charges	Ln 47 times Ln 62	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
64	Information Management Expense Factor		0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	
65	Information Management Monthly Charges	Ln 47 times Ln 64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
66	Intangible Expense Factor		0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	
67	Intangible Expense Monthly Charges	Ln 47 times Ln 66	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
68	Total Monthly "Directly Attributed" Expense Charges	Sum Lns. 55, 57, 59, 61, 63, 65, 67	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
69	TOTAL MONTHLY "DIRECT" CHARGES	Sum, Lns. 53, 69	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.03
	MONTHLY COMMON EXPENSES:																			
70	Executive Expense Factor		0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	
71	Executive Expense Monthly Charges	Ln 69 times Ln 70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
72	Planning Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
73	Planning Expense Monthly Charges	Ln 69 times Ln 72	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
74	External Relations Expense Factor		0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	
75	External Relations Monthly Charges	Ln 69 times Ln 74	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
76	Legal Expense Factor		0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	
77	Legal Expense Monthly Charges	Ln 69 times Ln 76	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
78	Procurement Expense Factor		0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	
79	Procurement Expense Monthly Charges	Ln 69 times Ln 78	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
80	Research and Development Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
81	R&D Expense Monthly Charges	Ln 69 times Ln 80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
82	General Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
83	General Expense Monthly Charges	Ln 69 times Ln 82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
84	Total Monthly "Common" Expenses Charges	um, Lns. 71, 73, 75, 77, 79, 81, 8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
85	TOTAL MONTHLY "TELRIC"	Sum, Lns. 69, 84	$0.01	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.01	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.01	$0.00	$0.00	$0.03

QWEST CORPORATION
Arizona Corporation Commission Docket No. 00000A-00-0194

TELRIC -- DS1 UDIT, 0-8 Miles -- FIXED COMPONENT

Ln No. (a)	Plant Account Description Account Number (b)	Source (c)	Other 357C (d)	Digital 257C (e)	Premises 257CP (f)	SONET 257CS (g)	SONET Premises 257CSP (h)	Poles 1C (i)	C-Wire 3C (j)	Conduit 4C (k)	Cable UG Metal 5C (l)	Drop Buried 35C (m)	Drop Aerial 42C (n)	Cable Bur. Metal 45C (n)	Cable Aer. Metal 52C (o)	Cable Bld. Metal 62C (p)	Cable UG Fiber 85C (q)	Cable Bur. Fiber 845C (r)	Cable Bld. Fiber 862C (s)	TOTALS (t)
			Circuit - Digital								Outside Plant									
	INVESTMENT																			
1	Equipment		977.27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	977.27
2	Bldg Loading Fact		0.0418	0.0418	0.0000	0.0418	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
3	Building	Ln 1 times Ln 2	40.85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	40.85
4	Land Loading Fact		0.0036	0.0036	0.0000	0.0036	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
5	Land	Ln 1 times Ln 4	3.52	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.52
6	**Loaded Investment**	**Sum, Lns. 1, 3, 5**	**1,021.64**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**1,021.64**
	MONTHLY INVESTMENT-RELATED CHARGES, EQUIPMENT:																			
7	Avg Depr Factor		0.1082	0.1082	0.1082	0.1082	0.1082	0.0674	0.1404	0.0227	0.0772	0.0944	0.1137	0.0944	0.1137	0.0598	0.0900	0.0662	0.0990	
8	Avg Annual Depr	Ln 1 times Ln 7	105.74	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
9	Avg Monthly Depr	Ln 8 divided by 12	8.81	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.81
10	Avg COM Factor		0.0420	0.0420	0.0420	0.0420	0.0420	0.0500	0.0755	0.0581	0.0546	0.0552	0.0536	0.0552	0.0536	0.0562	0.0562	0.0538	0.0589	
11	Avg Annual COM	Ln 1 times Ln 10	41.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
12	Avg Monthly COM	Ln 11 divided by 12	3.42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.42
13	Avg IT Factor		0.0175	0.0175	0.0175	0.0175	0.0175	0.0208	0.0314	0.0242	0.0227	0.0230	0.0223	0.0230	0.0223	0.0234	0.0234	0.0224	0.0245	
14	Avg Annual IT	Ln 1 times Ln 13	17.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
15	Avg Monthly IT	Ln 14 divided by 12	1.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.43
16	Total Maint Factor		0.0182	0.0118	0.0118	0.0118	0.0118	0.0045	0.0156	0.0046	0.0376	0.0845	0.1158	0.0845	0.1158	0.0156	0.0376	0.0139	0.0200	
17	Total Annual Maint	Ln 1 times Ln 16	17.79	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
18	Total Monthly Maint	Ln 17 divided by 12	1.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.48
19	Ad Valorem Tax Factor		0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	
20	Annual AV Taxes	Ln 1 times Ln 19	13.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
21	Monthly AV Taxes	Ln 20 divided by 12	1.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.11
22	Tot Mo Inv Related Charge, Equip		16.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	16.25
	MONTHLY INVESTMENT-RELATED CHARGES, L&B LOADINGS																			
23	Building Loading	Ln 3 above	40.85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
24	Total AC Factor, Bldg		0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	
25	Bldg Annual Charge	Ln 23 times Ln 24	9.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
26	Bldg Monthly Charge	Ln 25 divided by 12	0.76	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.76
27	Land Loading	Ln 5 above	3.52	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
28	Total AC Factor, Land		0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	
29	Land Annual Charge	Ln 27 times Ln 28	0.79	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
30	Land Monthly Charge	Ln 29 divided by 12	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07
31	Total L&B Monthly Charge	Sum, Lns. 26, 30	0.83	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.83
	BILLING AND COLLECTION CHARGES:																			
32	Total Plant Investment Monthly Charges	Sum, Lns. 22 and 31	17.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
33	B&C Factor		0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	
34	Total Monthly B&C Charge	Ln 32 times Ln 33	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07
35	**TOTAL MONTHLY INV. RELATED CHARGES**	**Sum, Lns. 22, 31, 34**	**17.15**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**17.15**
	MONTHLY PRODUCT ADMINISTRATION RELATED CHARGES:																			
36	Direct Assigned Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
37	Direct Assigned Monthly Charges	Ln 35 times Ln 36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
38	Product Management Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
39	Product Management Monthly Charges	Ln 35 times Ln 38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
40	Sales Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
41	Monthly Sales Charges	Ln. 35 times Ln. 40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
42	Advertising Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
43	Monthly Advertising Charges	Ln 35 times Ln. 42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
44	Business Fees (Other Taxes) Expense Factor		0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	
45	Monthly Business Fees Charges	n. 44 times Sum Lns. 37, 39, 41, 4	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03
46	Total Monthly Product Administration Charges	Sum, Lns. 37, 39, 41, 43, 45	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03

QWEST CORPORATION
Arizona Corporation Commission Docket No. 00000A-00-0194

TELRIC -- DS1 UDIT, 0-8 Miles -- FIXED COMPONENT

Ln. No.	Plant Account Description Account Number	Source	Circuit - Digital: Other 357C	Digital 257C	Premises 257CP	SONET 257CS	SONET Premises 257CSP	Outside Plant: Poles 1C	C-Wire 3C	Conduit 4C	Cable UG Metal 5C	Drop Buried 35C	Drop Aerial 42C	Cable Bur. Metal 45C	Cable Aer. Metal 52C	Cable Bld. Metal 62C	Cable UG Fiber 85C	Cable Bur. Fiber 845C	Cable Bld. Fiber 862C	TOTALS
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(n)	(o)	(p)	(q)	(r)	(s)	(t)
47	TOTAL MO. "DIRECTLY ASSIGNED" CHGS.	Sum, Lns. 35, 46	17.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.18
	MONTHLY "NETWORK SUPPORT" EXPENSE:																			
48	Network Operations Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
49	Network Operations Monthly Charges	Ln 47 times Ln 48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
50	"Network Support" Expense Factor		0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	
51	Network Support" Monthly Charges	Ln 47 times Ln 50	0.27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.27
52	Total Monthly Network Support Charges	Sum, Lns 49, 51	0.27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.27
53	TOTAL MONTHLY DIRECT + SUPPORT	Sum, Lns. 47, 52	17.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.45
	MONTHLY "DIRECTLY ATTRIBUTED" EXPENSES:																			
54	General Support Assets Expense Factor		0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	
55	General Support Assets Monthly Charges	Ln 47 times Ln 54	1.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.40
56	Gen Pur Computer Expense Factor		0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	
57	Gen Pur Computer Monthly Charges	Ln 47 times Ln 56	0.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.60
58	Uncollectible Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
59	Uncollectible Monthly Charges	Ln 47 times Ln 58	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
60	Accounting Expense Factor		0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	
61	Accounting Expense Monthly Charges	Ln 47 times Ln 60	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14
62	Human Resources Expense Factor		0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	
63	Human Resources Monthly Charges	Ln 47 times Ln 62	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.13
64	Information Management Expense Factor		0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	
65	Information Management Monthly Charges	Ln 47 times Ln 64	0.95	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.95
66	Intangible Expense Factor		0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	
67	Intangible Expense Monthly Charges	Ln 47 times Ln 66	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04
68	Total Monthly "Directly Attributed" Expense Charges	Sum Lns 55, 57, 59, 61, 63, 65, 67	3.27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.27
69	TOTAL MONTHLY "DIRECT" CHARGES	Sum, Lns. 53, 69	20.72	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	20.72
	MONTHLY COMMON EXPENSES:																			
70	Executive Expense Factor		0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	
71	Executive Expense Monthly Charges	Ln 69 times Ln 70	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.13
72	Planning Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
73	Planning Expense Monthly Charges	Ln 69 times Ln 72	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
74	External Relations Expense Factor		0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	
75	External Relations Monthly Charges	Ln 69 times Ln 74	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.19
76	Legal Expense Factor		0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	
77	Legal Expense Monthly Charges	Ln 69 times Ln 76	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.12
78	Procurement Expense Factor		0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	
79	Procurement Expense Monthly Charges	Ln 69 times Ln 78	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05
80	Research and Development Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
81	R&D Expense Monthly Charges	Ln 69 times Ln 80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
82	General Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
83	General Expense Monthly Charges	Ln 69 times Ln 82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
84	Total Monthly "Common" Expenses Charges	um, Lns 71, 73, 75, 77, 79, 81, 8	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.50
85	TOTAL MONTHLY "TELRIC"	Sum, Lns. 69, 84	$21.22	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$21.22

QWEST CORPORATION
Arizona Corporation Commission Docket No. 00000A-00-0194

TELRIC -- DS1 UDIT. 0-8 Miles -- VARIABLE COMPONENT

Ln No (a)	Plant Account Description Account Number (b)	Source (c)	Circuit - Digital: Other 357C (d)	Digital 257C (e)	Premises 257CP (f)	SONET 257CS (g)	SONET Premises 257CSP (h)	Poles 1C (i)	C-Wire 3C (j)	Conduit 4C (k)	Outside Plant: Cable UG Metal 5C (l)	Drop Buried 35C (m)	Drop Aerial 42C (n)	Cable Bur. Metal 45C (n)	Cable Aer. Metal 52C (o)	Cable Bld. Metal 62C (p)	Cable UG Fiber 85C (q)	Cable Bur. Fiber 845C (r)	Cable Bld. Fiber 862C (s)	TOTALS (t)
	INVESTMENT																			
1	Equipment		8.09	0.00	0.00	0.00	0.00	0.00	0.00	23.06	0.00	0.00	0.00	0.00	0.00	0.00	17.11	0.00	0.00	48.26
2	Bldg Loading Fact		0.0418	0.0418	0.0000	0.0418	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
3	Building	Ln 1 times Ln 2	0.34	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.34
4	Land Loading Fact		0.0036	0.0036	0.0000	0.0036	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
5	Land	Ln 1 times Ln 4	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03
6	**Loaded Investment**	**Sum, Lns. 1, 3, 5**	**8.46**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**23.06**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**17.11**	**0.00**	**0.00**	**48.63**
	MONTHLY INVESTMENT-RELATED CHARGES, EQUIPMENT:																			
7	Avg Depr Factor		0.1082	0.1082	0.1082	0.1082	0.1082	0.0674	0.1404	0.0227	0.0772	0.0944	0.1137	0.0944	0.1137	0.0598	0.0900	0.0662	0.0990	
8	Avg Annual Depr	Ln 1 times Ln 7	0.88	0.00	0.00	0.00	0.00	0.00	0.00	0.52	0.00	0.00	0.00	0.00	0.00	0.00	1.54	0.00	0.00	
9	Avg Monthly Depr	Ln 8 divided by 12	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.13	0.00	0.00	0.24
10	Avg COM Factor		0.0420	0.0420	0.0420	0.0420	0.0420	0.0500	0.0755	0.0581	0.0546	0.0552	0.0536	0.0552	0.0536	0.0562	0.0562	0.0538	0.0589	
11	Avg Annual COM	Ln 1 times Ln 10	0.34	0.00	0.00	0.00	0.00	0.00	0.00	1.34	0.00	0.00	0.00	0.00	0.00	0.00	0.98	0.00	0.00	
12	Avg Monthly COM	Ln 11 divided by 12	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.00	0.00	0.22
13	Avg IT Factor		0.0175	0.0175	0.0175	0.0175	0.0175	0.0208	0.0314	0.0242	0.0227	0.0230	0.0223	0.0230	0.0223	0.0234	0.0234	0.0224	0.0245	
14	Avg Annual IT	Ln 1 times Ln 13	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.56	0.00	0.00	0.00	0.00	0.00	0.00	0.40	0.00	0.00	
15	Avg Monthly IT	Ln 14 divided by 12	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.09
16	Total Maint Factor		0.0182	0.0118	0.0118	0.0118	0.0118	0.0045	0.0156	0.0046	0.0376	0.0845	0.1158	0.0845	0.1158	0.0156	0.0376	0.0139	0.0200	
17	Total Annual Maint	Ln 1 times Ln 16	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.64	0.00	0.00	
18	Total Monthly Maint	Ln 17 divided by 12	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.07
19	Ad Valorem Tax Factor		0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	
20	Annual AV Taxes	Ln 1 times Ln 19	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.31	0.00	0.00	0.00	0.00	0.00	0.00	0.23	0.00	0.00	
21	Monthly AV Taxes	Ln 20 divided by 12	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.05
22	Tot Mo Inv Related Charge, Equip		0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.31	0.00	0.00	0.69
	MONTHLY INVESTMENT-RELATED CHARGES, L&B LOADINGS:																			
23	Building Loading	Ln 3 above	0.34	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
24	Total AC Factor, Bldg		0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	
25	Bldg Annual Charge	Ln 23 times Ln 24	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
26	Bldg Monthly Charge	Ln 25 divided by 12	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
27	Land Loading	Ln 5 above	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
28	Total AC Factor, Land		0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	
29	Land Annual Charge	Ln 27 times Ln 28	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
30	Land Monthly Charge	Ln 29 divided by 12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
31	Total L&B Monthly Charge	Sum, Lns 28 30	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
	BILLING AND COLLECTION CHARGES:																			
32	Total Plant Investment Monthly Charges	Sum, Lns 22 and 31	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.31	0.00	0.00	
33	B&C Factor		0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	
34	Total Monthly B&C Charge	Ln 32 times Ln 33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
35	**TOTAL MONTHLY INV. RELATED CHARGES**	**Sum, Lns. 22, 31, 34**	**0.14**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.24**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.32**	**0.00**	**0.00**	**0.70**
	MONTHLY PRODUCT ADMINISTRATION RELATED CHARGES:																			
36	Direct Assigned Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
37	Direct Assigned Monthly Charges	Ln 35 times Ln 36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
38	Product Management Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
39	Product Management Monthly Charges	Ln 35 times Ln 38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
40	Sales Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
41	Monthly Sales Charges	Ln 35 times Ln 40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
42	Advertising Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
43	Monthly Advertising Charges	Ln 35 times Ln 42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
44	Business Fees (Other Taxes) Expense Factor		0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	
45	Monthly Business Fees Charges	Ln 44 times Sum Lns 37, 39, 41, 4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
46	Total Monthly Product Administration Charges	Sum, Lns 37, 39, 41, 43, 45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

QWEST CORPORATION
Arizona Corporation Commission Docket No. 00000A-00-0194

TELRIC -- DS1 UDIT, 0-8 Miles -- VARIABLE COMPONENT

Ln. No.	Plant Account Description Account Number	Source	Circuit - Digital: Other 357C	Digital 257C	Premises 257CP	SONET 257CS	SONET Premises 257CSP	Poles 1C	C-Wire 3C	Conduit 4C	Outside Plant: Cable UG Metal 5C	Drop Buried 35C	Drop Aerial 42C	Cable Bur. Metal 45C	Cable Aer. Metal 52C	Cable Bld. Metal 62C	Cable UG Fiber 85C	Cable Bur. Fiber 845C	Cable Bld. Fiber 862C	TOTALS
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(n)	(o)	(p)	(q)	(r)	(s)	(t)
47	**TOTAL MO. "DIRECTLY ASSIGNED" CHGS.**	**Sum, Lns. 36, 46**	**0.14**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.24**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.32**	**0.00**	**0.00**	**0.70**
	MONTHLY "NETWORK SUPPORT" EXPENSE:																			
48	Network Operations Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
49	Network Operations Monthly Charges	Ln 47 times Ln 48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
50	"Network Support" Expense Factor		0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	
51	"Network Support" Monthly Charges	Ln 47 times Ln 50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.01
52	Total Monthly Network Support Charges	Sum, Lns 49, 51	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.01
53	**TOTAL MONTHLY DIRECT + SUPPORT**	**Sum, Lns. 47, 52**	**0.14**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.24**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.32**	**0.00**	**0.00**	**0.71**
	MONTHLY "DIRECTLY ATTRIBUTED" EXPENSES:																			
54	General Support Assets Expense Factor		0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	
55	General Support Assets Monthly Charges	Ln 47 times Ln 54	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.06
56	Gen Pur Computer Expense Factor		0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	
57	Gen Pur Computer Monthly Charges	Ln 47 times Ln 56	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.02
58	Uncollectible Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
59	Uncollectible Monthly Charges	Ln 47 times Ln 58	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
60	Accounting Expense Factor		0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	
61	Accounting Expense Monthly Charges	Ln 47 times Ln 60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
62	Human Resources Expense Factor		0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	
63	Human Resources Monthly Charges	Ln 47 times Ln 62	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
64	Information Management Expense Factor		0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	
65	Information Management Monthly Charges	Ln 47 times Ln 64	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.04
66	Intangible Expense Factor		0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	
67	Intangible Expense Monthly Charges	Ln 47 times Ln 66	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
68	Total Monthly "Directly Attributed" Expense Charges	Sum Lns. 55, 57, 59, 61, 63, 65, 67	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.00	0.00	0.13
69	**TOTAL MONTHLY "DIRECT" CHARGES**	**Sum, Lns 53, 68**	**0.17**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.29**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.38**	**0.00**	**0.00**	**0.84**
	MONTHLY COMMON EXPENSES:																			
70	Executive Expense Factor		0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	
71	Executive Expense Monthly Charges	Ln 69 times Ln 70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
72	Planning Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
73	Planning Expense Monthly Charges	Ln 69 times Ln 72	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
74	External Relations Expense Factor		0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	
75	External Relations Monthly Charges	Ln 69 times Ln 74	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
76	Legal Expense Factor		0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	
77	Legal Expense Monthly Charges	Ln 69 times Ln 76	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
78	Procurement Expense Factor		0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	
79	Procurement Expense Monthly Charges	Ln 69 times Ln 78	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
80	Research and Development Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
81	R&D Expense Monthly Charges	Ln 69 times Ln 80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
82	General Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
83	General Expense Monthly Charges	Ln 69 times Ln 82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
84	Total Monthly "Common" Expenses Charges	um, Lns 71, 73, 75, 77, 79, 81, 8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.02
85	**TOTAL MONTHLY "TELRIC"**	**Sum, Lns. 69, 84**	**$0.18**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$0.29**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$0.39**	**$0.00**	**$0.00**	**$0.86**

QWEST CORPORATION
Arizona Corporation Commission Docket No. 00000A-00-0194

TELRIC -- DS1 UDIT, 8-25 Miles -- FIXED COMPONENT

Ln No (a)	Plant Account Description Account Number (b)	Source (c)	Circuit - Digital: Other 357C (d)	Digital 257C (e)	Premises 257CP (f)	SONET 257CS (g)	SONET Premises 257CSP (h)	Poles 1C (i)	C-Wire 3C (j)	Conduit 4C (k)	Outside Plant: Cable UG Metal 5C (l)	Drop Buried 35C (m)	Drop Aerial 42C (n)	Cable Bur. Metal 45C (n)	Cable Aer. Metal. 52C (o)	Cable Bld. Metal 62C (p)	Cable UG Fiber 85C (q)	Cable Bur. Fiber 845C (r)	Cable Bld. Fiber 862C (s)	TOTALS (t)
	INVESTMENT																			
1	Equipment		984.69	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	984.69
2	Bldg Loading Fact		0.0418	0.0418	0.0000	0.0418	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
3	Building	Ln 1 times Ln 2	41.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	41.16
4	Land Loading Fact		0.0036	0.0036	0.0000	0.0036	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
5	Land	Ln 1 times Ln 4	3.54	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.54
6	Loaded Investment	Sum, Lns. 1, 3, 5	1,029.39	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1,029.39
	MONTHLY INVESTMENT-RELATED CHARGES, EQUIPMENT:																			
7	Avg Depr Factor		0.1082	0.1082	0.1082	0.1082	0.1082	0.0674	0.1404	0.0227	0.0772	0.0944	0.1137	0.0944	0.1137	0.0598	0.0900	0.0662	0.0990	
8	Avg Annual Depr	Ln 1 times Ln 7	106.54	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
9	Avg Monthly Depr	Ln 8 divided by 12	8.88	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.88
10	Avg COM Factor		0.0420	0.0420	0.0420	0.0420	0.0420	0.0500	0.0755	0.0581	0.0546	0.0552	0.0536	0.0552	0.0536	0.0562	0.0562	0.0538	0.0589	
11	Avg Annual COM	Ln 1 times Ln 10	41.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
12	Avg Monthly COM	Ln 11 divided by 12	3.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.45
13	Avg IT Factor		0.0175	0.0175	0.0175	0.0175	0.0175	0.0208	0.0314	0.0242	0.0227	0.0230	0.0223	0.0230	0.0223	0.0234	0.0234	0.0224	0.0245	
14	Avg Annual IT	Ln 1 times Ln 13	17.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
15	Avg Monthly IT	Ln 14 divided by 12	1.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.44
16	Total Maint Factor		0.0182	0.0118	0.0118	0.0118	0.0118	0.0045	0.0158	0.0046	0.0376	0.0845	0.1158	0.0845	0.1158	0.0156	0.0376	0.0139	0.0200	
17	Total Annual Maint	Ln 1 times Ln 16	17.92	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
18	Total Monthly Maint	Ln 17 divided by 12	1.49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.49
19	Ad Valorem Tax Factor		0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	
20	Annual AV Taxes	Ln 1 times Ln 19	13.39	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
21	Monthly AV Taxes	Ln 20 divided by 12	1.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.12
22	Tot Mo Inv Related Charge Equip		18.37	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	18.37
	MONTHLY INVESTMENT-RELATED CHARGES, L&B LOADINGS																			
23	Building Loading	Ln 3 above	41.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
24	Total AC Factor, Bldg		0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	
25	Bldg Annual Charge	Ln 23 times Ln 24	9.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
26	Bldg Monthly Charge	Ln 25 divided by 12	0.77	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.77
27	Land Loading	Ln 5 above	3.54	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
28	Total AC Factor, Land		0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	
29	Land Annual Charge	Ln 27 times Ln 28	0.79	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
30	Land Monthly Charge	Ln 29 divided by 12	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07
31	Total L&B Monthly Charge	Sum, Lns. 26, 30	0.83	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.83
	BILLING AND COLLECTION CHARGES:																			
32	Total Plant Investment Monthly Charges	Sum, Lns. 22 and 31	17.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
33	B&C Factor		0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	
34	Total Monthly B&C Charge	Ln 32 times Ln 33	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07
35	**TOTAL MONTHLY INV. RELATED CHARGES**	Sum, Lns. 22, 31, 34	17.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.28
	MONTHLY PRODUCT ADMINISTRATION RELATED CHARGES:																			
36	Direct Assigned Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
37	Direct Assigned Monthly Charges	Ln. 35 times Ln 36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
38	Product Management Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
39	Product Management Monthly Charges	Ln 35 times Ln 38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
40	Sales Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
41	Monthly Sales Charges	Ln. 35 times Ln. 40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
42	Advertising Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
43	Monthly Advertising Charges	Ln. 35 times Ln. 42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
44	Business Fees (Other Taxes) Expense Factor		0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	
45	Monthly Business Fees Charges	n. 44 times Sum Lns. 37, 39, 41, 4	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03
46	Total Monthly Product Administration Charges	Sum, Lns. 37, 39, 41, 43, 45	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03

QWEST CORPORATION
Arizona Corporation Commission Docket No. 00000A-00-0194

TELRIC -- DS1 UDIT, 8-25 Miles -- FIXED COMPONENT

Ln No.	Plant Account Description Account Number	Source	Circuit - Digital: Other 357C	Digital 257C	Premises 257CP	SONET 257CS	SONET Premises 257CSP	Outside Plant: Poles 1C	C-Wire 3C	Conduit 4C	Cable UG Metal 5C	Drop Buried 35C	Drop Aerial 42C	Cable Bur. Metal 45C	Cable Aer. Metal 52C	Cable Bld. Metal 62C	Cable UG Fiber 85C	Cable Bur. Fiber 845C	Cable Bld. Fiber 862C	TOTALS
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)	(s)	(t)
47	TOTAL MO. "DIRECTLY ASSIGNED" CHGS.	Sum, Lns. 35, 46	17.31	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.31
	MONTHLY "NETWORK SUPPORT" EXPENSE:																			
48	Network Operations Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
49	Network Operations Monthly Charges	Ln 47 times Ln 48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
50	"Network Support" Expense Factor		0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	
51	Network Support" Monthly Charges	Ln 47 times Ln 50	0.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.28
52	Total Monthly Network Support Charges	Sum, Lns. 49, 51	0.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.28
53	TOTAL MONTHLY DIRECT + SUPPORT	Sum, Lns. 47, 52	17.59	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.59
	MONTHLY "DIRECTLY ATTRIBUTED" EXPENSES:																			
54	General Support Assets Expense Factor		0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	
55	General Support Assets Monthly Charges	Ln 47 times Ln 54	1.41	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.41
56	Gen Pur Computer Expense Factor		0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	
57	Gen Pur Computer Monthly Charges	Ln 47 times Ln 56	0.61	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.61
58	Uncollectible Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
59	Uncollectible Monthly Charges	Ln 47 times Ln 58	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
60	Accounting Expense Factor		0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	
61	Accounting Expense Monthly Charges	Ln 47 times Ln 60	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14
62	Human Resources Expense Factor		0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	
63	Human Resources Monthly Charges	Ln 47 times Ln 62	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14
64	Information Management Expense Factor		0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	
65	Information Management Monthly Charges	Ln 47 times Ln 64	0.96	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.96
66	Intangible Expense Factor		0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	
67	Intangible Expense Monthly Charges	Ln 47 times Ln 66	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05
68	Total Monthly "Directly Attributed" Expense Charges	Sum Lns. 55, 57, 59, 61, 63, 65, 67	3.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.29
69	TOTAL MONTHLY "DIRECT" CHARGES	Sum, Lns. 53, 69	20.88	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	20.88
	MONTHLY COMMON EXPENSES:																			
70	Executive Expense Factor		0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	
71	Executive Expense Monthly Charges	Ln 69 times Ln 70	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14
72	Planning Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
73	Planning Expense Monthly Charges	Ln 69 times Ln 72	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
74	External Relations Expense Factor		0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	
75	External Relations Monthly Charges	Ln 69 times Ln 74	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.19
76	Legal Expense Factor		0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	
77	Legal Expense Monthly Charges	Ln 69 times Ln 76	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.13
78	Procurement Expense Factor		0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	
79	Procurement Expense Monthly Charges	Ln 69 times Ln 78	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05
80	Research and Development Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
81	R&D Expense Monthly Charges	Ln 69 times Ln 80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
82	General Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
83	General Expense Monthly Charges	Ln 69 times Ln 82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
84	Total Monthly "Common" Expenses Charges	um, Lns. 71, 73, 75, 77, 79, 81, 8	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.50
85	TOTAL MONTHLY "TELRIC"	Sum, Lns. 69, 84	$21.38	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$21.38

QWEST CORPORATION
Arizona Corporation Commission Docket No. 00000A-00-0194

TELRIC -- DS1 UDIT, 8-25 Miles -- VARIABLE COMPONENT

Ln No	Plant Account Description Account Number	Source	Circuit - Digital: Other 357C	Digital 257C	Premises 257CP	SONET 257CS	SONET Premises 257CSP	Poles 1C	C-Wire 3C	Conduit 4C	Outside Plant: Cable UG Metal 5C	Drop Buried 35C	Drop Aerial 42C	Cable Bur. Metal 45C	Cable Aer. Metal 52C	Cable Bld. Metal 62C	Cable UG Fiber 85C	Cable Bur. Fiber 845C	Cable Bld. Fiber 862C	TOTALS
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(n)	(o)	(p)	(q)	(r)	(s)	(t)
	INVESTMENT																			
1	Equipment		5.33	0.00	0.00	0.00	0.00	0.00	0.00	19.44	0.00	0.00	0.00	0.00	0.00	0.00	14.43	0.15	0.00	39.35
2	Bldg Loading Fact		0.0418	0.0418	0.0000	0.0418	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
3	Building	Ln 1 times Ln 2	0.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.22
4	Land Loading Fact		0.0036	0.0036	0.0000	0.0036	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
5	Land	Ln 1 times Ln 4	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02
6	**Loaded Investment**	**Sum, Lns. 1, 3, 5**	**5.57**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**19.44**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**14.43**	**0.15**	**0.00**	**39.59**
	MONTHLY INVESTMENT-RELATED CHARGES, EQUIPMENT:																			
7	Avg Depr Factor		0.1082	0.1082	0.1082	0.1082	0.1082	0.0674	0.1404	0.0227	0.0772	0.0944	0.1137	0.0944	0.1137	0.0598	0.0900	0.0662	0.0990	
8	Avg Annual Depr	Ln 1 times Ln 7	0.58	0.00	0.00	0.00	0.00	0.00	0.00	0.44	0.00	0.00	0.00	0.00	0.00	0.00	1.30	0.01	0.00	
9	Avg Monthly Depr	Ln 8 divided by 12	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.11	0.00	0.00	0.19
10	Avg COM Factor		0.0420	0.0420	0.0420	0.0420	0.0420	0.0500	0.0755	0.0581	0.0546	0.0552	0.0536	0.0552	0.0536	0.0562	0.0562	0.0538	0.0589	
11	Avg Annual COM	Ln 1 times Ln 10	0.22	0.00	0.00	0.00	0.00	0.00	0.00	1.13	0.00	0.00	0.00	0.00	0.00	0.00	0.81	0.01	0.00	
12	Avg Monthly COM	Ln 11 divided by 12	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.00	0.00	0.18
13	Avg IT Factor		0.0175	0.0175	0.0175	0.0175	0.0175	0.0208	0.0314	0.0242	0.0227	0.0230	0.0223	0.0230	0.0223	0.0234	0.0234	0.0224	0.0245	
14	Avg Annual IT	Ln 1 times Ln 13	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.47	0.00	0.00	0.00	0.00	0.00	0.00	0.34	0.00	0.00	
15	Avg Monthly IT	Ln 14 divided by 12	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.08
16	Total Maint Factor		0.0182	0.0118	0.0118	0.0118	0.0118	0.0045	0.0156	0.0046	0.0376	0.0845	0.1158	0.0845	0.1158	0.0156	0.0376	0.0139	0.0200	
17	Total Annual Maint	Ln 1 times Ln 16	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.54	0.00	0.00	
18	Total Monthly Maint	Ln 17 divided by 12	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.06
19	Ad Valorem Tax Factor		0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	
20	Annual AV Taxes	Ln 1 times Ln 19	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.26	0.00	0.00	0.00	0.00	0.00	0.00	0.20	0.00	0.00	
21	Monthly AV Taxes	Ln 20 divided by 12	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.04
22	Tot Mo Inv Related Charge Equip		0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.27	0.00	0.00	0.56
	MONTHLY INVESTMENT-RELATED CHARGES, L&B LOADINGS																			
23	Building Loading	Ln 3 above	0.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
24	Total AC Factor, Bldg		0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	
25	Bldg Annual Charge	Ln 23 times Ln 24	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
26	Bldg Monthly Charge	Ln 25 divided by 12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
27	Land Loading	Ln 5 above	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
28	Total AC Factor, Land		0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	
29	Land Annual Charge	Ln 27 times Ln 28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
30	Land Monthly Charge	Ln 29 divided by 12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
31	Total L&B Monthly Charge	Sum, Lns. 26, 30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	BILLING AND COLLECTION CHARGES:																			
32	Total Plant Investment Monthly Charges	Sum, Lns. 22 and 31	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.27	0.00	0.00	
33	B&C Factor		0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	
34	Total Monthly B&C Charge	Ln 32 times Ln 33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
35	**TOTAL MONTHLY INV. RELATED CHARGES**	**Sum, Lns. 22, 31, 34**	**0.09**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.20**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.27**	**0.00**	**0.00**	**0.56**
	MONTHLY PRODUCT ADMINISTRATION RELATED CHARGES:																			
36	Direct Assigned Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
37	Direct Assigned Monthly Charges	Ln 35 times Ln 36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
38	Product Management Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
39	Product Management Monthly Charges	Ln 35 times Ln 38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
40	Sales Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
41	Monthly Sales Charges	Ln 35 times Ln 40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
42	Advertising Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
43	Monthly Advertising Charges	Ln. 35 times Ln. 42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
44	Business Fees (Other Taxes) Expense Factor		0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	
45	Monthly Business Fees Charges	n 44 times Sum Lns 37, 39, 41, 4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
46	Total Monthly Product Administration Charges	Sum, Lns. 37, 39, 41, 43, 45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

QWEST CORPORATION
Arizona Corporation Commission Docket No. 00000A-00-0194

TELRIC -- DS1 UDIT, 8-25 Miles -- VARIABLE COMPONENT

Ln No.	Plant Account Description Account Number	Source	Circuit - Digital					Outside Plant												
			Other 357C	Digital 257C	Premises 257CP	SONET 257CS	SONET Premises 257CSP	Poles 1C	C-Wire 3C	Conduit 4C	Cable UG Metal 5C	Drop Buried 35C	Drop Aerial 42C	Cable Bur. Metal. 45C	Cable Aer. Metal. 52C	Cable Bld. Metal 62C	Cable UG Fiber 85C	Cable Bur. Fiber 845C	Cable Bld. Fiber 862C	TOTALS
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(n)	(o)	(p)	(q)	(r)	(s)	(t)
47	TOTAL MO. "DIRECTLY ASSIGNED" CHGS.	Sum, Lns. 35, 46	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.27	0.00	0.00	0.56
	MONTHLY "NETWORK SUPPORT" EXPENSE:																			
48	Network Operations Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
49	Network Operations Monthly Charges	Ln 47 times Ln 48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
50	"Network Support" Expense Factor		0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	
51	Network Support" Monthly Charges	Ln 47 times Ln 50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
52	Total Monthly Network Support Charges	Sum, Lns 49, 51	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
53	TOTAL MONTHLY DIRECT + SUPPORT	Sum, Lns. 47, 52	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.27	0.00	0.00	0.57
	MONTHLY "DIRECTLY ATTRIBUTED" EXPENSES:																			
54	General Support Assets Expense Factor		0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	
55	General Support Assets Monthly Charges	Ln 47 times Ln 54	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.05
56	Gen Pur Computer Expense Factor		0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	
57	Gen Pur Computer Monthly Charges	Ln 47 times Ln 56	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.02
58	Uncollectible Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
59	Uncollectible Monthly Charges	Ln 47 times Ln 58	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
60	Accounting Expense Factor		0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	
61	Accounting Expense Monthly Charges	Ln 47 times Ln 60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
62	Human Resources Expense Factor		0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	
63	Human Resources Monthly Charges	Ln 47 times Ln 62	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
64	Information Management Expense Factor		0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	
65	Information Management Monthly Charges	Ln 47 times Ln 64	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.03
66	Intangible Expense Factor		0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	
67	Intangible Expense Monthly Charges	Ln 47 times Ln 66	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
68	Total Monthly "Directly Attributed" Expense Charges	Sum Lns 55, 57, 59, 61, 63, 65, 67	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.11
69	TOTAL MONTHLY "DIRECT" CHARGES	Sum, Lns 53, 68	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.32	0.00	0.00	0.68
	MONTHLY COMMON EXPENSES:																			
70	Executive Expense Factor		0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	
71	Executive Expense Monthly Charges	Ln 69 times Ln 70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
72	Planning Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
73	Planning Expense Monthly Charges	Ln 69 times Ln 72	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
74	External Relations Expense Factor		0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	
75	External Relations Monthly Charges	Ln 69 times Ln 74	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
76	Legal Expense Factor		0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	
77	Legal Expense Monthly Charges	Ln 69 times Ln 76	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
78	Procurement Expense Factor		0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	
79	Procurement Expense Monthly Charges	Ln 69 times Ln 78	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
80	Research and Development Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
81	R&D Expense Monthly Charges	Ln 69 times Ln 80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
82	General Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
83	General Expense Monthly Charges	Ln 69 times Ln 82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
84	Total Monthly "Common" Expenses Charges	um, Lns 71, 73, 75, 77, 79, 81, 8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.02
85	TOTAL MONTHLY "TELRIC"	Sum, Lns. 69, 84	$0.12	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.25	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.33	$0.00	$0.00	$0.70

QWEST CORPORATION
Arizona Corporation Commission Docket No. 00000A-00-0194

TELRIC -- DS1 UDIT, 25-50 Miles -- FIXED COMPONENT

Ln No	Plant Account Description Account Number	Source	Circuit - Digital: Other 357C	Digital 257C	Premises 257CP	SONET 257CS	SONET Premises 257CSP	Outside Plant: Poles 1C	C-Wire 3C	Conduit 4C	Cable UG Metal 5C	Drop Buried 35C	Drop Aerial 42C	Cable Bur. Metal 45C	Cable Aer. Metal 52C	Cable Bld. Metal 62C	Cable UG Fiber 85C	Cable Bur. Fiber 845C	Cable Bld. Fiber 862C	TOTALS
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)	(s)	(t)	
	INVESTMENT																			
1	Equipment		997.83	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	997.83
2	Bldg Loading Fact		0.0418	0.0418	0.0000	0.0418	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
3	Building	Ln 1 times Ln 2	41.71	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	41.71
4	Land Loading Fact		0.0036	0.0036	0.0000	0.0036	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
5	Land	Ln 1 times Ln 4	3.59	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.59
6	**Loaded Investment**	**Sum, Lns. 1, 3, 5**	**1,043.13**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**1,043.13**
	MONTHLY INVESTMENT-RELATED CHARGES, EQUIPMENT:																			
7	Avg Depr Factor		0.1082	0.1082	0.1082	0.1082	0.1082	0.0674	0.1404	0.0227	0.0772	0.0944	0.1137	0.0944	0.1137	0.0598	0.0900	0.0662	0.0990	
8	Avg Annual Depr	Ln 1 times Ln 7	107.97	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
9	Avg Monthly Depr	Ln 8 divided by 12	9.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.00
10	Avg COM Factor		0.0420	0.0420	0.0420	0.0420	0.0420	0.0500	0.0755	0.0581	0.0546	0.0552	0.0536	0.0552	0.0536	0.0562	0.0562	0.0538	0.0589	
11	Avg Annual COM	Ln 1 times Ln 10	41.91	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
12	Avg Monthly COM	Ln 11 divided by 12	3.49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.49
13	Avg IT Factor		0.0175	0.0175	0.0175	0.0175	0.0175	0.0208	0.0314	0.0242	0.0227	0.0230	0.0223	0.0230	0.0223	0.0234	0.0234	0.0224	0.0245	
14	Avg Annual IT	Ln 1 times Ln 13	17.46	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
15	Avg Monthly IT	Ln 14 divided by 12	1.46	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.46
16	Total Maint Factor		0.0182	0.0118	0.0118	0.0118	0.0118	0.0045	0.0156	0.0046	0.0376	0.0845	0.1158	0.0845	0.1158	0.0156	0.0376	0.0139	0.0200	
17	Total Annual Maint	Ln 1 times Ln 16	18.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
18	Total Monthly Maint	Ln 17 divided by 12	1.51	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.51
19	Ad Valorem Tax Factor		0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	
20	Annual AV Taxes	Ln 1 times Ln 19	13.57	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
21	Monthly AV Taxes	Ln 20 divided by 12	1.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.13
22	Tot Mo Inv Related Charge, Equip		18.59	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	18.59
	MONTHLY INVESTMENT-RELATED CHARGES, L&B LOADINGS:																			
23	Building Loading	Ln 3 above	41.71	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
24	Total AC Factor, Bldg		0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	
25	Bldg Annual Charge	Ln 23 times Ln 24	9.31	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
26	Bldg Monthly Charge	Ln 25 divided by 12	0.78	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.78
27	Land Loading	Ln 5 above	3.59	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
28	Total AC Factor, Land		0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	
29	Land Annual Charge	Ln 27 times Ln 28	0.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
30	Land Monthly Charge	Ln 29 divided by 12	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07
31	Total L&B Monthly Charge	Sum, Lns. 26, 30	0.84	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.84
	BILLING AND COLLECTION CHARGES:																			
32	Total Plant Investment Monthly Charges	Sum, Lns. 22 and 31	17.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
33	B&C Factor		0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	
34	Total Monthly B&C Charge	Ln 32 times Ln 33	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.08
35	**TOTAL MONTHLY INV. RELATED CHARGES**	**Sum, Lns. 22, 31, 34**	**17.51**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**17.51**
	MONTHLY PRODUCT ADMINISTRATION RELATED CHARGES:																			
36	Direct Assigned Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
37	Direct Assigned Monthly Charges	Ln 35 times Ln 36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
38	Product Management Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
39	Product Management Monthly Charges	Ln 35 times Ln 38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
40	Sales Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
41	Monthly Sales Charges	Ln. 35 times Ln 40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
42	Advertising Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
43	Monthly Advertising Charges	Ln. 35 times Ln 42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
44	Business Fees (Other Taxes) Expense Factor		0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	
45	Monthly Business Fees Charges	Ln. 44 times Sum Lns. 37, 39, 41, 4	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03
46	Total Monthly Product Administration Charges	Sum, Lns. 37, 39, 41, 43, 45	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03

QWEST CORPORATION
Arizona Corporation Commission Docket No. 00000A-00-0194

TELRIC -- DS1 UDIT, 25-50 Miles -- FIXED COMPONENT

Ln No. (a)	Plant Account Description Account Number (b)	Source (c)	Circuit - Digital: Other 357C (d)	Digital 257C (e)	Premises 257CP (f)	SONET 257CS (g)	SONET Premises 257CSP (h)	Poles 1C (i)	C-Wire 3C (j)	Conduit 4C (k)	Outside Plant: Cable UG Metal 5C (l)	Drop Buried 35C (m)	Drop Aerial 42C (n)	Cable Bur. Metal 45C (n)	Cable Aer. Metal 52C (o)	Cable Bld. Metal 62C (p)	Cable UG Fiber 85C (q)	Cable Bur. Fiber 845C (r)	Cable Bld. Fiber 862C (s)	TOTALS (t)
47	TOTAL MO. "DIRECTLY ASSIGNED" CHGS.	Sum, Lns. 35, 46	17.54	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.54
	MONTHLY "NETWORK SUPPORT" EXPENSE:																			
48	Network Operations Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
49	Network Operations Monthly Charges	Ln 47 times Ln 48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
50	"Network Support" Expense Factor		0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	
51	Network Support" Monthly Charges	Ln 47 times Ln 50	0.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.28
52	Total Monthly Network Support Charges	Sum, Lns 49, 51	0.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.28
53	TOTAL MONTHLY DIRECT + SUPPORT	Sum, Lns. 47, 52	17.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.82
	MONTHLY "DIRECTLY ATTRIBUTED" EXPENSES:																			
54	General Support Assets Expense Factor		0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	
55	General Support Assets Monthly Charges	Ln 47 times Ln 54	1.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.43
56	Gen Pur Computer Expense Factor		0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	
57	Gen Pur Computer Monthly Charges	Ln 47 times Ln 56	0.61	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.61
58	Uncollectible Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
59	Uncollectible Monthly Charges	Ln 47 times Ln 58	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
60	Accounting Expense Factor		0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	
61	Accounting Expense Monthly Charges	Ln 47 times Ln 60	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14
62	Human Resources Expense Factor		0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	
63	Human Resources Monthly Charges	Ln 47 times Ln 62	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14
64	Information Management Expense Factor		0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	
65	Information Management Monthly Charges	Ln 47 times Ln 64	0.97	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.97
66	Intangible Expense Factor		0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	
67	Intangible Expense Monthly Charges	Ln 47 times Ln 66	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05
68	Total Monthly "Directly Attributed" Expense Charges	Sum Lns 55, 57, 59, 61, 63, 65, 67	3.34	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.34
69	TOTAL MONTHLY "DIRECT" CHARGES	Sum, Lns 53, 69	21.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.16
	MONTHLY COMMON EXPENSES:																			
70	Executive Expense Factor		0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	
71	Executive Expense Monthly Charges	Ln 69 times Ln 70	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14
72	Planning Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
73	Planning Expense Monthly Charges	Ln 69 times Ln 72	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
74	External Relations Expense Factor		0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	
75	External Relations Monthly Charges	Ln 69 times Ln 74	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.19
76	Legal Expense Factor		0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	
77	Legal Expense Monthly Charges	Ln 69 times Ln 76	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.13
78	Procurement Expense Factor		0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	
79	Procurement Expense Monthly Charges	Ln 69 times Ln 78	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05
80	Research and Development Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
81	R&D Expense Monthly Charges	Ln 69 times Ln 80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
82	General Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
83	General Expense Monthly Charges	Ln 69 times Ln 82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
84	Total Monthly "Common" Expenses Charges	um, Lns 71, 73, 75, 77, 79, 81, 8	0.51	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.51
85	TOTAL MONTHLY "TELRIC"	Sum, Lns. 69, 84	$21.66	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$21.66

QWEST CORPORATION
Arizona Corporation Commission Docket No. 00000A-00-0194

TELRIC -- DS1 UDIT, 25-50 Miles -- VARIABLE COMPONENT

Ln No	Plant Account Description Account Number	Source	Circuit - Digital: Other 357C	Digital 257C	Premises 257CP	SONET 257CS	SONET Premises 257CSP	Poles 1C	C-Wire 3C	Conduit 4C	Outside Plant: Cable UG Metal 5C	Drop Buried 35C	Drop Aerial 42C	Cable Bur. Metal 45C	Cable Aer. Metal 52C	Cable Bld. Metal 62C	Cable UG Fiber 85C	Cable Bur. Fiber 845C	Cable Bld. Fiber 862C	TOTALS
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(n)	(o)	(p)	(q)	(r)	(s)	(t)
	INVESTMENT																			
1	Equipment		13.95	0.00	0.00	0.00	0.00	0.00	0.00	28.89	0.00	0.00	0.00	0.00	0.00	0.00	21.44	5.88	0.00	70.16
2	Bldg Loading Fact		0.0418	0.0418	0.0000	0.0418	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
3	Building	Ln 1 times Ln 2	0.58	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.58
4	Land Loading Fact		0.0036	0.0036	0.0000	0.0036	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
5	Land	Ln 1 times Ln 4	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05
6	**Loaded Investment**	**Sum, Lns. 1, 3, 5**	**14.58**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**28.89**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**21.44**	**5.88**	**0.00**	**70.79**
	MONTHLY INVESTMENT-RELATED CHARGES, EQUIPMENT:																			
7	Avg Depr Factor		0.1082	0.1082	0.1082	0.1082	0.1082	0.0674	0.1404	0.0227	0.0772	0.0944	0.1137	0.0944	0.1137	0.0598	0.0900	0.0662	0.0990	
8	Avg Annual Depr	Ln 1 times Ln 7	1.51	0.00	0.00	0.00	0.00	0.00	0.00	0.66	0.00	0.00	0.00	0.00	0.00	0.00	1.93	0.39	0.00	
9	Avg Monthly Depr	Ln 8 divided by 12	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.16	0.03	0.00	0.37
10	Avg COM Factor		0.0420	0.0420	0.0420	0.0420	0.0420	0.0500	0.0755	0.0581	0.0546	0.0552	0.0536	0.0552	0.0536	0.0562	0.0562	0.0536	0.0589	
11	Avg Annual COM	Ln 1 times Ln 10	0.59	0.00	0.00	0.00	0.00	0.00	0.00	1.68	0.00	0.00	0.00	0.00	0.00	0.00	1.20	0.32	0.00	
12	Avg Monthly COM	Ln 11 divided by 12	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.03	0.00	0.32
13	Avg IT Factor		0.0175	0.0175	0.0175	0.0175	0.0175	0.0208	0.0314	0.0242	0.0227	0.0230	0.0223	0.0230	0.0223	0.0234	0.0234	0.0224	0.0245	
14	Avg Annual IT	Ln 1 times Ln 13	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.70	0.00	0.00	0.00	0.00	0.00	0.00	0.50	0.13	0.00	
15	Avg Monthly IT	Ln 14 divided by 12	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.01	0.00	0.13
16	Total Maint Factor		0.0182	0.0118	0.0118	0.0118	0.0118	0.0045	0.0156	0.0046	0.0376	0.0845	0.1158	0.0845	0.1158	0.0156	0.0376	0.0139	0.0200	
17	Total Annual Maint	Ln 1 times Ln 16	0.25	0.00	0.00	0.00	0.00	0.00	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.81	0.08	0.00	
18	Total Monthly Maint	Ln 17 divided by 12	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.01	0.00	0.11
19	Ad Valorem Tax Factor		0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	
20	Annual AV Taxes	Ln 1 times Ln 19	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.39	0.00	0.00	0.00	0.00	0.00	0.00	0.29	0.08	0.00	
21	Monthly AV Taxes	Ln 20 divided by 12	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.01	0.00	0.08
22	Tot Mo Inv Related Charge, Equip		0.23	0.00	0.00	0.00	0.00	0.00	0.00	0.30	0.00	0.00	0.00	0.00	0.00	0.00	0.39	0.08	0.00	1.01
	MONTHLY INVESTMENT-RELATED CHARGES, L&B LOADINGS																			
23	Building Loading	Ln 3 above	0.58	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
24	Total AC Factor, Bldg		0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	
25	Bldg Annual Charge	Ln 23 times Ln 24	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
26	Bldg Monthly Charge	Ln 25 divided by 12	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
27	Land Loading	Ln 5 above	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
28	Total AC Factor, Land		0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	
29	Land Annual Charge	Ln 27 times Ln 28	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
30	Land Monthly Charge	Ln 29 divided by 12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
31	Total L&B Monthly Charge	Sum, Lns. 26, 30	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
	BILLING AND COLLECTION CHARGES:																			
32	Total Plant Investment Monthly Charges	Sum, Lns. 22 and 31	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.30	0.00	0.00	0.00	0.00	0.00	0.00	0.39	0.08	0.00	
33	B&C Factor		0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	
34	Total Monthly B&C Charge	Ln 32 times Ln 33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
35	**TOTAL MONTHLY INV. RELATED CHARGES**	**Sum, Lns. 22, 31, 34**	**0.24**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.30**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.40**	**0.08**	**0.00**	**1.02**
	MONTHLY PRODUCT ADMINISTRATION RELATED CHARGES:																			
36	Direct Assigned Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
37	Direct Assigned Monthly Charges	Ln. 35 times Ln 36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
38	Product Management Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
39	Product Management Monthly Charges	Ln. 35 times Ln 38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
40	Sales Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
41	Monthly Sales Charges	Ln. 35 times Ln. 40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
42	Advertising Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
43	Monthly Advertising Charges	Ln. 35 times Ln. 42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
44	Business Fees (Other Taxes) Expense Factor		0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	
45	Monthly Business Fees Charges	n. 44 times Sum Lns. 37, 39, 41, 4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
46	Total Monthly Product Administration Charges	Sum, Lns. 37, 39, 41, 43, 45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

QWEST CORPORATION
Arizona Corporation Commission Docket No. 00000A-00-0194

TELRIC -- DS1 UDIT, 25-50 Miles -- VARIABLE COMPONENT

Ln No. (a)	Plant Account Description Account Number (b)	Source (c)	Circuit - Digital: Other 357C (d)	Digital 257C (e)	Premises 257CP (f)	SONET 257CS (g)	SONET Premises 257CSP (h)	Poles 1C (i)	C-Wire 3C (j)	Conduit 4C (k)	Outside Plant: Cable UG Metal 5C (l)	Drop Buried 35C (m)	Drop Aerial 42C (n)	Cable Bur. Metal 45C (n)	Cable Aer. Metal 52C (o)	Cable Bld. Metal 82C (p)	Cable UG Fiber 85C (q)	Cable Bur. Fiber 845C (r)	Cable Bld. Fiber 882C (s)	TOTALS (t)
47	TOTAL MO. "DIRECTLY ASSIGNED" CHGS.	Sum, Lns. 35, 46	0.25	0.00	0.00	0.00	0.00	0.00	0.00	0.30	0.00	0.00	0.00	0.00	0.00	0.00	0.40	0.08	0.00	1.02
	MONTHLY "NETWORK SUPPORT" EXPENSE:																			
48	Network Operations Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
49	Network Operations Monthly Charges	Ln 47 times Ln 48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
50	"Network Support" Expense Factor		0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	
51	Network Support" Monthly Charges	Ln 47 times Ln 50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.02
52	Total Monthly Network Support Charges	Sum, Lns. 49, 51	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.02
53	TOTAL MONTHLY DIRECT + SUPPORT	Sum, Lns. 47, 52	0.25	0.00	0.00	0.00	0.00	0.00	0.00	0.30	0.00	0.00	0.00	0.00	0.00	0.00	0.40	0.09	0.00	1.04
	MONTHLY "DIRECTLY ATTRIBUTED" EXPENSES:																			
54	General Support Assets Expense Factor		0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	
55	General Support Assets Monthly Charges	Ln 47 times Ln 54	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.01	0.00	0.08
56	Gen Pur Computer Expense Factor		0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	
57	Gen Pur Computer Monthly Charges	Ln 47 times Ln 56	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.04
58	Uncollectible Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
59	Uncollectible Monthly Charges	Ln 47 times Ln 58	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
60	Accounting Expense Factor		0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	
61	Accounting Expense Monthly Charges	Ln 47 times Ln 60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
62	Human Resources Expense Factor		0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	
63	Human Resources Monthly Charges	Ln 47 times Ln 62	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
64	Information Management Expense Factor		0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	
65	Information Management Monthly Charges	Ln 47 times Ln 64	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.06
66	Intangible Expense Factor		0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	
67	Intangible Expense Monthly Charges	Ln 47 times Ln 66	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
68	Total Monthly "Directly Attributed" Expense Charges	Sum Lns. 55, 57, 59, 61, 63, 65, 67	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.02	0.00	0.10
69	TOTAL MONTHLY "DIRECT" CHARGES	Sum, Lns. 53, 69	0.30	0.00	0.00	0.00	0.00	0.00	0.00	0.36	0.00	0.00	0.00	0.00	0.00	0.00	0.48	0.10	0.00	1.24
	MONTHLY COMMON EXPENSES:																			
70	Executive Expense Factor		0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	
71	Executive Expense Monthly Charges	Ln 69 times Ln 70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
72	Planning Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
73	Planning Expense Monthly Charges	Ln 69 times Ln 72	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
74	External Relations Expense Factor		0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	
75	External Relations Monthly Charges	Ln 69 times Ln 74	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
76	Legal Expense Factor		0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	
77	Legal Expense Monthly Charges	Ln 69 times Ln 76	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
78	Procurement Expense Factor		0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	
79	Procurement Expense Monthly Charges	Ln 69 times Ln 78	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
80	Research and Development Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
81	R&D Expense Monthly Charges	Ln 69 times Ln 80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
82	General Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
83	General Expense Monthly Charges	Ln 69 times Ln 82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
84	Total Monthly "Common" Expenses Charges	um, Lns. 71, 73, 75, 77, 79, 81, 8	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.03
85	TOTAL MONTHLY "TELRIC"	Sum, Lns. 69, 84	$0.30	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.37	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.49	$0.10	$0.00	$1.27

QWEST CORPORATION
Arizona Corporation Commission Docket No 00000A-00-0194

TELRIC -- DS1 UDIT, OVER 50 Miles -- FIXED COMPONENT

Ln No	Plant Account Description Account Number	Source	Circuit - Digital: Other 357C	Digital 257C	Premises 257CP	SONET 257CS	SONET Premises 257CSP	Poles 1C	C-Wire 3C	Conduit 4C	Cable UG Metal 5C	Drop Buried 35C	Outside Plant: Drop Aerial 42C	Cable Bur. Metal 45C	Cable Aer. Metal 52C	Cable Bld. Metal 62C	Cable UG Fiber 85C	Cable Bur. Fiber 845C	Cable Bld. Fiber 862C	TOTALS
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(n)	(o)	(p)	(q)	(r)	(s)	(t)
	INVESTMENT																			
1	Equipment		996.85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	996.85
2	Bldg Loading Fact		0.0418	0.0418	0.0000	0.0418	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
3	Building	Ln 1 times Ln 2	41.67	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	41.67
4	Land Loading Fact		0.0036	0.0036	0.0000	0.0036	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
5	Land	Ln 1 times Ln 4	3.59	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.59
6	**Loaded Investment**	**Sum, Lns. 1, 3, 5**	**1,042.11**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**1,042.11**
	MONTHLY INVESTMENT-RELATED CHARGES, EQUIPMENT:																			
7	Avg Depr Factor		0.1082	0.1082	0.1082	0.1082	0.1082	0.0674	0.1404	0.0227	0.0772	0.0944	0.1137	0.0944	0.1137	0.0598	0.0900	0.0662	0.0990	
8	Avg Annual Depr	Ln 1 times Ln 7	107.86	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
9	Avg Monthly Depr	Ln 8 divided by 12	8.99	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.99
10	Avg COM Factor		0.0420	0.0420	0.0420	0.0420	0.0420	0.0500	0.0755	0.0581	0.0546	0.0552	0.0536	0.0552	0.0536	0.0562	0.0562	0.0538	0.0589	
11	Avg Annual COM	Ln 1 times Ln 10	41.87	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
12	Avg Monthly COM	Ln 11 divided by 12	3.49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.49
13	Avg IT Factor		0.0175	0.0175	0.0175	0.0175	0.0175	0.0208	0.0314	0.0242	0.0227	0.0230	0.0223	0.0230	0.0223	0.0234	0.0234	0.0224	0.0245	
14	Avg Annual IT	Ln 1 times Ln 13	17.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
15	Avg Monthly IT	Ln 14 divided by 12	1.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.45
16	Total Maint Factor		0.0182	0.0118	0.0118	0.0118	0.0118	0.0045	0.0156	0.0046	0.0376	0.0845	0.1158	0.0845	0.1158	0.0156	0.0376	0.0139	0.0200	
17	Total Annual Maint	Ln 1 times Ln 16	18.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
18	Total Monthly Maint	Ln 17 divided by 12	1.51	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.51
19	Ad Valorem Tax Factor		0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	
20	Annual AV Taxes	Ln 1 times Ln 19	13.56	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
21	Monthly AV Taxes	Ln 20 divided by 12	1.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.13
22	Tot Mo Inv Related Charge, Equip		16.57	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	16.57
	MONTHLY INVESTMENT-RELATED CHARGES, L&B LOADINGS																			
23	Building Loading	Ln 3 above	41.67	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
24	Total AC Factor Bldg		0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	
25	Bldg Annual Charge	Ln 23 times Ln 24	9.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
26	Bldg Monthly Charge	Ln 25 divided by 12	0.78	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.78
27	Land Loading	Ln 5 above	3.59	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
28	Total AC Factor, Land		0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	
29	Land Annual Charge	Ln 27 times Ln 28	0.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
30	Land Monthly Charge	Ln 29 divided by 12	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07
31	Total L&B Monthly Charge	Sum, Lns 26, 30	0.84	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.84
	BILLING AND COLLECTION CHARGES:																			
32	Total Plant Investment Monthly Charges	Sum, Lns 22 and 31	17.41	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
33	B&C Factor		0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	
34	Total Monthly B&C Charge	Ln 32 times Ln 33	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07
35	**TOTAL MONTHLY INV. RELATED CHARGES**	**Sum, Lns. 22, 31, 34**	**17.49**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**17.49**
	MONTHLY PRODUCT ADMINISTRATION RELATED CHARGES:																			
36	Direct Assigned Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
37	Direct Assigned Monthly Charges	Ln 35 times Ln 36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
38	Product Management Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
39	Product Management Monthly Charges	Ln 35 times Ln 38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
40	Sales Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
41	Monthly Sales Charges	Ln 35 times Ln 40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
42	Advertising Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
43	Monthly Advertising Charges	Ln 35 times Ln 42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
44	Business Fees (Other Taxes) Expense Factor		0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	
45	Monthly Business Fees Charges	Ln 44 times Sum Lns. 37, 39, 41, 4	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03
46	Total Monthly Product Administration Charges	Sum, Lns 37, 39, 41, 43, 45	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03

QWEST CORPORATION
Arizona Corporation Commission Docket No. 00000A-00-0194

TELRIC -- DS1 UDIT, OVER 50 Miles -- FIXED COMPONENT

Ln. No.	Plant Account Description Account Number	Source	Circuit - Digital: Other 357C	Digital 257C	Premises 257CP	SONET 257CS	SONET Premises 257CSP	Poles 1C	C-Wire 3C	Conduit 4C	Outside Plant: Cable UG Metal. 5C	Drop Buried 35C	Drop Aerial 42C	Cable Bur. Metal. 45C	Cable Aer. Metal. 52C	Cable Bld. Metal 62C	Cable UG Fiber 85C	Cable Bur. Fiber 845C	Cable Bld. Fiber 862C	TOTALS
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(n)	(o)	(p)	(q)	(r)	(s)	(t)
47	TOTAL MO. "DIRECTLY ASSIGNED" CHGS.	Sum, Lns. 35, 46	17.52	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.52
	MONTHLY "NETWORK SUPPORT" EXPENSE:																			
48	Network Operations Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
49	Network Operations Monthly Charges	Ln 47 times Ln 48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
50	"Network Support" Expense Factor		0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	
51	Network Support" Monthly Charges	Ln 47 times Ln 50	0.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.28
52	Total Monthly Network Support Charges	Sum, Lns 49, 51	0.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.28
53	TOTAL MONTHLY DIRECT + SUPPORT	Sum, Lns. 47, 52	17.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.80
	MONTHLY "DIRECTLY ATTRIBUTED" EXPENSES:																			
54	General Support Assets Expense Factor		0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	
55	General Support Assets Monthly Charges	Ln 47 times Ln 54	1.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.43
56	Gen Pur Computer Expense Factor		0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	
57	Gen Pur Computer Monthly Charges	Ln 47 times Ln 56	0.61	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.61
58	Uncollectible Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
59	Uncollectible Monthly Charges	Ln 47 times Ln 58	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
60	Accounting Expense Factor		0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	
61	Accounting Expense Monthly Charges	Ln 47 times Ln 60	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14
62	Human Resources Expense Factor		0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	
63	Human Resources Monthly Charges	Ln 47 times Ln 62	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14
64	Information Management Expense Factor		0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	
65	Information Management Monthly Charges	Ln 47 times Ln 64	0.97	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.97
66	Intangible Expense Factor		0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	
67	Intangible Expense Monthly Charges	Ln 47 times Ln 66	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05
68	Total Monthly "Directly Attributed" Expense Charges	Sum Lns 55, 57, 59, 61, 63, 65, 67	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.33
69	TOTAL MONTHLY "DIRECT" CHARGES	Sum, Lns. 53, 69	21.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.14
	MONTHLY COMMON EXPENSES:																			
70	Executive Expense Factor		0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	
71	Executive Expense Monthly Charges	Ln 69 times Ln 70	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14
72	Planning Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
73	Planning Expense Monthly Charges	Ln 69 times Ln 72	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
74	External Relations Expense Factor		0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	
75	External Relations Monthly Charges	Ln 69 times Ln 74	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.19
76	Legal Expense Factor		0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	
77	Legal Expense Monthly Charges	Ln 69 times Ln 76	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.13
78	Procurement Expense Factor		0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	
79	Procurement Expense Monthly Charges	Ln 69 times Ln 78	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05
80	Research and Development Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
81	R&D Expense Monthly Charges	Ln 69 times Ln 80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
82	General Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
83	General Expense Monthly Charges	Ln 69 times Ln 82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
84	Total Monthly "Common" Expenses Charges	um, Lns 71, 73, 75, 77, 79, 81, 8	0.51	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.51
85	TOTAL MONTHLY "TELRIC"	Sum, Lns. 69, 84	$21.64	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$21.64

QWEST CORPORATION
Arizona Corporation Commission Docket No 00000A-00-0194

TELRIC -- DS1 UDIT, OVER 50 Miles -- VARIABLE COMPONENT

Ln No (a)	Plant Account Description Account Number (b)	Source (c)	Other 357C (d)	Digital 257C (e)	Circuit Digital Premises 257CP (f)	SONET 257CS (g)	SONET Premises 257CSP (h)	Poles 1C (i)	C-Wire 3C (j)	Conduit 4C (k)	Cable UG Metal 5C (l)	Drop Buried 35C (m)	Outside Plant Drop Aerial 42C (n)	Cable Bur. Metal 45C (n)	Cable Aer. Metal 52C (o)	Cable Bld. Metal 62C (p)	Cable UG Fiber 85C (q)	Cable Bur. Fiber 845C (r)	Cable Bld. Fiber 862C (s)	TOTALS (t)
	INVESTMENT																			
1	Equipment		7.64	0.00	0.00	0.00	0.00	0.00	0.00	16.93	0.00	0.00	0.00	0.00	0.00	0.00	12.56	0.00	0.00	37.13
2	Bldg Loading Fact		0.0418	0.0418	0.0000	0.0418	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
3	Building	Ln 1 times Ln 2	0.32	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.32
4	Land Loading Fact		0.0036	0.0036	0.0000	0.0036	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
5	Land	Ln 1 times Ln 4	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03
6	**Loaded Investment**	**Sum, Lns. 1, 3, 5**	**7.99**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**16.93**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**12.56**	**0.00**	**0.00**	**37.48**
	MONTHLY INVESTMENT-RELATED CHARGES, EQUIPMENT:																			
7	Avg Depr Factor		0.1082	0.1082	0.1082	0.1082	0.1082	0.0674	0.1404	0.0227	0.0772	0.0944	0.1137	0.0944	0.1137	0.0598	0.0900	0.0662	0.0990	
8	Avg Annual Depr	Ln 1 times Ln 7	0.83	0.00	0.00	0.00	0.00	0.00	0.00	0.38	0.00	0.00	0.00	0.00	0.00	0.00	1.13	0.00	0.00	
9	Avg Monthly Depr	Ln 8 divided by 12	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.00	0.00	0.20
10	Avg COM Factor		0.0420	0.0420	0.0420	0.0420	0.0420	0.0500	0.0755	0.0581	0.0546	0.0552	0.0536	0.0552	0.0536	0.0562	0.0562	0.0538	0.0589	
11	Avg Annual COM	Ln 1 times Ln 10	0.32	0.00	0.00	0.00	0.00	0.00	0.00	0.98	0.00	0.00	0.00	0.00	0.00	0.00	0.71	0.00	0.00	
12	Avg Monthly COM	Ln 11 divided by 12	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.00	0.00	0.17
13	Avg IT Factor		0.0175	0.0175	0.0175	0.0175	0.0175	0.0208	0.0314	0.0242	0.0227	0.0230	0.0223	0.0230	0.0223	0.0234	0.0234	0.0224	0.0245	
14	Avg Annual IT	Ln 1 times Ln 13	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.41	0.00	0.00	0.00	0.00	0.00	0.00	0.29	0.00	0.00	
15	Avg Monthly IT	Ln 14 divided by 12	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.07
16	Total Maint Factor		0.0182	0.0118	0.0118	0.0118	0.0118	0.0045	0.0156	0.0046	0.0376	0.0845	0.1158	0.0845	0.1158	0.0156	0.0376	0.0139	0.0200	
17	Total Annual Maint	Ln 1 times Ln 16	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.47	0.00	0.00	
18	Total Monthly Maint	Ln 17 divided by 12	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.06
19	Ad Valorem Tax Factor		0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	
20	Annual AV Taxes	Ln 1 times Ln 19	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.23	0.00	0.00	0.00	0.00	0.00	0.00	0.17	0.00	0.00	
21	Monthly AV Taxes	Ln 20 divided by 12	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.04
22	Tot Mo Inv Related Charge, Equip		0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.23	0.00	0.00	0.53
	MONTHLY INVESTMENT-RELATED CHARGES, L&B LOADINGS																			
23	Building Loading	Ln 3 above	0.32	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
24	Total AC Factor, Bldg		0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	
25	Bldg Annual Charge	Ln 23 times Ln 24	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
26	Bldg Monthly Charge	Ln 25 divided by 12	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
27	Land Loading	Ln 5 above	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
28	Total AC Factor, Land		0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	
29	Land Annual Charge	Ln 27 times Ln 28	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
30	Land Monthly Charge	Ln 29 divided by 12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
31	Total L&B Monthly Charge	Sum, Lns 26, 30	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
	BILLING AND COLLECTION CHARGES:																			
32	Total Plant Investment Monthly Charges	Sum, Lns 22 and 31	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.23	0.00	0.00	
33	B&C Factor		0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	
34	Total Monthly B&C Charge	Ln 32 times Ln 33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
35	**TOTAL MONTHLY INV. RELATED CHARGES**	**Sum, Lns. 22, 31, 34**	**0.13**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.17**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.23**	**0.00**	**0.00**	**0.54**
	MONTHLY PRODUCT ADMINISTRATION RELATED CHARGES:																			
36	Direct Assigned Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
37	Direct Assigned Monthly Charges	Ln. 35 times Ln 36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
38	Product Management Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
39	Product Management Monthly Charges	Ln 35 times Ln 38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
40	Sales Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
41	Monthly Sales Charges	Ln. 35 times Ln 40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
42	Advertising Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
43	Monthly Advertising Charges	Ln. 35 times Ln 42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
44	Business Fees (Other Taxes) Expense Factor		0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	
45	Monthly Business Fees Charges	Ln. 44 times Sum Lns 37, 39, 41, 4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
46	Total Monthly Product Administration Charges	Sum, Lns. 37, 39, 41, 43, 45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

QWEST CORPORATION
Arizona Corporation Commission Docket No. 00000A-00-0194

TELRIC -- DS1 UDIT, OVER 50 Miles -- VARIABLE COMPONENT

Ln No. (a)	Plant Account Description Account Number (b)	Source (c)	Circuit - Digital: Other 357C (d)	Digital 257C (e)	Premises 257CP (f)	SONET 257CS (g)	SONET Premises 257CSP (h)	Poles 1C (i)	C-Wire 3C (j)	Conduit 4C (k)	Outside Plant: Cable UG Metal 5C (l)	Drop Buried 35C (m)	Drop Aerial 42C (n)	Cable Bur. Metal 45C (n)	Cable Aer. Metal 52C (o)	Cable Bld. Metal 62C (p)	Cable UG Fiber 85C (q)	Cable Bur. Fiber 845C (r)	Cable Bld. Fiber 862C (s)	TOTALS (t)
47	**TOTAL MO. "DIRECTLY ASSIGNED" CHGS.**	**Sum, Lns. 35, 46**	**0.13**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.17**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.23**	**0.00**	**0.00**	**0.54**
	MONTHLY "NETWORK SUPPORT" EXPENSE:																			
48	Network Operations Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
49	Network Operations Monthly Charges	Ln 47 times Ln 48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
50	"Network Support" Expense Factor		0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	
51	Network Support" Monthly Charges	Ln 47 times Ln 50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
52	Total Monthly Network Support Charges	Sum, Lns 49, 51	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
53	**TOTAL MONTHLY DIRECT + SUPPORT**	**Sum, Lns. 47, 52**	**0.14**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.18**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.24**	**0.00**	**0.00**	**0.55**
	MONTHLY "DIRECTLY ATTRIBUTED" EXPENSES:																			
54	General Support Assets Expense Factor		0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	
55	General Support Assets Monthly Charges	Ln 47 times Ln 54	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.04
56	Gen Pur Computer Expense Factor		0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	
57	Gen Pur Computer Monthly Charges	Ln 47 times Ln 56	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.02
58	Uncollectible Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
59	Uncollectible Monthly Charges	Ln 47 times Ln 58	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
60	Accounting Expense Factor		0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	
61	Accounting Expense Monthly Charges	Ln 47 times Ln 60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
62	Human Resources Expense Factor		0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	
63	Human Resources Monthly Charges	Ln 47 times Ln 62	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
64	Information Management Expense Factor		0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	
65	Information Management Monthly Charges	Ln 47 times Ln 64	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.03
66	Intangible Expense Factor		0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	
67	Intangible Expense Monthly Charges	Ln 47 times Ln 66	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
68	Total Monthly "Directly Attributed" Expense Charges	Sum Lns 55, 57, 59, 61, 63, 65, 67	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.10
69	**TOTAL MONTHLY "DIRECT" CHARGES**	**Sum, Lns 53, 69**	**0.16**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.21**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.28**	**0.00**	**0.00**	**0.65**
	MONTHLY COMMON EXPENSES:																			
70	Executive Expense Factor		0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	
71	Executive Expense Monthly Charges	Ln 69 times Ln 70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
72	Planning Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
73	Planning Expense Monthly Charges	Ln 69 times Ln 72	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
74	External Relations Expense Factor		0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	
75	External Relations Monthly Charges	Ln 69 times Ln 74	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
76	Legal Expense Factor		0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	
77	Legal Expense Monthly Charges	Ln 69 times Ln 76	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
78	Procurement Expense Factor		0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	
79	Procurement Expense Monthly Charges	Ln 69 times Ln 78	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
80	Research and Development Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
81	R&D Expense Monthly Charges	Ln 69 times Ln 80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
82	General Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
83	General Expense Monthly Charges	Ln 69 times Ln 82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
84	Total Monthly "Common" Expenses Charges	um, Lns. 71, 73, 75, 77, 79, 81, 8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.02
85	**TOTAL MONTHLY "TELRIC"**	**Sum, Lns. 69, 84**	**$0.17**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$0.22**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$0.29**	**$0.00**	**$0.00**	**$0.67**

QWEST CORPORATION
Arizona Corporation Commission Docket No. 00000A-00-0194

TELRIC -- DS3 UDIT, 0-8 Miles -- FIXED COMPONENT

Ln. No. (a)	Plant Account Description Account Number (b)	Source (c)	Circuit - Digital: Other 357C (d)	Digital 257C (e)	Premises 257CP (f)	SONET 257CS (g)	SONET Premises 257CSP (h)	Outside Plant: Poles 1C (i)	C-Wire 3C (j)	Conduit 4C (k)	Cable UG Metal 5C (l)	Drop Buried 35C (m)	Drop Aerial 42C (n)	Cable Bur. Metal 45C (n)	Cable Aer. Metal 52C (o)	Cable Bld. Metal 62C (p)	Cable UG Fiber 85C (q)	Cable Bur. Fiber 845C (r)	Cable Bld. Fiber 882C (s)	TOTALS (t)
	INVESTMENT																			
1	Equipment		6,573.74	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6,573.74
2	Bldg Loading Fact		0.0418	0.0418	0.0000	0.0418	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
3	Building	Ln 1 times Ln 2	274.78	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	274.78
4	Land Loading Fact		0.0036	0.0036	0.0000	0.0036	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
5	Land	Ln 1 times Ln 4	23.67	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	23.67
6	Loaded Investment	Sum, Lns. 1, 3, 5	6,872.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6,872.19
	MONTHLY INVESTMENT-RELATED CHARGES, EQUIPMENT:																			
7	Avg Depr Factor		0.1082	0.1082	0.1082	0.1082	0.1082	0.0674	0.1404	0.0227	0.0772	0.0944	0.1137	0.0944	0.1137	0.0598	0.0900	0.0662	0.0990	
8	Avg Annual Depr	Ln 1 times Ln 7	711.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
9	Avg Monthly Depr	Ln 8 divided by 12	59.27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	59.27
10	Avg COM Factor		0.0420	0.0420	0.0420	0.0420	0.0420	0.0500	0.0755	0.0581	0.0546	0.0552	0.0536	0.0552	0.0536	0.0562	0.0562	0.0538	0.0589	
11	Avg Annual COM	Ln 1 times Ln 10	276.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
12	Avg Monthly COM	Ln 11 divided by 12	23.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	23.01
13	Avg IT Factor		0.0175	0.0175	0.0175	0.0175	0.0175	0.0208	0.0314	0.0242	0.0227	0.0230	0.0223	0.0230	0.0223	0.0234	0.0234	0.0224	0.0245	
14	Avg Annual IT	Ln 1 times Ln 13	115.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
15	Avg Monthly IT	Ln 14 divided by 12	9.59	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.59
16	Total Maint Factor		0.0182	0.0118	0.0118	0.0118	0.0118	0.0045	0.0156	0.0046	0.0376	0.0845	0.1158	0.0845	0.1158	0.0156	0.0376	0.0139	0.0200	
17	Total Annual Maint	Ln 1 times Ln 16	119.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
18	Total Monthly Maint	Ln 17 divided by 12	9.97	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.97
19	Ad Valorem Tax Factor		0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	
20	Annual AV Taxes	Ln 1 times Ln 19	89.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
21	Monthly AV Taxes	Ln 20 divided by 12	7.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.45
22	Tot Mo Inv Related Charge, Equip		109.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	109.29
	MONTHLY INVESTMENT-RELATED CHARGES, L&B LOADINGS:																			
23	Building Loading	Ln 3 above	274.78	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
24	Total AC Factor, Bldg		0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	
25	Bldg Annual Charge	Ln 23 times Ln 24	61.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
26	Bldg Monthly Charge	Ln 25 divided by 12	5.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.11
27	Land Loading	Ln 5 above	23.67	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
28	Total AC Factor, Land		0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	
29	Land Annual Charge	Ln 27 times Ln 28	5.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
30	Land Monthly Charge	Ln 29 divided by 12	0.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.44
31	Total L&B Monthly Charge	Sum, Lns 26, 30	5.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.55
	BILLING AND COLLECTION CHARGES:																			
32	Total Plant Investment Monthly Charges	Sum, Lns 22 and 31	114.84	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
33	B&C Factor		0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	
34	Total Monthly B&C Charge	Ln 32 times Ln 33	0.49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.49
35	**TOTAL MONTHLY INV. RELATED CHARGES**	Sum, Lns. 22, 31, 34	115.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	115.33
	MONTHLY PRODUCT ADMINISTRATION RELATED CHARGES:																			
36	Direct Assigned Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
37	Direct Assigned Monthly Charges	Ln 35 times Ln 36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
38	Product Management Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
39	Product Management Monthly Charges	Ln 35 times Ln 38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
40	Sales Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
41	Monthly Sales Charges	Ln 35 times Ln 40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
42	Advertising Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
43	Monthly Advertising Charges	Ln 35 times Ln 42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
44	Business Fees (Other Taxes) Expense Factor		0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	
45	Monthly Business Fees Charges	n 44 times Sum Lns 37, 39, 41, 4	0.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.22
46	Total Monthly Product Administration Charges	Sum, Lns 37, 39, 41, 43, 45	0.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.22

QWEST CORPORATION
Arizona Corporation Commission Docket No. 00000A-00-0194

TELRIC -- DS3 UDIT, 0-8 Miles -- FIXED COMPONENT

Ln No	Plant Account Description Account Number	Source	Circuit - Digital: Other 357C	Digital 257C	Premises 257CP	SONET 257CS	SONET Premises 257CSP	Outside Plant: Poles 1C	C-Wire 3C	Conduit 4C	Cable UG Metal 5C	Drop Buried 35C	Drop Aerial 42C	Cable Bur. Metal 45C	Cable Aer. Metal 52C	Cable Bld. Metal 62C	Cable UG Fiber 85C	Cable Bur. Fiber 845C	Cable Bld. Fiber 862C	TOTALS
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(n)	(o)	(p)	(q)	(r)	(s)	(t)
47	TOTAL MO. "DIRECTLY ASSIGNED" CHGS.	Sum, Lns. 35, 46	115.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	115.55
	MONTHLY "NETWORK SUPPORT" EXPENSE:																			
48	Network Operations Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
49	Network Operations Monthly Charges	Ln 47 times Ln 48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
50	"Network Support" Expense Factor		0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	
51	Network Support" Monthly Charges	Ln 47 times Ln 50	1.85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.85
52	Total Monthly Network Support Charges	Sum, Lns. 49, 51	1.85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.85
53	TOTAL MONTHLY DIRECT + SUPPORT	Sum, Lns. 47, 52	117.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	117.40
	MONTHLY "DIRECTLY ATTRIBUTED" EXPENSES:																			
54	General Support Assets Expense Factor		0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	
55	General Support Assets Monthly Charges	Ln 47 times Ln 54	9.42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.42
56	Gen Pur Computer Expense Factor		0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	
57	Gen Pur Computer Monthly Charges	Ln 47 times Ln 56	4.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.04
58	Uncollectible Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
59	Uncollectible Monthly Charges	Ln 47 times Ln 58	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
60	Accounting Expense Factor		0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	
61	Accounting Expense Monthly Charges	Ln 47 times Ln 60	0.92	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.92
62	Human Resources Expense Factor		0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	
63	Human Resources Monthly Charges	Ln 47 times Ln 62	0.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.90
64	Information Management Expense Factor		0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	
65	Information Management Monthly Charges	Ln 47 times Ln 64	6.39	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.39
66	Intangible Expense Factor		0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	
67	Intangible Expense Monthly Charges	Ln 47 times Ln 66	0.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.30
68	Total Monthly "Directly Attributed" Expense Charges	Sum Lns. 55, 57, 59, 61, 63, 65, 67	21.98	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.98
69	TOTAL MONTHLY "DIRECT" CHARGES	Sum, Lns. 53, 69	139.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	139.38
	MONTHLY COMMON EXPENSES:																			
70	Executive Expense Factor		0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	
71	Executive Expense Monthly Charges	Ln 69 times Ln 70	0.91	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.91
72	Planning Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
73	Planning Expense Monthly Charges	Ln 69 times Ln 72	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
74	External Relations Expense Factor		0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	
75	External Relations Monthly Charges	Ln 69 times Ln 74	1.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.28
76	Legal Expense Factor		0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	
77	Legal Expense Monthly Charges	Ln 69 times Ln 76	0.84	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.84
78	Procurement Expense Factor		0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	
79	Procurement Expense Monthly Charges	Ln 69 times Ln 78	0.31	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.31
80	Research and Development Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
81	R&D Expense Monthly Charges	Ln. 69 times Ln. 80	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
82	General Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
83	General Expense Monthly Charges	Ln. 69 times Ln. 82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
84	Total Monthly "Common" Expenses Charges	um, Lns. 71, 73, 75, 77, 79, 81, 8	3.34	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.34
85	TOTAL MONTHLY "TELRIC"	Sum, Lns. 69, 84	********	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$142.72

QWEST CORPORATION
Arizona Corporation Commission Docket No. 00000A-00-0194

TELRIC -- DS3 UDIT, 0-8 Miles -- VARIABLE COMPONENT

Ln. No. (a)	Plant Account Description Account Number (b)	Source (c)	Circuit - Digital: Other 357C (d)	Digital 257C (e)	Premises 257CP (f)	SONET 257CS (g)	SONET Premises 257CSP (h)	Poles 1C (i)	C-Wire 3C (j)	Conduit 4C (k)	Outside Plant: Cable UG Metal 5C (l)	Drop Buried 35C (m)	Drop Aerial 42C (n)	Cable Bur. Metal 45C (n)	Cable Aer. Metal 52C (o)	Cable Bld. Metal 62C (p)	Cable UG Fiber 85C (q)	Cable Bur. Fiber 845C (r)	Cable Bld. Fiber 862C (s)	TOTALS (t)
	INVESTMENT																			
1	Equipment		492.82	0.00	0.00	0.00	0.00	0.00	0.00	1,053.88	0.00	0.00	0.00	0.00	0.00	0.00	782.08	0.15	0.00	2,328.93
2	Bldg Loading Fact		0.0418	0.0418	0.0000	0.0418	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
3	Building	Ln 1 times Ln 2	20.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	20.60
4	Land Loading Fact		0.0036	0.0036	0.0000	0.0036	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
5	Land	Ln 1 times Ln 4	1.77	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.77
6	**Loaded Investment**	**Sum, Lns. 1, 3, 5**	**515.19**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**1,053.88**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**782.08**	**0.15**	**0.00**	**2,351.31**
	MONTHLY INVESTMENT-RELATED CHARGES, EQUIPMENT:																			
7	Avg Depr Factor		0.1082	0.1082	0.1082	0.1082	0.1082	0.0674	0.1404	0.0227	0.0772	0.0944	0.1137	0.0944	0.1137	0.0596	0.0900	0.0662	0.0990	
8	Avg Annual Depr	Ln 1 times Ln 7	53.32	0.00	0.00	0.00	0.00	0.00	0.00	23.92	0.00	0.00	0.00	0.00	0.00	0.00	70.39	0.01	0.00	
9	Avg Monthly Depr	Ln 8 divided by 12	4.44	0.00	0.00	0.00	0.00	0.00	0.00	1.99	0.00	0.00	0.00	0.00	0.00	0.00	5.87	0.00	0.00	12.30
10	Avg COM Factor		0.0420	0.0420	0.0420	0.0420	0.0420	0.0500	0.0755	0.0581	0.0546	0.0552	0.0536	0.0552	0.0536	0.0562	0.0562	0.0538	0.0589	
11	Avg Annual COM	Ln 1 times Ln 10	20.70	0.00	0.00	0.00	0.00	0.00	0.00	61.23	0.00	0.00	0.00	0.00	0.00	0.00	43.95	0.01	0.00	
12	Avg Monthly COM	Ln 11 divided by 12	1.72	0.00	0.00	0.00	0.00	0.00	0.00	5.10	0.00	0.00	0.00	0.00	0.00	0.00	3.66	0.00	0.00	10.49
13	Avg IT Factor		0.0175	0.0175	0.0175	0.0175	0.0175	0.0208	0.0314	0.0242	0.0227	0.0230	0.0223	0.0230	0.0223	0.0234	0.0234	0.0224	0.0245	
14	Avg Annual IT	Ln 1 times Ln 13	8.62	0.00	0.00	0.00	0.00	0.00	0.00	25.50	0.00	0.00	0.00	0.00	0.00	0.00	18.30	0.00	0.00	
15	Avg Monthly IT	Ln 14 divided by 12	0.72	0.00	0.00	0.00	0.00	0.00	0.00	2.13	0.00	0.00	0.00	0.00	0.00	0.00	1.53	0.00	0.00	4.37
16	Total Maint Factor		0.0182	0.0118	0.0118	0.0118	0.0118	0.0045	0.0156	0.0046	0.0376	0.0845	0.1158	0.0845	0.1158	0.0156	0.0376	0.0139	0.0200	
17	Total Annual Maint	Ln 1 times Ln 16	8.97	0.00	0.00	0.00	0.00	0.00	0.00	4.85	0.00	0.00	0.00	0.00	0.00	0.00	29.41	0.00	0.00	
18	Total Monthly Maint	Ln 17 divided by 12	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.40	0.00	0.00	0.00	0.00	0.00	0.00	2.45	0.00	0.00	3.60
19	Ad Valorem Tax Factor		0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	
20	Annual AV Taxes	Ln 1 times Ln 19	6.70	0.00	0.00	0.00	0.00	0.00	0.00	14.33	0.00	0.00	0.00	0.00	0.00	0.00	10.64	0.00	0.00	
21	Monthly AV Taxes	Ln 20 divided by 12	0.56	0.00	0.00	0.00	0.00	0.00	0.00	1.19	0.00	0.00	0.00	0.00	0.00	0.00	0.89	0.00	0.00	2.64
22	Tot Mo Inv Related Charge, Equip		8.19	0.00	0.00	0.00	0.00	0.00	0.00	10.82	0.00	0.00	0.00	0.00	0.00	0.00	14.39	0.00	0.00	33.41
	MONTHLY INVESTMENT-RELATED CHARGES, L&B LOADINGS:																			
23	Building Loading	Ln 3 above	20.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
24	Total AC Factor, Bldg		0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	
25	Bldg Annual Charge	Ln 23 times Ln 24	4.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
26	Bldg Monthly Charge	Ln 25 divided by 12	0.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.38
27	Land Loading	Ln 5 above	1.77	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
28	Total AC Factor, Land		0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	
29	Land Annual Charge	Ln 27 times Ln 28	0.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
30	Land Monthly Charge	Ln 29 divided by 12	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03
31	Total L&B Monthly Charge	Sum Lns 26, 30	0.42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.42
	BILLING AND COLLECTION CHARGES:																			
32	Total Plant Investment Monthly Charges	Sum, Lns 22 and 31	8.61	0.00	0.00	0.00	0.00	0.00	0.00	10.82	0.00	0.00	0.00	0.00	0.00	0.00	14.39	0.00	0.00	
33	B&C Factor		0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	
34	Total Monthly B&C Charge	Ln 32 times Ln 33	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.00	0.00	0.15
35	**TOTAL MONTHLY INV. RELATED CHARGES**	**Sum, Lns. 22, 31, 34**	**8.65**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**10.87**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**14.45**	**0.00**	**0.00**	**33.97**
	MONTHLY PRODUCT ADMINISTRATION RELATED CHARGES:																			
36	Direct Assigned Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
37	Direct Assigned Monthly Charges	Ln 35 times Ln 36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
38	Product Management Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
39	Product Management Monthly Charges	Ln 35 times Ln 38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
40	Sales Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
41	Monthly Sales Charges	Ln 35 times Ln 40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
42	Advertising Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
43	Monthly Advertising Charges	Ln 35 times Ln 42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
44	Business Fees (Other Taxes) Expense Factor		0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	
45	Monthly Business Fees Charges	n 44 times Sum Lns 37, 39, 41, 4	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.06
46	Total Monthly Product Administration Charges	Sum, Lns 37, 39, 41, 43, 45	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.06

QWEST CORPORATION
Arizona Corporation Commission Docket No. 00000A-00-0194

TELRIC -- DS3 UDIT, 0-8 Miles -- VARIABLE COMPONENT

Ln No	Plant Account Description Account Number	Source	Circuit - Digital: Other 357C	Digital 257C	Premises 257CP	SONET 257CS	SONET Premises 257CSP	Poles 1C	C-Wire 3C	Conduit 4C	Outside Plant: Cable UG Metal 5C	Drop Buried 35C	Drop Aerial 42C	Cable Bur. Metal 45C	Cable Aer. Metal 52C	Cable Bld. Metal 62C	Cable UG Fiber 85C	Cable Bur. Fiber 845C	Cable Bld. Fiber 862C	TOTALS
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(n)	(o)	(p)	(q)	(r)	(s)	(t)
47	TOTAL MO. "DIRECTLY ASSIGNED" CHGS.	Sum, Lns. 35, 46	8.66	0.00	0.00	0.00	0.00	0.00	0.00	10.89	0.00	0.00	0.00	0.00	0.00	0.00	14.48	0.00	0.00	34.03
	MONTHLY "NETWORK SUPPORT" EXPENSE:																			
48	Network Operations Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
49	Network Operations Monthly Charges	Ln 47 times Ln 48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
50	"Network Support" Expense Factor		0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	
51	Network Support" Monthly Charges	Ln 47 times Ln 50	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.23	0.00	0.00	0.54
52	Total Monthly Network Support Charges	Sum, Lns 49, 51	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.23	0.00	0.00	0.54
53	TOTAL MONTHLY DIRECT + SUPPORT	Sum, Lns. 47, 52	8.80	0.00	0.00	0.00	0.00	0.00	0.00	11.06	0.00	0.00	0.00	0.00	0.00	0.00	14.71	0.00	0.00	34.58
	MONTHLY "DIRECTLY ATTRIBUTED" EXPENSES:																			
54	General Support Assets Expense Factor		0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	
55	General Support Assets Monthly Charges	Ln 47 times Ln 54	0.71	0.00	0.00	0.00	0.00	0.00	0.00	0.89	0.00	0.00	0.00	0.00	0.00	0.00	1.18	0.00	0.00	2.77
56	Gen Pur Computer Expense Factor		0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	
57	Gen Pur Computer Monthly Charges	Ln 47 times Ln 56	0.30	0.00	0.00	0.00	0.00	0.00	0.00	0.38	0.00	0.00	0.00	0.00	0.00	0.00	0.51	0.00	0.00	1.19
58	Uncollectible Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
59	Uncollectible Monthly Charges	Ln 47 times Ln 58	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
60	Accounting Expense Factor		0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	
61	Accounting Expense Monthly Charges	Ln 47 times Ln 60	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.12	0.00	0.00	0.27
62	Human Resources Expense Factor		0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	
63	Human Resources Monthly Charges	Ln 47 times Ln 62	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.11	0.00	0.00	0.27
64	Information Management Expense Factor		0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	
65	Information Management Monthly Charges	Ln 47 times Ln 64	0.48	0.00	0.00	0.00	0.00	0.00	0.00	0.60	0.00	0.00	0.00	0.00	0.00	0.00	0.80	0.00	0.00	1.88
66	Intangible Expense Factor		0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	
67	Intangible Expense Monthly Charges	Ln 47 times Ln 66	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.09
68	Total Monthly "Directly Attributed" Expense Charges	Sum Lns 55, 57, 59, 61, 63, 65, 67	1.65	0.00	0.00	0.00	0.00	0.00	0.00	2.07	0.00	0.00	0.00	0.00	0.00	0.00	2.75	0.00	0.00	6.47
69	TOTAL MONTHLY "DIRECT" CHARGES	Sum, Lns. 53, 68	10.45	0.00	0.00	0.00	0.00	0.00	0.00	13.13	0.00	0.00	0.00	0.00	0.00	0.00	17.47	0.00	0.00	41.05
	MONTHLY COMMON EXPENSES:																			
70	Executive Expense Factor		0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	
71	Executive Expense Monthly Charges	Ln 69 times Ln 70	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.11	0.00	0.00	0.27
72	Planning Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
73	Planning Expense Monthly Charges	Ln 69 times Ln 72	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
74	External Relations Expense Factor		0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	
75	External Relations Monthly Charges	Ln 69 times Ln 74	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.16	0.00	0.00	0.38
76	Legal Expense Factor		0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	
77	Legal Expense Monthly Charges	Ln 69 times Ln 76	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.00	0.00	0.25
78	Procurement Expense Factor		0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	
79	Procurement Expense Monthly Charges	Ln 69 times Ln. 78	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.09
80	Research and Development Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
81	R&D Expense Monthly Charges	Ln. 69 times Ln 80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
82	General Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
83	General Expense Monthly Charges	Ln. 69 times Ln. 82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
84	Total Monthly "Common" Expenses Charges	um, Lns 71, 73, 75, 77, 79, 81, 8	0.25	0.00	0.00	0.00	0.00	0.00	0.00	0.31	0.00	0.00	0.00	0.00	0.00	0.00	0.42	0.00	0.00	0.98
85	TOTAL MONTHLY "TELRIC"	Sum, Lns. 69, 84	$10.70	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$13.45	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$17.88	$0.00	$0.00	$42.03

QWEST CORPORATION
Arizona Corporation Commission Docket No. 00000A-00-0194

TELRIC -- DS3 UDIT, 8-25 Miles -- FIXED COMPONENT

Ln No	Plant Account Description Account Number	Source	Circuit - Digital: Other 357C	Digital 257C	Premises 257CP	SONET 257CS	SONET Premises 257CSP	Outside Plant: Poles 1C	C-Wire 3C	Conduit 4C	Cable UG Metal 5C	Drop Buried 35C	Drop Aerial 42C	Cable Bur. Metal 45C	Cable Aer. Metal 52C	Cable Bld. Metal 62C	Cable UG Fiber 85C	Cable Bur. Fiber 845C	Cable Bld. Fiber 862C	TOTALS
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(n)	(o)	(p)	(q)	(r)	(s)	(t)
	INVESTMENT																			
1	Equipment		6,572.32	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6,572.32
2	Bldg Loading Fact		0.0418	0.0418	0.0000	0.0418	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
3	Building	Ln 1 times Ln 2	274.72	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	274.72
4	Land Loading Fact		0.0036	0.0036	0.0000	0.0036	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
5	Land	Ln 1 times Ln 4	23.66	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	23.66
6	**Loaded Investment**	**Sum, Lns. 1, 3, 5**	**6,870.70**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**6,870.70**
	MONTHLY INVESTMENT-RELATED CHARGES, EQUIPMENT:																			
7	Avg Depr Factor		0.1082	0.1082	0.1082	0.1082	0.1082	0.0674	0.1404	0.0227	0.0772	0.0944	0.1137	0.0944	0.1137	0.0598	0.0900	0.0662	0.0990	
8	Avg Annual Depr	Ln 1 times Ln 7	711.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
9	Avg Monthly Depr	Ln 8 divided by 12	59.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	59.26
10	Avg COM Factor		0.0420	0.0420	0.0420	0.0420	0.0420	0.0500	0.0755	0.0581	0.0546	0.0552	0.0536	0.0552	0.0536	0.0562	0.0562	0.0538	0.0589	
11	Avg Annual COM	Ln 1 times Ln 10	276.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
12	Avg Monthly COM	Ln 11 divided by 12	23.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	23.00
13	Avg IT Factor		0.0175	0.0175	0.0175	0.0175	0.0175	0.0208	0.0314	0.0242	0.0227	0.0230	0.0223	0.0230	0.0223	0.0234	0.0234	0.0224	0.0245	
14	Avg Annual IT	Ln 1 times Ln 13	115.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
15	Avg Monthly IT	Ln 14 divided by 12	9.58	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.58
16	Total Maint Factor		0.0182	0.0118	0.0118	0.0118	0.0118	0.0045	0.0156	0.0046	0.0376	0.0845	0.1158	0.0845	0.1158	0.0156	0.0376	0.0139	0.0200	
17	Total Annual Maint	Ln 1 times Ln 16	119.62	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
18	Total Monthly Maint	Ln 17 divided by 12	9.97	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.97
19	Ad Valorem Tax Factor		0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	
20	Annual AV Taxes	Ln 1 times Ln 19	89.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
21	Monthly AV Taxes	Ln 20 divided by 12	7.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.45
22	Tot Mo Inv Related Charge, Equip		109.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	109.26
	MONTHLY INVESTMENT-RELATED CHARGES, L&B LOADINGS																			
23	Building Loading	Ln 3 above	274.72	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
24	Total AC Factor, Bldg		0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	
25	Bldg Annual Charge	Ln 23 times Ln 24	61.32	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
26	Bldg Monthly Charge	Ln 25 divided by 12	5.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.11
27	Land Loading	Ln 5 above	23.66	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
28	Total AC Factor, Land		0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	
29	Land Annual Charge	Ln 27 times Ln 28	5.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
30	Land Monthly Charge	Ln 29 divided by 12	0.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.44
31	Total L&B Monthly Charge	Sum Lns 26, 30	5.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.55
	BILLING AND COLLECTION CHARGES:																			
32	Total Plant Investment Monthly Charges	Sum, Lns 22 and 31	114.81	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
33	B&C Factor		0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	
34	Total Monthly B&C Charge	Ln 32 times Ln 33	0.49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.49
35	**TOTAL MONTHLY INV. RELATED CHARGES**	**Sum, Lns. 22, 31, 34**	**115.31**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**115.31**
	MONTHLY PRODUCT ADMINISTRATION RELATED CHARGES:																			
36	Direct Assigned Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
37	Direct Assigned Monthly Charges	Ln 35 times Ln 36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
38	Product Management Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
39	Product Management Monthly Charges	Ln 35 times Ln 38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
40	Sales Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
41	Monthly Sales Charges	Ln 35 times Ln 40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
42	Advertising Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
43	Monthly Advertising Charges	Ln 35 times Ln 42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
44	Business Fees (Other Taxes) Expense Factor		0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	
45	Monthly Business Fees Charges	Ln 44 times Sum Lns 37, 39, 41, 4	0.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.22
46	Total Monthly Product Administration Charges	Sum, Lns 37, 39, 41, 43, 45	0.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.22

QWEST CORPORATION
Arizona Corporation Commission Docket No. 00000A-00-0194

TELRIC -- DS3 UDIT, 8-25 Miles -- FIXED COMPONENT

Ln No	Plant Account Description Account Number	Source	Circuit - Digital: Other 357C	Digital 257C	Premises 257CP	SONET 257CS	SONET Premises 257CSP	Poles 1C	C-Wire 3C	Conduit 4C	Cable UG Metal 5C	Drop Buried 35C	Outside Plant: Drop Aerial 42C	Cable Bur. Metal 45C	Cable Aer. Metal 52C	Cable Bld. Metal 62C	Cable UG Fiber 85C	Cable Bur. Fiber 845C	Cable Bld. Fiber 862C	TOTALS
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)	(s)	(t)
47	TOTAL MO. "DIRECTLY ASSIGNED" CHGS.	Sum, Lns. 38, 46	115.53	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	115.53
	MONTHLY "NETWORK SUPPORT" EXPENSE:																			
48	Network Operations Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
49	Network Operations Monthly Charges	Ln 47 times Ln 48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
50	"Network Support" Expense Factor		0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	
51	Network Support" Monthly Charges	Ln 47 times Ln 50	1.85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.85
52	Total Monthly Network Support Charges	Sum, Lns. 49, 51	1.85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.85
53	TOTAL MONTHLY DIRECT + SUPPORT	Sum, Lns. 47, 52	117.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	117.38
	MONTHLY "DIRECTLY ATTRIBUTED" EXPENSES:																			
54	General Support Assets Expense Factor		0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	
55	General Support Assets Monthly Charges	Ln 47 times Ln 54	9.42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.42
56	Gen Pur Computer Expense Factor		0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	
57	Gen Pur Computer Monthly Charges	Ln 47 times Ln 56	4.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.04
58	Uncollectible Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
59	Uncollectible Monthly Charges	Ln 47 times Ln 58	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
60	Accounting Expense Factor		0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	
61	Accounting Expense Monthly Charges	Ln 47 times Ln 60	0.92	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.92
62	Human Resources Expense Factor		0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	
63	Human Resources Monthly Charges	Ln 47 times Ln 62	0.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.90
64	Information Management Expense Factor		0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	
65	Information Management Monthly Charges	Ln 47 times Ln 64	6.39	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.39
66	Intangible Expense Factor		0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	
67	Intangible Expense Monthly Charges	Ln 47 times Ln 66	0.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.30
68	Total Monthly "Directly Attributed" Expense Charges	Sum Lns. 55, 57, 59, 61, 63, 65, 67	21.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.07
69	TOTAL MONTHLY "DIRECT" CHARGES	Sum, Lns. 53, 69	139.35	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	139.35
	MONTHLY COMMON EXPENSES:																			
70	Executive Expense Factor		0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	
71	Executive Expense Monthly Charges	Ln 69 times Ln 70	0.91	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.91
72	Planning Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
73	Planning Expense Monthly Charges	Ln 69 times Ln 72	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
74	External Relations Expense Factor		0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	
75	External Relations Monthly Charges	Ln 69 times Ln 74	1.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.28
76	Legal Expense Factor		0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	
77	Legal Expense Monthly Charges	Ln 69 times Ln 76	0.84	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.84
78	Procurement Expense Factor		0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	
79	Procurement Expense Monthly Charges	Ln 69 times Ln 78	0.31	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.31
80	Research and Development Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
81	R&D Expense Monthly Charges	Ln 69 times Ln 80	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
82	General Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
83	General Expense Monthly Charges	Ln 69 times Ln 82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
84	Total Monthly "Common" Expenses Charges	um, Lns. 71, 73, 75, 77, 79, 81, 8	3.34	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.34
85	TOTAL MONTHLY "TELRIC"	Sum, Lns. 69, 84	*********	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$142.69

QWEST CORPORATION
Arizona Corporation Commission Docket No. 00000A-00-0194

TELRIC -- DS3 UDIT, 8-25 Miles -- VARIABLE COMPONENT

Ln No. (a)	Plant Account Description Account Number (b)	Source (c)	Circuit - Digital: Other 357C (d)	Digital 257C (e)	Premises 257CP (f)	SONET 257CS (g)	SONET Premises 257CSP (h)	Poles 1C (i)	C-Wire 3C (j)	Conduit 4C (k)	Outside Plant: Cable UG Metal. 5C (l)	Drop Buried 35C (m)	Drop Aerial 42C (n)	Cable Bur. Metal 45C (n)	Cable Aer. Metal. 52C (o)	Cable Bld. Metal. 62C (p)	Cable UG Fiber 85C (q)	Cable Bur. Fiber 845C (r)	Cable Bld. Fiber 862C (s)	TOTALS (t)
	INVESTMENT																			
1	Equipment		100.81	0.00	0.00	0.00	0.00	0.00	0.00	381.22	0.00	0.00	0.00	0.00	0.00	0.00	282.90	10.11	0.00	775.04
2	Bldg Loading Fact		0.0418	0.0418	0.0000	0.0418	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
3	Building	Ln 1 times Ln 2	4.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.21
4	Land Loading Fact		0.0036	0.0036	0.0000	0.0036	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
5	Land	Ln 1 times Ln 4	0.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.36
6	**Loaded Investment**	**Sum, Lns. 1, 3, 5**	**105.39**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**381.22**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**282.90**	**10.11**	**0.00**	**779.62**
	MONTHLY INVESTMENT-RELATED CHARGES, EQUIPMENT:																			
7	Avg Depr Factor		0.1082	0.1082	0.1082	0.1082	0.1082	0.0674	0.1404	0.0227	0.0772	0.0944	0.1137	0.0944	0.1137	0.0598	0.0900	0.0662	0.0990	
8	Avg Annual Depr	Ln 1 times Ln 7	10.91	0.00	0.00	0.00	0.00	0.00	0.00	8.65	0.00	0.00	0.00	0.00	0.00	0.00	25.46	0.67	0.00	
9	Avg Monthly Depr	Ln 8 divided by 12	0.91	0.00	0.00	0.00	0.00	0.00	0.00	0.72	0.00	0.00	0.00	0.00	0.00	0.00	2.12	0.06	0.00	3.81
10	Avg COM Factor		0.0420	0.0420	0.0420	0.0420	0.0420	0.0500	0.0755	0.0581	0.0546	0.0552	0.0536	0.0552	0.0536	0.0562	0.0562	0.0538	0.0589	
11	Avg Annual COM	Ln 1 times Ln 10	4.23	0.00	0.00	0.00	0.00	0.00	0.00	22.15	0.00	0.00	0.00	0.00	0.00	0.00	15.90	0.54	0.00	
12	Avg Monthly COM	Ln 11 divided by 12	0.35	0.00	0.00	0.00	0.00	0.00	0.00	1.85	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.05	0.00	3.57
13	Avg IT Factor		0.0175	0.0175	0.0175	0.0175	0.0175	0.0208	0.0314	0.0242	0.0227	0.0230	0.0223	0.0230	0.0223	0.0234	0.0234	0.0224	0.0245	
14	Avg Annual IT	Ln 1 times Ln 13	1.76	0.00	0.00	0.00	0.00	0.00	0.00	9.23	0.00	0.00	0.00	0.00	0.00	0.00	6.62	0.23	0.00	
15	Avg Monthly IT	Ln 14 divided by 12	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.77	0.00	0.00	0.00	0.00	0.00	0.00	0.55	0.02	0.00	1.49
16	Total Maint Factor		0.0182	0.0118	0.0118	0.0118	0.0118	0.0045	0.0156	0.0046	0.0376	0.0845	0.1158	0.0845	0.1158	0.0156	0.0376	0.0139	0.0200	
17	Total Annual Maint	Ln 1 times Ln 16	1.83	0.00	0.00	0.00	0.00	0.00	0.00	1.75	0.00	0.00	0.00	0.00	0.00	0.00	10.64	0.14	0.00	
18	Total Monthly Maint	Ln 17 divided by 12	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.89	0.01	0.00	1.20
19	Ad Valorem Tax Factor		0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	
20	Annual AV Taxes	Ln 1 times Ln 19	1.37	0.00	0.00	0.00	0.00	0.00	0.00	5.18	0.00	0.00	0.00	0.00	0.00	0.00	3.85	0.14	0.00	
21	Monthly AV Taxes	Ln 20 divided by 12	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.43	0.00	0.00	0.00	0.00	0.00	0.00	0.32	0.01	0.00	0.88
22	Tot Mo Inv Related Charge, Equip		1.68	0.00	0.00	0.00	0.00	0.00	0.00	3.91	0.00	0.00	0.00	0.00	0.00	0.00	5.21	0.14	0.00	10.94
	MONTHLY INVESTMENT-RELATED CHARGES, L&B LOADINGS																			
23	Building Loading	Ln 3 above	4.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
24	Total AC Factor, Bldg		0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	
25	Bldg Annual Charge	Ln 23 times Ln 24	0.94	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
26	Bldg Monthly Charge	Ln 25 divided by 12	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.08
27	Land Loading	Ln 5 above	0.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
28	Total AC Factor, Land		0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	
29	Land Annual Charge	Ln 27 times Ln 28	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
30	Land Monthly Charge	Ln 29 divided by 12	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
31	Total L&B Monthly Charge	Sum, Lns 26, 30	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09
	BILLING AND COLLECTION CHARGES:																			
32	Total Plant Investment Monthly Charges	Sum, Lns 22 and 31	1.76	0.00	0.00	0.00	0.00	0.00	0.00	3.91	0.00	0.00	0.00	0.00	0.00	0.00	5.21	0.14	0.00	
33	B&C Factor		0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	
34	Total Monthly B&C Charge	Ln 32 times Ln 33	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.05
35	**TOTAL MONTHLY INV. RELATED CHARGES**	**Sum, Lns. 22, 31, 34**	**1.77**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**3.93**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**5.23**	**0.14**	**0.00**	**11.07**
	MONTHLY PRODUCT ADMINISTRATION RELATED CHARGES:																			
36	Direct Assigned Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
37	Direct Assigned Monthly Charges	Ln 35 times Ln 36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
38	Product Management Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
39	Product Management Monthly Charges	Ln 35 times Ln 38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
40	Sales Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
41	Monthly Sales Charges	Ln 35 times Ln 40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
42	Advertising Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
43	Monthly Advertising Charges	Ln 35 times Ln 42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
44	Business Fees (Other Taxes) Expense Factor		0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	
45	Monthly Business Fees Charges	n 44 times Sum Lns 37, 39, 41, 4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.02
46	Total Monthly Product Administration Charges	Sum, Lns 37, 39, 41, 43, 45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.02

QWEST CORPORATION
Arizona Corporation Commission Docket No. 00000A-00-0194

TELRIC -- DS3 UDIT, 8-25 Miles -- VARIABLE COMPONENT

Ln No.	Plant Account Description Account Number	Source	Circuit - Digital: Other 357C	Digital 257C	Premises 257CP	SONET 257CS	SONET Premises 257CSP	Poles 1C	C-Wire 3C	Conduit 4C	Outside Plant: Cable UG Metal 5C	Drop Buried 35C	Drop Aerial 42C	Cable Bur. Metal 45C	Cable Aer. Metal 52C	Cable Bld. Metal 82C	Cable UG Fiber 85C	Cable Bur. Fiber 845C	Cable Bld. Fiber 882C	TOTALS
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(n)	(o)	(p)	(q)	(r)	(s)	(t)
47	**TOTAL MO. "DIRECTLY ASSIGNED" CHGS.**	**Sum, Lns. 35, 46**	**1.77**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**3.94**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**5.24**	**0.14**	**0.00**	**11.09**
	MONTHLY "NETWORK SUPPORT" EXPENSE:																			
48	Network Operations Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
49	Network Operations Monthly Charges	Ln 47 times Ln 48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
50	"Network Support" Expense Factor		0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	
51	Network Support" Monthly Charges	Ln 47 times Ln 50	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.00	0.00	0.18
52	Total Monthly Network Support Charges	Sum, Lns. 49, 51	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.00	0.00	0.18
53	**TOTAL MONTHLY DIRECT + SUPPORT**	**Sum, Lns. 47, 52**	**1.80**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**4.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**5.32**	**0.15**	**0.00**	**11.27**
	MONTHLY "DIRECTLY ATTRIBUTED" EXPENSES:																			
54	General Support Assets Expense Factor		0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	
55	General Support Assets Monthly Charges	Ln 47 times Ln 54	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.32	0.00	0.00	0.00	0.00	0.00	0.00	0.43	0.01	0.00	0.90
56	Gen Pur Computer Expense Factor		0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	
57	Gen Pur Computer Monthly Charges	Ln 47 times Ln 56	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.18	0.01	0.00	0.39
58	Uncollectible Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
59	Uncollectible Monthly Charges	Ln 47 times Ln 58	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
60	Accounting Expense Factor		0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	
61	Accounting Expense Monthly Charges	Ln 47 times Ln 60	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.09
62	Human Resources Expense Factor		0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	
63	Human Resources Monthly Charges	Ln 47 times Ln 62	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.09
64	Information Management Expense Factor		0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	
65	Information Management Monthly Charges	Ln 47 times Ln 64	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.22	0.00	0.00	0.00	0.00	0.00	0.00	0.29	0.01	0.00	0.61
66	Intangible Expense Factor		0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	
67	Intangible Expense Monthly Charges	Ln 47 times Ln 66	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.03
68	Total Monthly "Directly Attributed" Expense Charges	Sum Lns. 55, 57, 59, 61, 63, 65, 67	0.34	0.00	0.00	0.00	0.00	0.00	0.00	0.75	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.03	0.00	2.11
69	**TOTAL MONTHLY "DIRECT" CHARGES**	**Sum, Lns. 53, 69**	**2.14**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**4.75**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**6.32**	**0.17**	**0.00**	**13.38**
	MONTHLY COMMON EXPENSES:																			
70	Executive Expense Factor		0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	
71	Executive Expense Monthly Charges	Ln 69 times Ln 70	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.09
72	Planning Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
73	Planning Expense Monthly Charges	Ln 69 times Ln 72	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
74	External Relations Expense Factor		0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	
75	External Relations Monthly Charges	Ln 69 times Ln 74	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.00	0.00	0.12
76	Legal Expense Factor		0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	
77	Legal Expense Monthly Charges	Ln 69 times Ln 76	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.08
78	Procurement Expense Factor		0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	
79	Procurement Expense Monthly Charges	Ln 69 times Ln 78	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.03
80	Research and Development Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
81	R&D Expense Monthly Charges	Ln 69 times Ln 80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
82	General Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
83	General Expense Monthly Charges	Ln 69 times Ln 82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
84	Total Monthly "Common" Expenses Charges	um, Lns. 71, 73, 75, 77, 79, 81, 8	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.15	0.00	0.00	0.32
85	**TOTAL MONTHLY "TELRIC"**	**Sum, Lns. 69, 84**	**$2.19**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$4.86**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$6.47**	**$0.18**	**$0.00**	**$13.70**

QWEST CORPORATION
Arizona Corporation Commission Docket No. 00000A-00-0194

TELRIC -- DS3 UDIT, 25-50 Miles -- FIXED COMPONENT

Ln. No.	Plant Account Description Account Number	Source	Circuit - Digital: Other 357C	Digital 257C	Premises 257CP	SONET 257CS	SONET Premises 257CSP	Outside Plant: Poles 1C	C-Wire 3C	Conduit 4C	Cable UG Metal 5C	Drop Buried 35C	Drop Aerial 42C	Cable Bur. Metal 45C	Cable Aer. Metal 52C	Cable Bld. Metal 62C	Cable UG Fiber 85C	Cable Bur. Fiber 845C	Cable Bld. Fiber 862C	TOTALS
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)	(s)	(t)
	INVESTMENT																			
1	Equipment		6,153.57	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6,153.57
2	Bldg Loading Fact		0.0418	0.0418	0.0000	0.0418	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
3	Building	Ln 1 times Ln 2	257.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	257.22
4	Land Loading Fact		0.0036	0.0036	0.0000	0.0036	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
5	Land	Ln 1 times Ln 4	22.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	22.15
6	**Loaded Investment**	**Sum, Lns. 1, 3, 5**	**6,432.94**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**6,432.94**
	MONTHLY INVESTMENT-RELATED CHARGES, EQUIPMENT:																			
7	Avg Depr Factor		0.1082	0.1082	0.1082	0.1082	0.1082	0.0674	0.1404	0.0227	0.0772	0.0944	0.1137	0.0944	0.1137	0.0598	0.0900	0.0662	0.0990	
8	Avg Annual Depr	Ln 1 times Ln 7	665.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
9	Avg Monthly Depr	Ln 8 divided by 12	55.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	55.48
10	Avg COM Factor		0.0420	0.0420	0.0420	0.0420	0.0420	0.0500	0.0755	0.0581	0.0546	0.0552	0.0536	0.0552	0.0536	0.0562	0.0562	0.0538	0.0589	
11	Avg Annual COM	Ln 1 times Ln 10	258.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
12	Avg Monthly COM	Ln 11 divided by 12	21.54	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.54
13	Avg IT Factor		0.0175	0.0175	0.0175	0.0175	0.0175	0.0208	0.0314	0.0242	0.0227	0.0230	0.0223	0.0230	0.0223	0.0234	0.0234	0.0224	0.0245	
14	Avg Annual IT	Ln 1 times Ln 13	107.69	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
15	Avg Monthly IT	Ln 14 divided by 12	8.97	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.97
16	Total Maint Factor		0.0182	0.0118	0.0118	0.0118	0.0118	0.0045	0.0156	0.0046	0.0376	0.0845	0.1158	0.0845	0.1158	0.0156	0.0376	0.0139	0.0200	
17	Total Annual Maint	Ln 1 times Ln 16	111.99	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
18	Total Monthly Maint	Ln 17 divided by 12	9.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.33
19	Ad Valorem Tax Factor		0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	
20	Annual AV Taxes	Ln 1 times Ln 19	83.69	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
21	Monthly AV Taxes	Ln 20 divided by 12	6.97	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.97
22	Tot Mo Inv Related Charge, Equip		102.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	102.30
	MONTHLY INVESTMENT-RELATED CHARGES, L&B LOADINGS:																			
23	Building Loading	Ln 3 above	257.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
24	Total AC Factor, Bldg		0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	
25	Bldg Annual Charge	Ln 23 times Ln 24	57.41	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
26	Bldg Monthly Charge	Ln 25 divided by 12	4.78	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.78
27	Land Loading	Ln 5 above	22.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
28	Total AC Factor, Land		0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	
29	Land Annual Charge	Ln 27 times Ln 28	4.94	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
30	Land Monthly Charge	Ln 29 divided by 12	0.41	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.41
31	Total L&B Monthly Charge	Sum, Lns 26 30	5.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.20
	BILLING AND COLLECTION CHARGES:																			
32	Total Plant Investment Monthly Charges	Sum, Lns. 22 and 31	107.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
33	B&C Factor		0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	
34	Total Monthly B&C Charge	Ln 32 times Ln 33	0.46	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.46
35	**TOTAL MONTHLY INV. RELATED CHARGES**	**Sum, Lns. 22, 31, 34**	**107.96**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**107.96**
	MONTHLY PRODUCT ADMINISTRATION RELATED CHARGES:																			
36	Direct Assigned Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
37	Direct Assigned Monthly Charges	Ln 35 times Ln 36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
38	Product Management Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
39	Product Management Monthly Charges	Ln 35 times Ln 38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
40	Sales Expense Factor		0.0000	-0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
41	Monthly Sales Charges	Ln 35 times Ln 40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
42	Advertising Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
43	Monthly Advertising Charges	Ln 35 times Ln 42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
44	Business Fees (Other Taxes) Expense Factor		0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	
45	Monthly Business Fees Charges	Ln. 44 times Sum Lns 37, 39, 41, 4	0.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.21
46	Total Monthly Product Administration Charges	Sum, Lns. 37, 39, 41, 43, 45	0.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.21

QWEST CORPORATION
Arizona Corporation Commission Docket No. 00000A-00-0194

TELRIC -- DS3 UDIT, 25-50 Miles -- FIXED COMPONENT

Ln No	Plant Account Description Account Number	Source	Other 357C	Digital 257C	Premises 257CP	SONET 257CS	SONET Premises 257CSP	Poles 1C	C-Wire 3C	Conduit 4C	Cable UG Metal 5C	Drop Buried 35C	Drop Aerial 42C	Cable Bur. Metal 45C	Cable Aer. Metal 52C	Cable Bld. Metal 62C	Cable UG Fiber 85C	Cable Bur. Fiber 845C	Cable Bld. Fiber 862C	TOTALS
			Circuit - Digital					Outside Plant												
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(n)	(o)	(p)	(q)	(r)	(s)	(t)
47	TOTAL MO. "DIRECTLY ASSIGNED" CHGS.	Sum, Lns. 35, 46	108.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	108.17
	MONTHLY "NETWORK SUPPORT" EXPENSE:																			
48	Network Operations Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
49	Network Operations Monthly Charges	Ln 47 times Ln 48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
50	"Network Support" Expense Factor		0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	
51	Network Support" Monthly Charges	Ln 47 times Ln 50	1.73	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.73
52	Total Monthly Network Support Charges	Sum, Lns. 49, 51	1.73	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.73
53	TOTAL MONTHLY DIRECT + SUPPORT	Sum, Lns. 47, 52	109.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	109.90
	MONTHLY "DIRECTLY ATTRIBUTED" EXPENSES:																			
54	General Support Assets Expense Factor		0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	
55	General Support Assets Monthly Charges	Ln 47 times Ln 54	8.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.82
56	Gen Pur Computer Expense Factor		0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	
57	Gen Pur Computer Monthly Charges	Ln 47 times Ln 56	3.79	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.79
58	Uncollectible Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
59	Uncollectible Monthly Charges	Ln 47 times Ln 58	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
60	Accounting Expense Factor		0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	
61	Accounting Expense Monthly Charges	Ln 47 times Ln 60	0.87	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.87
62	Human Resources Expense Factor		0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	
63	Human Resources Monthly Charges	Ln 47 times Ln 62	0.84	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.84
64	Information Management Expense Factor		0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	
65	Information Management Monthly Charges	Ln 47 times Ln 64	5.98	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.98
66	Intangible Expense Factor		0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	
67	Intangible Expense Monthly Charges	Ln 47 times Ln 66	0.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.28
68	Total Monthly "Directly Attributed" Expense Charges	Sum Lns. 55, 57, 59, 61, 63, 65, 67	20.57	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	20.57
69	TOTAL MONTHLY "DIRECT" CHARGES	Sum, Lns. 53, 69	130.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	130.47
	MONTHLY COMMON EXPENSES:																			
70	Executive Expense Factor		0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	
71	Executive Expense Monthly Charges	Ln 69 times Ln 70	0.85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.85
72	Planning Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
73	Planning Expense Monthly Charges	Ln 69 times Ln 72	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
74	External Relations Expense Factor		0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	
75	External Relations Monthly Charges	Ln 69 times Ln 74	1.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.20
76	Legal Expense Factor		0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	
77	Legal Expense Monthly Charges	Ln 69 times Ln 76	0.78	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.78
78	Procurement Expense Factor		0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	
79	Procurement Expense Monthly Charges	Ln 69 times Ln 78	0.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.29
80	Research and Development Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
81	R&D Expense Monthly Charges	Ln 69 times Ln 80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
82	General Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
83	General Expense Monthly Charges	Ln 69 times Ln. 82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
84	Total Monthly "Common" Expenses Charges	um, Lns. 71, 73, 75, 77, 79, 81, 8	3.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.12
85	TOTAL MONTHLY "TELRIC"	Sum, Lns. 69, 84	*********	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$133.59

QWEST CORPORATION
Arizona Corporation Commission Docket No. 00000A-00-0194

TELRIC -- DS3 UDIT, 25-50 Miles -- VARIABLE COMPONENT

Ln. No.	Plant Account Description Account Number	Source	Other 357C	Digital 257C	Premises 257CP	SONET 257CS	SONET Premises 257CSP	Poles 1C	C-Wire 3C	Conduit 4C	Cable UG Metal. 5C	Drop Buried 35C	Drop Aerial 42C	Cable Bur. Metal. 45C	Cable Aer. Metal. 52C	Cable Bld. Metal 62C	Cable UG Fiber 85C	Cable Bur. Fiber 845C	Cable Bld. Fiber 862C	TOTALS
			Circuit - Digital					Outside Plant												
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(n)	(o)	(p)	(q)	(r)	(s)	(t)
	INVESTMENT																			
1	Equipment		211.42	0.00	0.00	0.00	0.00	0.00	0.00	391.17	0.00	0.00	0.00	0.00	0.00	0.00	290.28	0.00	0.00	892.87
2	Bldg Loading Fact		0.0418	0.0418	0.0000	0.0418	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
3	Building	Ln 1 times Ln 2	8.84	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.84
4	Land Loading Fact		0.0036	0.0036	0.0000	0.0036	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
5	Land	Ln 1 times Ln 4	0.76	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.76
6	**Loaded Investment**	**Sum, Lns. 1, 3, 5**	**221.02**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**391.17**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**290.28**	**0.00**	**0.00**	**902.47**
	MONTHLY INVESTMENT-RELATED CHARGES, EQUIPMENT:																			
7	Avg Depr Factor		0.1082	0.1082	0.1082	0.1082	0.1082	0.0674	0.1404	0.0227	0.0772	0.0944	0.1137	0.0944	0.1137	0.0598	0.0900	0.0662	0.0990	
8	Avg Annual Depr	Ln 1 times Ln 7	22.88	0.00	0.00	0.00	0.00	0.00	0.00	8.88	0.00	0.00	0.00	0.00	0.00	0.00	26.13	0.00	0.00	
9	Avg Monthly Depr	Ln 8 divided by 12	1.91	0.00	0.00	0.00	0.00	0.00	0.00	0.74	0.00	0.00	0.00	0.00	0.00	0.00	2.18	0.00	0.00	4.82
10	Avg COM Factor		0.0420	0.0420	0.0420	0.0420	0.0420	0.0500	0.0755	0.0581	0.0546	0.0552	0.0536	0.0552	0.0536	0.0562	0.0562	0.0538	0.0589	
11	Avg Annual COM	Ln 1 times Ln 10	8.88	0.00	0.00	0.00	0.00	0.00	0.00	22.73	0.00	0.00	0.00	0.00	0.00	0.00	18.31	0.00	0.00	
12	Avg Monthly COM	Ln 11 divided by 12	0.74	0.00	0.00	0.00	0.00	0.00	0.00	1.89	0.00	0.00	0.00	0.00	0.00	0.00	1.38	0.00	0.00	3.99
13	Avg IT Factor		0.0175	0.0175	0.0175	0.0175	0.0175	0.0208	0.0314	0.0242	0.0227	0.0230	0.0223	0.0230	0.0223	0.0234	0.0234	0.0224	0.0245	
14	Avg Annual IT	Ln 1 times Ln 13	3.70	0.00	0.00	0.00	0.00	0.00	0.00	9.47	0.00	0.00	0.00	0.00	0.00	0.00	6.79	0.00	0.00	
15	Avg Monthly IT	Ln 14 divided by 12	0.31	0.00	0.00	0.00	0.00	0.00	0.00	0.79	0.00	0.00	0.00	0.00	0.00	0.00	0.57	0.00	0.00	1.66
16	Total Maint Factor		0.0182	0.0118	0.0118	0.0118	0.0118	0.0045	0.0156	0.0046	0.0376	0.0845	0.1158	0.0845	0.1158	0.0156	0.0376	0.0139	0.0200	
17	Total Annual Maint	Ln 1 times Ln 16	3.85	0.00	0.00	0.00	0.00	0.00	0.00	1.80	0.00	0.00	0.00	0.00	0.00	0.00	10.91	0.00	0.00	
18	Total Monthly Maint	Ln 17 divided by 12	0.32	0.00	0.00	0.00	0.00	0.00	0.00	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.91	0.00	0.00	1.38
19	Ad Valorem Tax Factor		0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	
20	Annual AV Taxes	Ln 1 times Ln 19	2.88	0.00	0.00	0.00	0.00	0.00	0.00	5.32	0.00	0.00	0.00	0.00	0.00	0.00	3.95	0.00	0.00	
21	Monthly AV Taxes	Ln 20 divided by 12	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.44	0.00	0.00	0.00	0.00	0.00	0.00	0.33	0.00	0.00	1.01
22	Tot Mo Inv Related Charge, Equip		3.51	0.00	0.00	0.00	0.00	0.00	0.00	4.02	0.00	0.00	0.00	0.00	0.00	0.00	5.34	0.00	0.00	12.87
	MONTHLY INVESTMENT-RELATED CHARGES, L&B LOADINGS																			
23	Building Loading	Ln 3 above	8.84	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
24	Total AC Factor, Bldg		0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	
25	Bldg Annual Charge	Ln 23 times Ln 24	1.97	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
26	Bldg Monthly Charge	Ln 25 divided by 12	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.16
27	Land Loading	Ln 5 above	0.76	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
28	Total AC Factor, Land		0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	
29	Land Annual Charge	Ln 27 times Ln 28	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
30	Land Monthly Charge	Ln 29 divided by 12	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
31	Total L&B Monthly Charge	Sum, Lns. 26, 30	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.18
	BILLING AND COLLECTION CHARGES:																			
32	Total Plant Investment Monthly Charges	Sum, Lns. 22 and 31	3.69	0.00	0.00	0.00	0.00	0.00	0.00	4.02	0.00	0.00	0.00	0.00	0.00	0.00	5.34	0.00	0.00	
33	B&C Factor		0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	
34	Total Monthly B&C Charge	Ln 32 times Ln 33	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.06
35	**TOTAL MONTHLY INV. RELATED CHARGES**	**Sum, Lns. 22, 31, 34**	**3.71**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**4.03**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**5.36**	**0.00**	**0.00**	**13.11**
	MONTHLY PRODUCT ADMINISTRATION RELATED CHARGES:																			
36	Direct Assigned Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
37	Direct Assigned Monthly Charges	Ln 35 times Ln 36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
38	Product Management Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
39	Product Management Monthly Charges	Ln 35 times Ln 38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
40	Sales Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
41	Monthly Sales Charges	Ln 35 times Ln 40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
42	Advertising Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
43	Monthly Advertising Charges	Ln 35 times Ln 42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
44	Business Fees (Other Taxes) Expense Factor		0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	
45	Monthly Business Fees Charges	Ln 44 times Sum Lns 37, 39, 41, 4	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.02
46	Total Monthly Product Administration Charges	Sum, Lns. 37, 39, 41, 43, 45	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.02

QWEST CORPORATION
Arizona Corporation Commission Docket No 00000A-00-0194

TELRIC -- DS3 UDIT, 25-50 Miles -- VARIABLE COMPONENT

Ln No	Plant Account Description Account Number	Source	Other 357C	Digital 257C	Premises 257CP	SONET 257CS	SONET Premises 257CSP	Poles 1C	C-Wire 3C	Conduit 4C	Cable UG Metal 5C	Drop Buried 35C	Drop Aerial 42C	Cable Bur. Metal 45C	Cable Aer. Metal 52C	Cable Bld. Metal 62C	Cable UG Fiber 85C	Cable Bur. Fiber 845C	Cable Bld. Fiber 862C	TOTALS
			Circuit - Digital					Outside Plant												
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(n)	(o)	(p)	(q)	(r)	(s)	(t)
47	**TOTAL MO. "DIRECTLY ASSIGNED" CHGS**	**Sum, Lns. 38, 46**	**3.72**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**4.04**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**5.37**	**0.00**	**0.00**	**13.13**
	MONTHLY "NETWORK SUPPORT" EXPENSE:																			
48	Network Operations Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
49	Network Operations Monthly Charges	Ln 47 times Ln 48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
50	"Network Support" Expense Factor		0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	
51	Network Support" Monthly Charges	Ln 47 times Ln 50	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.00	0.00	0.21
52	Total Monthly Network Support Charges	Sum, Lns 49, 51	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.00	0.00	0.21
53	**TOTAL MONTHLY DIRECT + SUPPORT**	**Sum, Lns. 47, 52**	**3.78**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**4.11**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**5.46**	**0.00**	**0.00**	**13.34**
	MONTHLY "DIRECTLY ATTRIBUTED" EXPENSES:																			
54	General Support Assets Expense Factor		0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	
55	General Support Assets Monthly Charges	Ln 47 times Ln 54	0.30	0.00	0.00	0.00	0.00	0.00	0.00	0.33	0.00	0.00	0.00	0.00	0.00	0.00	0.44	0.00	0.00	1.07
56	Gen Pur Computer Expense Factor		0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	
57	Gen Pur Computer Monthly Charges	Ln 47 times Ln 56	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.19	0.00	0.00	0.46
58	Uncollectible Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
59	Uncollectible Monthly Charges	Ln 47 times Ln 58	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
60	Accounting Expense Factor		0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	
61	Accounting Expense Monthly Charges	Ln 47 times Ln 60	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.11
62	Human Resources Expense Factor		0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	
63	Human Resources Monthly Charges	Ln 47 times Ln 62	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.10
64	Information Management Expense Factor		0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	
65	Information Management Monthly Charges	Ln 47 times Ln 64	0.21	0.00	0.00	0.00	0.00	0.00	0.00	0.22	0.00	0.00	0.00	0.00	0.00	0.00	0.30	0.00	0.00	0.73
66	Intangible Expense Factor		0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	
67	Intangible Expense Monthly Charges	Ln 47 times Ln 66	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.03
68	Total Monthly "Directly Attributed" Expense Charges	Sum Lns. 55, 57, 59, 61, 63, 65, 67	0.71	0.00	0.00	0.00	0.00	0.00	0.00	0.77	0.00	0.00	0.00	0.00	0.00	0.00	1.02	0.00	0.00	2.50
69	**TOTAL MONTHLY "DIRECT" CHARGES**	**Sum, Lns. 53, 69**	**4.48**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**4.87**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**6.48**	**0.00**	**0.00**	**15.84**
	MONTHLY COMMON EXPENSES:																			
70	Executive Expense Factor		0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	
71	Executive Expense Monthly Charges	Ln 69 times Ln 70	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.10
72	Planning Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
73	Planning Expense Monthly Charges	Ln 69 times Ln 72	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
74	External Relations Expense Factor		0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	
75	External Relations Monthly Charges	Ln 69 times Ln 74	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.00	0.00	0.15
76	Legal Expense Factor		0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	
77	Legal Expense Monthly Charges	Ln 69 times Ln 76	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.10
78	Procurement Expense Factor		0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	
79	Procurement Expense Monthly Charges	Ln 69 times Ln 78	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.03
80	Research and Development Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
81	R&D Expense Monthly Charges	Ln 69 times Ln 80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
82	General Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
83	General Expense Monthly Charges	Ln 69 times Ln. 82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
84	Total Monthly "Common" Expenses Charges	um, Lns. 71, 73, 75, 77, 79, 81, 8	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.16	0.00	0.00	0.38
85	**TOTAL MONTHLY "TELRIC"**	**Sum, Lns. 69, 84**	**$4.59**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$4.99**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$6.64**	**$0.00**	**$0.00**	**$16.22**

QWEST CORPORATION
Arizona Corporation Commission Docket No. 00000A-00-0194

TELRIC -- DS3 UDIT, OVER 50 Miles -- FIXED COMPONENT

Ln No.	Plant Account Description Account Number	Source	Circuit - Digital: Other 357C	Digital 257C	Premises 257CP	SONET 257CS	SONET Premises 257CSP	Poles 1C	C-Wire 3C	Conduit 4C	Outside Plant: Cable UG Metal. 5C	Drop Buried 35C	Drop Aerial 42C	Cable Bur. Metal. 45C	Cable Aer. Metal. 52C	Cable Bld. Metal. 62C	Cable UG Fiber 85C	Cable Bur. Fiber 845C	Cable Bld. Fiber 862C	TOTALS
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(n)	(o)	(p)	(q)	(r)	(s)	(t)
	INVESTMENT																			
1	Equipment		6,491.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6,491.36
2	Bldg Loading Fact		0.0418	0.0418	0.0000	0.0418	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
3	Building	Ln 1 times Ln 2	271.34	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	271.34
4	Land Loading Fact		0.0036	0.0036	0.0000	0.0036	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
5	Land	Ln 1 times Ln 4	23.37	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	23.37
6	Loaded Investment	Sum, Lns. 1, 3, 5	6,786.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6,786.07
	MONTHLY INVESTMENT-RELATED CHARGES, EQUIPMENT:																			
7	Avg Depr Factor		0.1082	0.1082	0.1082	0.1082	0.1082	0.0674	0.1404	0.0227	0.0772	0.0944	0.1137	0.0944	0.1137	0.0598	0.0900	0.0662	0.0990	
8	Avg Annual Depr	Ln 1 times Ln 7	702.37	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
9	Avg Monthly Depr	Ln 8 divided by 12	58.53	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	58.53
10	Avg COM Factor		0.0420	0.0420	0.0420	0.0420	0.0420	0.0500	0.0755	0.0581	0.0546	0.0552	0.0536	0.0552	0.0536	0.0562	0.0562	0.0538	0.0589	
11	Avg Annual COM	Ln 1 times Ln 10	272.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
12	Avg Monthly COM	Ln 11 divided by 12	22.72	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	22.72
13	Avg IT Factor		0.0175	0.0175	0.0175	0.0175	0.0175	0.0208	0.0314	0.0242	0.0227	0.0230	0.0223	0.0230	0.0223	0.0234	0.0234	0.0224	0.0245	
14	Avg Annual IT	Ln 1 times Ln 13	113.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
15	Avg Monthly IT	Ln 14 divided by 12	9.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.47
16	Total Maint Factor		0.0182	0.0118	0.0118	0.0118	0.0118	0.0046	0.0156	0.0046	0.0376	0.0845	0.1158	0.0845	0.1158	0.0156	0.0376	0.0139	0.0200	
17	Total Annual Maint	Ln 1 times Ln 16	118.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
18	Total Monthly Maint	Ln 17 divided by 12	9.85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.85
19	Ad Valorem Tax Factor		0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	
20	Annual AV Taxes	Ln 1 times Ln 19	88.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
21	Monthly AV Taxes	Ln 20 divided by 12	7.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.36
22	Tot Mo Inv Related Charge, Equip		107.92	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	107.92
	MONTHLY INVESTMENT-RELATED CHARGES, L&B LOADINGS																			
23	Building Loading	Ln 3 above	271.34	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
24	Total AC Factor, Bldg		0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	
25	Bldg Annual Charge	Ln 23 times Ln 24	60.56	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
26	Bldg Monthly Charge	Ln 25 divided by 12	5.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.05
27	Land Loading	Ln 5 above	23.37	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
28	Total AC Factor, Land		0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	
29	Land Annual Charge	Ln 27 times Ln 28	5.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
30	Land Monthly Charge	Ln 29 divided by 12	0.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.43
31	Total L&B Monthly Charge	Sum, Lns. 26, 30	5.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.48
	BILLING AND COLLECTION CHARGES:																			
32	Total Plant Investment Monthly Charges	Sum, Lns. 22 and 31	113.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
33	B&C Factor		0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	
34	Total Monthly B&C Charge	Ln 32 times Ln 33	0.49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.49
35	**TOTAL MONTHLY INV. RELATED CHARGES**	Sum, Lns. 22, 31, 34	113.89	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	113.89
	MONTHLY PRODUCT ADMINISTRATION RELATED CHARGES:																			
36	Direct Assigned Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
37	Direct Assigned Monthly Charges	Ln. 35 times Ln 36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
38	Product Management Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
39	Product Management Monthly Charges	Ln 35 times Ln 38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
40	Sales Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
41	Monthly Sales Charges	Ln 35 times Ln 40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
42	Advertising Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
43	Monthly Advertising Charges	Ln 35 times Ln 42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
44	Business Fees (Other Taxes) Expense Factor		0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	
45	Monthly Business Fees Charges	Ln 44 times Sum Lns. 37, 39, 41, 4	0.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.22
46	Total Monthly Product Administration Charges	Sum, Lns. 37, 39, 41, 43, 45	0.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.22

QWEST CORPORATION
Arizona Corporation Commission Docket No. 00000A-00-0194

TELRIC -- DS3 UDIT, OVER 50 Miles -- FIXED COMPONENT

Ln. No.	Plant Account Description Account Number	Source	Other 357C	Digital 257C	Premises 257CP	SONET 257CS	SONET Premises 257CSP	Poles 1C	C-Wire 3C	Conduit 4C	Cable UG Metal 5C	Drop Buried 35C	Drop Aerial 42C	Cable Bur. Metal 45C	Cable Aer. Metal 52C	Cable Bld. Metal 62C	Cable UG Fiber 85C	Cable Bur. Fiber 845C	Cable Bld. Fiber 862C	TOTALS
			Circuit - Digital								Outside Plant									
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(n)	(o)	(p)	(q)	(r)	(s)	(t)
47	TOTAL MO. "DIRECTLY ASSIGNED" CHGS.	Sum, Lns. 35, 46	114.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	114.10
	MONTHLY "NETWORK SUPPORT" EXPENSE:																			
48	Network Operations Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
49	Network Operations Monthly Charges	Ln 47 times Ln 48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
50	"Network Support" Expense Factor		0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	
51	Network Support" Monthly Charges	Ln 47 times Ln 50	1.83	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.83
52	Total Monthly Network Support Charges	Sum, Lns 49, 51	1.83	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.83
53	TOTAL MONTHLY DIRECT + SUPPORT	Sum, Lns. 47, 52	115.93	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	115.93
	MONTHLY "DIRECTLY ATTRIBUTED" EXPENSES:																			
54	General Support Assets Expense Factor		0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	
55	General Support Assets Monthly Charges	Ln 47 times Ln 54	9.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.30
56	Gen Pur Computer Expense Factor		0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	
57	Gen Pur Computer Monthly Charges	Ln 47 times Ln 56	3.99	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.99
58	Uncollectible Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
59	Uncollectible Monthly Charges	Ln 47 times Ln 58	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
60	Accounting Expense Factor		0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	
61	Accounting Expense Monthly Charges	Ln 47 times Ln 60	0.91	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.91
62	Human Resources Expense Factor		0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	
63	Human Resources Monthly Charges	Ln 47 times Ln 62	0.89	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.89
64	Information Management Expense Factor		0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	
65	Information Management Monthly Charges	Ln 47 times Ln 64	6.31	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.31
66	Intangible Expense Factor		0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	
67	Intangible Expense Monthly Charges	Ln 47 times Ln 66	0.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.30
68	Total Monthly "Directly Attributed" Expense Charges	Sum Lns 55, 57, 59, 61, 63, 65, 67	21.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.70
69	TOTAL MONTHLY "DIRECT" CHARGES	Sum, Lns. 53, 69	137.63	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	137.63
	MONTHLY COMMON EXPENSES:																			
70	Executive Expense Factor		0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	
71	Executive Expense Monthly Charges	Ln 69 times Ln 70	0.89	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.89
72	Planning Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
73	Planning Expense Monthly Charges	Ln 69 times Ln 72	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
74	External Relations Expense Factor		0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	
75	External Relations Monthly Charges	Ln 69 times Ln 74	1.27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.27
76	Legal Expense Factor		0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	
77	Legal Expense Monthly Charges	Ln 69 times Ln 76	0.83	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.83
78	Procurement Expense Factor		0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	
79	Procurement Expense Monthly Charges	Ln 69 times Ln 78	0.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.30
80	Research and Development Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
81	R&D Expense Monthly Charges	Ln 69 times Ln 80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
82	General Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
83	General Expense Monthly Charges	Ln 69 times Ln 82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
84	Total Monthly "Common" Expenses Charges	um, Lns 71, 73, 75, 77, 79, 81, 8	3.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.29
85	TOTAL MONTHLY "TELRIC"	Sum, Lns. 69, 84	********	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$140.93

QWEST CORPORATION
Arizona Corporation Commission Docket No. 00000A-00-0194

TELRIC -- DS3 UDIT, OVER 50 Miles -- VARIABLE COMPONENT

Ln. No. (a)	Plant Account Description Account Number (b)	Source (c)	Circuit - Digital: Other 357C (d)	Digital 257C (e)	Premises 257CP (f)	SONET 257CS (g)	SONET Premises 257CSP (h)	Poles 1C (i)	C-Wire 3C (j)	Conduit 4C (k)	Outside Plant: Cable UG Metal 5C (l)	Drop Buried 35C (m)	Drop Aerial 42C (n)	Cable Bur. Metal 45C (n)	Cable Aer. Metal 52C (o)	Cable Bld. Metal 62C (p)	Cable UG Fiber 85C (q)	Cable Bur. Fiber 845C (r)	Cable Bld. Fiber 862C (s)	TOTALS (t)
	INVESTMENT																			
1	Equipment		150.79	0.00	0.00	0.00	0.00	0.00	0.00	239.24	0.00	0.00	0.00	0.00	0.00	0.00	177.54	35.04	0.00	602.61
2	Bldg Loading Fact		0.0418	0.0418	0.0000	0.0418	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
3	Building	Ln 1 times Ln 2	6.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.30
4	Land Loading Fact		0.0036	0.0036	0.0000	0.0036	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
5	Land	Ln 1 times Ln 4	0.54	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.54
6	**Loaded Investment**	**Sum, Lns. 1, 3, 5**	**157.64**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**239.24**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**177.54**	**35.04**	**0.00**	**609.46**
	MONTHLY INVESTMENT RELATED CHARGES, EQUIPMENT:																			
7	Avg Depr Factor		0.1082	0.1082	0.1082	0.1082	0.1082	0.0674	0.1404	0.0227	0.0772	0.0944	0.1137	0.0944	0.1137	0.0598	0.0900	0.0862	0.0990	
8	Avg Annual Depr	Ln 1 times Ln 7	16.32	0.00	0.00	0.00	0.00	0.00	0.00	5.43	0.00	0.00	0.00	0.00	0.00	0.00	15.98	2.32	0.00	
9	Avg Monthly Depr	Ln 8 divided by 12	1.36	0.00	0.00	0.00	0.00	0.00	0.00	0.45	0.00	0.00	0.00	0.00	0.00	0.00	1.33	0.19	0.00	3.34
10	Avg COM Factor		0.0420	0.0420	0.0420	0.0420	0.0420	0.0500	0.0755	0.0581	0.0546	0.0552	0.0536	0.0552	0.0536	0.0562	0.0562	0.0538	0.0589	
11	Avg Annual COM	Ln 1 times Ln 10	6.33	0.00	0.00	0.00	0.00	0.00	0.00	13.90	0.00	0.00	0.00	0.00	0.00	0.00	9.98	1.89	0.00	
12	Avg Monthly COM	Ln 11 divided by 12	0.53	0.00	0.00	0.00	0.00	0.00	0.00	1.16	0.00	0.00	0.00	0.00	0.00	0.00	0.83	0.16	0.00	2.67
13	Avg IT Factor		0.0175	0.0175	0.0175	0.0175	0.0175	0.0208	0.0314	0.0242	0.0227	0.0230	0.0223	0.0230	0.0223	0.0234	0.0234	0.0224	0.0245	
14	Avg Annual IT	Ln 1 times Ln 13	2.64	0.00	0.00	0.00	0.00	0.00	0.00	5.79	0.00	0.00	0.00	0.00	0.00	0.00	4.15	0.78	0.00	
15	Avg Monthly IT	Ln 14 divided by 12	0.22	0.00	0.00	0.00	0.00	0.00	0.00	0.48	0.00	0.00	0.00	0.00	0.00	0.00	0.35	0.07	0.00	1.11
16	Total Maint Factor		0.0182	0.0118	0.0118	0.0118	0.0118	0.0045	0.0156	0.0046	0.0376	0.0845	0.1158	0.0845	0.1158	0.0156	0.0376	0.0139	0.0200	
17	Total Annual Maint	Ln 1 times Ln 16	2.74	0.00	0.00	0.00	0.00	0.00	0.00	1.10	0.00	0.00	0.00	0.00	0.00	0.00	6.68	0.49	0.00	
18	Total Monthly Maint	Ln 17 divided by 12	0.23	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.56	0.04	0.00	0.92
19	Ad Valorem Tax Factor		0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	
20	Annual AV Taxes	Ln 1 times Ln 19	2.05	0.00	0.00	0.00	0.00	0.00	0.00	3.25	0.00	0.00	0.00	0.00	0.00	0.00	2.41	0.48	0.00	
21	Monthly AV Taxes	Ln 20 divided by 12	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.27	0.00	0.00	0.00	0.00	0.00	0.00	0.20	0.04	0.00	0.68
22	Tot Mo Inv Related Charge, Equip		2.51	0.00	0.00	0.00	0.00	0.00	0.00	2.46	0.00	0.00	0.00	0.00	0.00	0.00	3.27	0.50	0.00	8.73
	MONTHLY INVESTMENT RELATED CHARGES, L&B LOADINGS																			
23	Building Loading	Ln 3 above	6.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
24	Total AC Factor, Bldg		0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	
25	Bldg Annual Charge	Ln 23 times Ln 24	1.41	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
26	Bldg Monthly Charge	Ln 25 divided by 12	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.12
27	Land Loading	Ln 5, above	0.54	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
28	Total AC Factor, Land		0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	
29	Land Annual Charge	Ln 27 times Ln 28	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
30	Land Monthly Charge	Ln 29 divided by 12	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
31	Total L&B Monthly Charge	Sum, Lns. 26, 30	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.13
	BILLING AND COLLECTION CHARGES:																			
32	Total Plant Investment Monthly Charges	Sum, Lns. 22 and 31	2.63	0.00	0.00	0.00	0.00	0.00	0.00	2.46	0.00	0.00	0.00	0.00	0.00	0.00	3.27	0.50	0.00	
33	B&C Factor		0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	
34	Total Monthly B&C Charge	Ln 32 times Ln 33	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.04
35	**TOTAL MONTHLY INV. RELATED CHARGES**	**Sum, Lns. 22, 31, 34**	**2.65**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**2.47**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**3.28**	**0.50**	**0.00**	**8.89**
	MONTHLY PRODUCT ADMINISTRATION RELATED CHARGES:																			
36	Direct Assigned Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
37	Direct Assigned Monthly Charges	Ln 35 times Ln 36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
38	Product Management Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
39	Product Management Monthly Charges	Ln 35 times Ln 38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
40	Sales Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
41	Monthly Sales Charges	Ln. 35 times Ln 40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
42	Advertising Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
43	Monthly Advertising Charges	Ln 35 times Ln 42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
44	Business Fees (Other Taxes) Expense Factor		0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	
45	Monthly Business Fees Charges	n. 44 times Sum Lns. 37, 39, 41, 4	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.02
46	Total Monthly Product Administration Charges	Sum, Lns. 37, 39, 41, 43, 45	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.02

QWEST CORPORATION
Arizona Corporation Commission Docket No. 00000A-00-0194

TELRIC -- DS3 UDIT, OVER 50 Miles -- VARIABLE COMPONENT

Ln No	Plant Account Description Account Number	Source	Other 357C	Digital 257C	Premises 257CP	SONET 257CS	SONET Premises 257CSP	Poles 1C	C-Wire 3C	Conduit 4C	Cable UG Metal 5C	Drop Buried 35C	Drop Aerial 42C	Cable Bur. Metal 45C	Cable Aer. Metal 52C	Cable Bld. Metal 62C	Cable UG Fiber 85C	Cable Bur. Fiber 845C	Cable Bld. Fiber 862C	TOTALS
			Circuit - Digital					Outside Plant												
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(n)	(o)	(p)	(q)	(r)	(s)	(t)
47	TOTAL MO. "DIRECTLY ASSIGNED" CHGS.	Sum, Lns. 35, 46	2.65	0.00	0.00	0.00	0.00	0.00	0.00	2.47	0.00	0.00	0.00	0.00	0.00	0.00	3.29	0.50	0.00	8.91
	MONTHLY "NETWORK SUPPORT" EXPENSE:																			
48	Network Operations Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
49	Network Operations Monthly Charges	Ln 47 times Ln 48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
50	"Network Support" Expense Factor		0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	
51	Network Support" Monthly Charges	Ln 47 times Ln 50	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.01	0.00	0.14
52	Total Monthly Network Support Charges	Sum, Lns. 49, 51	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.01	0.00	0.14
53	TOTAL MONTHLY DIRECT + SUPPORT	Sum, Lns. 47, 52	2.69	0.00	0.00	0.00	0.00	0.00	0.00	2.51	0.00	0.00	0.00	0.00	0.00	0.00	3.34	0.51	0.00	9.05
	MONTHLY "DIRECTLY ATTRIBUTED" EXPENSES:																			
54	General Support Assets Expense Factor		0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	
55	General Support Assets Monthly Charges	Ln 47 times Ln 54	0.22	0.00	0.00	0.00	0.00	0.00	0.00	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.27	0.04	0.00	0.73
56	Gen Pur Computer Expense Factor		0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	
57	Gen Pur Computer Monthly Charges	Ln 47 times Ln 56	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.12	0.02	0.00	0.31
58	Uncollectible Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
59	Uncollectible Monthly Charges	Ln 47 times Ln 58	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
60	Accounting Expense Factor		0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	
61	Accounting Expense Monthly Charges	Ln 47 times Ln 60	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.07
62	Human Resources Expense Factor		0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	
63	Human Resources Monthly Charges	Ln 47 times Ln 62	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.07
64	Information Management Expense Factor		0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	
65	Information Management Monthly Charges	Ln 47 times Ln 64	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.18	0.03	0.00	0.49
66	Intangible Expense Factor		0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	
67	Intangible Expense Monthly Charges	Ln 47 times Ln 66	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.02
68	Total Monthly "Directly Attributed" Expense Charges	Sum Lns. 55, 57, 59, 61, 63, 65, 67	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.47	0.00	0.00	0.00	0.00	0.00	0.00	0.63	0.09	0.00	1.69
69	TOTAL MONTHLY "DIRECT" CHARGES	Sum, Lns. 53, 69	3.20	0.00	0.00	0.00	0.00	0.00	0.00	2.98	0.00	0.00	0.00	0.00	0.00	0.00	3.96	0.60	0.00	10.75
	MONTHLY COMMON EXPENSES:																			
70	Executive Expense Factor		0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	
71	Executive Expense Monthly Charges	Ln 69 times Ln 70	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.07
72	Planning Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
73	Planning Expense Monthly Charges	Ln 69 times Ln 72	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
74	External Relations Expense Factor		0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	
75	External Relations Monthly Charges	Ln 69 times Ln 74	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.01	0.00	0.10
76	Legal Expense Factor		0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	
77	Legal Expense Monthly Charges	Ln 69 times Ln 76	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.06
78	Procurement Expense Factor		0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	
79	Procurement Expense Monthly Charges	Ln 69 times Ln 78	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.02
80	Research and Development Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
81	R&D Expense Monthly Charges	Ln 69 times Ln 80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
82	General Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
83	General Expense Monthly Charges	Ln 69 times Ln. 82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
84	Total Monthly "Common" Expenses Charges	um, Lns. 71, 73, 75, 77, 79, 81, 8	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.01	0.00	0.26
85	TOTAL MONTHLY "TELRIC"	Sum, Lns. 69, 84	$3.27	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$3.05	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$4.06	$0.62	$0.00	$11.00

QWEST CORPORATION
Arizona Corporation Commission Docket No 00000A-00-0194

TELRIC -- OC3 UDIT, 0-8 Miles -- FIXED COMPONENT

Ln No	Plant Account Description Account Number	Source	Circuit - Digital: Other 357C	Digital 257C	Premises 257CP	SONET 257CS	SONET Premises 257CSP	Poles 1C	C-Wire 3C	Conduit 4C	Outside Plant: Cable UG Metal 5C	Drop Buried 35C	Drop Aerial 42C	Cable Bur. Metal 45C	Cable Aer. Metal 52C	Cable Bld. Metal 62C	Cable UG Fiber 85C	Cable Bur. Fiber 845C	Cable Bld. Fiber 862C	TOTALS
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(n)	(o)	(p)	(q)	(r)	(s)	(t)
	INVESTMENT																			
1	Equipment		26 808 05	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	26,808.05
2	Bldg Loading Fact		0.0418	0 0418	0 0000	0 0418	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	
3	Building	Ln 1 times Ln 2	1 120 58	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	1,120.58
4	Land Loading Fact		0.0036	0 0036	0 0000	0 0036	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	
5	Land	Ln 1 times Ln 4	96 51	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	96.51
6	Loaded Investment	Sum, Lns. 1, 3, 5	28,025 14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	28,025.14
	MONTHLY INVESTMENT-RELATED CHARGES, EQUIPMENT:																			
7	Avg Depr Factor		0.1082	0.1082	0.1082	0.1082	0.1082	0.0674	0.1404	0.0227	0.0772	0.0944	0.1137	0.0944	0.1137	0.0598	0.0900	0.0662	0.0990	
8	Avg Annual Depr	Ln 1 times Ln 7	2 900 83	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	
9	Avg Monthly Depr	Ln 8 divided by 12	241 72	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	241.72
10	Avg COM Factor		0.0420	0.0420	0.0420	0.0420	0.0420	0.0500	0.0755	0.0581	0.0546	0.0552	0.0536	0.0552	0.0536	0.0562	0.0562	0.0538	0.0589	
11	Avg Annual COM	Ln 1 times Ln 10	1 125 94	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	
12	Avg Monthly COM	Ln 11 divided by 12	93 83	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	93.83
13	Avg IT Factor		0.0175	0.0175	0.0175	0.0175	0.0175	0.0208	0.0314	0.0242	0.0227	0.0230	0.0223	0.0230	0.0223	0.0234	0.0234	0.0224	0.0245	
14	Avg Annual IT	Ln 1 times Ln 13	469 14	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	
15	Avg Monthly IT	Ln 14 divided by 12	39 10	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	39.10
16	Total Maint Factor		0.0182	0.0118	0.0118	0.0118	0.0118	0.0046	0.0156	0.0044	0.0376	0.0846	0.1158	0.0846	0.1158	0.0156	0.0376	0.0139	0.0200	
17	Total Annual Maint	Ln 1 times Ln 16	487 91	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	
18	Total Monthly Maint	Ln 17 divided by 12	40 66	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	40.66
19	Ad Valorem Tax Factor		0 0136	0 0136	0 0136	0 0136	0 0136	0 0136	0 0136	0 0136	0 0136	0 0136	0 0136	0 0136	0 0136	0 0136	0 0136	0 0136	0 0136	
20	Annual AV Taxes	Ln 1 times Ln 19	364 59	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	
21	Monthly AV Taxes	Ln 20 divided by 12	30 38	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	30.38
22	Tot Mo Inv Related Charge, Equip		445 68	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	445.68
	MONTHLY INVESTMENT-RELATED CHARGES, L&B LOADINGS:																			
23	Building Loading	Ln 3 above	1 120 58	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	
24	Total AC Factor, Bldg		0.2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	
25	Bldg Annual Charge	Ln 23 times Ln 24	250 11	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	
26	Bldg Monthly Charge	Ln 25 divided by 12	20 84	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	20.84
27	Land Loading	Ln 5 above	96 51	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	
28	Total AC Factor, Land		0.2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	
29	Land Annual Charge	Ln 27 times Ln 28	21 54	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	
30	Land Monthly Charge	Ln 29 divided by 12	1 80	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	1.80
31	Total L&B Monthly Charge	Sum, Lns 26, 30	22 84	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	22.84
	BILLING AND COLLECTION CHARGES:																			
32	Total Plant Investment Monthly Charges	Sum, Lns 22 and 31	468 32	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	
33	B&C Factor		0.0043	0 0043	0 0043	0 0043	0 0043	0 0043	0.0043	0 0043	0 0043	0 0043	0 0043	0 0043	0 0043	0 0043	0 0043	0 0043	0 0043	
34	Total Monthly B&C Charge	Ln 32 times Ln 33	2 02	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	2.02
35	TOTAL MONTHLY INV. RELATED CHARGES	Sum, Lns. 22, 31, 34	470.34	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	470.34
	MONTHLY PRODUCT ADMINISTRATION RELATED CHARGES:																			
36	Direct Assigned Expense Factor		0.0000	0 0000	0.0000	0 0000	0 0000	0 0000	0 0000	0.0000	0 0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
37	Direct Assigned Monthly Charges	Ln. 35 times Ln 36	0 00	0 00	0 00	0 00	0 00	0 00	0.00	0.00	0 00	0 00	0.00	0.00	0.00	0 00	0.00	0.00	0.00	0.00
38	Product Management Expense Factor		0.0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
39	Product Management Monthly Charges	Ln 35 times Ln 38	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0.00
40	Sales Expense Factor		0.0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	
41	Monthly Sales Charges	Ln. 35 times Ln 40	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0.00
42	Advertising Expense Factor		0.0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	
43	Monthly Advertising Charges	Ln. 35 times Ln. 42	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0.00
44	Business Fees (Other Taxes) Expense Factor		0.0019	0 0019	0 0019	0 0019	0.0019	0 0019	0 0019	0 0019	0 0019	0 0019	0 0019	0 0019	0 0019	0 0019	0.0019	0 0019	0 0019	
45	Monthly Business Fees Charges	Ln. 44 times Sum Lns. 37, 39, 41, 4	0 89	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0.89
46	Total Monthly Product Administration Charges	Sum, Lns. 37, 39, 41, 43, 45	0 89	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0.89

QWEST CORPORATION
Arizona Corporation Commission Docket No. 00000A-00-0194

TELRIC -- OC3 UDIT, 0-8 Miles -- FIXED COMPONENT

Ln. No	Plant Account Description Account Number	Source	Circuit - Digital: Other 357C	Digital 257C	Premises 257CP	SONET 257CS	SONET Premises 257CSP	Outside Plant: Poles 1C	C-Wire 3C	Conduit 4C	Cable UG Metal 5C	Drop Buried 35C	Drop Aerial 42C	Cable Bur. Metal 45C	Cable Aer. Metal 52C	Cable Bld. Metal 62C	Cable UG Fiber 85C	Cable Bur. Fiber 845C	Cable Bld. Fiber 862C	TOTALS
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(n)	(o)	(p)	(q)	(r)	(s)	(t)
47	TOTAL MO. "DIRECTLY ASSIGNED" CHGS.	Sum, Lns. 35, 46	471.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	471.23
	MONTHLY "NETWORK SUPPORT" EXPENSE:																			
48	Network Operations Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
49	Network Operations Monthly Charges	Ln 47 times Ln 48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
50	"Network Support" Expense Factor		0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	
51	Network Support" Monthly Charges	Ln 47 times Ln 50	7.54	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.54
52	Total Monthly Network Support Charges	Sum, Lns 49, 51	7.54	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.54
53	TOTAL MONTHLY DIRECT + SUPPORT	Sum, Lns. 47, 52	478.77	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	478.77
	MONTHLY "DIRECTLY ATTRIBUTED" EXPENSES:																			
54	General Support Assets Expense Factor		0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	
55	General Support Assets Monthly Charges	Ln 47 times Ln 54	38.41	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	38.41
56	Gen Pur Computer Expense Factor		0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	
57	Gen Pur Computer Monthly Charges	Ln 47 times Ln 56	16.49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	16.49
58	Uncollectible Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
59	Uncollectible Monthly Charges	Ln 47 times Ln 58	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
60	Accounting Expense Factor		0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	
61	Accounting Expense Monthly Charges	Ln 47 times Ln 60	3.77	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.77
62	Human Resources Expense Factor		0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	
63	Human Resources Monthly Charges	Ln 47 times Ln 62	3.68	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.68
64	Information Management Expense Factor		0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	
65	Information Management Monthly Charges	Ln 47 times Ln 64	26.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	26.06
66	Intangible Expense Factor		0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	
67	Intangible Expense Monthly Charges	Ln 47 times Ln 66	1.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.23
68	Total Monthly "Directly Attributed" Expense Charges	Sum Lns 55, 57, 59, 61, 63, 65, 67	89.63	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	89.63
69	TOTAL MONTHLY "DIRECT" CHARGES	Sum, Lns. 53, 69	568.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	568.40
	MONTHLY COMMON EXPENSES:																			
70	Executive Expense Factor		0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	
71	Executive Expense Monthly Charges	Ln 69 times Ln 70	3.69	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.69
72	Planning Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
73	Planning Expense Monthly Charges	Ln 69 times Ln 72	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
74	External Relations Expense Factor		0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	
75	External Relations Monthly Charges	Ln 69 times Ln 74	5.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.23
76	Legal Expense Factor		0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	
77	Legal Expense Monthly Charges	Ln 69 times Ln 76	3.41	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.41
78	Procurement Expense Factor		0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	
79	Procurement Expense Monthly Charges	Ln 69 times Ln 78	1.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.25
80	Research and Development Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
81	R&D Expense Monthly Charges	Ln 69 times Ln 80	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02
82	General Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
83	General Expense Monthly Charges	Ln 69 times Ln 82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
84	Total Monthly "Common" Expenses Charges	um, Lns 71, 73, 75, 77, 79, 81, 8	13.81	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.81
85	TOTAL MONTHLY "TELRIC"	Sum, Lns. 69, 84	*********	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$582.00

QWEST CORPORATION
Arizona Corporation Commission Docket No. 00000A-00-0194

TELRIC -- OC3 UDIT, 0-8 Miles -- VARIABLE COMPONENT

Ln No.	Plant Account Description Account Number	Source	Other 357C	Digital 257C	Premises 257CP	SONET 257CS	SONET Premises 257CSP	Poles 1C	C-Wire 3C	Conduit 4C	Cable UG Metal. 5C	Drop Buried 35C	Drop Aerial 42C	Cable Bur. Metal. 45C	Cable Aer. Metal 52C	Cable Bld. Metal 62C	Cable UG Fiber 85C	Cable Bur. Fiber 845C	Cable Bld. Fiber 862C	TOTALS
			Circuit - Digital					Outside Plant												
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(n)	(o)	(p)	(q)	(r)	(s)	(t)
	INVESTMENT																			
1	Equipment		3 545 89	0 00	0 00	0 00	0 00	0 00	0 00	3,161 64	0 00	0 00	0.00	0 00	0 00	0 00	2,346.24	0 00	0 00	9 053.77
2	Bldg Loading Fact		0.0418	0 0418	0 0000	0 0418	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0.0000	0.0000	0 0000	0 0000	0.0000	0.0000	0 0000	
3	Building	Ln 1 times Ln 2	148 22	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0.00	0 00	0 00	0 00	0.00	0 00	0 00	148.22
4	Land Loading Fact		0 0036	0 0036	0 0000	0 0036	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0.0000	0.0000	0 0000	0 0000	0.0000	0.0000	0 0000	
5	Land	Ln 1 times Ln 4	12 77	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0.00	0 00	0 00	0 00	0.00	0 00	0 00	12.77
6	**Loaded Investment**	**Sum, Lns. 1, 3, 5**	**3,706 87**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**3,161.64**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**2,346.24**	**0.00**	**0.00**	**9,214.75**
	MONTHLY INVESTMENT-RELATED CHARGES, EQUIPMENT:																			
7	Avg Depr Factor		0.1082	0.1082	0.1082	0.1082	0.1082	0.0674	0.1404	0.0227	0.0772	0.0944	0.1137	0.0944	0.1137	0.0598	0.0900	0.0662	0.0990	
8	Avg Annual Depr	Ln 1 times Ln 7	383 87	0 00	0 00	0 00	0 00	0 00	0 00	71 77	0 00	0 00	0 00	0 00	0 00	0 00	211.16	0 00	0 00	
9	Avg Monthly Depr	Ln 8 divided by 12	31 97	0 00	0 00	0 00	0 00	0 00	0 00	5 98	0 00	0 00	0.00	0 00	0 00	0 00	17.60	0 00	0 00	55.55
10	Avg COM Factor		0.0420	0.0420	0.0420	0.0420	0.0420	0.0500	0.0755	0.0581	0.0546	0.0552	0.0536	0.0552	0.0536	0.0562	0.0562	0.0538	0.0589	
11	Avg Annual COM	Ln 1 times Ln 10	148 93	0 00	0 00	0 00	0 00	0 00	0 00	183 69	0 00	0 00	0 00	0 00	0 00	0 00	131 86	0 00	0 00	
12	Avg Monthly COM	Ln 11 divided by 12	12 41	0 00	0 00	0 00	0 00	0 00	0 00	15 31	0 00	0 00	0 00	0 00	0 00	0 00	10.99	0 00	0 00	38.71
13	Avg IT Factor		0.0175	0.0175	0.0175	0.0175	0.0175	0.0208	0.0314	0.0242	0.0227	0.0230	0.0223	0.0230	0.0223	0.0234	0.0234	0.0224	0.0245	
14	Avg Annual IT	Ln 1 times Ln 13	62 05	0 00	0 00	0 00	0 00	0 00	0 00	76 51	0 00	0 00	0 00	0 00	0 00	0 00	54.90	0 00	0 00	
15	Avg Monthly IT	Ln 14 divided by 12	5 17	0 00	0 00	0 00	0 00	0 00	0 00	6 38	0 00	0 00	0 00	0 00	0 00	0 00	4 58	0 00	0 00	16.12
16	Total Maint Factor		0.0182	0.0118	0.0118	0.0118	0.0118	0.0046	0.0156	0.0046	0.0376	0.0845	0.1158	0.0845	0.1158	0.0156	0.0376	0.0139	0.0200	
17	Total Annual Maint	Ln 1 times Ln 16	64 54	0 00	0 00	0 00	0 00	0 00	0 00	14 54	0 00	0 00	0 00	0 00	0 00	0 00	66 22	0 00	0 00	
18	Total Monthly Maint	Ln 17 divided by 12	5 38	0 00	0 00	0 00	0 00	0 00	0 00	1 21	0 00	0 00	0 00	0 00	0 00	0 00	7 35	0 00	0 00	13.94
19	Ad Valorem Tax Factor		0 0136	0 0136	0 0136	0 0136	0 0136	0 0136	0 0136	0 0136	0 0136	0 0136	0 0136	0 0136	0 0136	0 0136	0 0136	0 0136	0 0136	
20	Annual AV Taxes	Ln 1 times Ln 19	48 22	0 00	0 00	0 00	0 00	0 00	0 00	43 00	0 00	0 00	0 00	0 00	0 00	0 00	31 91	0 00	0 00	
21	Monthly AV Taxes	Ln 20 divided by 12	4 02	0 00	0 00	0 00	0 00	0 00	0 00	3 58	0 00	0 00	0 00	0 00	0 00	0 00	2 66	0 00	0 00	10.26
22	Tot Mo Inv Related Charge, Equip		58 95	0 00	0 00	0 00	0 00	0 00	0 00	32 46	0 00	0 00	0 00	0 00	0 00	0 00	43 17	0 00	0 00	134 58
	MONTHLY INVESTMENT-RELATED CHARGES, L&B LOADINGS																			
23	Building Loading	Ln 3 above	148 22	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	
24	Total AC Factor, Bldg		0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	
25	Bldg Annual Charge	Ln 23 times Ln 24	33 08	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	
26	Bldg Monthly Charge	Ln 25 divided by 12	2 76	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	2 76
27	Land Loading	Ln 5 above	12 77	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	
28	Total AC Factor, Land		0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	
29	Land Annual Charge	Ln 27 times Ln 28	2 85	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	
30	Land Monthly Charge	Ln 29 divided by 12	0 24	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0.24
31	Total L&B Monthly Charge	Sum, Lns. 26, 30	2 99	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	2.99
	BILLING AND COLLECTION CHARGES:																			
32	Total Plant Investment Monthly Charges	Sum, Lns 22 and 31	61 94	0 00	0 00	0 00	0 00	0 00	0 00	32 46	0 00	0 00	0 00	0 00	0 00	0 00	43 17	0 00	0 00	
33	B&C Factor		0.0043	0 0043	0 0043	0 0043	0 0043	0 0043	0 0043	0 0043	0 0043	0 0043	0 0043	0 0043	0 0043	0 0043	0 0043	0 0043	0 0043	
34	Total Monthly B&C Charge	Ln 32 times Ln 33	0 27	0 00	0 00	0 00	0 00	0 00	0 00	0 14	0 00	0 00	0 00	0 00	0 00	0 00	0 19	0 00	0 00	0.59
35	**TOTAL MONTHLY INV. RELATED CHARGES**	**Sum, Lns. 22, 31, 34**	**62.21**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**32.60**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**43.36**	**0.00**	**0.00**	**138.17**
	MONTHLY PRODUCT ADMINISTRATION RELATED CHARGES:																			
36	Direct Assigned Expense Factor		0.0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000
37	Direct Assigned Monthly Charges	Ln 35 times Ln 36	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0.00
38	Product Management Expense Factor		0.0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	
39	Product Management Monthly Charges	Ln 35 times Ln 38	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0.00
40	Sales Expense Factor		0.0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	
41	Monthly Sales Charges	Ln 35 times Ln 40	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0.00
42	Advertising Expense Factor		0.0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	
43	Monthly Advertising Charges	Ln 35 times Ln 42	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0.00
44	Business Fees (Other Taxes) Expense Factor		0.0019	0 0019	0 0019	0 0019	0 0019	0 0019	0 0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	
45	Monthly Business Fees Charges	Ln 44 times Sum Lns. 37, 39, 41, 4	0 12	0.00	0 00	0 00	0.00	0 00	0 00	0.06	0.00	0.00	0.00	0.00	0 00	0.00	0.08	0.00	0.00	0.26
46	Total Monthly Product Administration Charges	Sum, Lns. 37, 39, 41, 43, 45	0 12	0.00	0.00	0 00	0 00	0.00	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.00	0.00	0.26

QWEST CORPORATION
Arizona Corporation Commission Docket No. 00000A-00-0194

TELRIC -- OC3 UDIT, 0-8 Miles -- VARIABLE COMPONENT

Ln No. (a)	Plant Account Description Account Number (b)	Source (c)	Circuit - Digital: Other 357C (d)	Digital 257C (e)	Premises 257CP (f)	SONET 257CS (g)	SONET Premises 257CSP (h)	Outside Plant: Poles 1C (i)	C-Wire 3C (j)	Conduit 4C (k)	Cable UG Metal 5C (l)	Drop Buried 35C (m)	Drop Aerial 42C (n)	Cable Bur. Metal. 45C (n)	Cable Aer. Metal. 52C (o)	Cable Bld. Metal 62C (p)	Cable UG Fiber 85C (q)	Cable Bur. Fiber 845C (r)	Cable Bld. Fiber 862C (s)	TOTALS (t)
47	TOTAL MO. "DIRECTLY ASSIGNED" CHGS.	Sum, Lns. 35, 46	62.33	0.00	0.00	0.00	0.00	0.00	0.00	32.66	0.00	0.00	0.00	0.00	0.00	0.00	43.44	0.00	0.00	138.43
	MONTHLY "NETWORK SUPPORT" EXPENSE:																			
48	Network Operations Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
49	Network Operations Monthly Charges	Ln 47 times Ln 48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
50	"Network Support" Expense Factor		0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	
51	Network Support" Monthly Charges	Ln 47 times Ln 50	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.52	0.00	0.00	0.00	0.00	0.00	0.00	0.70	0.00	0.00	2.21
52	Total Monthly Network Support Charges	Sum, Lns 49, 51	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.52	0.00	0.00	0.00	0.00	0.00	0.00	0.70	0.00	0.00	2.21
53	TOTAL MONTHLY DIRECT + SUPPORT	Sum, Lns. 47, 52	63.33	0.00	0.00	0.00	0.00	0.00	0.00	33.18	0.00	0.00	0.00	0.00	0.00	0.00	44.13	0.00	0.00	140.64
	MONTHLY "DIRECTLY ATTRIBUTED" EXPENSES:																			
54	General Support Assets Expense Factor		0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	
55	General Support Assets Monthly Charges	Ln 47 times Ln 54	5.08	0.00	0.00	0.00	0.00	0.00	0.00	2.66	0.00	0.00	0.00	0.00	0.00	0.00	3.54	0.00	0.00	11.28
56	Gen Pur Computer Expense Factor		0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	
57	Gen Pur Computer Monthly Charges	Ln 47 times Ln 56	2.18	0.00	0.00	0.00	0.00	0.00	0.00	1.14	0.00	0.00	0.00	0.00	0.00	0.00	1.52	0.00	0.00	4.85
58	Uncollectible Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
59	Uncollectible Monthly Charges	Ln 47 times Ln 58	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
60	Accounting Expense Factor		0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	
61	Accounting Expense Monthly Charges	Ln 47 times Ln 60	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.26	0.00	0.00	0.00	0.00	0.00	0.00	0.35	0.00	0.00	1.11
62	Human Resources Expense Factor		0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	
63	Human Resources Monthly Charges	Ln 47 times Ln 62	0.49	0.00	0.00	0.00	0.00	0.00	0.00	0.25	0.00	0.00	0.00	0.00	0.00	0.00	0.34	0.00	0.00	1.08
64	Information Management Expense Factor		0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	
65	Information Management Monthly Charges	Ln 47 times Ln 64	3.45	0.00	0.00	0.00	0.00	0.00	0.00	1.81	0.00	0.00	0.00	0.00	0.00	0.00	2.40	0.00	0.00	7.66
66	Intangible Expense Factor		0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	
67	Intangible Expense Monthly Charges	Ln 47 times Ln 66	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.11	0.00	0.00	0.36
68	Total Monthly "Directly Attributed" Expense Charges	Sum Lns 55, 57, 59, 61, 63, 65, 67	11.86	0.00	0.00	0.00	0.00	0.00	0.00	6.21	0.00	0.00	0.00	0.00	0.00	0.00	8.26	0.00	0.00	26.33
69	TOTAL MONTHLY "DIRECT" CHARGES	Sum, Lns. 53, 69	75.18	0.00	0.00	0.00	0.00	0.00	0.00	39.40	0.00	0.00	0.00	0.00	0.00	0.00	52.40	0.00	0.00	166.97
	MONTHLY COMMON EXPENSES:																			
70	Executive Expense Factor		0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	
71	Executive Expense Monthly Charges	Ln 69 times Ln 70	0.49	0.00	0.00	0.00	0.00	0.00	0.00	0.26	0.00	0.00	0.00	0.00	0.00	0.00	0.34	0.00	0.00	1.09
72	Planning Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
73	Planning Expense Monthly Charges	Ln 69 times Ln 72	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
74	External Relations Expense Factor		0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	
75	External Relations Monthly Charges	Ln 69 times Ln 74	0.69	0.00	0.00	0.00	0.00	0.00	0.00	0.36	0.00	0.00	0.00	0.00	0.00	0.00	0.48	0.00	0.00	1.54
76	Legal Expense Factor		0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	
77	Legal Expense Monthly Charges	Ln 69 times Ln 76	0.45	0.00	0.00	0.00	0.00	0.00	0.00	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.31	0.00	0.00	1.00
78	Procurement Expense Factor		0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	
79	Procurement Expense Monthly Charges	Ln 69 times Ln 78	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.12	0.00	0.00	0.37
80	Research and Development Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
81	R&D Expense Monthly Charges	Ln 69 times Ln 80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
82	General Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
83	General Expense Monthly Charges	Ln 69 times Ln 82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
84	Total Monthly "Common" Expenses Charges	um, Lns. 71, 73, 75, 77, 79, 81, 8	1.80	0.00	0.00	0.00	0.00	0.00	0.00	0.94	0.00	0.00	0.00	0.00	0.00	0.00	1.25	0.00	0.00	4.00
85	TOTAL MONTHLY "TELRIC"	Sum, Lns. 69, 84	$76.98	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$40.34	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$53.65	$0.00	$0.00	$170.97

QWEST CORPORATION
Arizona Corporation Commission Docket No. 00000A-00-0194

TELRIC -- OC3 UDIT, 8-25 Miles -- FIXED COMPONENT

Ln No	Plant Account Description Account Number	Source	Other 357C	Digital 257C	Premises 257CP	SONET 257CS	SONET Premises 257CSP	Poles 1C	C-Wire 3C	Conduit 4C	Cable UG Metal 5C	Drop Buried 35C	Drop Aerial 42C	Cable Bur. Metal 45C	Cable Aer. Metal 52C	Cable Bld. Metal 62C	Cable UG Fiber 85C	Cable Bur. Fiber 845C	Cable Bld. Fiber 862C	TOTALS
			Circuit - Digital					Outside Plant												
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(n)	(o)	(p)	(q)	(r)	(s)	(t)
	INVESTMENT																			
1	Equipment		27,005.87	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	27,005.87
2	Bldg Loading Fact		0.0418	0.0418	0.0000	0.0418	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
3	Building	Ln 1 times Ln 2	1,128.85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1,128.85
4	Land Loading Fact		0.0036	0.0036	0.0000	0.0036	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
5	Land	Ln 1 times Ln 4	97.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	97.22
6	**Loaded Investment**	**Sum, Lns. 1, 3, 5**	**28,231.94**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**28,231.94**
	MONTHLY INVESTMENT-RELATED CHARGES, EQUIPMENT:																			
7	Avg Depr Factor		0.1082	0.1082	0.1082	0.1082	0.1082	0.0674	0.1404	0.0227	0.0772	0.0944	0.1137	0.0944	0.1137	0.0598	0.0900	0.0662	0.0990	
8	Avg Annual Depr	Ln 1 times Ln 7	2,922.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
9	Avg Monthly Depr	Ln 8 divided by 12	243.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	243.50
10	Avg COM Factor		0.0420	0.0420	0.0420	0.0420	0.0420	0.0500	0.0755	0.0581	0.0546	0.0552	0.0536	0.0552	0.0536	0.0562	0.0562	0.0538	0.0589	
11	Avg Annual COM	Ln 1 times Ln 10	1,134.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
12	Avg Monthly COM	Ln 11 divided by 12	94.52	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	94.52
13	Avg IT Factor		0.0175	0.0175	0.0175	0.0175	0.0175	0.0208	0.0314	0.0242	0.0227	0.0230	0.0223	0.0230	0.0223	0.0234	0.0234	0.0224	0.0245	
14	Avg Annual IT	Ln 1 times Ln 13	472.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
15	Avg Monthly IT	Ln 14 divided by 12	39.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	39.38
16	Total Maint Factor		0.0182	0.0118	0.0118	0.0118	0.0118	0.0045	0.0156	0.0046	0.0376	0.0845	0.1158	0.0845	0.1158	0.0156	0.0376	0.0139	0.0200	
17	Total Annual Maint	Ln 1 times Ln 16	491.51	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
18	Total Monthly Maint	Ln 17 divided by 12	40.96	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	40.96
19	Ad Valorem Tax Factor		0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	
20	Annual AV Taxes	Ln 1 times Ln 19	367.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
21	Monthly AV Taxes	Ln 20 divided by 12	30.61	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	30.61
22	Tot Mo Inv Related Charge, Equip		448.97	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	448.97
	MONTHLY INVESTMENT-RELATED CHARGES, L&B LOADINGS:																			
23	Building Loading	Ln 3, above	1,128.85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
24	Total AC Factor, Bldg		0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	
25	Bldg Annual Charge	Ln 23 times Ln 24	251.98	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
26	Bldg Monthly Charge	Ln 25 divided by 12	21.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.00
27	Land Loading	Ln 5, above	97.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
28	Total AC Factor, Land		0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	
29	Land Annual Charge	Ln 27 times Ln 28	21.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
30	Land Monthly Charge	Ln 29 divided by 12	1.81	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.81
31	Total L&B Monthly Charge	Sum, Lns. 26, 30	22.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	22.80
	BILLING AND COLLECTION CHARGES:																			
32	Total Plant Investment Monthly Charges	Sum, Lns. 22 and 31	471.78	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
33	B&C Factor		0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	
34	Total Monthly B&C Charge	Ln 32 times Ln 33	2.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.03
35	**TOTAL MONTHLY INV. RELATED CHARGES**	**Sum, Lns. 22, 31, 34**	**473.81**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**473.81**
	MONTHLY PRODUCT ADMINISTRATION RELATED CHARGES:																			
36	Direct Assigned Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
37	Direct Assigned Monthly Charges	Ln 35 times Ln 36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
38	Product Management Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
39	Product Management Monthly Charges	Ln 35 times Ln 38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
40	Sales Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
41	Monthly Sales Charges	Ln 35 times Ln 40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
42	Advertising Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
43	Monthly Advertising Charges	Ln. 35 times Ln. 42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
44	Business Fees (Other Taxes) Expense Factor		0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	
45	Monthly Business Fees Charges	Ln. 44 times Sum Lns. 37, 39, 41, 4	0.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.90
46	Total Monthly Product Administration Charges	Sum, Lns. 37, 39, 41, 43, 45	0.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.90

QWEST CORPORATION
Arizona Corporation Commission Docket No. 00000A-00-0194

TELRIC -- OC3 UDIT, 8-25 Miles -- FIXED COMPONENT

Ln. No. (a)	Plant Account Description Account Number (b)	Source (c)	Other 357C (d)	Circuit - Digital: Digital 257C (e)	Circuit - Digital: Premises 257CP (f)	Circuit - Digital: SONET 257CS (g)	Circuit - Digital: SONET Premises 257CSP (h)	Poles 1C (i)	C-Wire 3C (j)	Conduit 4C (k)	Outside Plant: Cable UG Metal. 5C (l)	Drop Buried 35C (m)	Drop Aerial 42C (n)	Cable Bur. Metal 45C (n)	Cable Aer. Metal 52C (o)	Cable Bld. Metal 62C (p)	Cable UG Fiber 85C (q)	Cable Bur. Fiber 845C (r)	Cable Bld. Fiber 862C (s)	TOTALS (t)
47	TOTAL MO. "DIRECTLY ASSIGNED" CHGS.	Sum, Lns. 35, 46	474.71	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	474.71
	MONTHLY "NETWORK SUPPORT" EXPENSE:																			
48	Network Operations Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
49	Network Operations Monthly Charges	Ln 47 times Ln 48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
50	"Network Support" Expense Factor		0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	
51	Network Support" Monthly Charges	Ln 47 times Ln 50	7.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.60
52	Total Monthly Network Support Charges	Sum, Lns. 49, 51	7.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.60
53	TOTAL MONTHLY DIRECT + SUPPORT	Sum, Lns. 47, 52	482.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	482.30
	MONTHLY "DIRECTLY ATTRIBUTED" EXPENSES:																			
54	General Support Assets Expense Factor		0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	
55	General Support Assets Monthly Charges	Ln 47 times Ln 54	38.69	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	38.69
56	Gen Pur Computer Expense Factor		0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	
57	Gen Pur Computer Monthly Charges	Ln 47 times Ln 56	16.61	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	16.61
58	Uncollectible Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
59	Uncollectible Monthly Charges	Ln 47 times Ln 58	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
60	Accounting Expense Factor		0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	
61	Accounting Expense Monthly Charges	Ln 47 times Ln 60	3.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.80
62	Human Resources Expense Factor		0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	
63	Human Resources Monthly Charges	Ln 47 times Ln 62	3.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.70
64	Information Management Expense Factor		0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	
65	Information Management Monthly Charges	Ln 47 times Ln 64	26.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	26.25
66	Intangible Expense Factor		0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	
67	Intangible Expense Monthly Charges	Ln 47 times Ln 66	1.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.23
68	Total Monthly "Directly Attributed" Expense Charges	Sum Lns. 55, 57, 59, 61, 63, 65, 67	90.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	90.29
69	TOTAL MONTHLY "DIRECT" CHARGES	Sum, Lns. 53, 69	572.59	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	572.59
	MONTHLY COMMON EXPENSES:																			
70	Executive Expense Factor		0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	
71	Executive Expense Monthly Charges	Ln 69 times Ln 70	3.72	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.72
72	Planning Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
73	Planning Expense Monthly Charges	Ln 69 times Ln 72	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
74	External Relations Expense Factor		0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	
75	External Relations Monthly Charges	Ln 69 times Ln 74	5.27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.27
76	Legal Expense Factor		0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	
77	Legal Expense Monthly Charges	Ln 69 times Ln 76	3.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.44
78	Procurement Expense Factor		0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	
79	Procurement Expense Monthly Charges	Ln 69 times Ln 78	1.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.26
80	Research and Development Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
81	R&D Expense Monthly Charges	Ln 69 times Ln 80	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02
82	General Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
83	General Expense Monthly Charges	Ln 69 times Ln 82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
84	Total Monthly "Common" Expenses Charges	um, Lns. 71, 73, 75, 77, 79, 81, 8	13.71	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.71
85	TOTAL MONTHLY "TELRIC"	Sum, Lns. 69, 84	*********	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$586.30

QWEST CORPORATION
Arizona Corporation Commission Docket No. 00000A-00-0194

TELRIC -- OC3 UDIT, 8-25 Miles -- VARIABLE COMPONENT

Ln No	Plant Account Description Account Number	Source	Circuit - Digital								Outside Plant									
			Other 357C	Digital 257C	Premises 257CP	SONET 257CS	SONET Premises 257CSP	Poles 1C	C-Wire 3C	Conduit 4C	Cable UG Metal 5C	Drop Buried 35C	Drop Aerial 42C	Cable Bur. Metal 45C	Cable Aer. Metal 52C	Cable Bld. Metal 62C	Cable UG Fiber 85C	Cable Bur. Fiber 845C	Cable Bld. Fiber 862C	TOTALS
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)	(s)	(t)	
	INVESTMENT																			
1	Equipment		579.80	0.00	0.00	0.00	0.00	0.00	0.00	1,143.66	0.00	0.00	0.00	0.00	0.00	0.00	848.71	30.32	0.00	2,602.49
2	Bldg Loading Fact		0.0418	0.0418	0.0000	0.0418	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
3	Building	Ln 1 times Ln 2	24.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24.24
4	Land Loading Fact		0.0036	0.0036	0.0000	0.0036	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
5	Land	Ln 1 times Ln 4	2.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.09
6	**Loaded Investment**	**Sum, Lns. 1, 3, 5**	**606.12**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**1,143.66**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**848.71**	**30.32**	**0.00**	**2,628.81**
	MONTHLY INVESTMENT-RELATED CHARGES, EQUIPMENT:																			
7	Avg Depr Factor		0.1082	0.1082	0.1082	0.1082	0.1082	0.0674	0.1404	0.0227	0.0772	0.0944	0.1137	0.0944	0.1137	0.0598	0.0900	0.0662	0.0990	
8	Avg Annual Depr	Ln 1 times Ln 7	62.73	0.00	0.00	0.00	0.00	0.00	0.00	25.96	0.00	0.00	0.00	0.00	0.00	0.00	76.38	2.01	0.00	
9	Avg Monthly Depr	Ln 8 divided by 12	5.23	0.00	0.00	0.00	0.00	0.00	0.00	2.16	0.00	0.00	0.00	0.00	0.00	0.00	6.37	0.17	0.00	13.92
10	Avg COM Factor		0.0420	0.0420	0.0420	0.0420	0.0420	0.0500	0.0755	0.0581	0.0546	0.0552	0.0536	0.0552	0.0536	0.0562	0.0562	0.0536	0.0589	
11	Avg Annual COM	Ln 1 times Ln 10	24.35	0.00	0.00	0.00	0.00	0.00	0.00	66.45	0.00	0.00	0.00	0.00	0.00	0.00	47.70	1.63	0.00	
12	Avg Monthly COM	Ln 11 divided by 12	2.03	0.00	0.00	0.00	0.00	0.00	0.00	5.54	0.00	0.00	0.00	0.00	0.00	0.00	3.97	0.14	0.00	11.68
13	Avg IT Factor		0.0175	0.0175	0.0175	0.0175	0.0175	0.0208	0.0314	0.0242	0.0227	0.0230	0.0223	0.0230	0.0223	0.0234	0.0234	0.0224	0.0245	
14	Avg Annual IT	Ln 1 times Ln 13	10.15	0.00	0.00	0.00	0.00	0.00	0.00	27.68	0.00	0.00	0.00	0.00	0.00	0.00	19.86	0.68	0.00	
15	Avg Monthly IT	Ln 14 divided by 12	0.85	0.00	0.00	0.00	0.00	0.00	0.00	2.31	0.00	0.00	0.00	0.00	0.00	0.00	1.65	0.06	0.00	4.86
16	Total Maint Factor		0.0182	0.0118	0.0118	0.0118	0.0118	0.0045	0.0156	0.0046	0.0376	0.0845	0.1158	0.0845	0.1158	0.0156	0.0376	0.0139	0.0200	
17	Total Annual Maint	Ln 1 times Ln 16	10.55	0.00	0.00	0.00	0.00	0.00	0.00	5.26	0.00	0.00	0.00	0.00	0.00	0.00	31.91	0.42	0.00	
18	Total Monthly Maint	Ln 17 divided by 12	0.88	0.00	0.00	0.00	0.00	0.00	0.00	0.44	0.00	0.00	0.00	0.00	0.00	0.00	2.66	0.04	0.00	4.01
19	Ad Valorem Tax Factor		0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	
20	Annual AV Taxes	Ln 1 times Ln 19	7.89	0.00	0.00	0.00	0.00	0.00	0.00	15.55	0.00	0.00	0.00	0.00	0.00	0.00	11.54	0.41	0.00	
21	Monthly AV Taxes	Ln 20 divided by 12	0.66	0.00	0.00	0.00	0.00	0.00	0.00	1.30	0.00	0.00	0.00	0.00	0.00	0.00	0.96	0.03	0.00	2.95
22	Tot Mo Inv Related Charge, Equip		9.64	0.00	0.00	0.00	0.00	0.00	0.00	11.74	0.00	0.00	0.00	0.00	0.00	0.00	15.62	0.43	0.00	37.43
	MONTHLY INVESTMENT-RELATED CHARGES, L&B LOADINGS																			
23	Building Loading	Ln 3 above	24.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
24	Total AC Factor, Bldg		0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	
25	Bldg Annual Charge	Ln 23 times Ln 24	5.41	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
26	Bldg Monthly Charge	Ln 25 divided by 12	0.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.45
27	Land Loading	Ln 5 above	2.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
28	Total AC Factor, Land		0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	
29	Land Annual Charge	Ln 27 times Ln 28	0.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
30	Land Monthly Charge	Ln 29 divided by 12	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04
31	Total L&B Monthly Charge	Sum, Lns 26, 30	0.49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.49
	BILLING AND COLLECTION CHARGES:																			
32	Total Plant Investment Monthly Charges	Sum, Lns 22 and 31	10.13	0.00	0.00	0.00	0.00	0.00	0.00	11.74	0.00	0.00	0.00	0.00	0.00	0.00	15.62	0.43	0.00	
33	B&C Factor		0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	
34	Total Monthly B&C Charge	Ln 32 times Ln 33	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.00	0.00	0.18
35	**TOTAL MONTHLY INV. RELATED CHARGES**	**Sum, Lns. 22, 31, 34**	**10.17**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**11.79**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**15.68**	**0.43**	**0.00**	**38.08**
	MONTHLY PRODUCT ADMINISTRATION RELATED CHARGES:																			
36	Direct Assigned Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
37	Direct Assigned Monthly Charges	Ln 35 times Ln 36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
38	Product Management Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
39	Product Management Monthly Charges	Ln 35 times Ln 38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
40	Sales Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
41	Monthly Sales Charges	Ln. 35 times Ln. 40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
42	Advertising Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
43	Monthly Advertising Charges	Ln. 35 times Ln. 42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
44	Business Fees (Other Taxes) Expense Factor		0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	
45	Monthly Business Fees Charges	n. 44 times Sum Lns. 37, 39, 41, 4	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.07
46	Total Monthly Product Administration Charges	Sum, Lns. 37, 39, 41, 43, 45	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.07

QWEST CORPORATION
Arizona Corporation Commission Docket No. 00000A-00-0194

TELRIC -- OC3 UDIT, 8-25 Miles -- VARIABLE COMPONENT

Ln. No.	Plant Account Description Account Number	Source	Circuit - Digital: Other 357C	Digital 257C	Premises 257CP	SONET 257CS	SONET Premises 257CSP	Outside Plant: Poles 1C	C-Wire 3C	Conduit 4C	Cable UG Metal. 5C	Drop Buried 35C	Drop Aerial 42C	Cable Bur. Metal. 45C	Cable Aer. Metal 52C	Cable Bld. Metal 62C	Cable UG Fiber 85C	Cable Bur. Fiber 845C	Cable Bld. Fiber 862C	TOTALS
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(n)	(o)	(p)	(q)	(r)	(s)	(t)
47	TOTAL MO. "DIRECTLY ASSIGNED" CHGS.	Sum, Lns. 35, 46	10.19	0.00	0.00	0.00	0.00	0.00	0.00	11.81	0.00	0.00	0.00	0.00	0.00	0.00	15.71	0.43	0.00	38.15
	MONTHLY "NETWORK SUPPORT" EXPENSE:																			
48	Network Operations Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
49	Network Operations Monthly Charges	Ln 47 times Ln 48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
50	"Network Support" Expense Factor		0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	
51	Network Support" Monthly Charges	Ln 47 times Ln 50	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.25	0.01	0.00	0.61
52	Total Monthly Network Support Charges	Sum, Lns. 49, 51	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.25	0.01	0.00	0.61
53	TOTAL MONTHLY DIRECT + SUPPORT	Sum, Lns. 47, 52	10.35	0.00	0.00	0.00	0.00	0.00	0.00	12.00	0.00	0.00	0.00	0.00	0.00	0.00	15.96	0.44	0.00	38.76
	MONTHLY "DIRECTLY ATTRIBUTED" EXPENSES:																			
54	General Support Assets Expense Factor		0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	
55	General Support Assets Monthly Charges	Ln 47 times Ln 54	0.83	0.00	0.00	0.00	0.00	0.00	0.00	0.96	0.00	0.00	0.00	0.00	0.00	0.00	1.28	0.04	0.00	3.11
56	Gen Pur Computer Expense Factor		0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	
57	Gen Pur Computer Monthly Charges	Ln 47 times Ln 56	0.36	0.00	0.00	0.00	0.00	0.00	0.00	0.41	0.00	0.00	0.00	0.00	0.00	0.00	0.55	0.02	0.00	1.34
58	Uncollectible Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
59	Uncollectible Monthly Charges	Ln 47 times Ln 58	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
60	Accounting Expense Factor		0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	
61	Accounting Expense Monthly Charges	Ln 47 times Ln 60	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.13	0.00	0.00	0.31
62	Human Resources Expense Factor		0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	
63	Human Resources Monthly Charges	Ln 47 times Ln 62	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.12	0.00	0.00	0.30
64	Information Management Expense Factor		0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	
65	Information Management Monthly Charges	Ln 47 times Ln 64	0.56	0.00	0.00	0.00	0.00	0.00	0.00	0.65	0.00	0.00	0.00	0.00	0.00	0.00	0.87	0.02	0.00	2.11
66	Intangible Expense Factor		0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	
67	Intangible Expense Monthly Charges	Ln 47 times Ln 66	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.10
68	Total Monthly "Directly Attributed" Expense Charges	Sum Lns. 55, 57, 59, 61, 63, 65, 67	1.94	0.00	0.00	0.00	0.00	0.00	0.00	2.25	0.00	0.00	0.00	0.00	0.00	0.00	2.99	0.08	0.00	7.28
69	TOTAL MONTHLY "DIRECT" CHARGES	Sum, Lns. 53, 69	12.29	0.00	0.00	0.00	0.00	0.00	0.00	14.25	0.00	0.00	0.00	0.00	0.00	0.00	18.95	0.52	0.00	46.02
	MONTHLY COMMON EXPENSES:																			
70	Executive Expense Factor		0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	
71	Executive Expense Monthly Charges	Ln 69 times Ln 70	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.12	0.00	0.00	0.30
72	Planning Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
73	Planning Expense Monthly Charges	Ln 69 times Ln 72	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
74	External Relations Expense Factor		0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	
75	External Relations Monthly Charges	Ln 69 times Ln 74	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.17	0.00	0.00	0.42
76	Legal Expense Factor		0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	
77	Legal Expense Monthly Charges	Ln 69 times Ln 76	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.11	0.00	0.00	0.28
78	Procurement Expense Factor		0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	
79	Procurement Expense Monthly Charges	Ln 69 times Ln 78	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.10
80	Research and Development Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
81	R&D Expense Monthly Charges	Ln 69 times Ln 80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
82	General Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
83	General Expense Monthly Charges	Ln 69 times Ln 82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
84	Total Monthly "Common" Expenses Charges	um, Lns. 71, 73, 75, 77, 79, 81, 8	0.29	0.00	0.00	0.00	0.00	0.00	0.00	0.34	0.00	0.00	0.00	0.00	0.00	0.00	0.45	0.01	0.00	1.10
85	TOTAL MONTHLY "TELRIC"	Sum, Lns. 69, 84	$12.59	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$14.59	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$19.41	$0.53	$0.00	$47.12

QWEST CORPORATION
Arizona Corporation Commission Docket No. 00000A-00-0194

TELRIC -- OC3 UDIT, 25-50 Miles -- FIXED COMPONENT

Ln No.	Plant Account Description Account Number	Source	Circuit - Digital: Other 357C	Digital 257C	Premises 257CP	SONET 257CS	SONET Premises 257CSP	Poles 1C	C-Wire 3C	Conduit 4C	Outside Plant: Cable UG Metal 5C	Drop Buried 35C	Drop Aerial 42C	Cable Bur. Metal 45C	Cable Aer. Metal 52C	Cable Bld. Metal 62C	Cable UG Fiber 85C	Cable Bur. Fiber 845C	Cable Bld. Fiber 862C	TOTALS
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(n)	(o)	(p)	(q)	(r)	(s)	(t)
	INVESTMENT																			
1	Equipment		25 936 06	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0.00	0 00	0 00	0 00	0.00	0 00	0.00	25 936 06
2	Bldg Loading Fact		0.0418	0 0418	0 0000	0 0418	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0.0000	0 0000	0.0000	
3	Building	Ln 1 times Ln 2	1 084 13	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0.00	0 00	0 00	0 00	0.00	0 00	0.00	1 084 13
4	Land Loading Fact		0.0036	0 0036	0 0000	0 0036	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0.0000	0 0000	0.0000	
5	Land	Ln 1 times Ln 4	93 37	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0.00	0 00	0 00	0 00	0.00	0 00	0.00	93.37
6	**Loaded Investment**	**Sum, Lns. 1, 3, 5**	**27,113.56**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**27,113.56**
	MONTHLY INVESTMENT-RELATED CHARGES, EQUIPMENT:																			
7	Avg Depr Factor		0.1082	0.1082	0.1082	0.1082	0.1082	0.0674	0.1404	0.0227	0.0772	0.0944	0.1137	0.0944	0.1137	0.0598	0.0900	0.0662	0.0990	
8	Avg Annual Depr	Ln 1 times Ln 7	2,806 26	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	
9	Avg Monthly Depr	Ln 8 divided by 12	233 86	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	233.86
10	Avg COM Factor		0.0420	0.0420	0.0420	0.0420	0.0420	0.0500	0.0755	0.0581	0.0546	0.0552	0.0536	0.0552	0.0536	0.0562	0.0562	0.0538	0.0589	
11	Avg Annual COM	Ln 1 times Ln 10	1 089 31	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	
12	Avg Monthly COM	Ln 11 divided by 12	90 78	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	90.78
13	Avg IT Factor		0.0175	0.0175	0.0175	0.0175	0.0175	0.0208	0.0314	0.0242	0.0227	0.0230	0.0223	0.0230	0.0223	0.0234	0.0234	0.0224	0.0245	
14	Avg Annual IT	Ln 1 times Ln 13	453 88	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	
15	Avg Monthly IT	Ln 14 divided by 12	37 82	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	37.82
16	Total Maint Factor		0.0182	0.0118	0.0118	0.0118	0.0118	0.0045	0.0156	0.0046	0.0376	0.0845	0.1158	0.0845	0.1158	0.0156	0.0376	0.0139	0.0200	
17	Total Annual Maint	Ln 1 times Ln 16	472 04	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	
18	Total Monthly Maint	Ln 17 divided by 12	39 34	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	39.34
19	Ad Valorem Tax Factor		0.0136	0 0136	0 0136	0 0136	0 0136	0 0136	0 0136	0 0136	0 0136	0 0136	0 0136	0 0136	0 0136	0 0136	0 0136	0 0136	0 0136	
20	Annual AV Taxes	Ln 1 times Ln 19	352 73	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	
21	Monthly AV Taxes	Ln 20 divided by 12	29 39	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	29.39
22	Tot Mo Inv Related Charge, Equip		431 19	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	431 19
	MONTHLY INVESTMENT-RELATED CHARGES, L&B LOADINGS																			
23	Building Loading	Ln 3 above	1 084 13	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	
24	Total AC Factor, Bldg		0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	
25	Bldg Annual Charge	Ln 23 times Ln 24	241 98	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	
26	Bldg Monthly Charge	Ln 25 divided by 12	20 16	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	20.16
27	Land Loading	Ln 5, above	93 37	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	
28	Total AC Factor, Land		0.2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0.2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0.2232	0 2232	0.2232	
29	Land Annual Charge	Ln 27 times Ln 28	20 84	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	
30	Land Monthly Charge	Ln 29 divided by 12	1 74	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	1.74
31	Total L&B Monthly Charge	Sum, Lns 26, 30	21 90	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	21.90
	BILLING AND COLLECTION CHARGES:																			
32	Total Plant Investment Monthly Charges	Sum, Lns 22 and 31	453 09	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	
33	B&C Factor		0.0043	0 0043	0 0043	0 0043	0 0043	0 0043	0 0043	0 0043	0 0043	0 0043	0 0043	0 0043	0 0043	0 0043	0 0043	0 0043	0 0043	
34	Total Monthly B&C Charge	Ln 32 times Ln 33	1 95	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	1.95
35	**TOTAL MONTHLY INV. RELATED CHARGES**	**Sum, Lns. 22, 31, 34**	**455.04**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**455.04**
	MONTHLY PRODUCT ADMINISTRATION RELATED CHARGES:																			
36	Direct Assigned Expense Factor		0.0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0.0000	0 0000	0.0000	0.0000
37	Direct Assigned Monthly Charges	Ln 35 times Ln 36	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0.00
38	Product Management Expense Factor		0.0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0.0000	0 0000	0.0000	
39	Product Management Monthly Charges	Ln 35 times Ln 38	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0.00
40	Sales Expense Factor		0.0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0.0000	0 0000	0.0000	
41	Monthly Sales Charges	Ln 35 times Ln 40	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0.00
42	Advertising Expense Factor		0.0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0.0000	0 0000	0.0000	
43	Monthly Advertising Charges	Ln 35 times Ln 42	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0.00
44	Business Fees (Other Taxes) Expense Factor		0.0019	0 0019	0.0019	0 0019	0 0019	0 0019	0 0019	0 0019	0 0019	0 0019	0 0019	0 0019	0 0019	0 0019	0.0019	0 0019	0.0019	
45	Monthly Business Fees Charges	n. 44 times Sum Lns. 37, 39, 41, 4	0 86	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0.86
46	Total Monthly Product Administration Charges	Sum, Lns 37, 39, 41, 43, 45	0 86	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0.86

QWEST CORPORATION
Arizona Corporation Commission Docket No. 00000A-00-0194

TELRIC -- OC3 UDIT, 25-50 Miles -- FIXED COMPONENT

Ln. No.	Plant Account Description Account Number	Source	Circuit - Digital: Other 357C	Digital 257C	Premises 257CP	SONET 257CS	SONET Premises 257CSP	Poles 1C	C-Wire 3C	Conduit 4C	Outside Plant: Cable UG Metal 5C	Drop Buried 35C	Drop Aerial 42C	Cable Bur. Metal 45C	Cable Aer. Metal 52C	Cable Bld. Metal 62C	Cable UG Fiber 85C	Cable Bur. Fiber 845C	Cable Bld. Fiber 862C	TOTALS
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(n)	(o)	(p)	(q)	(r)	(s)	(t)
47	TOTAL MO. "DIRECTLY ASSIGNED" CHGS.	Sum, Lns. 35, 46	455.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	455.90
	MONTHLY "NETWORK SUPPORT" EXPENSE:																			
48	Network Operations Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
49	Network Operations Monthly Charges	Ln 47 times Ln 48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
50	"Network Support" Expense Factor		0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	
51	Network Support" Monthly Charges	Ln 47 times Ln 50	7.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.29
52	Total Monthly Network Support Charges	Sum, Lns. 49, 51	7.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.29
53	TOTAL MONTHLY DIRECT + SUPPORT	Sum, Lns. 47, 52	463.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	463.20
	MONTHLY "DIRECTLY ATTRIBUTED" EXPENSES:																			
54	General Support Assets Expense Factor		0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	
55	General Support Assets Monthly Charges	Ln 47 times Ln 54	37.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	37.16
56	Gen Pur Computer Expense Factor		0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	
57	Gen Pur Computer Monthly Charges	Ln 47 times Ln 56	15.96	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	15.96
58	Uncollectible Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
59	Uncollectible Monthly Charges	Ln 47 times Ln 58	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
60	Accounting Expense Factor		0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	
61	Accounting Expense Monthly Charges	Ln 47 times Ln 60	3.65	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.65
62	Human Resources Expense Factor		0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	
63	Human Resources Monthly Charges	Ln 47 times Ln 62	3.56	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.56
64	Information Management Expense Factor		0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	
65	Information Management Monthly Charges	Ln 47 times Ln 64	25.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	25.21
66	Intangible Expense Factor		0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	
67	Intangible Expense Monthly Charges	Ln 47 times Ln 66	1.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.19
68	Total Monthly "Directly Attributed" Expense Charges	Sum Lns. 55, 57, 59, 61, 63, 65, 67	86.71	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	86.71
69	TOTAL MONTHLY "DIRECT" CHARGES	Sum, Lns. 53, 69	549.91	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	549.91
	MONTHLY COMMON EXPENSES:																			
70	Executive Expense Factor		0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	
71	Executive Expense Monthly Charges	Ln 69 times Ln 70	3.57	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.57
72	Planning Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
73	Planning Expense Monthly Charges	Ln 69 times Ln 72	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
74	External Relations Expense Factor		0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	
75	External Relations Monthly Charges	Ln 69 times Ln 74	5.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.06
76	Legal Expense Factor		0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	
77	Legal Expense Monthly Charges	Ln 69 times Ln 76	3.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.30
78	Procurement Expense Factor		0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	
79	Procurement Expense Monthly Charges	Ln 69 times Ln 78	1.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.21
80	Research and Development Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
81	R&D Expense Monthly Charges	Ln 69 times Ln 80	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02
82	General Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
83	General Expense Monthly Charges	Ln 69 times Ln 82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
84	Total Monthly "Common" Expenses Charges	um, Lns. 71, 73, 75, 77, 79, 81, 8	13.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.18
85	TOTAL MONTHLY "TELRIC"	Sum, Lns. 69, 84	*********	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$563.07

QWEST CORPORATION
Arizona Corporation Commission Docket No 00000A-00-0194

TELRIC -- OC3 UDIT, 25-50 Miles -- VARIABLE COMPONENT

Ln No	Plant Account Description Account Number	Source	Circuit - Digital: Other 357C	Digital 257C	Premises 257CP	SONET 257CS	SONET Premises 257CSP	Poles 1C	C-Wire 3C	Conduit 4C	Outside Plant: Cable UG Metal 5C	Drop Buried 35C	Drop Aerial 42C	Cable Bur. Metal 45C	Cable Aer. Metal 52C	Cable Bld. Metal 62C	Cable UG Fiber 85C	Cable Bur. Fiber 845C	Cable Bld. Fiber 862C	TOTALS
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(n)	(o)	(p)	(q)	(r)	(s)	(t)
	INVESTMENT																			
1	Equipment		1,231.85	0.00	0.00	0.00	0.00	0.00	0.00	1,173.50	0.00	0.00	0.00	0.00	0.00	0.00	870.85	0.00	0.00	3,276.00
2	Bldg Loading Fact		0.0418	0.0418	0.0000	0.0418	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
3	Building	Ln 1 times Ln 2	51.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	51.48
4	Land Loading Fact		0.0036	0.0036	0.0000	0.0036	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
5	Land	Ln 1 times Ln 4	4.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.43
6	**Loaded Investment**	**Sum, Lns. 1, 3, 5**	**1,287.57**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**1,173.50**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**870.85**	**0.00**	**0.00**	**3,331.52**
	MONTHLY INVESTMENT-RELATED CHARGES, EQUIPMENT:																			
7	Avg Depr Factor		0.1082	0.1082	0.1082	0.1082	0.1082	0.0674	0.1404	0.0227	0.0772	0.0944	0.1137	0.0944	0.1137	0.0598	0.0900	0.0662	0.0990	
8	Avg Annual Depr	Ln 1 times Ln 7	133.26	0.00	0.00	0.00	0.00	0.00	0.00	26.64	0.00	0.00	0.00	0.00	0.00	0.00	78.38	0.00	0.00	
9	Avg Monthly Depr	Ln 8 divided by 12	11.11	0.00	0.00	0.00	0.00	0.00	0.00	2.22	0.00	0.00	0.00	0.00	0.00	0.00	6.53	0.00	0.00	19.86
10	Avg COM Factor		0.0420	0.0420	0.0420	0.0420	0.0420	0.0500	0.0755	0.0581	0.0546	0.0552	0.0536	0.0552	0.0536	0.0562	0.0562	0.0538	0.0589	
11	Avg Annual COM	Ln 1 times Ln 10	51.73	0.00	0.00	0.00	0.00	0.00	0.00	68.18	0.00	0.00	0.00	0.00	0.00	0.00	48.94	0.00	0.00	
12	Avg Monthly COM	Ln 11 divided by 12	4.31	0.00	0.00	0.00	0.00	0.00	0.00	5.68	0.00	0.00	0.00	0.00	0.00	0.00	4.08	0.00	0.00	14.07
13	Avg IT Factor		0.0175	0.0175	0.0175	0.0175	0.0175	0.0208	0.0314	0.0242	0.0227	0.0230	0.0223	0.0230	0.0223	0.0234	0.0234	0.0224	0.0245	
14	Avg Annual IT	Ln 1 times Ln 13	21.55	0.00	0.00	0.00	0.00	0.00	0.00	28.40	0.00	0.00	0.00	0.00	0.00	0.00	20.38	0.00	0.00	
15	Avg Monthly IT	Ln 14 divided by 12	1.80	0.00	0.00	0.00	0.00	0.00	0.00	2.37	0.00	0.00	0.00	0.00	0.00	0.00	1.70	0.00	0.00	5.86
16	Total Maint Factor		0.0182	0.0118	0.0118	0.0118	0.0118	0.0045	0.0156	0.0046	0.0376	0.0845	0.1158	0.0845	0.1158	0.0156	0.0376	0.0139	0.0200	
17	Total Annual Maint	Ln 1 times Ln 16	22.42	0.00	0.00	0.00	0.00	0.00	0.00	5.40	0.00	0.00	0.00	0.00	0.00	0.00	32.74	0.00	0.00	
18	Total Monthly Maint	Ln 17 divided by 12	1.87	0.00	0.00	0.00	0.00	0.00	0.00	0.45	0.00	0.00	0.00	0.00	0.00	0.00	2.73	0.00	0.00	5.05
19	Ad Valorem Tax Factor		0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	
20	Annual AV Taxes	Ln 1 times Ln 19	16.75	0.00	0.00	0.00	0.00	0.00	0.00	15.96	0.00	0.00	0.00	0.00	0.00	0.00	11.84	0.00	0.00	
21	Monthly AV Taxes	Ln 20 divided by 12	1.40	0.00	0.00	0.00	0.00	0.00	0.00	1.33	0.00	0.00	0.00	0.00	0.00	0.00	0.99	0.00	0.00	3.71
22	Tot Mo Inv Related Charge Equip		20.48	0.00	0.00	0.00	0.00	0.00	0.00	12.05	0.00	0.00	0.00	0.00	0.00	0.00	18.02	0.00	0.00	48.55
	MONTHLY INVESTMENT-RELATED CHARGES, L&B LOADINGS																			
23	Building Loading	Ln 3 above	51.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
24	Total AC Factor, Bldg		0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	
25	Bldg Annual Charge	Ln 23 times Ln 24	11.49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
26	Bldg Monthly Charge	Ln 25 divided by 12	0.96	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.96
27	Land Loading	Ln 5 above	4.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
28	Total AC Factor, Land		0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	
29	Land Annual Charge	Ln 27 times Ln 28	0.99	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
30	Land Monthly Charge	Ln 29 divided by 12	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.08
31	Total L&B Monthly Charge	Sum, Lns 26, 30	1.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.04
	BILLING AND COLLECTION CHARGES:																			
32	Total Plant Investment Monthly Charges	Sum, Lns 22 and 31	21.52	0.00	0.00	0.00	0.00	0.00	0.00	12.05	0.00	0.00	0.00	0.00	0.00	0.00	18.02	0.00	0.00	
33	B&C Factor		0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	
34	Total Monthly B&C Charge	Ln 32 times Ln 33	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.00	0.00	0.21
35	**TOTAL MONTHLY INV. RELATED CHARGES**	**Sum, Lns. 22, 31, 34**	**21.61**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**12.10**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**18.09**	**0.00**	**0.00**	**49.80**
	MONTHLY PRODUCT ADMINISTRATION RELATED CHARGES:																			
36	Direct Assigned Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
37	Direct Assigned Monthly Charges	Ln 35 times Ln 36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
38	Product Management Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
39	Product Management Monthly Charges	Ln 35 times Ln 38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
40	Sales Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
41	Monthly Sales Charges	Ln. 35 times Ln. 40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
42	Advertising Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
43	Monthly Advertising Charges	Ln. 35 times Ln. 42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
44	Business Fees (Other Taxes) Expense Factor		0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	
45	Monthly Business Fees Charges	In 44 times Sum Lns. 37, 39, 41, 4	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.09
46	Total Monthly Product Administration Charges	Sum, Lns. 37, 39, 41, 43, 45	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.09

QWEST CORPORATION
Arizona Corporation Commission Docket No. 00000A-00-0194

TELRIC -- OC3 UDIT, 25-50 Miles -- VARIABLE COMPONENT

Ln. No. (a)	Plant Account Description Account Number (b)	Source (c)	Circuit - Digital: Other 357C (d)	Digital 257C (e)	Premises 257CP (f)	SONET 257CS (g)	SONET Premises 257CSP (h)	Poles 1C (i)	C-Wire 3C (j)	Conduit 4C (k)	Outside Plant: Cable UG Metal. 5C (l)	Drop Buried 35C (m)	Drop Aerial 42C (n)	Cable Bur. Metal. 45C (n)	Cable Aer. Metal. 52C (o)	Cable Bld. Metal 62C (p)	Cable UG Fiber 85C (q)	Cable Bur. Fiber 845C (r)	Cable Bld. Fiber 862C (s)	TOTALS (t)
47	TOTAL MO. "DIRECTLY ASSIGNED" CHGS.	Sum, Lns. 35, 46	21.65	0.00	0.00	0.00	0.00	0.00	0.00	12.12	0.00	0.00	0.00	0.00	0.00	0.00	16.12	0.00	0.00	49.90
	MONTHLY "NETWORK SUPPORT" EXPENSE:																			
48	Network Operations Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
49	Network Operations Monthly Charges	Ln 47 times Ln 48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
50	"Network Support" Expense Factor		0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	
51	Network Support" Monthly Charges	Ln 47 times Ln 50	0.35	0.00	0.00	0.00	0.00	0.00	0.00	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.26	0.00	0.00	0.80
52	Total Monthly Network Support Charges	Sum, Lns. 49, 51	0.35	0.00	0.00	0.00	0.00	0.00	0.00	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.26	0.00	0.00	0.80
53	TOTAL MONTHLY DIRECT + SUPPORT	Sum, Lns. 47, 52	22.00	0.00	0.00	0.00	0.00	0.00	0.00	12.32	0.00	0.00	0.00	0.00	0.00	0.00	16.38	0.00	0.00	50.69
	MONTHLY "DIRECTLY ATTRIBUTED" EXPENSES:																			
54	General Support Assets Expense Factor		0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	
55	General Support Assets Monthly Charges	Ln 47 times Ln 54	1.76	0.00	0.00	0.00	0.00	0.00	0.00	0.99	0.00	0.00	0.00	0.00	0.00	0.00	1.31	0.00	0.00	4.07
56	Gen Pur Computer Expense Factor		0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	
57	Gen Pur Computer Monthly Charges	Ln 47 times Ln 56	0.76	0.00	0.00	0.00	0.00	0.00	0.00	0.42	0.00	0.00	0.00	0.00	0.00	0.00	0.56	0.00	0.00	1.75
58	Uncollectible Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
59	Uncollectible Monthly Charges	Ln 47 times Ln 58	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
60	Accounting Expense Factor		0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	
61	Accounting Expense Monthly Charges	Ln 47 times Ln 60	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.13	0.00	0.00	0.40
62	Human Resources Expense Factor		0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	
63	Human Resources Monthly Charges	Ln 47 times Ln 62	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.13	0.00	0.00	0.39
64	Information Management Expense Factor		0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	
65	Information Management Monthly Charges	Ln 47 times Ln 64	1.20	0.00	0.00	0.00	0.00	0.00	0.00	0.67	0.00	0.00	0.00	0.00	0.00	0.00	0.89	0.00	0.00	2.76
66	Intangible Expense Factor		0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	
67	Intangible Expense Monthly Charges	Ln 47 times Ln 66	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.13
68	Total Monthly "Directly Attributed" Expense Charges	Sum Lns. 55, 57, 59, 61, 63, 65, 67	4.12	0.00	0.00	0.00	0.00	0.00	0.00	2.31	0.00	0.00	0.00	0.00	0.00	0.00	3.07	0.00	0.00	9.49
69	TOTAL MONTHLY "DIRECT" CHARGES	Sum, Lns. 53, 69	26.11	0.00	0.00	0.00	0.00	0.00	0.00	14.62	0.00	0.00	0.00	0.00	0.00	0.00	19.45	0.00	0.00	60.18
	MONTHLY COMMON EXPENSES:																			
70	Executive Expense Factor		0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	
71	Executive Expense Monthly Charges	Ln 69 times Ln 70	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.13	0.00	0.00	0.39
72	Planning Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
73	Planning Expense Monthly Charges	Ln 69 times Ln 72	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
74	External Relations Expense Factor		0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	
75	External Relations Monthly Charges	Ln 69 times Ln 74	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.18	0.00	0.00	0.55
76	Legal Expense Factor		0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	
77	Legal Expense Monthly Charges	Ln 69 times Ln 76	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.12	0.00	0.00	0.36
78	Procurement Expense Factor		0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	
79	Procurement Expense Monthly Charges	Ln 69 times Ln 78	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.13
80	Research and Development Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
81	R&D Expense Monthly Charges	Ln 69 times Ln 80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
82	General Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
83	General Expense Monthly Charges	Ln 69 times Ln 82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
84	Total Monthly "Common" Expenses Charges	um, Lns. 71, 73, 75, 77, 79, 81, 8	0.63	0.00	0.00	0.00	0.00	0.00	0.00	0.35	0.00	0.00	0.00	0.00	0.00	0.00	0.47	0.00	0.00	1.44
85	TOTAL MONTHLY "TELRIC"	Sum, Lns. 69, 84	$26.74	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$14.97	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$19.91	$0.00	$0.00	$61.62

QWEST CORPORATION
Arizona Corporation Commission Docket No. 00000A-00-0194

TELRIC -- OC3 UDIT, Over 50 Miles -- FIXED COMPONENT

Ln No	Plant Account Description Account Number	Source	Circuit - Digital: Other 357C	Digital 257C	Premises 257CP	SONET 257CS	SONET Premises 257CSP	Poles 1C	C-Wire 3C	Conduit 4C	Outside Plant: Cable UG Metal 5C	Drop Buried 35C	Drop Aerial 42C	Cable Bur. Metal 45C	Cable Aer. Metal 52C	Cable Bld. Metal 62C	Cable UG Fiber 85C	Cable Bur. Fiber 845C	Cable Bld. Fiber 862C	TOTALS
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(n)	(o)	(p)	(q)	(r)	(s)	(t)
	INVESTMENT																			
1	Equipment		26 619 90	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	26,619.90
2	Bldg Loading Fact		0.0418	0 0418	0 0000	0 0418	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	
3	Building	Ln 1 times Ln 2	1 112 71	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	1,112.71
4	Land Loading Fact		0 0036	0 0036	0 0000	0 0036	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	
5	Land	Ln 1 times Ln 4	95 83	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	95.83
6	**Loaded Investment**	**Sum, Lns. 1, 3, 5**	**27,828.44**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**27,828.44**
	MONTHLY INVESTMENT-RELATED CHARGES, EQUIPMENT:																			
7	Avg Depr Factor		0.1082	0.1082	0.1082	0.1082	0.1082	0.0674	0.1404	0.0227	0.0772	0.0944	0.1137	0.0944	0.1137	0.0598	0.0900	0.0662	0.0990	
8	Avg Annual Depr	Ln 1 times Ln 7	2,880 27	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	
9	Avg Monthly Depr	Ln 8 divided by 12	240 02	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	240.02
10	Avg COM Factor		0.0420	0.0420	0.0420	0.0420	0.0420	0.0500	0.0755	0.0581	0.0546	0.0552	0.0536	0.0552	0.0536	0.0562	0.0562	0.0538	0.0589	
11	Avg Annual COM	Ln 1 times Ln 10	1 118 04	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	
12	Avg Monthly COM	Ln 11 divided by 12	93 17	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	93.17
13	Avg IT Factor		0.0175	0 0175	0.0175	0.0175	0.0175	0.0208	0.0314	0.0242	0.0227	0.0230	0.0223	0.0230	0.0223	0.0234	0.0234	0.0224	0.0245	
14	Avg Annual IT	Ln 1 times Ln 13	465 85	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	
15	Avg Monthly IT	Ln 14 divided by 12	38 82	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	38.82
16	Total Maint Factor		0.0182	0.0118	0.0118	0.0118	0.0118	0.0045	0.0156	0.0046	0.0376	0.0845	0.1158	0.0845	0.1158	0.0156	0.0376	0.0139	0.0200	
17	Total Annual Maint	Ln 1 times Ln 16	484 48	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	
18	Total Monthly Maint	Ln 17 divided by 12	40 37	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	40.37
19	Ad Valorem Tax Factor		0.0136	0 0136	0 0136	0 0136	0 0136	0 0136	0 0136	0 0136	0 0136	0 0136	0 0136	0 0136	0 0136	0 0136	0 0136	0 0136	0 0136	
20	Annual AV Taxes	Ln 1 times Ln 19	362 03	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	
21	Monthly AV Taxes	Ln 20 divided by 12	30 17	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	30.17
22	Tot Mo Inv Related Charge, Equip		442 56	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	442.56
	MONTHLY INVESTMENT-RELATED CHARGES, L&B LOADINGS																			
23	Building Loading	Ln 3 above	1 112 71	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	
24	Total AC Factor, Bldg		0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	
25	Bldg Annual Charge	Ln 23 times Ln 24	248 36	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	
26	Bldg Monthly Charge	Ln 25 divided by 12	20 70	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	20.70
27	Land Loading	Ln 5, above	95 83	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	
28	Total AC Factor, Land		0.2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	
29	Land Annual Charge	Ln 27 times Ln 28	21 39	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	
30	Land Monthly Charge	Ln 29 divided by 12	1 78	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	1.78
31	Total L&B Monthly Charge	Sum, Lns 26, 30	22 48	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	22.48
	BILLING AND COLLECTION CHARGES:																			
32	Total Plant Investment Monthly Charges	Sum, Lns 22 and 31	465 03	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	
33	B&C Factor		0.0043	0 0043	0 0043	0 0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	
34	Total Monthly B&C Charge	Ln 32 times Ln 33	2 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	2.00
35	**TOTAL MONTHLY INV. RELATED CHARGES**	**Sum, Lns. 22, 31, 34**	**467.04**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**467.04**
	MONTHLY PRODUCT ADMINISTRATION RELATED CHARGES:																			
36	Direct Assigned Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0 0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0 0000
37	Direct Assigned Monthly Charges	Ln. 35 times Ln 36	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0.00
38	Product Management Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
39	Product Management Monthly Charges	Ln. 35 times Ln 38	0 00	0 00	0 00	0 00	0.00	0 00	0 00	0.00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0.00
40	Sales Expense Factor		0.0000	0 0000	0 0000	0 0000	0.0000	0.0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	
41	Monthly Sales Charges	Ln 35 times Ln. 40	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0.00
42	Advertising Expense Factor		0.0000	0 0000	0 0000	0 0000	0.0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	
43	Monthly Advertising Charges	Ln. 35 times Ln. 42	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0.00
44	Business Fees (Other Taxes) Expense Factor		0.0019	0 0019	0 0019	0.0019	0 0019	0.0019	0 0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	
45	Monthly Business Fees Charges	n. 44 times Sum Lns 37, 39, 41, 4	0 89	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0.89
46	Total Monthly Product Administration Charges	Sum, Lns. 37, 39, 41, 43, 45	0.89	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.89

QWEST CORPORATION
Arizona Corporation Commission Docket No. 00000A-00-0194

TELRIC -- OC3 UDIT, Over 50 Miles -- FIXED COMPONENT

Ln No.	Plant Account Description Account Number	Source	Circuit - Digital: Other 357C	Digital 257C	Premises 257CP	SONET 257CS	SONET Premises 257CSP	Outside Plant: Poles 1C	C-Wire 3C	Conduit 4C	Cable UG Metal 5C	Drop Buried 35C	Drop Aerial 42C	Cable Bur. Metal. 45C	Cable Aer. Metal. 52C	Cable Bld. Metal 62C	Cable UG Fiber 85C	Cable Bur. Fiber 845C	Cable Bld. Fiber 862C	TOTALS
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(n)	(o)	(p)	(q)	(r)	(s)	(t)
47	TOTAL MO. "DIRECTLY ASSIGNED" CHGS.	Sum, Lns. 35, 46	467.92	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	467.92
	MONTHLY "NETWORK SUPPORT" EXPENSE:																			
48	Network Operations Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
49	Network Operations Monthly Charges	Ln 47 times Ln 48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
50	"Network Support" Expense Factor		0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	
51	Network Support" Monthly Charges	Ln 47 times Ln 50	7.49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.49
52	Total Monthly Network Support Charges	Sum, Lns 49, 51	7.49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.49
53	TOTAL MONTHLY DIRECT + SUPPORT	Sum, Lns. 47, 52	475.41	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	475.41
	MONTHLY "DIRECTLY ATTRIBUTED" EXPENSES:																			
54	General Support Assets Expense Factor		0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	
55	General Support Assets Monthly Charges	Ln 47 times Ln 54	38.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	38.14
56	Gen Pur Computer Expense Factor		0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	
57	Gen Pur Computer Monthly Charges	Ln 47 times Ln 56	16.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	16.38
58	Uncollectible Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
59	Uncollectible Monthly Charges	Ln 47 times Ln 58	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
60	Accounting Expense Factor		0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	
61	Accounting Expense Monthly Charges	Ln 47 times Ln 60	3.74	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.74
62	Human Resources Expense Factor		0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	
63	Human Resources Monthly Charges	Ln 47 times Ln 62	3.65	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.65
64	Information Management Expense Factor		0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	
65	Information Management Monthly Charges	Ln 47 times Ln 64	25.88	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	25.88
66	Intangible Expense Factor		0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	
67	Intangible Expense Monthly Charges	Ln 47 times Ln 66	1.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.22
68	Total Monthly "Directly Attributed" Expense Charges	Sum Lns 55, 57, 59, 61, 63, 65, 67	89.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	89.00
69	TOTAL MONTHLY "DIRECT" CHARGES	Sum, Lns. 53, 69	564.41	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	564.41
	MONTHLY COMMON EXPENSES:																			
70	Executive Expense Factor		0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	
71	Executive Expense Monthly Charges	Ln 69 times Ln 70	3.67	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.67
72	Planning Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
73	Planning Expense Monthly Charges	Ln 69 times Ln 72	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
74	External Relations Expense Factor		0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	
75	External Relations Monthly Charges	Ln 69 times Ln 74	5.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.19
76	Legal Expense Factor		0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	
77	Legal Expense Monthly Charges	Ln 69 times Ln 76	3.39	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.39
78	Procurement Expense Factor		0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	
79	Procurement Expense Monthly Charges	Ln 69 times Ln 78	1.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.24
80	Research and Development Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
81	R&D Expense Monthly Charges	Ln 69 times Ln 80	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02
82	General Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
83	General Expense Monthly Charges	Ln 69 times Ln 82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
84	Total Monthly "Common" Expenses Charges	um, Lns 71, 73, 75, 77, 79, 81, 8	13.51	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.51
85	TOTAL MONTHLY "TELRIC"	Sum, Lns. 69, 84	*********	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$577.92

QWEST CORPORATION
Arizona Corporation Commission Docket No. 00000A-00-0194

TELRIC -- OC3 UDIT, Over 50 Miles -- VARIABLE COMPONENT

Ln No	Plant Account Description Account Number	Source	Circuit - Digital: Other 357C	Digital 257C	Premises 257CP	SONET 257CS	SONET Premises 257CSP	Poles 1C	C-Wire 3C	Conduit 4C	Outside Plant: Cable UG Metal 5C	Drop Buried 35C	Drop Aerial 42C	Cable Bur. Metal 45C	Cable Aer. Metal 52C	Cable Bld. Metal 62C	Cable UG Fiber 85C	Cable Bur. Fiber 845C	Cable Bld. Fiber 862C	TOTALS
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(n)	(o)	(p)	(q)	(r)	(s)	(t)
	INVESTMENT																			
1	Equipment		625.32	0.00	0.00	0.00	0.00	0.00	0.00	717.72	0.00	0.00	0.00	0.00	0.00	0.00	532.62	105.12	0.00	1,980.78
2	Bldg Loading Fact		0.0418	0.0418	0.0000	0.0418	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
3	Building	Ln 1 times Ln 2	26.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	26.14
4	Land Loading Fact		0.0036	0.0036	0.0000	0.0036	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
5	Land	Ln 1 times Ln 4	2.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.25
6	**Loaded Investment**	**Sum, Lns. 1, 3, 5**	**653.71**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**717.72**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**532.62**	**105.12**	**0.00**	**2,009.17**
	MONTHLY INVESTMENT-RELATED CHARGES, EQUIPMENT:																			
7	Avg Depr Factor		0.1082	0.1082	0.1082	0.1082	0.1082	0.0674	0.1404	0.0227	0.0772	0.0944	0.1137	0.0944	0.1137	0.0598	0.0900	0.0662	0.0990	
8	Avg Annual Depr	Ln 1 times Ln 7	67.66	0.00	0.00	0.00	0.00	0.00	0.00	16.29	0.00	0.00	0.00	0.00	0.00	0.00	47.94	6.96	0.00	
9	Avg Monthly Depr	Ln 8 divided by 12	5.64	0.00	0.00	0.00	0.00	0.00	0.00	1.36	0.00	0.00	0.00	0.00	0.00	0.00	3.99	0.58	0.00	11.57
10	Avg COM Factor		0.0420	0.0420	0.0420	0.0420	0.0420	0.0500	0.0755	0.0581	0.0546	0.0552	0.0536	0.0552	0.0536	0.0562	0.0562	0.0538	0.0589	
11	Avg Annual COM	Ln 1 times Ln 10	26.26	0.00	0.00	0.00	0.00	0.00	0.00	41.70	0.00	0.00	0.00	0.00	0.00	0.00	29.93	5.66	0.00	
12	Avg Monthly COM	Ln 11 divided by 12	2.19	0.00	0.00	0.00	0.00	0.00	0.00	3.47	0.00	0.00	0.00	0.00	0.00	0.00	2.49	0.47	0.00	8.63
13	Avg IT Factor		0.0175	0.0175	0.0175	0.0175	0.0175	0.0208	0.0314	0.0242	0.0227	0.0230	0.0223	0.0230	0.0223	0.0234	0.0234	0.0224	0.0245	
14	Avg Annual IT	Ln 1 times Ln 13	10.94	0.00	0.00	0.00	0.00	0.00	0.00	17.37	0.00	0.00	0.00	0.00	0.00	0.00	12.46	2.35	0.00	
15	Avg Monthly IT	Ln 14 divided by 12	0.91	0.00	0.00	0.00	0.00	0.00	0.00	1.45	0.00	0.00	0.00	0.00	0.00	0.00	1.04	0.20	0.00	3.59
16	Total Maint Factor		0.0182	0.0118	0.0118	0.0118	0.0118	0.0045	0.0156	0.0046	0.0376	0.0845	0.1158	0.0845	0.1158	0.0156	0.0376	0.0139	0.0200	
17	Total Annual Maint	Ln 1 times Ln 16	11.38	0.00	0.00	0.00	0.00	0.00	0.00	3.30	0.00	0.00	0.00	0.00	0.00	0.00	20.03	1.46	0.00	
18	Total Monthly Maint	Ln 17 divided by 12	0.95	0.00	0.00	0.00	0.00	0.00	0.00	0.28	0.00	0.00	0.00	0.00	0.00	0.00	1.67	0.12	0.00	3.01
19	Ad Valorem Tax Factor		0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	
20	Annual AV Taxes	Ln 1 times Ln 19	8.50	0.00	0.00	0.00	0.00	0.00	0.00	9.76	0.00	0.00	0.00	0.00	0.00	0.00	7.24	1.43	0.00	
21	Monthly AV Taxes	Ln 20 divided by 12	0.71	0.00	0.00	0.00	0.00	0.00	0.00	0.81	0.00	0.00	0.00	0.00	0.00	0.00	0.60	0.12	0.00	2.24
22	Tot Mo Inv Related Charge, Equip		10.40	0.00	0.00	0.00	0.00	0.00	0.00	7.37	0.00	0.00	0.00	0.00	0.00	0.00	9.80	1.49	0.00	29.05
	MONTHLY INVESTMENT-RELATED CHARGES, L&B LOADINGS																			
23	Building Loading	Ln 3 above	26.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
24	Total AC Factor Bldg		0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	
25	Bldg Annual Charge	Ln 23 times Ln 24	5.83	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
26	Bldg Monthly Charge	Ln 25 divided by 12	0.49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.49
27	Land Loading	Ln 5 above	2.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
28	Total AC Factor, Land		0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	
29	Land Annual Charge	Ln 27 times Ln 28	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
30	Land Monthly Charge	Ln 29 divided by 12	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04
31	Total L&B Monthly Charge	Sum, Lns. 26, 30	0.53	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.53
	BILLING AND COLLECTION CHARGES:																			
32	Total Plant Investment Monthly Charges	Sum, Lns. 22 and 31	10.92	0.00	0.00	0.00	0.00	0.00	0.00	7.37	0.00	0.00	0.00	0.00	0.00	0.00	9.80	1.49	0.00	
33	B&C Factor		0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	
34	Total Monthly B&C Charge	Ln 32 times Ln 33	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.01	0.00	0.13
35	**TOTAL MONTHLY INV. RELATED CHARGES**	**Sum, Lns. 22, 31, 34**	**10.97**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**7.40**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**9.84**	**1.49**	**0.00**	**29.71**
	MONTHLY PRODUCT ADMINISTRATION RELATED CHARGES:																			
36	Direct Assigned Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
37	Direct Assigned Monthly Charges	Ln 35 times Ln 36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
38	Product Management Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
39	Product Management Monthly Charges	Ln 35 times Ln 38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
40	Sales Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
41	Monthly Sales Charges	Ln 35 times Ln 40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
42	Advertising Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
43	Monthly Advertising Charges	Ln 35 times Ln 42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
44	Business Fees (Other Taxes) Expense Factor		0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	
45	Monthly Business Fees Charges	Ln 44 times Sum Lns. 37, 39, 41, 4	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.06
46	Total Monthly Product Administration Charges	Sum, Lns. 37, 39, 41, 43, 45	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.06

QWEST CORPORATION
Arizona Corporation Commission Docket No. 00000A-00-0194

TELRIC -- OC3 UDIT, Over 50 Miles -- VARIABLE COMPONENT

Ln. No.	Plant Account Description Account Number	Source	Circuit - Digital					Outside Plant												
			Other 357C	Digital 257C	Premises 257CP	SONET 257CS	SONET Premises 257CSP	Poles 1C	C-Wire 3C	Conduit 4C	Cable UG Metal 5C	Drop Buried 35C	Drop Aerial 42C	Cable Bur. Metal 45C	Cable Aer. Metal 52C	Cable Bld. Metal 62C	Cable UG Fiber 85C	Cable Bur. Fiber 845C	Cable Bld. Fiber 862C	TOTALS
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(n)	(o)	(p)	(q)	(r)	(s)	(t)
47	TOTAL MO. "DIRECTLY ASSIGNED" CHGS.	Sum, Lns. 35, 46	10.99	0.00	0.00	0.00	0.00	0.00	0.00	7.41	0.00	0.00	0.00	0.00	0.00	0.00	9.86	1.50	0.00	29.76
	MONTHLY "NETWORK SUPPORT" EXPENSE:																			
48	Network Operations Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
49	Network Operations Monthly Charges	Ln 47 times Ln 48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
50	"Network Support" Expense Factor		0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	
51	"Network Support" Monthly Charges	Ln 47 times Ln 50	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.16	0.02	0.00	0.48
52	Total Monthly Network Support Charges	Sum, Lns. 49, 51	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.16	0.02	0.00	0.48
53	TOTAL MONTHLY DIRECT + SUPPORT	Sum, Lns. 47, 52	11.17	0.00	0.00	0.00	0.00	0.00	0.00	7.53	0.00	0.00	0.00	0.00	0.00	0.00	10.02	1.52	0.00	30.24
	MONTHLY "DIRECTLY ATTRIBUTED" EXPENSES:																			
54	General Support Assets Expense Factor		0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	
55	General Support Assets Monthly Charges	Ln 47 times Ln 54	0.90	0.00	0.00	0.00	0.00	0.00	0.00	0.60	0.00	0.00	0.00	0.00	0.00	0.00	0.80	0.12	0.00	2.43
56	Gen Pur Computer Expense Factor		0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	
57	Gen Pur Computer Monthly Charges	Ln 47 times Ln 56	0.38	0.00	0.00	0.00	0.00	0.00	0.00	0.26	0.00	0.00	0.00	0.00	0.00	0.00	0.35	0.05	0.00	1.04
58	Uncollectible Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
59	Uncollectible Monthly Charges	Ln 47 times Ln 58	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
60	Accounting Expense Factor		0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	
61	Accounting Expense Monthly Charges	Ln 47 times Ln 60	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.01	0.00	0.24
62	Human Resources Expense Factor		0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	
63	Human Resources Monthly Charges	Ln 47 times Ln 62	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.01	0.00	0.23
64	Information Management Expense Factor		0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	
65	Information Management Monthly Charges	Ln 47 times Ln 64	0.61	0.00	0.00	0.00	0.00	0.00	0.00	0.41	0.00	0.00	0.00	0.00	0.00	0.00	0.55	0.08	0.00	1.65
66	Intangible Expense Factor		0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	
67	Intangible Expense Monthly Charges	Ln 47 times Ln 66	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.08
68	Total Monthly "Directly Attributed" Expense Charges	Sum Lns. 55, 57, 59, 61,63, 65, 67	2.09	0.00	0.00	0.00	0.00	0.00	0.00	1.41	0.00	0.00	0.00	0.00	0.00	0.00	1.88	0.28	0.00	5.66
69	TOTAL MONTHLY "DIRECT" CHARGES	Sum, Lns. 53, 69	13.26	0.00	0.00	0.00	0.00	0.00	0.00	8.94	0.00	0.00	0.00	0.00	0.00	0.00	11.89	1.81	0.00	35.90
	MONTHLY COMMON EXPENSES:																			
70	Executive Expense Factor		0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	
71	Executive Expense Monthly Charges	Ln 69 times Ln 70	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.01	0.00	0.23
72	Planning Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
73	Planning Expense Monthly Charges	Ln 69 times Ln 72	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
74	External Relations Expense Factor		0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	
75	External Relations Monthly Charges	Ln 69 times Ln 74	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.11	0.02	0.00	0.33
76	Legal Expense Factor		0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	
77	Legal Expense Monthly Charges	Ln 69 times Ln 76	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.01	0.00	0.22
78	Procurement Expense Factor		0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	
79	Procurement Expense Monthly Charges	Ln 69 times Ln 78	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.08
80	Research and Development Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
81	R&D Expense Monthly Charges	Ln 69 times Ln 80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
82	General Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
83	General Expense Monthly Charges	Ln 69 times Ln 82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
84	Total Monthly "Common" Expenses Charges	um, Lns. 71, 73, 75, 77, 79, 81, 8	0.32	0.00	0.00	0.00	0.00	0.00	0.00	0.21	0.00	0.00	0.00	0.00	0.00	0.00	0.28	0.04	0.00	0.86
85	TOTAL MONTHLY "TELRIC"	Sum, Lns. 69, 84	$13.58	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$9.16	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$12.18	$1.85	$0.00	$36.76

QWEST CORPORATION
Arizona Corporation Commission Docket No. 00000A-00-0194

TELRIC -- OC12 UDIT, 0-8 Miles -- FIXED COMPONENT

Ln No	Plant Account Description Account Number	Source	Other 357C	Digital 257C	Circuit Digital Premises 257CP	SONET 257CS	SONET Premises 257CSP	Poles 1C	C Wire 3C	Conduit 4C	Cable UG Metal 5C	Drop Buried 35C	Drop Aerial 42C	Outside Plant Cable Bur. Metal 45C	Cable Aer. Metal 52C	Cable Bld. Metal 62C	Cable UG Fiber 85C	Cable Bur. Fiber 845C	Cable Bld. Fiber 862C	TOTALS
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(n)	(o)	(p)	(q)	(r)	(s)	(t)
	INVESTMENT																			
1	Equipment		76 698 46	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	76,698 46
2	Bldg Loading Fact		0 0418	0 0418	0 0000	0 0418	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0.0000	0 0000	0 0000	0.0000	0.0000	
3	Building	Ln 1 times Ln 2	3 206 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0.00	0.00	0 00	0.00	3,206 00
4	Land Loading Fact		0 0036	0 0036	0 0000	0 0036	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0.0000	0 0000	0 0000	0 0000	0.0000	
5	Land	Ln 1 times Ln 4	276 11	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0.00	0.00	0.00	0.00	276 11
6	**Loaded Investment**	**Sum, Lns. 1, 3, 5**	**80,180 57**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**80,180.57**
	MONTHLY INVESTMENT-RELATED CHARGES, EQUIPMENT																			
7	Avg Depr Factor		0 1082	0.1082	0 1082	0.1082	0.1082	0.0674	0.1404	0.0227	0.0772	0.0944	0.1137	0.0944	0.1137	0.0598	0.0900	0.0662	0.0990	
8	Avg Annual Depr	Ln 1 times Ln 7	8 298 77	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	
9	Avg Monthly Depr	Ln 8 divided by 12	691 56	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	691.56
10	Avg COM Factor		0.0420	0.0420	0.0420	0.0420	0.0420	0.0500	0.0755	0.0581	0.0546	0.0552	0.0536	0.0552	0.0536	0.0562	0.0562	0.0538	0.0589	
11	Avg Annual COM	Ln 1 times Ln 10	3 221 34	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	
12	Avg Monthly COM	Ln 11 divided by 12	268 44	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	268.44
13	Avg IT Factor		0 0175	0 0175	0.0175	0.0175	0.0175	0.0208	0.0314	0.0242	0.0227	0.0230	0.0223	0.0230	0.0223	0.0234	0.0234	0.0224	0.0246	
14	Avg Annual IT	Ln 1 times Ln 13	1 342 22	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	
15	Avg Monthly IT	Ln 14 divided by 12	111 85	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	111.85
16	Total Maint Factor		0 0182	0 0118	0 0118	0 0118	0 0118	0.0046	0.0156	0.0046	0.0376	0.0845	0.1158	0.0845	0.1158	0.0156	0.0376	0.0139	0.0200	
17	Total Annual Maint	Ln 1 times Ln 16	1 395 91	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	
18	Total Monthly Maint	Ln 17 divided by 12	116 33	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	116 33
19	Ad Valorem Tax Factor		0 0136	0 0136	0 0136	0 0136	0 0136	0 0136	0 0136	0 0136	0 0136	0 0136	0 0136	0 0136	0 0136	0 0136	0 0136	0 0136	0 0136	
20	Annual AV Taxes	Ln 1 times Ln 19	1 043 10	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	
21	Monthly AV Taxes	Ln 20 divided by 12	86 92	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	86 92
22	Tot Mo Inv Related Charge Equip		1 275 11	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	1,275 11
	MONTHLY INVESTMENT-RELATED CHARGES, L&B LOADINGS																			
23	Building Loading	Ln 3 above	3 206 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	
24	Total AC Factor Bldg		0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	
25	Bldg Annual Charge	Ln 23 times Ln 24	715 58	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	
26	Bldg Monthly Charge	Ln 25 divided by 12	59 63	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	59 63
27	Land Loading	Ln 5 above	276 11	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	
28	Total AC Factor Land		0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	
29	Land Annual Charge	Ln 27 times Ln 28	61 63	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	
30	Land Monthly Charge	Ln 29 divided by 12	5 14	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	5 14
31	Total L&B Monthly Charge	Sum, Lns 26, 30	64 77	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	64.77
	BILLING AND COLLECTION CHARGES:																			
32	Total Plant Investment Monthly Charges	Sum Lns 22 and 31	1 339 88	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	
33	B&C Factor		0.0043	0 0043	0 0043	0 0043	0 0043	0 0043	0 0043	0 0043	0 0043	0 0043	0 0043	0 0043	0 0043	0 0043	0 0043	0 0043	0 0043	
34	Total Monthly B&C Charge	Ln 32 times Ln 33	5 77	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	5 77
35	**TOTAL MONTHLY INV. RELATED CHARGES**	**Sum, Lns. 22, 31, 34**	**1,345.65**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**1,345.65**
	MONTHLY PRODUCT ADMINISTRATION RELATED CHARGES:																			
36	Direct Assigned Expense Factor		0.0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0.0000	0.0000	0.0000
37	Direct Assigned Monthly Charges	Ln 35 times Ln 36	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
38	Product Management Expense Factor		0.0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0.0000	
39	Product Management Monthly Charges	Ln 35 times Ln 38	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
40	Sales Expense Factor		0.0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0.0000	0.0000	
41	Monthly Sales Charges	Ln 35 times Ln 40	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
42	Advertising Expense Factor		0.0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0.0000	0.0000	
43	Monthly Advertising Charges	Ln 35 times Ln 42	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
44	Business Fees (Other Taxes) Expense Factor		0.0019	0 0019	0 0019	0 0019	0 0019	0 0019	0 0019	0 0019	0 0019	0 0019	0 0019	0 0019	0 0019	0 0019	0 0019	0.0019	0.0019	
45	Monthly Business Fees Charges	Ln 44 times Sum Lns 37, 39, 41, 43	2 56	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	2 56
46	Total Monthly Product Administration Charges	Sum, Lns 37, 39, 41, 43, 45	2 56	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	2.56

QWEST CORPORATION
Arizona Corporation Commission Docket No. 00000A-00-0194

TELRIC -- OC12 UDIT, 0-8 Miles -- FIXED COMPONENT

Ln No.	Plant Account Description Account Number	Source	Circuit - Digital: Other 357C	Digital 257C	Premises 257CP	SONET 257CS	SONET Premises 257CSP	Poles 1C	C-Wire 3C	Conduit 4C	Outside Plant: Cable UG Metal 5C	Drop Buried 35C	Drop Aerial 42C	Cable Bur. Metal 45C	Cable Aer. Metal 52C	Cable Bld. Metal 62C	Cable UG Fiber 85C	Cable Bur. Fiber 845C	Cable Bld. Fiber 862C	TOTALS
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(n)	(o)	(p)	(q)	(r)	(s)	(t)
47	TOTAL MO. "DIRECTLY ASSIGNED" CHGS.	Sum, Lns. 38, 46	1,348.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1,348.20
	MONTHLY "NETWORK SUPPORT" EXPENSE:																			
48	Network Operations Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
49	Network Operations Monthly Charges	Ln 47 times Ln 48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
50	"Network Support" Expense Factor		0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	
51	Network Support" Monthly Charges	Ln 47 times Ln 50	21.57	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.57
52	Total Monthly Network Support Charges	Sum, Lns. 49, 51	21.57	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.57
53	TOTAL MONTHLY DIRECT + SUPPORT	Sum, Lns. 47, 52	1,369.77	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1,369.77
	MONTHLY "DIRECTLY ATTRIBUTED" EXPENSES:																			
54	General Support Assets Expense Factor		0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	
55	General Support Assets Monthly Charges	Ln 47 times Ln 54	109.88	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	109.88
56	Gen. Pur. Computer Expense Factor		0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	
57	Gen. Pur. Computer Monthly Charges	Ln 47 times Ln 56	47.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	47.19
58	Uncollectible Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
59	Uncollectible Monthly Charges	Ln 47 times Ln 58	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
60	Accounting Expense Factor		0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	
61	Accounting Expense Monthly Charges	Ln 47 times Ln 60	10.79	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.79
62	Human Resources Expense Factor		0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	
63	Human Resources Monthly Charges	Ln 47 times Ln 62	10.52	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.52
64	Information Management Expense Factor		0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	
65	Information Management Monthly Charges	Ln 47 times Ln 64	74.56	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	74.56
66	Intangible Expense Factor		0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	
67	Intangible Expense Monthly Charges	Ln 47 times Ln 66	3.51	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.51
68	Total Monthly "Directly Attributed" Expense Charges	Sum Lns. 55, 57, 59, 61, 63, 65, 67	256.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	256.43
69	TOTAL MONTHLY "DIRECT" CHARGES	Sum, Lns. 53, 69	1,626.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1,626.20
	MONTHLY COMMON EXPENSES:																			
70	Executive Expense Factor		0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	
71	Executive Expense Monthly Charges	Ln 69 times Ln 70	10.57	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.57
72	Planning Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
73	Planning Expense Monthly Charges	Ln 69 times Ln 72	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
74	External Relations Expense Factor		0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	
75	External Relations Monthly Charges	Ln 69 times Ln 74	14.96	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.96
76	Legal Expense Factor		0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	
77	Legal Expense Monthly Charges	Ln 69 times Ln 76	9.76	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.76
78	Procurement Expense Factor		0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	
79	Procurement Expense Monthly Charges	Ln 69 times Ln 78	3.58	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.58
80	Research and Development Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
81	R&D Expense Monthly Charges	Ln 69 times Ln 80	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06
82	General Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
83	General Expense Monthly Charges	Ln 69 times Ln 82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
84	Total Monthly "Common" Expenses Charges	Sum Lns. 71, 73, 75, 77, 79, 81, 83	38.92	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	38.92
85	TOTAL MONTHLY "TELRIC"	Sum, Lns. 69, 84	*********	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$1,665.13

QWEST CORPORATION
Arizona Corporation Commission Docket No. 00000A-00-0194

TELRIC -- OC12 UDIT, 0-8 Miles -- VARIABLE COMPONENT

Ln No	Plant Account Description Account Number	Source	Circuit - Digital: Other 357C	Digital 257C	Premises 257CP	SONET 257CS	SONET Premises 257CSP	Poles 1C	C-Wire 3C	Conduit 4C	Outside Plant: Cable UG Metal 5C	Drop Buried 35C	Drop Aerial 42C	Cable Bur. Metal 45C	Cable Aer. Metal 52C	Cable Bld. Metal 62C	Cable UG Fiber 85C	Cable Bur. Fiber 845C	Cable Bld. Fiber 862C	TOTALS
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)	(s)	(t)
	INVESTMENT																			
1	Equipment		104.53	0.00	0.00	0.00	0.00	0.00	0.00	1,755.14	0.00	0.00	0.00	0.00	0.00	0.00	1,302.48	0.00	0.00	3,162.15
2	Bldg Loading Fact		0.0418	0.0418	0.0000	0.0418	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
3	Building	Ln 1 times Ln 2	4.37	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.37
4	Land Loading Fact		0.0036	0.0036	0.0000	0.0036	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
5	Land	Ln 1 times Ln 4	0.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.38
6	**Loaded Investment**	**Sum, Lns 1, 3, 5**	**109.28**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**1,755.14**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**1,302.48**	**0.00**	**0.00**	**3,166.90**
	MONTHLY INVESTMENT-RELATED CHARGES, EQUIPMENT:																			
7	Avg Depr Factor		0.1082	0.1082	0.1082	0.1082	0.1082	0.0674	0.1404	0.0227	0.0772	0.0944	0.1137	0.0944	0.1137	0.0598	0.0900	0.0662	0.0990	
8	Avg Annual Depr	Ln 1 times Ln 7	11.31	0.00	0.00	0.00	0.00	0.00	0.00	39.84	0.00	0.00	0.00	0.00	0.00	0.00	117.22	0.00	0.00	
9	Avg Monthly Depr	Ln 8 divided by 12	0.94	0.00	0.00	0.00	0.00	0.00	0.00	3.32	0.00	0.00	0.00	0.00	0.00	0.00	9.77	0.00	0.00	14.03
10	Avg COM Factor		0.0420	0.0420	0.0420	0.0420	0.0420	0.0500	0.0755	0.0581	0.0546	0.0552	0.0536	0.0552	0.0536	0.0562	0.0562	0.0538	0.0589	
11	Avg Annual COM	Ln 1 times Ln 10	4.39	0.00	0.00	0.00	0.00	0.00	0.00	101.97	0.00	0.00	0.00	0.00	0.00	0.00	73.20	0.00	0.00	
12	Avg Monthly COM	Ln 11 divided by 12	0.37	0.00	0.00	0.00	0.00	0.00	0.00	8.50	0.00	0.00	0.00	0.00	0.00	0.00	6.10	0.00	0.00	14.96
13	Avg IT Factor		0.0175	0.0175	0.0175	0.0175	0.0175	0.0208	0.0314	0.0242	0.0227	0.0230	0.0223	0.0230	0.0223	0.0234	0.0234	0.0224	0.0246	
14	Avg Annual IT	Ln 1 times Ln 13	1.83	0.00	0.00	0.00	0.00	0.00	0.00	42.47	0.00	0.00	0.00	0.00	0.00	0.00	30.48	0.00	0.00	
15	Avg Monthly IT	Ln 14 divided by 12	0.15	0.00	0.00	0.00	0.00	0.00	0.00	3.54	0.00	0.00	0.00	0.00	0.00	0.00	2.54	0.00	0.00	6.23
16	Total Maint Factor		0.0182	0.0118	0.0118	0.0118	0.0118	0.0045	0.0156	0.0046	0.0376	0.0845	0.1158	0.0845	0.1158	0.0156	0.0376	0.0139	0.0200	
17	Total Annual Maint	Ln 1 times Ln 16	1.90	0.00	0.00	0.00	0.00	0.00	0.00	8.07	0.00	0.00	0.00	0.00	0.00	0.00	48.97	0.00	0.00	
18	Total Monthly Maint	Ln 17 divided by 12	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.67	0.00	0.00	0.00	0.00	0.00	0.00	4.08	0.00	0.00	4.91
19	Ad Valorem Tax Factor		0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	
20	Annual AV Taxes	Ln 1 times Ln 19	1.42	0.00	0.00	0.00	0.00	0.00	0.00	23.87	0.00	0.00	0.00	0.00	0.00	0.00	17.71	0.00	0.00	
21	Monthly AV Taxes	Ln 20 divided by 12	0.12	0.00	0.00	0.00	0.00	0.00	0.00	1.99	0.00	0.00	0.00	0.00	0.00	0.00	1.48	0.00	0.00	3.58
22	Tot Mo Inv Related Charge Equip		1.74	0.00	0.00	0.00	0.00	0.00	0.00	18.02	0.00	0.00	0.00	0.00	0.00	0.00	23.97	0.00	0.00	43.72
	MONTHLY INVESTMENT-RELATED CHARGES, L&B LOADINGS																			
23	Building Loading	Ln 3 above	4.37	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
24	Total AC Factor Bldg		0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	
25	Bldg Annual Charge	Ln 23 times Ln 24	0.98	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
26	Bldg Monthly Charge	Ln 25 divided by 12	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.08
27	Land Loading	Ln 5 above	0.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
28	Total AC Factor Land		0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	
29	Land Annual Charge	Ln 27 times Ln 28	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
30	Land Monthly Charge	Ln 29 divided by 12	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
31	Total L&B Monthly Charge	Sum, Lns 26, 30	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09
	BILLING AND COLLECTION CHARGES:																			
32	Total Plant Investment Monthly Charges	Sum, Lns 22 and 31	1.83	0.00	0.00	0.00	0.00	0.00	0.00	18.02	0.00	0.00	0.00	0.00	0.00	0.00	23.97	0.00	0.00	
33	B&C Factor		0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	
34	Total Monthly B&C Charge	Ln 32 times Ln 33	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.00	0.00	0.19
35	**TOTAL MONTHLY INV. RELATED CHARGES**	**Sum, Lns. 22, 31, 34**	**1.83**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**18.10**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**24.07**	**0.00**	**0.00**	**44.00**
	MONTHLY PRODUCT ADMINISTRATION RELATED CHARGES:																			
36	Direct Assigned Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
37	Direct Assigned Monthly Charges	Ln 35 times Ln 36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
38	Product Management Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
39	Product Management Monthly Charges	Ln 35 times Ln 38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
40	Sales Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
41	Monthly Sales Charges	Ln 35 times Ln 40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
42	Advertising Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
43	Monthly Advertising Charges	Ln. 35 times Ln. 42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
44	Business Fees (Other Taxes) Expense Factor		0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	
45	Monthly Business Fees Charges	n 44 times Sum Lns 37, 39, 41, 4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.08
46	Total Monthly Product Administration Charges	Sum, Lns 37, 39, 41, 43, 45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.08

QWEST CORPORATION
Arizona Corporation Commission Docket No. 00000A-00-0194

TELRIC -- OC12 UDIT, 0-8 Miles -- VARIABLE COMPONENT

Ln No	Plant Account Description Account Number	Source	Circuit - Digital: Other 357C	Digital 257C	Premises 257CP	SONET 257CS	SONET Premises 257CSP	Poles 1C	C-Wire 3C	Conduit 4C	Outside Plant: Cable UG Metal 5C	Drop Buried 35C	Drop Aerial 42C	Cable Bur. Metal 45C	Cable Aer. Metal 52C	Cable Bld. Metal 62C	Cable UG Fiber 85C	Cable Bur. Fiber 845C	Cable Bld. Fiber 862C	TOTALS
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(n)	(o)	(p)	(q)	(r)	(s)	(t)
47	TOTAL MO. "DIRECTLY ASSIGNED" CHGS.	Sum, Lns. 35, 46	1.84	0.00	0.00	0.00	0.00	0.00	0.00	18.13	0.00	0.00	0.00	0.00	0.00	0.00	24.11	0.00	0.00	44.08
	MONTHLY "NETWORK SUPPORT" EXPENSE:																			
48	Network Operations Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
49	Network Operations Monthly Charges	Ln 47 times Ln 48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
50	"Network Support" Expense Factor		0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	
51	Network Support" Monthly Charges	Ln 47 times Ln 50	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.29	0.00	0.00	0.00	0.00	0.00	0.00	0.39	0.00	0.00	0.71
52	Total Monthly Network Support Charges	Sum, Lns 49, 51	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.29	0.00	0.00	0.00	0.00	0.00	0.00	0.39	0.00	0.00	0.71
53	TOTAL MONTHLY DIRECT + SUPPORT	Sum, Lns. 47, 52	1.87	0.00	0.00	0.00	0.00	0.00	0.00	18.42	0.00	0.00	0.00	0.00	0.00	0.00	24.50	0.00	0.00	44.79
	MONTHLY "DIRECTLY ATTRIBUTED" EXPENSES:																			
54	General Support Assets Expense Factor		0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	
55	General Support Assets Monthly Charges	Ln 47 times Ln 54	0.15	0.00	0.00	0.00	0.00	0.00	0.00	1.48	0.00	0.00	0.00	0.00	0.00	0.00	1.97	0.00	0.00	3.59
56	Gen Pur Computer Expense Factor		0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	
57	Gen Pur Computer Monthly Charges	Ln 47 times Ln 56	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.63	0.00	0.00	0.00	0.00	0.00	0.00	0.84	0.00	0.00	1.54
58	Uncollectible Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
59	Uncollectible Monthly Charges	Ln 47 times Ln 58	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
60	Accounting Expense Factor		0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	
61	Accounting Expense Monthly Charges	Ln 47 times Ln 60	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.19	0.00	0.00	0.35
62	Human Resources Expense Factor		0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	
63	Human Resources Monthly Charges	Ln 47 times Ln 62	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.19	0.00	0.00	0.34
64	Information Management Expense Factor		0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	
65	Information Management Monthly Charges	Ln 47 times Ln 64	0.10	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.33	0.00	0.00	2.44
66	Intangible Expense Factor		0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	
67	Intangible Expense Monthly Charges	Ln 47 times Ln 66	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.00	0.00	0.11
68	Total Monthly "Directly Attributed" Expense Charges	Sum Lns 55, 57, 59, 61, 63, 65, 67	0.35	0.00	0.00	0.00	0.00	0.00	0.00	3.45	0.00	0.00	0.00	0.00	0.00	0.00	4.59	0.00	0.00	8.38
69	TOTAL MONTHLY "DIRECT" CHARGES	Sum, Lns 53, 69	2.22	0.00	0.00	0.00	0.00	0.00	0.00	21.87	0.00	0.00	0.00	0.00	0.00	0.00	29.09	0.00	0.00	53.17
	MONTHLY COMMON EXPENSES																			
70	Executive Expense Factor		0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	
71	Executive Expense Monthly Charges	Ln 69 times Ln 70	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.19	0.00	0.00	0.35
72	Planning Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
73	Planning Expense Monthly Charges	Ln 69 times Ln 72	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
74	External Relations Expense Factor		0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	
75	External Relations Monthly Charges	Ln 69 times Ln 74	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.27	0.00	0.00	0.49
76	Legal Expense Factor		0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	
77	Legal Expense Monthly Charges	Ln 69 times Ln 76	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.17	0.00	0.00	0.32
78	Procurement Expense Factor		0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	
79	Procurement Expense Monthly Charges	Ln 69 times Ln 78	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.00	0.00	0.12
80	Research and Development Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
81	R&D Expense Monthly Charges	Ln 69 times Ln 80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
82	General Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
83	General Expense Monthly Charges	Ln 69 times Ln 82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
84	Total Monthly "Common" Expenses Charges	um, Lns 71, 73, 75, 77, 79, 81, 8	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.52	0.00	0.00	0.00	0.00	0.00	0.00	0.70	0.00	0.00	1.27
85	TOTAL MONTHLY "TELRIC"	Sum, Lns. 69, 84	$2.27	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$22.39	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$29.78	$0.00	$0.00	$54.45

QWEST CORPORATION
Arizona Corporation Commission Docket No 00000A-00-0194

TELRIC -- OC12 UDIT. 8-25 Miles -- FIXED COMPONENT

Ln No	Plant Account Description Account Number	Source	Other 357C	Digital 257C	Premises 257CP	SONET 257CS	SONET Premises 257CSP	Poles 1C	C Wire 3C	Conduit 4C	Cable UG Metal 5C	Drop Buried 35C	Drop Aerial 42C	Cable Bur. Metal 45C	Cable Aer. Metal 52C	Cable Bld. Metal 62C	Cable UG Fiber 85C	Cable Bur. Fiber 845C	Cable Bld. Fiber 862C	TOTALS
			Circuit Digital					Outside Plant												
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(n)	(o)	(p)	(q)	(r)	(s)	(t)
	INVESTMENT																			
1	Equipment		76,698.46	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	76,698.46
2	Bldg Loading Fact		0.0418	0.0418	0.0000	0.0418	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
3	Building	Ln 1 times Ln 2	3,206.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3,206.00
4	Land Loading Fact		0.0036	0.0036	0.0000	0.0036	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
5	Land	Ln 1 times Ln 4	276.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	276.11
6	Loaded Investment	Sum, Lns 1, 3, 5	80,180.57	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	80,180.57
	MONTHLY INVESTMENT-RELATED CHARGES, EQUIPMENT:																			
7	Avg Depr Factor		0.1082	0.1082	0.1082	0.1082	0.1082	0.0674	0.1404	0.0227	0.0772	0.0944	0.1137	0.0944	0.1137	0.0598	0.0900	0.0662	0.0990	
8	Avg Annual Depr	Ln 1 times Ln 7	8,298.77	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
9	Avg Monthly Depr	Ln 8 divided by 12	691.56	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	691.56
10	Avg COM Factor		0.0420	0.0420	0.0420	0.0420	0.0420	0.0500	0.0755	0.0581	0.0546	0.0552	0.0536	0.0552	0.0536	0.0562	0.0562	0.0538	0.0589	
11	Avg Annual COM	Ln 1 times Ln 10	3,221.34	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
12	Avg Monthly COM	Ln 11 divided by 12	268.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	268.44
13	Avg IT Factor		0.0175	0.0175	0.0175	0.0175	0.0175	0.0208	0.0314	0.0242	0.0227	0.0230	0.0223	0.0230	0.0223	0.0234	0.0234	0.0224	0.0245	
14	Avg Annual IT	Ln 1 times Ln 13	1,342.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
15	Avg Monthly IT	Ln 14 divided by 12	111.85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	111.85
16	Total Maint Factor		0.0182	0.0118	0.0118	0.0118	0.0118	0.0045	0.0156	0.0046	0.0376	0.0845	0.1158	0.0845	0.1158	0.0156	0.0376	0.0139	0.0200	
17	Total Annual Maint	Ln 1 times Ln 16	1,395.91	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
18	Total Monthly Maint	Ln 17 divided by 12	116.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	116.33
19	Ad Valorem Tax Factor		0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	
20	Annual AV Taxes	Ln 1 times Ln 19	1,043.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
21	Monthly AV Taxes	Ln 20 divided by 12	86.92	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	86.92
22	Tot Mo Inv Related Charge, Equip		1,275.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1,275.11
	MONTHLY INVESTMENT-RELATED CHARGES, L&B LOADINGS																			
23	Building Loading	Ln 3 above	3,206.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
24	Total AC Factor, Bldg		0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	
25	Bldg Annual Charge	Ln 23 times Ln 24	715.58	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
26	Bldg Monthly Charge	Ln 25 divided by 12	59.63	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	59.63
27	Land Loading	Ln 5 above	276.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
28	Total AC Factor, Land		0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	
29	Land Annual Charge	Ln 27 times Ln 28	61.63	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
30	Land Monthly Charge	Ln 29 divided by 12	5.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.14
31	Total L&B Monthly Charge	Sum Lns 26, 30	64.77	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	64.77
	BILLING AND COLLECTION CHARGES:																			
32	Total Plant Investment Monthly Charges	Sum. Lns 22 and 31	1,339.88	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
33	B&C Factor		0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	
34	Total Monthly B&C Charge	Ln 32 times Ln 33	5.77	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.77
35	TOTAL MONTHLY INV. RELATED CHARGES	Sum, Lns. 22, 31, 34	1,345.65	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1,345.65
	MONTHLY PRODUCT ADMINISTRATION RELATED CHARGES:																			
36	Direct Assigned Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
37	Direct Assigned Monthly Charges	Ln 35 times Ln 36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
38	Product Management Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
39	Product Management Monthly Charges	Ln 35 times Ln 38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
40	Sales Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
41	Monthly Sales Charges	Ln 35 times Ln 40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
42	Advertising Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
43	Monthly Advertising Charges	Ln 35 times Ln 42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
44	Business Fees (Other Taxes) Expense Factor		0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	
45	Monthly Business Fees Charges	Ln 44 times Sum Lns 37, 39, 41, 43	2.56	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.56
46	Total Monthly Product Administration Charges	Sum, Lns 37, 39, 41, 43, 45	2.56	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.56

QWEST CORPORATION
Arizona Corporation Commission Docket No. 00000A-00-0194

TELRIC -- OC12 UDIT, 8-25 Miles -- FIXED COMPONENT

Ln. No	Plant Account Description Account Number	Source	Circuit - Digital: Other 357C	Digital 257C	Premises 257CP	SONET 257CS	SONET Premises 257CSP	Poles 1C	C-Wire 3C	Conduit 4C	Outside Plant: Cable UG Metal 5C	Drop Buried 35C	Drop Aerial 42C	Cable Bur. Metal 45C	Cable Aer. Metal 52C	Cable Bld. Metal 62C	Cable UG Fiber 85C	Cable Bur. Fiber 845C	Cable Bld. Fiber 862C	TOTALS
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(n)	(o)	(p)	(q)	(r)	(s)	(t)
47	TOTAL MO. "DIRECTLY ASSIGNED" CHGS.	Sum, Lns. 36, 46	1,348.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1,348.20
	MONTHLY "NETWORK SUPPORT" EXPENSE:																			
48	Network Operations Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
49	Network Operations Monthly Charges	Ln 47 times Ln 48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
50	"Network Support" Expense Factor		0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	
51	Network Support" Monthly Charges	Ln 47 times Ln 50	21.57	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.57
52	Total Monthly Network Support Charges	Sum, Lns. 49, 51	21.57	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.57
53	TOTAL MONTHLY DIRECT + SUPPORT	Sum, Lns. 47, 52	1,369.77	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1,369.77
	MONTHLY "DIRECTLY ATTRIBUTED" EXPENSES:																			
54	General Support Assets Expense Factor		0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	
55	General Support Assets Monthly Charges	Ln 47 times Ln 54	109.88	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	109.88
56	Gen Pur Computer Expense Factor		0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	
57	Gen Pur Computer Monthly Charges	Ln 47 times Ln 56	47.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	47.19
58	Uncollectible Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
59	Uncollectible Monthly Charges	Ln 47 times Ln 58	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
60	Accounting Expense Factor		0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	
61	Accounting Expense Monthly Charges	Ln 47 times Ln 60	10.79	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.79
62	Human Resources Expense Factor		0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	
63	Human Resources Monthly Charges	Ln 47 times Ln 62	10.52	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.52
64	Information Management Expense Factor		0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	
65	Information Management Monthly Charges	Ln 47 times Ln 64	74.56	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	74.56
66	Intangible Expense Factor		0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	
67	Intangible Expense Monthly Charges	Ln 47 times Ln 66	3.51	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.51
68	Total Monthly "Directly Attributed" Expense Charges	Sum Lns. 55, 57, 59, 61, 63, 65, 67	256.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	256.43
69	TOTAL MONTHLY "DIRECT" CHARGES	Sum, Lns. 53, 69	1,626.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1,626.20
	MONTHLY COMMON EXPENSES:																			
70	Executive Expense Factor		0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	
71	Executive Expense Monthly Charges	Ln 69 times Ln 70	10.57	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.57
72	Planning Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
73	Planning Expense Monthly Charges	Ln 69 times Ln 72	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
74	External Relations Expense Factor		0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	
75	External Relations Monthly Charges	Ln 69 times Ln 74	14.96	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.96
76	Legal Expense Factor		0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	
77	Legal Expense Monthly Charges	Ln 69 times Ln 76	9.76	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.76
78	Procurement Expense Factor		0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	
79	Procurement Expense Monthly Charges	Ln 69 times Ln 78	3.58	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.58
80	Research and Development Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
81	R&D Expense Monthly Charges	Ln 69 times Ln 80	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06
82	General Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
83	General Expense Monthly Charges	Ln 69 times Ln 82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
84	Total Monthly "Common" Expenses Charges	Sum, Lns. 71, 73, 75, 77, 79, 81, 83	38.92	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	38.92
85	TOTAL MONTHLY "TELRIC"	Sum, Lns. 69, 84	*********	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$1,665.13

QWEST CORPORATION
Arizona Corporation Commission Docket No. 00000A-00-0194

TELRIC -- OC12 UDIT, 8.25 Miles -- VARIABLE COMPONENT

Ln No	Plant Account Description Account Number	Source	Circuit - Digital: Other 357C	Digital 257C	Premises 257CP	SONET 257CS	SONET Premises 257CSP	Outside Plant: Poles 1C	C-Wire 3C	Conduit 4C	Cable UG Metal 5C	Drop Buried 35C	Drop Aerial 42C	Cable Bur. Metal 45C	Cable Aer. Metal 52C	Cable Bld. Metal 62C	Cable UG Fiber 85C	Cable Bur. Fiber 845C	Cable Bld. Fiber 862C	TOTALS
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)	(s)	(t)
	INVESTMENT																			
1	Equipment		186.83	0.00	0.00	0.00	0.00	0.00	0.00	1,752.44	0.00	0.00	0.00	0.00	0.00	0.00	1,300.48	30.32	0.00	3,270.07
2	Bldg Loading Fact		0.0418	0.0418	0.0000	0.0418	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
3	Building	Ln 1 times Ln 2	7.81	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.81
4	Land Loading Fact		0.0036	0.0036	0.0000	0.0036	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
5	Land	Ln 1 times Ln 4	0.67	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.67
6	**Loaded Investment**	**Sum, Lns. 1, 3, 5**	**195.31**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**1,752.44**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**1,300.48**	**30.32**	**0.00**	**3,278.55**
	MONTHLY INVESTMENT-RELATED CHARGES, EQUIPMENT:																			
7	Avg Depr Factor		0.1082	0.1082	0.1082	0.1082	0.1082	0.0674	0.1404	0.0227	0.0772	0.0944	0.1137	0.0944	0.1137	0.0598	0.0900	0.0662	0.0990	
8	Avg Annual Depr	Ln 1 times Ln 7	20.22	0.00	0.00	0.00	0.00	0.00	0.00	39.78	0.00	0.00	0.00	0.00	0.00	0.00	117.04	2.01	0.00	
9	Avg Monthly Depr	Ln 8 divided by 12	1.68	0.00	0.00	0.00	0.00	0.00	0.00	3.32	0.00	0.00	0.00	0.00	0.00	0.00	9.75	0.17	0.00	14.92
10	Avg COM Factor		0.0420	0.0420	0.0420	0.0420	0.0420	0.0500	0.0755	0.0581	0.0546	0.0552	0.0536	0.0552	0.0536	0.0562	0.0562	0.0538	0.0589	
11	Avg Annual COM	Ln 1 times Ln 10	7.85	0.00	0.00	0.00	0.00	0.00	0.00	101.82	0.00	0.00	0.00	0.00	0.00	0.00	73.09	1.63	0.00	
12	Avg Monthly COM	Ln 11 divided by 12	0.65	0.00	0.00	0.00	0.00	0.00	0.00	8.48	0.00	0.00	0.00	0.00	0.00	0.00	6.09	0.14	0.00	15.37
13	Avg IT Factor		0.0175	0.0175	0.0175	0.0175	0.0175	0.0208	0.0314	0.0242	0.0227	0.0230	0.0223	0.0230	0.0223	0.0234	0.0234	0.0224	0.0245	
14	Avg Annual IT	Ln 1 times Ln 13	3.27	0.00	0.00	0.00	0.00	0.00	0.00	42.41	0.00	0.00	0.00	0.00	0.00	0.00	30.43	0.68	0.00	
15	Avg Monthly IT	Ln 14 divided by 12	0.27	0.00	0.00	0.00	0.00	0.00	0.00	3.53	0.00	0.00	0.00	0.00	0.00	0.00	2.54	0.06	0.00	6.40
16	Total Maint Factor		0.0182	0.0118	0.0118	0.0118	0.0118	0.0045	0.0156	0.0046	0.0376	0.0845	0.1158	0.0845	0.1158	0.0156	0.0376	0.0139	0.0200	
17	Total Annual Maint	Ln 1 times Ln 16	3.40	0.00	0.00	0.00	0.00	0.00	0.00	8.06	0.00	0.00	0.00	0.00	0.00	0.00	48.90	0.42	0.00	
18	Total Monthly Maint	Ln 17 divided by 12	0.28	0.00	0.00	0.00	0.00	0.00	0.00	0.67	0.00	0.00	0.00	0.00	0.00	0.00	4.07	0.04	0.00	5.07
19	Ad Valorem Tax Factor		0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	
20	Annual AV Taxes	Ln 1 times Ln 19	2.54	0.00	0.00	0.00	0.00	0.00	0.00	23.83	0.00	0.00	0.00	0.00	0.00	0.00	17.69	0.41	0.00	
21	Monthly AV Taxes	Ln 20 divided by 12	0.21	0.00	0.00	0.00	0.00	0.00	0.00	1.99	0.00	0.00	0.00	0.00	0.00	0.00	1.47	0.03	0.00	3.71
22	Tot Mo Inv Related Charge, Equip		3.11	0.00	0.00	0.00	0.00	0.00	0.00	17.99	0.00	0.00	0.00	0.00	0.00	0.00	23.93	0.43	0.00	45.46
	MONTHLY INVESTMENT-RELATED CHARGES, L&B LOADINGS																			
23	Building Loading	Ln 3 above	7.81	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
24	Total AC Factor Bldg		0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	
25	Bldg Annual Charge	Ln 23 times Ln 24	1.74	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
26	Bldg Monthly Charge	Ln 25 divided by 12	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.15
27	Land Loading	Ln 5 above	0.67	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
28	Total AC Factor Land		0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	
29	Land Annual Charge	Ln 27 times Ln 28	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
30	Land Monthly Charge	Ln 29 divided by 12	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
31	Total L&B Monthly Charge	Sum Lns 26, 30	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.16
	BILLING AND COLLECTION CHARGES:																			
32	Total Plant Investment Monthly Charges	Sum Lns 22 and 31	3.26	0.00	0.00	0.00	0.00	0.00	0.00	17.99	0.00	0.00	0.00	0.00	0.00	0.00	23.93	0.43	0.00	
33	B&C Factor		0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	
34	Total Monthly B&C Charge	Ln 32 times Ln 33	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.00	0.00	0.20
35	**TOTAL MONTHLY INV. RELATED CHARGES**	**Sum, Lns. 22, 31, 34**	**3.28**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**18.07**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**24.03**	**0.43**	**0.00**	**45.81**
	MONTHLY PRODUCT ADMINISTRATION RELATED CHARGES:																			
36	Direct Assigned Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
37	Direct Assigned Monthly Charges	Ln 35 times Ln 36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
38	Product Management Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
39	Product Management Monthly Charges	Ln 35 times Ln 38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
40	Sales Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
41	Monthly Sales Charges	Ln 35 times Ln 40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
42	Advertising Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
43	Monthly Advertising Charges	Ln 35 times Ln 42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
44	Business Fees (Other Taxes) Expense Factor		0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	
45	Monthly Business Fees Charges	Ln 44 times Sum Lns 37, 39, 41, 4	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.09
46	Total Monthly Product Administration Charges	Sum, Lns 37, 39, 41, 43, 45	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.09

QWEST CORPORATION
Arizona Corporation Commission Docket No. 00000A-00-0194

TELRIC -- OC12 UDIT, 8-25 Miles -- VARIABLE COMPONENT

Ln No	Plant Account Description Account Number	Source	Circuit - Digital: Other 357C	Digital 257C	Premises 257CP	SONET 257CS	SONET Premises 257CSP	Poles 1C	C-Wire 3C	Conduit 4C	Outside Plant: Cable UG Metal 5C	Drop Buried 35C	Drop Aerial 42C	Cable Bur. Metal 45C	Cable Aer. Metal. 52C	Cable Bld. Metal. 62C	Cable UG Fiber 85C	Cable Bur. Fiber 845C	Cable Bld. Fiber 862C	TOTALS
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(n)	(o)	(p)	(q)	(r)	(s)	(t)
47	TOTAL MO. "DIRECTLY ASSIGNED" CHGS.	Sum, Lns. 35, 46	3.28	0.00	0.00	0.00	0.00	0.00	0.00	18.10	0.00	0.00	0.00	0.00	0.00	0.00	24.08	0.43	0.00	45.90
	MONTHLY "NETWORK SUPPORT" EXPENSE:																			
48	Network Operations Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
49	Network Operations Monthly Charges	Ln 47 times Ln 48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
50	"Network Support" Expense Factor		0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	
51	Network Support" Monthly Charges	Ln 47 times Ln 50	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.29	0.00	0.00	0.00	0.00	0.00	0.00	0.39	0.01	0.00	0.73
52	Total Monthly Network Support Charges	Sum, Lns. 49, 51	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.29	0.00	0.00	0.00	0.00	0.00	0.00	0.39	0.01	0.00	0.73
53	TOTAL MONTHLY DIRECT + SUPPORT	Sum, Lns. 47, 52	3.34	0.00	0.00	0.00	0.00	0.00	0.00	18.39	0.00	0.00	0.00	0.00	0.00	0.00	24.46	0.44	0.00	46.63
	MONTHLY "DIRECTLY ATTRIBUTED" EXPENSES:																			
54	General Support Assets Expense Factor		0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	
55	General Support Assets Monthly Charges	Ln 47 times Ln 54	0.27	0.00	0.00	0.00	0.00	0.00	0.00	1.48	0.00	0.00	0.00	0.00	0.00	0.00	1.96	0.04	0.00	3.74
56	Gen Pur Computer Expense Factor		0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	
57	Gen Pur Computer Monthly Charges	Ln 47 times Ln 56	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.63	0.00	0.00	0.00	0.00	0.00	0.00	0.84	0.02	0.00	1.81
58	Uncollectible Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
59	Uncollectible Monthly Charges	Ln 47 times Ln 58	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
60	Accounting Expense Factor		0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	
61	Accounting Expense Monthly Charges	Ln 47 times Ln 60	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.19	0.00	0.00	0.37
62	Human Resources Expense Factor		0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	
63	Human Resources Monthly Charges	Ln 47 times Ln 62	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.19	0.00	0.00	0.36
64	Information Management Expense Factor		0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	
65	Information Management Monthly Charges	Ln 47 times Ln 64	0.18	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.33	0.02	0.00	2.54
66	Intangible Expense Factor		0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	
67	Intangible Expense Monthly Charges	Ln 47 times Ln 66	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.00	0.00	0.12
68	Total Monthly "Directly Attributed" Expense Charges	Sum Lns. 55, 57, 59, 61, 63, 65, 67	0.62	0.00	0.00	0.00	0.00	0.00	0.00	3.44	0.00	0.00	0.00	0.00	0.00	0.00	4.58	0.08	0.00	8.73
69	TOTAL MONTHLY "DIRECT" CHARGES	Sum, Lns. 53, 69	3.96	0.00	0.00	0.00	0.00	0.00	0.00	21.84	0.00	0.00	0.00	0.00	0.00	0.00	29.04	0.52	0.00	55.36
	MONTHLY COMMON EXPENSES:																			
70	Executive Expense Factor		0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	
71	Executive Expense Monthly Charges	Ln 69 times Ln 70	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.19	0.00	0.00	0.36
72	Planning Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
73	Planning Expense Monthly Charges	Ln 69 times Ln 72	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
74	External Relations Expense Factor		0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	
75	External Relations Monthly Charges	Ln 69 times Ln 74	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.27	0.00	0.00	0.51
76	Legal Expense Factor		0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	
77	Legal Expense Monthly Charges	Ln 69 times Ln 76	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.17	0.00	0.00	0.33
78	Procurement Expense Factor		0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	
79	Procurement Expense Monthly Charges	Ln 69 times Ln 78	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.00	0.00	0.12
80	Research and Development Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
81	R&D Expense Monthly Charges	Ln. 69 times Ln 80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
82	General Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
83	General Expense Monthly Charges	Ln 69 times Ln 82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
84	Total Monthly "Common" Expenses Charges	um, Lns. 71, 73, 75, 77, 79, 81, 8	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.52	0.00	0.00	0.00	0.00	0.00	0.00	0.70	0.01	0.00	1.33
85	TOTAL MONTHLY "TELRIC"	Sum, Lns. 69, 84	$4.06	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$22.36	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$29.74	$0.53	$0.00	$56.69

QWEST CORPORATION
Arizona Corporation Commission Docket No 00000A-00-0194

TELRIC -- OC12 UDIT, 25-50 Miles -- FIXED COMPONENT

Ln No	Plant Account Description Account Number	Source	Other 357C	Digital 257C	Circuit Digital Premises 257CP	SONET 257CS	SONET Premises 257CSP	Poles 1C	C Wire 3C	Conduit 4C	Cable UG Metal 5C	Drop Buried 35C	Drop Aerial 42C	Outside Plant Cable Bur. Metal 45C	Cable Aer. Metal 52C	Cable Bld. Metal 62C	Cable UG Fiber 85C	Cable Bur. Fiber 845C	Cable Bld. Fiber 862C	TOTALS
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(n)	(o)	(p)	(q)	(r)	(s)	(t)
	INVESTMENT																			
1	Equipment		76,698.46	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	76,698.46
2	Bldg Loading Fact		0.0418	0.0418	0.0000	0.0418	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
3	Building	Ln 1 times Ln 2	3,206.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3,206.00
4	Land Loading Fact		0.0036	0.0036	0.0000	0.0036	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
5	Land	Ln 1 times Ln 4	276.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	276.11
6	**Loaded Investment**	**Sum, Lns. 1, 3, 5**	**80,180.57**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**80,180.57**
	MONTHLY INVESTMENT-RELATED CHARGES, EQUIPMENT:																			
7	Avg Depr Factor		0.1082	0.1082	0.1082	0.1082	0.1082	0.0674	0.1404	0.0227	0.0772	0.0944	0.1137	0.0944	0.1137	0.0598	0.0900	0.0662	0.0990	
8	Avg Annual Depr	Ln 1 times Ln 7	8,298.77	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
9	Avg Monthly Depr	Ln 8 divided by 12	691.56	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	691.56
10	Avg COM Factor		0.0420	0.0420	0.0420	0.0420	0.0420	0.0500	0.0755	0.0581	0.0546	0.0552	0.0536	0.0552	0.0536	0.0562	0.0562	0.0538	0.0589	
11	Avg Annual COM	Ln 1 times Ln 10	3,221.34	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
12	Avg Monthly COM	Ln 11 divided by 12	268.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	268.44
13	Avg IT Factor		0.0175	0.0175	0.0175	0.0175	0.0175	0.0208	0.0314	0.0242	0.0227	0.0230	0.0223	0.0230	0.0223	0.0234	0.0234	0.0224	0.0245	
14	Avg Annual IT	Ln 1 times Ln 13	1,342.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
15	Avg Monthly IT	Ln 14 divided by 12	111.85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	111.85
16	Total Maint Factor		0.0182	0.0118	0.0118	0.0118	0.0118	0.0045	0.0156	0.0046	0.0376	0.0845	0.1158	0.0845	0.1158	0.0156	0.0376	0.0139	0.0200	
17	Total Annual Maint	Ln 1 times Ln 16	1,395.91	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
18	Total Monthly Maint	Ln 17 divided by 12	116.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	116.33
19	Ad Valorem Tax Factor		0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	
20	Annual AV Taxes	Ln 1 times Ln 19	1,043.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
21	Monthly AV Taxes	Ln 20 divided by 12	86.92	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	86.92
22	Tot Mo Inv Related Charge, Equip		1,275.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1,275.11
	MONTHLY INVESTMENT-RELATED CHARGES, L&B LOADINGS																			
23	Building Loading	Ln 3 above	3,206.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
24	Total AC Factor, Bldg		0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	
25	Bldg Annual Charge	Ln 23 times Ln 24	715.58	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
26	Bldg Monthly Charge	Ln 25 divided by 12	59.63	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	59.63
27	Land Loading	Ln 5 above	276.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
28	Total AC Factor, Land		0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	
29	Land Annual Charge	Ln 27 times Ln 28	61.63	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
30	Land Monthly Charge	Ln 29 divided by 12	5.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.14
31	Total L&B Monthly Charge	Sum, Lns. 26, 30	64.77	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	64.77
	BILLING AND COLLECTION CHARGES:																			
32	Total Plant Investment Monthly Charges	Sum, Lns. 22 and 31	1,339.88	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
33	B&C Factor		0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	
34	Total Monthly B&C Charge	Ln 32 times Ln 33	5.77	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.77
35	**TOTAL MONTHLY INV. RELATED CHARGES**	**Sum, Lns. 22, 31, 34**	**1,345.65**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**1,345.65**
	MONTHLY PRODUCT ADMINISTRATION RELATED CHARGES:																			
36	Direct Assigned Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
37	Direct Assigned Monthly Charges	Ln 35 times Ln 36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
38	Product Management Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
39	Product Management Monthly Charges	Ln 35 times Ln 38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
40	Sales Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
41	Monthly Sales Charges	Ln 35 times Ln 40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
42	Advertising Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
43	Monthly Advertising Charges	Ln 35 times Ln 42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
44	Business Fees (Other Taxes) Expense Factor		0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	
45	Monthly Business Fees Charges	Ln 44 times Sum Lns. 37, 39, 41, 43	2.56	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.56
46	Total Monthly Product Administration Charges	Sum, Lns. 37, 39, 41, 43, 45	2.56	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.56

QWEST CORPORATION
Arizona Corporation Commission Docket No. 00000A-00-0194

TELRIC -- OC12 UDIT, 25-50 Miles -- FIXED COMPONENT

Ln No. (a)	Plant Account Description Account Number (b)	Source (c)	Circuit - Digital: Other 357C (d)	Digital 257C (e)	Premises 257CP (f)	SONET 257CS (g)	SONET Premises 257CSP (h)	Poles 1C (i)	C-Wire 3C (j)	Conduit 4C (k)	Outside Plant: Cable UG Metal 5C (l)	Drop Buried 35C (m)	Drop Aerial 42C (n)	Cable Bur. Metal 45C (n)	Cable Aer. Metal. 52C (o)	Cable Bld. Metal. 62C (p)	Cable UG Fiber 85C (q)	Cable Bur. Fiber 845C (r)	Cable Bld. Fiber 862C (s)	TOTALS (t)
47	TOTAL MO. "DIRECTLY ASSIGNED" CHGS.	Sum, Lns. 35, 46	1,348.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1,348.20
	MONTHLY "NETWORK SUPPORT" EXPENSE:																			
48	Network Operations Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
49	Network Operations Monthly Charges	Ln 47 times Ln 48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
50	"Network Support" Expense Factor		0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	
51	"Network Support" Monthly Charges	Ln 47 times Ln 50	21.57	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.57
52	Total Monthly Network Support Charges	Sum, Lns. 49, 51	21.57	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.57
53	TOTAL MONTHLY DIRECT + SUPPORT	Sum, Lns. 47, 52	1,369.77	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1,369.77
	MONTHLY "DIRECTLY ATTRIBUTED" EXPENSES:																			
54	General Support Assets Expense Factor		0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	
55	General Support Assets Monthly Charges	Ln 47 times Ln 54	109.88	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	109.88
56	Gen. Pur. Computer Expense Factor		0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	
57	Gen. Pur. Computer Monthly Charges	Ln 47 times Ln 56	47.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	47.19
58	Uncollectible Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
59	Uncollectible Monthly Charges	Ln 47 times Ln 58	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
60	Accounting Expense Factor		0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	
61	Accounting Expense Monthly Charges	Ln 47 times Ln 60	10.79	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.79
62	Human Resources Expense Factor		0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	
63	Human Resources Monthly Charges	Ln 47 times Ln 62	10.52	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.52
64	Information Management Expense Factor		0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	
65	Information Management Monthly Charges	Ln 47 times Ln 64	74.56	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	74.56
66	Intangible Expense Factor		0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	
67	Intangible Expense Monthly Charges	Ln 47 times Ln 66	3.51	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.51
68	Total Monthly "Directly Attributed" Expense Charges	Sum Lns. 55, 57, 59, 61, 63, 65, 67	256.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	256.43
69	TOTAL MONTHLY "DIRECT" CHARGES	Sum, Lns. 53, 69	1,626.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1,626.20
	MONTHLY COMMON EXPENSES																			
70	Executive Expense Factor		0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	
71	Executive Expense Monthly Charges	Ln 69 times Ln 70	10.57	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.57
72	Planning Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
73	Planning Expense Monthly Charges	Ln 69 times Ln 72	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
74	External Relations Expense Factor		0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	
75	External Relations Monthly Charges	Ln 69 times Ln 74	14.96	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.96
76	Legal Expense Factor		0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	
77	Legal Expense Monthly Charges	Ln 69 times Ln 76	9.76	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.76
78	Procurement Expense Factor		0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	
79	Procurement Expense Monthly Charges	Ln 69 times Ln 78	3.58	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.58
80	Research and Development Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
81	R&D Expense Monthly Charges	Ln 69 times Ln 80	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06
82	General Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
83	General Expense Monthly Charges	Ln 69 times Ln 82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
84	Total Monthly "Common" Expenses Charges	Sum, Lns. 71, 73, 75, 77, 79, 81, 83	38.92	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	38.92
85	TOTAL MONTHLY "TELRIC"	Sum, Lns. 69, 84	********	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$1,665.13

QWEST CORPORATION
Arizona Corporation Commission Docket No. 00000A-00-0194

TELRIC -- OC12 UDIT, 25-50 Miles -- VARIABLE COMPONENT

Ln No	Plant Account Description Account Number	Source	Other 357C	Digital 257C	Circuit Digital Premises 257CP	SONET 257CS	SONET Premises 257CSP	Poles 1C	C-Wire 3C	Conduit 4C	Cable UG Metal 5C	Drop Buried 35C	Outside Plant Drop Aerial 42C	Cable Bur. Metal 45C	Cable Aer. Metal 52C	Cable Bld. Metal 62C	Cable UG Fiber 85C	Cable Bur. Fiber 845C	Cable Bld. Fiber 862C	TOTALS
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(n)	(o)	(p)	(q)	(r)	(s)	(t)
	INVESTMENT																			
1	Equipment		508.40	0.00	0.00	0.00	0.00	0.00	0.00	1,692.54	0.00	0.00	0.00	0.00	0.00	0.00	1,256.02	0.00	0.00	3,456.96
2	Bldg Loading Fact		0.0418	0.0418	0.0000	0.0418	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
3	Building	Ln 1 times Ln 2	21.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.25
4	Land Loading Fact		0.0036	0.0036	0.0000	0.0036	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
5	Land	Ln 1 times Ln 4	1.83	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.83
6	**Loaded Investment**	**Sum, Lns 1, 3, 5**	**531.48**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**1,692.54**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**1,256.02**	**0.00**	**0.00**	**3,480.04**
	MONTHLY INVESTMENT-RELATED CHARGES, EQUIPMENT																			
7	Avg Depr Factor		0.1082	0.1082	0.1082	0.1082	0.1082	0.0674	0.1404	0.0227	0.0772	0.0944	0.1137	0.0944	0.1137	0.0598	0.0900	0.0662	0.0990	
8	Avg Annual Depr	Ln 1 times Ln 7	55.01	0.00	0.00	0.00	0.00	0.00	0.00	38.42	0.00	0.00	0.00	0.00	0.00	0.00	113.04	0.00	0.00	
9	Avg Monthly Depr	Ln 8 divided by 12	4.58	0.00	0.00	0.00	0.00	0.00	0.00	3.20	0.00	0.00	0.00	0.00	0.00	0.00	9.42	0.00	0.00	17.21
10	Avg COM Factor		0.0420	0.0420	0.0420	0.0420	0.0420	0.0500	0.0755	0.0581	0.0546	0.0552	0.0536	0.0552	0.0536	0.0562	0.0562	0.0538	0.0589	
11	Avg Annual COM	Ln 1 times Ln 10	21.35	0.00	0.00	0.00	0.00	0.00	0.00	98.34	0.00	0.00	0.00	0.00	0.00	0.00	70.59	0.00	0.00	
12	Avg Monthly COM	Ln 11 divided by 12	1.78	0.00	0.00	0.00	0.00	0.00	0.00	8.19	0.00	0.00	0.00	0.00	0.00	0.00	5.88	0.00	0.00	15.86
13	Avg IT Factor		0.0175	0.0175	0.0175	0.0175	0.0175	0.0208	0.0314	0.0242	0.0227	0.0230	0.0223	0.0230	0.0223	0.0234	0.0234	0.0224	0.0245	
14	Avg Annual IT	Ln 1 times Ln 13	8.90	0.00	0.00	0.00	0.00	0.00	0.00	40.96	0.00	0.00	0.00	0.00	0.00	0.00	29.39	0.00	0.00	
15	Avg Monthly IT	Ln 14 divided by 12	0.74	0.00	0.00	0.00	0.00	0.00	0.00	3.41	0.00	0.00	0.00	0.00	0.00	0.00	2.45	0.00	0.00	6.60
16	Total Maint Factor		0.0182	0.0118	0.0118	0.0118	0.0118	0.0045	0.0156	0.0046	0.0376	0.0845	0.1158	0.0845	0.1158	0.0156	0.0376	0.0139	0.0200	
17	Total Annual Maint	Ln 1 times Ln 16	9.25	0.00	0.00	0.00	0.00	0.00	0.00	7.79	0.00	0.00	0.00	0.00	0.00	0.00	47.23	0.00	0.00	
18	Total Monthly Maint	Ln 17 divided by 12	0.77	0.00	0.00	0.00	0.00	0.00	0.00	0.65	0.00	0.00	0.00	0.00	0.00	0.00	3.94	0.00	0.00	5.36
19	Ad Valorem Tax Factor		0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	
20	Annual AV Taxes	Ln 1 times Ln 19	6.91	0.00	0.00	0.00	0.00	0.00	0.00	23.02	0.00	0.00	0.00	0.00	0.00	0.00	17.08	0.00	0.00	
21	Monthly AV Taxes	Ln 20 divided by 12	0.58	0.00	0.00	0.00	0.00	0.00	0.00	1.92	0.00	0.00	0.00	0.00	0.00	0.00	1.42	0.00	0.00	3.92
22	Tot Mo Inv Related Charge Equip		8.45	0.00	0.00	0.00	0.00	0.00	0.00	17.38	0.00	0.00	0.00	0.00	0.00	0.00	23.11	0.00	0.00	48.94
	MONTHLY INVESTMENT-RELATED CHARGES, L&B LOADINGS																			
23	Building Loading	Ln 3 above	21.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
24	Total AC Factor Bldg		0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	
25	Bldg Annual Charge	Ln 23 times Ln 24	4.74	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
26	Bldg Monthly Charge	Ln 25 divided by 12	0.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.40
27	Land Loading	Ln 5 above	1.83	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
28	Total AC Factor Land		0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	
29	Land Annual Charge	Ln 27 times Ln 28	0.41	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
30	Land Monthly Charge	Ln 29 divided by 12	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03
31	Total L&B Monthly Charge	Sum, Lns 26, 30	0.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.43
	BILLING AND COLLECTION CHARGES:																			
32	Total Plant Investment Monthly Charges	Sum, Lns 22 and 31	8.88	0.00	0.00	0.00	0.00	0.00	0.00	17.38	0.00	0.00	0.00	0.00	0.00	0.00	23.11	0.00	0.00	
33	B&C Factor		0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	
34	Total Monthly B&C Charge	Ln 32 times Ln 33	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.00	0.00	0.21
35	**TOTAL MONTHLY INV. RELATED CHARGES**	**Sum, Lns. 22, 31, 34**	**8.92**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**17.45**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**23.21**	**0.00**	**0.00**	**49.58**
	MONTHLY PRODUCT ADMINISTRATION RELATED CHARGES:																			
36	Direct Assigned Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
37	Direct Assigned Monthly Charges	Ln 35 times Ln 36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
38	Product Management Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
39	Product Management Monthly Charges	Ln. 35 times Ln 38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
40	Sales Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
41	Monthly Sales Charges	Ln 35 times Ln 40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
42	Advertising Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
43	Monthly Advertising Charges	Ln. 35 times Ln. 42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
44	Business Fees (Other Taxes) Expense Factor		0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	
45	Monthly Business Fees Charges	n. 44 times Sum Lns. 37, 39, 41, 4	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.09
46	Total Monthly Product Administration Charges	Sum, Lns. 37, 39, 41, 43, 45	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.09

QWEST CORPORATION
Arizona Corporation Commission Docket No. 00000A-00-0194

TELRIC -- OC12 UDIT, 25-50 Miles -- VARIABLE COMPONENT

Ln No	Plant Account Description Account Number	Source	Circuit - Digital: Other 357C	Digital 257C	Premises 257CP	SONET 257CS	SONET Premises 257CSP	Poles 1C	C-Wire 3C	Conduit 4C	Outside Plant: Cable UG Metal 5C	Drop Buried 35C	Drop Aerial 42C	Cable Bur. Metal 45C	Cable Aer. Metal 52C	Cable Bld. Metal 62C	Cable UG Fiber 85C	Cable Bur. Fiber 845C	Cable Bld. Fiber 862C	TOTALS
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(n)	(o)	(p)	(q)	(r)	(s)	(t)
47	TOTAL MO. "DIRECTLY ASSIGNED" CHGS.	Sum, Lns. 35, 46	8.94	0.00	0.00	0.00	0.00	0.00	0.00	17.48	0.00	0.00	0.00	0.00	0.00	0.00	23.25	0.00	0.00	49.68
	MONTHLY "NETWORK SUPPORT" EXPENSE:																			
48	Network Operations Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
49	Network Operations Monthly Charges	Ln 47 times Ln 48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
50	"Network Support" Expense Factor		0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	
51	Network Support" Monthly Charges	Ln 47 times Ln 50	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.28	0.00	0.00	0.00	0.00	0.00	0.00	0.37	0.00	0.00	0.79
52	Total Monthly Network Support Charges	Sum, Lns. 49, 51	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.28	0.00	0.00	0.00	0.00	0.00	0.00	0.37	0.00	0.00	0.79
53	TOTAL MONTHLY DIRECT + SUPPORT	Sum, Lns. 47, 52	9.08	0.00	0.00	0.00	0.00	0.00	0.00	17.76	0.00	0.00	0.00	0.00	0.00	0.00	23.63	0.00	0.00	50.47
	MONTHLY "DIRECTLY ATTRIBUTED" EXPENSES:																			
54	General Support Assets Expense Factor		0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	
55	General Support Assets Monthly Charges	Ln 47 times Ln 54	0.73	0.00	0.00	0.00	0.00	0.00	0.00	1.43	0.00	0.00	0.00	0.00	0.00	0.00	1.90	0.00	0.00	4.05
56	Gen Pur Computer Expense Factor		0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	
57	Gen Pur Computer Monthly Charges	Ln 47 times Ln 56	0.31	0.00	0.00	0.00	0.00	0.00	0.00	0.61	0.00	0.00	0.00	0.00	0.00	0.00	0.81	0.00	0.00	1.74
58	Uncollectible Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
59	Uncollectible Monthly Charges	Ln 47 times Ln 58	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
60	Accounting Expense Factor		0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	
61	Accounting Expense Monthly Charges	Ln 47 times Ln 60	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.19	0.00	0.00	0.40
62	Human Resources Expense Factor		0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	
63	Human Resources Monthly Charges	Ln 47 times Ln 62	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.18	0.00	0.00	0.39
64	Information Management Expense Factor		0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	
65	Information Management Monthly Charges	Ln 47 times Ln 64	0.49	0.00	0.00	0.00	0.00	0.00	0.00	0.97	0.00	0.00	0.00	0.00	0.00	0.00	1.29	0.00	0.00	2.75
66	Intangible Expense Factor		0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	
67	Intangible Expense Monthly Charges	Ln 47 times Ln 66	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.00	0.00	0.13
68	Total Monthly "Directly Attributed" Expense Charges	Sum Lns. 55, 57, 59, 61, 63, 65, 67	1.70	0.00	0.00	0.00	0.00	0.00	0.00	3.33	0.00	0.00	0.00	0.00	0.00	0.00	4.42	0.00	0.00	9.45
69	TOTAL MONTHLY "DIRECT" CHARGES	Sum, Lns. 53, 69	10.78	0.00	0.00	0.00	0.00	0.00	0.00	21.09	0.00	0.00	0.00	0.00	0.00	0.00	28.05	0.00	0.00	59.92
	MONTHLY COMMON EXPENSES:																			
70	Executive Expense Factor		0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	
71	Executive Expense Monthly Charges	Ln 69 times Ln 70	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.18	0.00	0.00	0.39
72	Planning Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
73	Planning Expense Monthly Charges	Ln 69 times Ln 72	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
74	External Relations Expense Factor		0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	
75	External Relations Monthly Charges	Ln 69 times Ln 74	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.26	0.00	0.00	0.55
76	Legal Expense Factor		0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	
77	Legal Expense Monthly Charges	Ln 69 times Ln 76	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.17	0.00	0.00	0.36
78	Procurement Expense Factor		0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	
79	Procurement Expense Monthly Charges	Ln 69 times Ln 78	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.00	0.00	0.13
80	Research and Development Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
81	R&D Expense Monthly Charges	Ln 69 times Ln 80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
82	General Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
83	General Expense Monthly Charges	Ln 69 times Ln 82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
84	Total Monthly "Common" Expenses Charges	um, Lns. 71, 73, 75, 77, 79, 81, 8	0.26	0.00	0.00	0.00	0.00	0.00	0.00	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.67	0.00	0.00	1.43
85	TOTAL MONTHLY "TELRIC"	Sum, Lns. 69, 84	$11.04	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$21.59	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$28.72	$0.00	$0.00	$61.35

QWEST CORPORATION
Arizona Corporation Commission Docket No 00000A-00-0194

TELRIC -- OC12 UDIT, Over 50 Miles -- FIXED COMPONENT

Ln No	Plant Account Description Account Number	Source	Other 357C	Digital 257C	Circuit Digital Premises 257CP	SONET 257CS	SONET Premises 257CSP	Poles 1C	C Wire 3C	Conduit 4C	Cable UG Metal 5C	Drop Buried 35C	Drop Aerial 42C	Outside Plant Cable Bur. Metal 45C	Cable Aer. Metal 52C	Cable Bld. Metal 62C	Cable UG Fiber 85C	Cable Bur. Fiber 845C	Cable Bld. Fiber 862C	TOTALS
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(n)	(o)	(p)	(q)	(r)	(s)	(t)
	INVESTMENT																			
1	Equipment		76 698 46	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	76,698 46
2	Bldg Loading Fact		0 0418	0 0418	0 0000	0 0418	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	
3	Building	Ln 1 times Ln 2	3 206 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	3,206 00
4	Land Loading Fact		0 0036	0 0036	0 0000	0 0036	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	
5	Land	Ln 1 times Ln 4	276 11	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	276 11
6	**Loaded Investment**	**Sum, Lns. 1, 3, 5**	**80,180 57**	**0 00**	**0 00**	**0 00**	**0 00**	**0 00**	**0 00**	**0 00**	**0 00**	**0 00**	**0 00**	**0 00**	**0 00**	**0 00**	**0 00**	**0 00**	**0 00**	**80,180.57**
	MONTHLY INVESTMENT-RELATED CHARGES, EQUIPMENT																			
7	Avg Depr Factor		0.1082	0.1082	0.1082	0.1082	0.1082	0.0674	0.1404	0.0227	0.0772	0.0944	0.1137	0.0944	0.1137	0.0598	0.0900	0.0662	0.0990	
8	Avg Annual Depr	Ln 1 times Ln 7	8 298 77	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	
9	Avg Monthly Depr	Ln 8 divided by 12	691 56	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	691 56
10	Avg COM Factor		0.0420	0.0420	0.0420	0.0420	0.0420	0.0500	0.0755	0.0581	0.0546	0.0552	0.0536	0.0552	0.0536	0.0562	0.0562	0.0538	0.0589	
11	Avg Annual COM	Ln 1 times Ln 10	3 221 34	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	
12	Avg Monthly COM	Ln 11 divided by 12	268 44	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	268 44
13	Avg IT Factor		0 0178	0 0178	0 0178	0 0178	0 0178	0 0208	0 0314	0 0242	0 0227	0 0230	0 0223	0 0230	0 0223	0 0234	0 0234	0 0224	0 0246	
14	Avg Annual IT	Ln 1 times Ln 13	1 342 22	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	
15	Avg Monthly IT	Ln 14 divided by 12	111 85	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	111 85
16	Total Maint Factor		0 0182	0 0118	0 0118	0 0118	0 0118	0 0045	0 0156	0 0046	0 0378	0 0845	0 1158	0 0845	0 1158	0 0156	0 0376	0 0139	0 0200	
17	Total Annual Maint	Ln 1 times Ln 16	1 395 91	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	
18	Total Monthly Maint	Ln 17 divided by 12	116 33	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	116 33
19	Ad Valorem Tax Factor		0 0136	0 0136	0 0136	0 0136	0 0136	0 0136	0 0136	0 0136	0 0136	0 0136	0 0136	0 0136	0 0136	0 0136	0 0136	0 0136	0 0136	
20	Annual AV Taxes	Ln 1 times Ln 19	1 043 10	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	
21	Monthly AV Taxes	Ln 20 divided by 12	86 92	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	86 92
22	Tot Mo Inv Related Charge Equip		1 275 11	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	1,275 11
	MONTHLY INVESTMENT-RELATED CHARGES, L&B LOADINGS																			
23	Building Loading	Ln 3 above	3 206 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	
24	Total AC Factor Bldg		0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	
25	Bldg Annual Charge	Ln 23 times Ln 24	715 58	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	
26	Bldg Monthly Charge	Ln 25 divided by 12	59 63	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	59 63
27	Land Loading	Ln 5 above	276 11	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	
28	Total AC Factor Land		0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	0 2232	
29	Land Annual Charge	Ln 27 times Ln 28	61 63	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	
30	Land Monthly Charge	Ln 29 divided by 12	5 14	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	5 14
31	Total L&B Monthly Charge	Sum Lns 26 30	64 77	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	64 77
	BILLING AND COLLECTION CHARGES:																			
32	Total Plant Investment Monthly Charges	Sum Lns 22 and 31	1 339 88	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	
33	B&C Factor		0 0043	0 0043	0 0043	0 0043	0 0043	0 0043	0 0043	0 0043	0 0043	0 0043	0 0043	0 0043	0 0043	0 0043	0 0043	0 0043	0 0043	
34	Total Monthly B&C Charge	Ln 32 times Ln 33	5 77	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	5 77
35	**TOTAL MONTHLY INV. RELATED CHARGES**	**Sum, Lns. 22, 31, 34**	**1,345 65**	**0 00**	**0 00**	**0 00**	**0 00**	**0 00**	**0 00**	**0 00**	**0 00**	**0 00**	**0 00**	**0 00**	**0 00**	**0 00**	**0 00**	**0 00**	**0 00**	**1,345.65**
	MONTHLY PRODUCT ADMINISTRATION RELATED CHARGES:																			
36	Direct Assigned Expense Factor		0.0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000
37	Direct Assigned Monthly Charges	Ln 35 times Ln 36	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
38	Product Management Expense Factor		0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	
39	Product Management Monthly Charges	Ln. 35 times Ln 38	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
40	Sales Expense Factor		0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	
41	Monthly Sales Charges	Ln 35 times Ln 40	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
42	Advertising Expense Factor		0.0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	0 0000	
43	Monthly Advertising Charges	Ln 35 times Ln 42	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
44	Business Fees (Other Taxes) Expense Factor		0.0019	0 0019	0 0019	0 0019	0 0019	0 0019	0 0019	0 0019	0 0019	0 0019	0 0019	0 0019	0 0019	0 0019	0 0019	0 0019	0 0019	
45	Monthly Business Fees Charges	Ln 44 times Sum Lns. 37, 39, 41, 43	2 56	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	2 56
46	Total Monthly Product Administration Charges	Sum, Lns 37, 39, 41, 43, 45	2 56	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	2 56

QWEST CORPORATION
Arizona Corporation Commission Docket No. 00000A-00-0194

TELRIC -- OC12 UDIT, Over 50 Miles -- FIXED COMPONENT

Ln No.	Plant Account Description Account Number	Source	Circuit - Digital: Other 357C	Digital 257C	Premises 257CP	SONET 257CS	SONET Premises 257CSP	Outside Plant: Poles 1C	C-Wire 3C	Conduit 4C	Cable UG Metal 5C	Drop Buried 35C	Drop Aerial 42C	Cable Bur. Metal 45C	Cable Aer. Metal 52C	Cable Bld. Metal 62C	Cable UG Fiber 85C	Cable Bur. Fiber 845C	Cable Bld. Fiber 862C	TOTALS
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(n)	(o)	(p)	(q)	(r)	(s)	(t)
47	TOTAL MO. "DIRECTLY ASSIGNED" CHGS.	Sum, Lns. 35, 46	1,348.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1,348.20
	MONTHLY "NETWORK SUPPORT" EXPENSE:																			
48	Network Operations Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
49	Network Operations Monthly Charges	Ln 47 times Ln 48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
50	"Network Support" Expense Factor		0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	
51	Network Support" Monthly Charges	Ln 47 times Ln 50	21.57	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.57
52	Total Monthly Network Support Charges	Sum Lns 49, 51	21.57	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.57
53	TOTAL MONTHLY DIRECT + SUPPORT	Sum, Lns 47, 52	1,369.77	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1,369.77
	MONTHLY "DIRECTLY ATTRIBUTED" EXPENSES:																			
54	General Support Assets Expense Factor		0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	
55	General Support Assets Monthly Charges	Ln 47 times Ln 54	109.88	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	109.88
56	Gen. Pur. Computer Expense Factor		0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	
57	Gen. Pur. Computer Monthly Charges	Ln 47 times Ln 56	47.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	47.19
58	Uncollectible Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
59	Uncollectible Monthly Charges	Ln 47 times Ln 58	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
60	Accounting Expense Factor		0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	
61	Accounting Expense Monthly Charges	Ln 47 times Ln 60	10.79	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.79
62	Human Resources Expense Factor		0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	
63	Human Resources Monthly Charges	Ln 47 times Ln 62	10.52	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.52
64	Information Management Expense Factor		0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	
65	Information Management Monthly Charges	Ln 47 times Ln 64	74.56	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	74.56
66	Intangible Expense Factor		0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	
67	Intangible Expense Monthly Charges	Ln 47 times Ln 66	3.51	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.51
68	Total Monthly "Directly Attributed" Expense Charges	Sum Lns 55, 57, 59, 61, 63, 65, 67	256.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	256.43
69	TOTAL MONTHLY "DIRECT" CHARGES	Sum, Lns 53, 68	1,626.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1,626.20
	MONTHLY COMMON EXPENSES:																			
70	Executive Expense Factor		0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	
71	Executive Expense Monthly Charges	Ln 69 times Ln 70	10.57	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.57
72	Planning Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
73	Planning Expense Monthly Charges	Ln 69 times Ln 72	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
74	External Relations Expense Factor		0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	
75	External Relations Monthly Charges	Ln 69 times Ln 74	14.96	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.96
76	Legal Expense Factor		0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	
77	Legal Expense Monthly Charges	Ln 69 times Ln 76	9.76	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.76
78	Procurement Expense Factor		0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	
79	Procurement Expense Monthly Charges	Ln 69 times Ln 78	3.58	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.58
80	Research and Development Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
81	R&D Expense Monthly Charges	Ln 69 times Ln 80	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06
82	General Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
83	General Expense Monthly Charges	Ln 69 times Ln 82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
84	Total Monthly "Common" Expenses Charges	Sum, Lns 71, 73, 75, 77, 79, 81, 83	38.92	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	38.92
85	TOTAL MONTHLY "TELRIC"	Sum, Lns. 69, 84	*********	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$1,665.13

QWEST CORPORATION
Arizona Corporation Commission Docket No 00000A-00-0194

TELRIC -- OC12 UDIT, Over 50 Miles -- VARIABLE COMPONENT

Ln No (a)	Plant Account Description Account Number (b)	Source (c)	Circuit - Digital: Other 357C (d)	Digital 257C (e)	Premises 257CP (f)	SONET 257CS (g)	SONET Premises 257CSP (h)	Poles 1C (i)	C Wire 3C (j)	Conduit 4C (k)	Cable UG Metal 5C (l)	Drop Buried 35C (m)	Outside Plant: Drop Aerial 42C (n)	Cable Bur Metal 45C (n)	Cable Aer. Metal 52C (o)	Cable Bld. Metal 62C (p)	Cable UG Fiber 85C (q)	Cable Bur. Fiber 845C (r)	Cable Bld. Fiber 862C (s)	TOTALS (t)
	INVESTMENT																			
1	Equipment		995.84	0.00	0.00	0.00	0.00	0.00	0.00	1,645.33	0.00	0.00	0.00	0.00	0.00	0.00	1,220.99	105.12	0.00	3,967.28
2	Bldg Loading Fact		0.0418	0.0418	0.0000	0.0418	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
3	Building	Ln 1 times Ln 2	41.63	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	41.63
4	Land Loading Fact		0.0036	0.0036	0.0000	0.0036	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
5	Land	Ln 1 times Ln 4	3.59	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.59
6	**Loaded Investment**	**Sum, Lns. 1, 3, 5**	**1,041.05**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**1,645.33**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**1,220.99**	**105.12**	**0.00**	**4,012.49**
	MONTHLY INVESTMENT-RELATED CHARGES, EQUIPMENT:																			
7	Avg Depr Factor		0.1082	0.1082	0.1082	0.1082	0.1082	0.0674	0.1404	0.0227	0.0772	0.0944	0.1137	0.0944	0.1137	0.0598	0.0900	0.0662	0.0990	
8	Avg Annual Depr	Ln 1 times Ln 7	107.75	0.00	0.00	0.00	0.00	0.00	0.00	37.35	0.00	0.00	0.00	0.00	0.00	0.00	109.89	6.96	0.00	
9	Avg Monthly Depr	Ln 8 divided by 12	8.98	0.00	0.00	0.00	0.00	0.00	0.00	3.11	0.00	0.00	0.00	0.00	0.00	0.00	9.16	0.58	0.00	21.83
10	Avg COM Factor		0.0420	0.0420	0.0420	0.0420	0.0420	0.0500	0.0755	0.0581	0.0546	0.0552	0.0536	0.0552	0.0536	0.0562	0.0562	0.0538	0.0589	
11	Avg Annual COM	Ln 1 times Ln 10	41.83	0.00	0.00	0.00	0.00	0.00	0.00	95.59	0.00	0.00	0.00	0.00	0.00	0.00	68.62	5.66	0.00	
12	Avg Monthly COM	Ln 11 divided by 12	3.49	0.00	0.00	0.00	0.00	0.00	0.00	7.97	0.00	0.00	0.00	0.00	0.00	0.00	5.72	0.47	0.00	17.64
13	Avg IT Factor		0.0175	0.0175	0.0175	0.0175	0.0175	0.0208	0.0314	0.0242	0.0227	0.0230	0.0223	0.0230	0.0223	0.0234	0.0234	0.0224	0.0245	
14	Avg Annual IT	Ln 1 times Ln 13	17.43	0.00	0.00	0.00	0.00	0.00	0.00	39.82	0.00	0.00	0.00	0.00	0.00	0.00	28.57	2.35	0.00	
15	Avg Monthly IT	Ln 14 divided by 12	1.45	0.00	0.00	0.00	0.00	0.00	0.00	3.32	0.00	0.00	0.00	0.00	0.00	0.00	2.38	0.20	0.00	7.35
16	Total Maint Factor		0.0182	0.0118	0.0118	0.0118	0.0118	0.0046	0.0156	0.0046	0.0376	0.0845	0.1158	0.0845	0.1158	0.0156	0.0376	0.0139	0.0200	
17	Total Annual Maint	Ln 1 times Ln 16	18.12	0.00	0.00	0.00	0.00	0.00	0.00	7.57	0.00	0.00	0.00	0.00	0.00	0.00	45.91	1.46	0.00	
18	Total Monthly Maint	Ln 17 divided by 12	1.51	0.00	0.00	0.00	0.00	0.00	0.00	0.63	0.00	0.00	0.00	0.00	0.00	0.00	3.83	0.12	0.00	6.09
19	Ad Valorem Tax Factor		0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	0.0136	
20	Annual AV Taxes	Ln 1 times Ln 19	13.54	0.00	0.00	0.00	0.00	0.00	0.00	22.38	0.00	0.00	0.00	0.00	0.00	0.00	16.61	1.43	0.00	
21	Monthly AV Taxes	Ln 20 divided by 12	1.13	0.00	0.00	0.00	0.00	0.00	0.00	1.86	0.00	0.00	0.00	0.00	0.00	0.00	1.38	0.12	0.00	4.50
22	Tot Mo Inv Related Charge, Equip		16.56	0.00	0.00	0.00	0.00	0.00	0.00	16.69	0.00	0.00	0.00	0.00	0.00	0.00	22.47	1.49	0.00	57.40
	MONTHLY INVESTMENT-RELATED CHARGES, L&B LOADINGS																			
23	Building Loading	Ln 3 above	41.63	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
24	Total AC Factor, Bldg		0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	
25	Bldg Annual Charge	Ln 23 times Ln 24	9.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
26	Bldg Monthly Charge	Ln 25 divided by 12	0.77	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.77
27	Land Loading	Ln 5 above	3.59	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
28	Total AC Factor, Land		0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	0.2232	
29	Land Annual Charge	Ln 27 times Ln 28	0.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
30	Land Monthly Charge	Ln 29 divided by 12	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07
31	Total L&B Monthly Charge	Sum Lns 26 30	0.84	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.84
	BILLING AND COLLECTION CHARGES:																			
32	Total Plant Investment Monthly Charges	Sum Lns 22 and 31	17.40	0.00	0.00	0.00	0.00	0.00	0.00	16.69	0.00	0.00	0.00	0.00	0.00	0.00	22.47	1.49	0.00	
33	B&C Factor		0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	0.0043	
34	Total Monthly B&C Charge	Ln 32 times Ln 33	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.01	0.00	0.25
35	**TOTAL MONTHLY INV. RELATED CHARGES**	**Sum, Lns. 22, 31, 34**	**17.47**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**16.96**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**22.56**	**1.49**	**0.00**	**58.49**
	MONTHLY PRODUCT ADMINISTRATION RELATED CHARGES:																			
36	Direct Assigned Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
37	Direct Assigned Monthly Charges	Ln 35 times Ln 36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
38	Product Management Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
39	Product Management Monthly Charges	Ln 35 times Ln 38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
40	Sales Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
41	Monthly Sales Charges	Ln 35 times Ln 40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
42	Advertising Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
43	Monthly Advertising Charges	Ln 35 times Ln 42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
44	Business Fees (Other Taxes) Expense Factor		0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	
45	Monthly Business Fees Charges	Ln 44 times Sum Lns 37, 39, 41, 4	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.11
46	Total Monthly Product Administration Charges	Sum, Lns. 37, 39, 41, 43, 45	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.11

QWEST CORPORATION
Arizona Corporation Commission Docket No. 00000A-00-0194

TELRIC -- OC12 UDIT, Over 50 Miles -- VARIABLE COMPONENT

Ln. No	Plant Account Description Account Number	Source	Circuit - Digital: Other 357C	Digital 257C	Premises 257CP	SONET 257CS	SONET Premises 257CSP	Poles 1C	C-Wire 3C	Conduit 4C	Outside Plant: Cable UG Metal 5C	Drop Buried 35C	Drop Aerial 42C	Cable Bur. Metal 45C	Cable Aer. Metal 52C	Cable Bld. Metal 62C	Cable UG Fiber 85C	Cable Bur. Fiber 845C	Cable Bld. Fiber 862C	TOTALS
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(n)	(o)	(p)	(q)	(r)	(s)	(t)
47	TOTAL MO. "DIRECTLY ASSIGNED" CHGS.	Sum, Lns. 35, 46	17.50	0.00	0.00	0.00	0.00	0.00	0.00	17.00	0.00	0.00	0.00	0.00	0.00	0.00	22.61	1.50	0.00	58.61
	MONTHLY "NETWORK SUPPORT" EXPENSE:																			
48	Network Operations Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
49	Network Operations Monthly Charges	Ln 47 times Ln 48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
50	"Network Support" Expense Factor		0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	0.0160	
51	Network Support" Monthly Charges	Ln 47 times Ln 50	0.28	0.00	0.00	0.00	0.00	0.00	0.00	0.27	0.00	0.00	0.00	0.00	0.00	0.00	0.36	0.02	0.00	0.94
52	Total Monthly Network Support Charges	Sum Lns 49, 51	0.28	0.00	0.00	0.00	0.00	0.00	0.00	0.27	0.00	0.00	0.00	0.00	0.00	0.00	0.36	0.02	0.00	0.94
53	TOTAL MONTHLY DIRECT + SUPPORT	Sum, Lns. 47, 52	17.78	0.00	0.00	0.00	0.00	0.00	0.00	17.27	0.00	0.00	0.00	0.00	0.00	0.00	22.97	1.52	0.00	59.54
	MONTHLY "DIRECTLY ATTRIBUTED" EXPENSES:																			
54	General Support Assets Expense Factor		0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	0.0815	
55	General Support Assets Monthly Charges	Ln 47 times Ln 54	1.43	0.00	0.00	0.00	0.00	0.00	0.00	1.39	0.00	0.00	0.00	0.00	0.00	0.00	1.84	0.12	0.00	4.78
56	Gen Pur Computer Expense Factor		0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	0.0350	
57	Gen Pur Computer Monthly Charges	Ln 47 times Ln 56	0.61	0.00	0.00	0.00	0.00	0.00	0.00	0.59	0.00	0.00	0.00	0.00	0.00	0.00	0.79	0.05	0.00	2.05
58	Uncollectible Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
59	Uncollectible Monthly Charges	Ln 47 times Ln 58	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
60	Accounting Expense Factor		0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	
61	Accounting Expense Monthly Charges	Ln 47 times Ln 60	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.18	0.01	0.00	0.47
62	Human Resources Expense Factor		0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	
63	Human Resources Monthly Charges	Ln 47 times Ln 62	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.18	0.01	0.00	0.46
64	Information Management Expense Factor		0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	0.0553	
65	Information Management Monthly Charges	Ln 47 times Ln 64	0.97	0.00	0.00	0.00	0.00	0.00	0.00	0.94	0.00	0.00	0.00	0.00	0.00	0.00	1.25	0.08	0.00	3.24
66	Intangible Expense Factor		0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	
67	Intangible Expense Monthly Charges	Ln 47 times Ln 66	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.00	0.00	0.15
68	Total Monthly "Directly Attributed" Expense Charges	Sum Lns 55, 57, 59, 61, 63, 65, 67	3.33	0.00	0.00	0.00	0.00	0.00	0.00	3.23	0.00	0.00	0.00	0.00	0.00	0.00	4.30	0.26	0.00	11.15
69	TOTAL MONTHLY "DIRECT" CHARGES	Sum, Lns 53, 69	21.11	0.00	0.00	0.00	0.00	0.00	0.00	20.50	0.00	0.00	0.00	0.00	0.00	0.00	27.27	1.81	0.00	70.69
	MONTHLY COMMON EXPENSES																			
70	Executive Expense Factor		0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	
71	Executive Expense Monthly Charges	Ln 69 times Ln 70	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.18	0.01	0.00	0.46
72	Planning Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
73	Planning Expense Monthly Charges	Ln 69 times Ln 72	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
74	External Relations Expense Factor		0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	0.0092	
75	External Relations Monthly Charges	Ln 69 times Ln 74	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.25	0.02	0.00	0.65
76	Legal Expense Factor		0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	
77	Legal Expense Monthly Charges	Ln 69 times Ln 76	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.16	0.01	0.00	0.42
78	Procurement Expense Factor		0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	
79	Procurement Expense Monthly Charges	Ln 69 times Ln 78	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.00	0.00	0.16
80	Research and Development Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
81	R&D Expense Monthly Charges	Ln 69 times Ln 80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
82	General Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
83	General Expense Monthly Charges	Ln 69 times Ln 82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
84	Total Monthly "Common" Expenses Charges	um, Lns 71, 73, 75, 77, 79, 81, 8	0.51	0.00	0.00	0.00	0.00	0.00	0.00	0.49	0.00	0.00	0.00	0.00	0.00	0.00	0.65	0.04	0.00	1.69
85	TOTAL MONTHLY "TELRIC"	Sum, Lns. 69, 84	$21.62	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$20.99	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$27.92	$1.85	$0.00	$72.38

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TELRIC -- Shared Transport per MOU

Ln No (a)	Plant Account Description Account Number (b)	Source (c)	Digital Switch 377C (d)	UG Fiber Cable 85C (e)	Other Digital Equipment 357C (f)	Conduit Systems 4C (g)	Buried Fiber Cable 845C (h)	TOTALS (i)
	INVESTMENT							
1	Equipment		0.002262	0.000238	0.000876	0.000254	0.000009	0.003639
2	Bldg Loading Fact		0.0418	0.0418	0.0418	0.0418	0.0418	
3	Building	Ln 1 times Ln 2	0.000095	0.000010	0.000037	0.000011	0.000000	0.000152
4	Land Loading Fact		0.0036	0.0036	0.0036	0.0036	0.0036	
5	Land	Ln 1 times Ln 4	0.000008	0.000001	0.000003	0.000001	0.000000	0.000013
6	Loaded Investment	Sum, Lns. 1, 3, 5	0.002365	0.000249	0.000916	0.000265	0.000009	0.003804
	MONTHLY INVESTMENT RELATED CHARGES, EQUIPMENT:							
7	Avg Depr Factor		0.1042	0.0900	0.1082	0.0227	0.0662	
8	Avg Annual Depr	Ln 1 times Ln 7	0.000236	0.000021	0.000095	0.000006	0.000001	
9	Avg Monthly Depr	Ln 8 divided by 12	0.000020	0.000002	0.000008	0.000000	0.000000	0.000030
10	Avg COM Factor		0.0419	0.0562	0.0420	0.0581	0.0538	
11	Avg Annual COM	Ln 1 times Ln 10	0.000095	0.000013	0.000037	0.000015	0.000000	
12	Avg Monthly COM	Ln 11 divided by 12	0.000008	0.000001	0.000003	0.000001	0.000000	0.000013
13	Avg IT Factor		0.0175	0.0234	0.0175	0.0242	0.0224	
14	Avg Annual IT	Ln 1 times Ln 13	0.000040	0.000006	0.000015	0.000006	0.000000	
15	Avg Monthly IT	Ln 14 divided by 12	0.000003	0.000000	0.000001	0.000001	0.000000	0.000006
16	Total Maint Factor		0.0238	0.0153	0.0182	0.0044	0.0139	
17	Total Annual Maint	Ln 1 times Ln 16	0.000054	0.000004	0.000016	0.000001	0.000000	
18	Total Monthly Maint	Ln 17 divided by 12	0.000004	0.000000	0.000001	0.000000	0.000000	0.000006
19	Ad Valorem Tax Factor		0.0136	0.0136	0.0136	0.0136	0.0136	
20	Annual AV Taxes	Ln 1 times Ln 19	0.000031	0.000003	0.000012	0.000003	0.000000	
21	Monthly AV Taxes	Ln 20 divided by 12	0.000003	0.000000	0.000001	0.000000	0.000000	0.000004
22	Tot Mo Inv Related Charge Equip		0.000038	0.000004	0.000015	0.000003	0.000000	0.000059
	MONTHLY INVESTMENT RELATED CHARGES, L&B LOADINGS							
23	Building Loading	Ln 3 above	0.000095	0.000010	0.000037	0.000011	0.000000	0.000152
24	Total AC Factor Bldg		0.0400	0.0400	0.0400	0.0400	0.0400	
25	Bldg Annual Charge	Ln 23 times Ln 24	0.000004	0.000000	0.000001	0.000000	0.000000	
26	Bldg Monthly Charge	Ln 25 divided by 12	0.000000	0.000000	0.000000	0.000000	0.000000	0.000001
27	Land Loading	Ln 5 above	0.000008	0.000001	0.000003	0.000001	0.000000	0.000013
28	Total AC Factor Land		0.0400	0.0400	0.0400	0.0400	0.0400	
29	Land Annual Charge	Ln 27 times Ln 28	0.000000	0.000000	0.000000	0.000000	0.000000	
30	Land Monthly Charge	Ln 29 divided by 12	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
31	Total L&B Monthly Charge	Sum, Lns 26, 30	0.000000	0.000000	0.000000	0.000000	0.000000	0.000001
	BILLING AND COLLECTION CHARGES:							
32	Total Plant Investment Monthly Charges	Sum, Lns 22 and 31	0.000038	0.000004	0.000015	0.000003	0.000000	0.000060
33	B&C Factor		0.0043	0.0043	0.0043	0.0043	0.0043	
34	Total Monthly B&C Charge	Ln 32 times Ln 33	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
35	**TOTAL MONTHLY INV. RELATED CHARGES**	Sum, Lns. 22, 31, 34	0.000038	0.000004	0.000015	0.000003	0.000000	0.000060
	MONTHLY PRODUCT ADMINISTRATION RELATED CHARGES:							
36	Direct Assigned Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
37	Direct Assigned Monthly Charges	Ln 35 times Ln 36	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
38	Product Management Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
39	Product Management Monthly Charges	Ln 35 times Ln 38	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
40	Sales Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
41	Monthly Sales Charges	Ln 35 times Ln 40	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
42	Advertising Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
43	Monthly Advertising Charges	Ln 35 times Ln 42	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
44	Business Fees (Other Taxes) Expense Factor		0.0019	0.0019	0.0019	0.0019	0.0019	0.0019
45	Monthly Business Fees Charges	n 44 times Sum Lns 37, 39, 41, 4	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
46	Total Monthly Product Administration Charges	Sum, Lns 37, 39, 41, 43, 45	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

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TELRIC -- Shared Transport per MOU

Ln No	Plant Account Description Account Number	Source	Digital Switch 377C	UG Fiber Cable 85C	Other Digital Equipment 357C	Conduit Systems 4C	Buried Fiber Cable 845C	TOTALS
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)
47	**TOTAL MO. "DIRECTLY ASSIGNED" CHGS.**	**Sum, Lns. 35, 46**	**0.000038**	**0.000004**	**0.000015**	**0.000003**	**0.000000**	**0.000060**
	MONTHLY "NETWORK SUPPORT" EXPENSE:							
48	Network Operations Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	
49	Network Operations Monthly Charges	Ln 47 times Ln 48	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
50	"Network Support" Expense Factor		0.0160	0.0160	0.0160	0.0160	0.0160	
51	Network Support" Monthly Charges	Ln 47 times Ln 50	0.000001	0.000000	0.000000	0.000000	0.000000	0.000001
52	Total Monthly Network Support Charges	Sum, Lns. 49, 51	0.000001	0.000000	0.000000	0.000000	0.000000	0.000001
53	**TOTAL MONTHLY DIRECT + SUPPORT**	**Sum, Lns. 47, 52**	**0.000039**	**0.000004**	**0.000015**	**0.000003**	**0.000000**	**0.000061**
	MONTHLY "DIRECTLY ATTRIBUTED" EXPENSES:							
54	General Support Assets Expense Factor		0.0815	0.0815	0.0815	0.0815	0.0815	
55	General Support Assets Monthly Charges	Ln 47 times Ln 54	0.000003	0.000000	0.000001	0.000000	0.000000	0.000005
56	Gen Pur Computer Expense Factor		0.0350	0.0350	0.0350	0.0350	0.0350	
57	Gen Pur Computer Monthly Charges	Ln 47 times Ln 56	0.000001	0.000000	0.000001	0.000000	0.000000	0.000002
58	Uncollectible Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	
59	Uncollectible Monthly Charges	Ln 47 times Ln 58	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
60	Accounting Expense Factor		0.0080	0.0080	0.0080	0.0080	0.0080	
61	Accounting Expense Monthly Charges	Ln 47 times Ln 60	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
62	Human Resources Expense Factor		0.0078	0.0078	0.0078	0.0078	0.0078	
63	Human Resources Monthly Charges	Ln 47 times Ln 62	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
64	Information Management Expense Factor		0.0553	0.0553	0.0553	0.0553	0.0553	
65	Information Management Monthly Charges	Ln 47 times Ln 64	0.000002	0.000000	0.000001	0.000000	0.000000	0.000003
66	Intangible Expense Factor		0.0026	0.0026	0.0026	0.0026	0.0026	
67	Intangible Expense Monthly Charges	Ln 47 times Ln 66	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
68	Total Monthly "Directly Attributed" Expense Charges	Sum Lns 55, 57, 59, 61 63, 65, 67	0.000007	0.000001	0.000003	0.000001	0.000000	0.000011
69	**TOTAL MONTHLY "DIRECT" CHARGES**	**Sum, Lns. 53, 68**	**0.000046**	**0.000005**	**0.000018**	**0.000003**	**0.000000**	**0.000072**
	MONTHLY COMMON EXPENSES:							
70	Executive Expense Factor		0.0065	0.0065	0.0065	0.0065	0.0065	
71	Executive Expense Monthly Charges	Ln 69 times Ln 70	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
72	Planning Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	
73	Planning Expense Monthly Charges	Ln 69 times Ln 72	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
74	External Relations Expense Factor		0.0092	0.0092	0.0092	0.0092	0.0092	
75	External Relations Monthly Charges	Ln 69 times Ln 74	0.000000	0.000000	0.000000	0.000000	0.000000	0.000001
76	Legal Expense Factor		0.0060	0.0060	0.0060	0.0060	0.0060	
77	Legal Expense Monthly Charges	Ln 69 times Ln 76	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
78	Procurement Expense Factor		0.0022	0.0022	0.0022	0.0022	0.0022	
79	Procurement Expense Monthly Charges	Ln 69 times Ln 78	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
80	Research and Development Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	
81	R&D Expense Monthly Charges	Ln 69 times Ln 80	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
82	General Expense Factor		0.0000	0.0000	0.0000	0.0000	0.0000	
83	General Expense Monthly Charges	Ln 69 times Ln 82	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
84	Total Monthly "Common" Expenses Charges	Sum, Lns. 71, 73, 75, 77, 79, 81, 83	0.000001	0.000000	0.000000	0.000000	0.000000	0.000002
85	**TOTAL MONTHLY "TELRIC"**	**Sum, Lns. 69, 84**	**$0.000047**	**$0.000005**	**$0.000018**	**$0.000003**	**$0.000000**	**$0.000074**

BEFORE THE
ARIZONA CORPORATION COMMISSION

IN THE MATTER OF THE GENERIC INVESTIGATION INTO U S WEST COMMUNICATIONS, INC.'S COMPLIANCE WITH CERTAIN WHOLESALE PRICING REQUIREMENTS FOR UNBUNDLED NETWORK ELEMENTS AND RESALE DISCOUNTS	)	DOCKET NO. T00000A-00-0194

DIRECT TESTIMONY OF

THOMAS H. WEISS

ON BEHALF OF
AT&T COMMUNICATIONS OF THE MOUNTAIN STATES, INC.
WORLDCOM CORPORATION
&
XO ARIZONA, INC.

RE: QWEST'S LOOPMOD2 COST MODEL

NON-PROPRIETARY VERSION

May 18, 2001

EXHIBIT
AT/WorldCom
admitted 9

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1 **I. INTRODUCTION & WITNESS QUALIFICATIONS**

2 **Q. MR. WEISS, PLEASE STATE YOUR NAME AND BUSINESS ADDRESS**
3 **FOR THE RECORD.**

4 A. My name is Thomas H. Weiss. My business address is 205 E. Spring Street,
5 Fuquay-Varina, NC, 27526.

6 **Q. ARE YOU THE SAME THOMAS H. WEISS WHO EARLIER FILED**
7 **TESTIMONY IN THIS DOCKET ON BEHALF OF AT&T**
8 **COMMUNICATIONS OF THE MOUNTAIN STATES, INC.,**
9 **WORLDCOM CORPORATION, AND XO ARIZONA, INC.?**

10 A. Yes, I am.

11 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY AT THIS TIME?**

12 A. My purpose is to report the results of my review of Qwest's LoopMod2, the
13 model with which Qwest computes its costs of unbundled loop elements.

14

15 **II. QWEST'S LOOPMOD2 MODEL**

16 **A. In General**

17 **Q. PLEASE BRIEFLY DESCRIBE AND EXPLAIN YOUR**
18 **UNDERSTANDING OF THE FACILITIES THAT QWEST'S LOOP**
19 **MODEL2 IS DESIGNED TO ADDRESS.**

20 A. As I understand the model, Qwest, LoopMod2 ("LM2" or "the Model") is
21 designed to value the investment in wireline telecommunications plant that

extends a network access channel[1] (a/k/a "loop") from the telephone company central office to a customer's premises.

In general, access channels are provided from a central office to areas of customer demand over cables, known as "feeder" cables (containing several network access channels) that terminate in a point located physically near the center of access demand concentration.[2] From that concentration point,[3] other cables, known as "distribution" cables, extend the customer access channels, usually over metallic pairs of wires, to points, known as "customer terminals" (a/k/a pedestals, distribution panels, etc.), that are near (but usually not actually on) the specific customer premises. From the customer terminals, the access channels are routed over "drop wire" to a Network Interface Device ("NID") – the device to which the customer connects terminal equipment.[4]

In general, a minimum of four (4) feeder cables leave a central office with one feeder designed to serve customers in each of four quadrants (e.g., North, South, East, West) of the area served by the central office. Distribution cables are provided and routed, as necessary, within areas of concentrated demand (known as "Distribution Areas," or "DAs") so as to reach all customers that are located in the DA and who demand access to the network.

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[1] Pairs of metal wires or the digital electronic equivalent of a pair of metal wires (e.g., DS0 signal).

[2] Feeder cables typically contain several metallic pairs of wire or, alternatively, optical glass fibers over which network access can be provided to several customer locations via multiplexing arrangements.

[3] Known generally as the Subscriber Area Interface ("SAI"), or Feeder Distribution Interface ("FDI").

[4] For example, telephone sets, splitters, and modems.

1 **Q. PLEASE BRIEFLY DESCRIBE YOUR UNDERSTANDING OF QWEST'S**
2 **LOOPMOD2 PROGRAM.**

3 A. According to Qwest, LM2 is a computer program model that is designed to
4 develop the incremental investment costs required for Qwest to provide subscriber
5 loops. Actually, LM2 is an MS Excel file consisting of several worksheets that
6 link to other files necessary to run the Model. The linked files are also MS Excel
7 worksheets containing input data or other programs (sub-programs of LM2) that
8 extract and process data from the input files to describe the physical make-up (i.e.,
9 metallic or fiber cable sizes, length, multiplex equipment, etc.) of the various
10 types of loops (e.g., 2-wire, 4-wire, etc.).

11 LM2 can be viewed as three subsidiary modules: an engineering module, a
12 construction module and an investment cost module. The engineering module can
13 be broken down further into feeder and distribution routines. Using cable and
14 equipment component pricing information from the input files, LM2 converts the
15 physical plant required to serve end-user customers to UNE loop investment data
16 that serve as inputs to Qwest's Wholesale Cost Program ("WCP") -- the model
17 that computes Qwest's monthly recurring UNE loop cost estimates.[5] For
18 purposes of this docket, Qwest includes both LM2 and WCP as modules of its

[5] WCP applies the cost factors (from the Capital Cost Factors Model and the Expense Factors Model - TELRIC) to investment amounts from other models, such as LM2, to estimate Qwest's monthly recurring costs to provide various network elements (e.g., 2-wire loops, 4-wire loops, etc.). I have discussed my concerns with Qwest's cost factors in my testimony filed on May 16, 2001.

1 Integrated Cost Model ("ICM")[6] that is provided on the CD-ROM presented with
2 Ms. Million's testimony.

3 According to Qwest, LM2 calculates loop investment amounts using standard
4 loop feeder and distribution engineering design practices applied to end-user loop
5 demand as that demand is actually distributed throughout the wire center serving
6 areas. Qwest contends that the plant and equipment pricing information (i.e.,
7 prices of materials, and construction labor, etc.) used in LM2 is *primarily*
8 Arizona-specific and represents the unit costs that Qwest pays for loop plant
9 material, and prices that Outside Plant ("OSP") contractors can charge Qwest to
10 provide, construct, and install loop facilities in this state.[7]

11 **Q. WHAT IS YOUR UNDERSTANDING OF THE MANNER IN WHICH**
12 **THE MODEL DESIGNS FEEDER PLANT?**

13 A. I understand that the LM2 engineering module designs feeder plant for each
14 quadrant in the wire center serving area beginning at the point in each quadrant
15 that is farthest away from the wire center. From that farthest point, the Model
16 moves toward the wire center, adding demand along the route as it passes various
17 distribution areas. The result of this routine is a compilation of total demand at
18 various specific distances from the wire center along the feeder route. Based on
19 this demand information, the engineering module predicts the distances from the

---

6 Qwest's ICM consolidates inputs to and output from the individual UNE models (LM2, the Switching Cost Model (SCM), the Transport Model V4 (TM4)) and cost factor models (e.g., Capital Cost Model and Expense Factors Model) to develop, from WCP, estimates of monthly recurring costs of producing various UNEs.

7 Testimony of Dick Buckley on behalf of Qwest, page 2, lines 15-18.

wire center where feeder cable capacity would "taper" down[8] along the feeder route. Using the taper point demand information, the engineering module decides the technology to be employed on the route (i.e., metallic pairs or digital loop carrier on fiber cable) and the method that would be utilized to place the cable (buried, aerial, underground, etc.). To determine the minimum capacity of the facilities needed, a user-defined feeder fill factor[9] is applied to the demands aggregated at each taper point. The engineering module then selects standard cable sizes (e.g., 600 pair copper cable, 48 pair fiber, etc.) to be constructed in each segment of the cable along the feeder route. At this point in the feeder plant engineering simulation, the feeder cable is defined, by segment, in terms of its length and required capacity.

Q. HOW DOES THE MODEL CALCULATE INVESTMENT IN THE DISTRIBUTION PORTION OF THE LOOP?

A. To calculate investment in the distribution portion of the loop, the Model looks at each distribution area ("DA") in the area served by the wire center and defines the DA in terms of the number of working lines in it, the longest loop in it, and the number and size of customer entrance terminals in it. With this information, the engineering module LM2 decides the design for the distribution plant to serve the customers in the DA.

---

8 Known to OSP engineers as the "taper points" on a feeder cable.

9 The Model is default value is 80 percent per LoopMod2 User's Manual, page 1.7.

Rather than designing the distribution plant uniquely for each DA, the engineering module selects a representative design for each DA from a group of five standard distribution plant designs developed by Qwest to represent the universe of distribution designs applicable throughout the former U S WEST fourteen-state region. The standard designs, designated as Distribution Groups ("DGs") 1 through 5, reflect five categories of DA loop density ranging from high rise buildings (high density) to farm or ranch-type properties (lowest density). Each of the five standard designs is defined further by a standard amount of distribution cable footage and equipment.

Based on the length of the longest loop in the DA, and the area (square miles) encompassed by it, the engineering module matches each DA in the serving area with one of the standard distribution designs. Then, based on computed lot size in the DA as compared to computed lot size from the selected standard design, the engineering module adjusts the total cable footage from the standard design to scale the amount of cable reflected in the standard design to more closely match the dimensions of each DA in the serving area.

The outputs from the feeder and distribution sub-routines are forwarded to the main worksheet where, using unit material and construction cost data from other files, the average investment for various loop types in the state is finally computed.

B. Flaws in Model Inputs

Q. MR. WEISS, UPON WHAT INPUT VARIABLES DOES QWEST BASE ITS LM2?

A. Qwest has chosen to ground LM2 in several variables that should strongly influence the cost that ILECs incur to engineer and construct loop plant. A broad listing of those key variables that Qwest reflects in its LM2 analyses appears below:[10]

1. Distribution Cable Fills;
2. Feeder Cable Fills;
3. Average Drop Lengths;
4. Construction (Placement) Methods;
5. Allocation of Construction Methods;
6. Structure Sharing; and
7. Unit Prices (of cable and equipment).

Underlying each of these key variables are various assumptions and subsidiary inputs. For example, LM2 offers the analyst the opportunity to chose between two assumed techniques for reflecting distribution fill in the Model (Item No. 1, above); several options are available for the analyst to allocate plant construction methods used in different distribution groupings (Items No. 4 and 5, above); etc. I will cover these options, as necessary, as I address each of the key variables.

1. <u>Distribution Fill:</u>

Q. WHAT IS YOUR UNDERSTANDING OF THE TERM "DISTRIBUTION FILL" AS THAT CONCEPT IS INCORPORATED INTO THE MODEL?

A. In its default form, the Model does not strictly reflect the traditional interpretation of the term "fill"– i.e., units working divided by units available – for distribution

[10] Source: PROPRIETARY Exhibit RJB-3 to the Direct Testimony of Dick Buckley on behalf of Qwest.

1 plant.[11] Qwest contends that fill factors should not apply to distribution plant
2 because distribution plant is designed based on an "Engineering Standard"
3 number of lines per site to which loop capacity could be extended in the DA
4 rather than on the basis of working lines plus an allowance for spare and defective
5 capacity.[12] This Engineering Standard essentially assumes that distribution plant
6 will be designed to meet not just existing demand plus an allowance for spare and
7 defective pairs, but rather for the ultimate demand that may exist in a particular
8 DA.

9 Under this approach, for DGs 1, 2, and 5, LM2 models < PROP >lines per site.
10 For DGs 3 and 4, the model assumes < PROP >lines per site. LM2 then adjusts
11 these benchmarks upward, increasing the number of distribution lines in the
12 standard design to recognize an allowance for spare and defective capacity less an
13 allowance for dedicated spare capacity[13] -- a net increase of < Prop > percent.
14 Thus, for example, if a Qwest standard design would assume that 400 lines are
15 required to serve all of the sites in a DA by applying the < PROP > benchmark
16 design assumption, the model would then increase that 400 line total by applying
17 the < PROP > percent factor, yielding a design requirement of at least < PROP >
18 pairs. The Model then divides the total investment cost for the standard design
19 over that < PROP > pairs, yielding the investment per pair that is used to

---

[11] I have provided a more comprehensive discussion regarding fill factors in my testimony filed on May 16, 2001.

[12] Direct Testimony of James C. Overton on behalf of Qwest, page 5.

[13] These allowance factors are NOT user-adjustable when LoopMod2 is run from ICM. However, the allowance factors CAN be adjusted when the Model is run on a stand-alone basis.

1 determine the total investment cost for DAs that match to that particular standard
2 design.

3 The Model provides an analyst the option to over-ride the < PROP >
4 "Engineering Standard" and to specify distribution fills according to the
5 traditional definition – working capacity as a percentage of total available
6 capacity. Running LM2 by over-riding the Engineering Standard approach to
7 distribution design and setting the distribution fills to <PROP> for DGs 1, 2, and
8 5, and < PROP > for DGs 3 and 4, yields monthly recurring costs for UNE loops
9 that are virtually the same as those produced using Qwest's default inputs
10 exclusively.

11 **Q. JUST WHAT IS THE PRACTICAL INTERPRETATION OF QWEST'S**
12 **PROPOSED "ENGINEERING STANDARD" DISTRIBUTION FILL?**

13 A. If DGs 1, 2, and 5 are designed to a <PROP> per site benchmark, yielding an
14 effective distribution fill under that benchmark of <PROP> percent, the
15 implication is that an average of only <PROP> pair per site < PROP > is assigned
16 and working in DGs 1,2, and 5. Similarly, in DGs 3 and 4, an average of only
17 <PROP > per site is assigned < PROP > The remaining pairs are not utilized.

18 **Q. THIS COMMISSION HAS DETERMINED IN THE PAST THAT THE**
19 **APPROPRIATE FILL FACTOR FOR AN EFFICIENT NETWORK TO BE**
20 **MODELED UNDER TELRIC IS ACHIEVABLE AVERAGE FILL. IS**
21 **QWEST'S PROPOSED ENGINEERING STANDARD DISTRIBUTION**
22 **FILL AN ACHIEVABLE AVERAGE FILL?**

1 A. No. It is inappropriate in a TELRIC methodology to assume that only one
2 distribution pair per site will be assigned and working. While it is true today that
3 at least one access line at every site will be put to work in any distribution area, it
4 is also true that many, but not all, sites will utilize two or more access lines. For
5 example, many residences use one line for routine daily voice communications
6 and a second line for voice and/or Internet access via modem. Certainly, office
7 buildings and commercial sites consume more than one pair. In fact, most ILEC
8 outside plant engineering groups with which I am familiar recognize that an
9 assumption of one working access line per site in the distribution network is an
10 anachronism.

11 I understand that in the past cost docket, Qwest presented evidence that its actual
12 usage as of May of 1995 was 1.1 lines per living unit. Certainly, this actual usage
13 has increased considerably since May of 1995, given the increased use of the
14 Internet and Qwest's heavy advertising of second lines in Arizona and other states
15 within its region. As Mr. Hydock's testimony indicates, Qwest's line counts in
16 Arizona have increased tremendously since the last cost proceeding, in part due to
17 added demand for second lines.

18 **Q. WHAT IS A MORE REALISTIC FILL FACTOR FOR DISTRIBUTION**
19 **PLANT IN TODAY'S MARKET?**

20 A. I recommend that prices for UNE loops be based conservatively[14] on a minimum
21 distribution fill of 0.6250 for DGs 1, 2, and 5. For DGs 3 and 4, I recommend a

[14] Conservative, that is, in the favor of Qwest.

minimum fill factor of 0.6667. At 0.6250, every site in DGs 1, 2, and 5 would have access to 2 lines; all sites would be considered to consume at least one distribution pair, and every fourth site would be considered to consume two access lines. At 0.6667, every site in DGs 3 and 4 would have access to 3 lines; most sites would be considered to consume at least 2 lines and some as many as 3 lines. In my opinion, this reflects an achievable average fill as required by this Commission's order in the prior cost docket.

2. Feeder Fill:

Q. WHAT IS YOUR UNDERSTANDING OF FEEDER FILL AS THAT TERM APPLIES TO LM2?

A. According to Qwest, feeder fill is the factor by which feeder cable capacity is increased above the size needed to serve a given quantity of demand in order to provide spare pairs for breakage, line administration and some amount of growth.[15] Qwest's LM2 applies a feeder fill factor only to copper feeder cable.

Q. WHAT DEFAULT FEEDER FILL FACTOR IS USED IN QWEST'S LM2?

A. Qwest's default runs on LM2 reflect a copper feeder fill factor of 0.80 extracted directly from Section 3.3 on page 56 of the Inputs Portfolio documentation supplied with HAI Model Release 5.0a.[16] According to Ms. Million, Qwest uses the 0.80 copper feeder fill factor from the Commission's Decision No. 60635 in which the Commission found that the "achievable average" fill factor of 0.80 used

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[15] Exhibit RJB-3, page 3; a direct quotation from Section 3.3 on page 56 of the HAI Model , Release 5.0a Inputs Portfolio.

[16] Qwest response to AT&T Request No. 03-117(f).

in the HAI Model was to be used in cost studies.[17] Qwest does not explain why it chose to use the Commission's prior finding for feeder fill while ignoring the Commission's finding regarding distribution fill. Feeder Fill is directly accessible and able to be adjusted easily by the analyst in either the version of LM2 that is bundled with ICM or in the stand-alone version of LoopMod2.

Q. DO YOU HAVE ANY COMMENTS ON QWEST'S USE OF THE 0.80 COPPER FEEDER FILL FACTOR?

A. Yes. The 0.80 achievable average copper fill factor falls within the range of copper feeder fill factors I have recommended for use in UNE loop cost studies. Accordingly, I do not object to Qwest's choice of the 0.80 copper feeder fill factor in this case.

3. Average Drop Lengths:

Q. WHAT IS YOUR UNDERSTANDING OF THE AVERAGE DROP LENGTHS AS THAT TERM IS USED IN QWEST'S LM2?

A. The drop wire is the facility that extends from the distribution terminal nearest to the customer's location to the customer's premises. In LM2, drop lengths are broken out between aerial and buried and by distribution density group only in DGs 3, 4, and 5.[18]

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[17] ACC Docket No. U-3021-96-448 et al., Decision No. 60635, p. 17.

[18] Access lines in DGs 1 and 2 enter the customers' premises through entrance facilities (bulk wire terminals typically used in offices and other commercial locations).

1 **Q. WHAT DROP LENGTHS DOES QWEST USE IN ITS DEFAULT RUNS**
2 **OF THE LOOP MODEL?**

3 A. Default values for drop lengths, in linear feet, are specific by DG as shown
4 below:[19]

5	1. Aerial Drop, Density Group 3	<PROP>
6	2. Aerial Drop, Density Group 4	<PROP>
7	3. Aerial Drop, Density Group 5	<PROP>
8	4. Buried Drop, Density Group 3	<PROP>
9	5. Buried Drop, Density Group 4	<PROP>
10	6. Buried Drop, Density Group 5	<PROP>

11 According to Qwest, drop lengths are a < PROP >, and these default values used
12 in Qwest's runs of LM2 apply to all states in which Qwest operates; they produce
13 average statewide drop lengths of approximately <PROP> to <PROP> feet which
14 Qwest claims is substantially less than average statewide drop lengths determined
15 from surveys of existing drops in the states of New Mexico, Minnesota, and
16 Wyoming.[20]

17 **Q. HAS QWEST OFFERED ANY EVIDENCE THAT THE DROP LENGTHS**
18 **USED IN ITS DEFAULT RUNS OF LM2 HERE IN ARIZONA BEAR ANY**
19 **RELATIONSHIP TO THE ACTUAL DROP LENGTHS IN THIS STATE?**

20 A. No. In fact, in response to AT&T Information Request No. 02-073, Qwest
21 refused to provide any information regarding actual drop lengths in Arizona,

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19 PROPRIETARY Exhibit RJB-3 filed on behalf of Qwest with the testimony of Dick Buckley.

20 Id.

1 objecting that the request is burdensome, not currently available, and would
2 require a special study to assemble.

3 **Q. ARE QWEST'S ESTIMATES OF DROP LENGTHS REASONABLE IN**
4 **YOUR VIEW?**

5 A. No. Qwest's drop length proposals are grounded in the physical measurements of
6 site locations embodied in Qwest's portfolio of five standard distribution designs.
7 As I noted earlier, the use of those five standard designs, and the broad
8 assumptions behind them, for modeling UNE loop costs in Arizona does not
9 capture the actual physical characteristics of distribution plant in the state.
10 Accordingly, in Arizona, any conclusions or results derived from the standard
11 designs are flawed at the outset; that, of course, includes Qwest's assumed drop
12 lengths.

13 Periodic studies of the average physical characteristics of loop plant, conducted
14 by the former Bell Operating Companies, have shown that the average length of
15 service drops nationwide has been approximately 73 feet[21] -- well below any
16 Arizona statewide average drop length that could be derived from Qwest's LM2
17 default assumptions (the shortest default drop length proposed by Qwest is 70 feet
18 in DG1). Thus, in my opinion, the default drop lengths used in LM2 are clearly
19 overstated.

20 **Q. WHAT DROP LENGTHS DO YOU RECOMMEND THE COMMISSION**
21 **ADOPT FOR USE IN MODELING THE COST OF UNE LOOPS?**

---

21 Telcordia Technologies, Telcordia Notes on the Network, Issue 4, October 2000, page 12.8.

1 A. Given the broad difference between the nationwide average described and
2 Qwest's proposed LM2 default drop lengths, I recommend that the Commission
3 shorten Qwest's default proposals by about 30 percent in DG3 and 50 percent in
4 DGs 4 and 5. Specifically, I recommend that the Commission adopt average drop
5 lengths of 50 ft. for DG3, 100 ft. for DG4, and 150 ft. for DG5.

6 4. Placement Costs:

7 **Q. WHAT IS YOUR UNDERSTANDING OF THE DEFAULT CABLE**
8 **PLACEMENT COSTS USED BY QWEST IN ITS LM2 UNE LOOP COST**
9 **STUDIES?**

10 A. Qwest contends that its default placement costs < PROP >
11
12
13 .[22] The unit costs range from a low of < PROP > to plow a foot of cable
14 into the ground to a high of < PROP > per ft. to directionally bore the cable.[23]
15 The accuracy of the unit costs for placing buried cable is critical to the
16 determination of valid UNE loop costs through LM2.

17 **Q. GIVEN THE IMPORTANCE OF THESE UNIT COST INPUTS TO LM2,**
18 **DID AT&T SEEK TO INVESTIGATE QWEST'S CLAIMS WITH**
19 **RESPECT TO UNIT COST OF MATERIAL AND CONSTRUCTION?**

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[22] PROPRIETARY page 4 to Exhibit RJB-3 submitted with the testimony of Dick Buckley on behalf of Qwest.

[23] Directional boring involves the deployment of expensive high-precision lateral drilling machinery to place buried cable in sections where substantial disruption of to the operation or use of critical infrastructure would result if other construction methods were used.

1 A. Yes. AT&T's discovery request, Set No. 3, Item No. 117 addressed a broad range
2 of LM2 matters, and it included requests for the documents that support Qwest's
3 material and construction cost estimates.[24] In the same information request,
4 AT&T sought data and documents that would show Qwest's actual recent
5 Arizona booked unit costs of material and labor associated with loop construction
6 in the state.[25]

7 **Q. DID QWEST RESPOND TO THE AT&T REQUESTS?**

8 A. Qwest steadfastly objected to most of the requests, then provided answers that:
9 (1) were not responsive; (2) provided no substantive answer (along with an
10 explanation as to why nothing substantive was provided), or (3) simply (and
11 without explanation) provided nothing at all. In short, Qwest's responses to
12 AT&T's requests for information to support Qwest's material and construction
13 cost estimates produced nothing of value by which AT&T, this Commission, its
14 Staff or other intervenors could assess and critically evaluate Qwest's claimed
15 material and construction cost estimates. If Qwest does provide the information
16 sought in response to AT&T Request 03-117, then I would like the opportunity to
17 supplement this testimony based on those responses.

18 **Q. NOTWITHSTANDING QWEST'S INTRANSIGENCE IN RESPONDING**
19 **TO AT&T'S REQUEST 03-117, DO YOU HAVE ANY COMMENTS AT**

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24 ATT Request 03-117, Items (h), (i), and (o).

25 ATT Request 03-117, Items (p), (q), (r), (s), (t), (u), (v), (w), (x), (y), (z), (aa), (bb), (cc), and (dd).

1 **THIS TIME CONCERNING QWEST'S DEFAULT UNIT COSTS FOR**

2 **PLACING BURIED CABLE?**

3 A. Yes. Qwest has stated that its default unit costs for placing buried cable are

4 derived directly from contracts into which it has entered with cable construction

5 contracting firms. In connection with my responsibilities as Division Engineer

6 with GTE and, more recently, in connection with my executive responsibilities

7 with an independent telephone company in Vermont, I have been involved

8 directly in cable construction contracting activities. These companies, and other

9 ILECs with which I am less directly familiar, do enter into agreements like those

10 Qwest is apparently referencing with contractors to place cable on routine OSP

11 projects. These contracts, however, are typically limited to projects involving a

12 relatively low amount of total expenditures over relatively short time frames.

13 The companies' purpose for entering into such contracts was to avoid the usual

14 red tape involved with securing approvals from higher levels in the organization

15 so as to allow construction to begin on routine projects without undue delay. The

16 contracts serve both parties well but in entering into them, management

17 recognizes that some premium cost is attached to the contractor's agreement to be

18 available on short notice to meet a specific completion date. In contrast, when

19 large construction projects are at issue, the construction contracting procedures

20 are quite different and usually involve circulating requests for proposals, securing

21 bids for work and selecting a construction contractor based on the bid responses.

22 In these cases, management expects and receives significant savings in unit costs

23 of construction activities relative to the unit costs involved with routine contracts.

1 I would be most surprised if Qwest did not approach its OSP construction
2 program in this way, yielding one set of unit costs for small projects and a quite
3 different set for larger projects.

4 If Qwest's unit construction costs for buried cable are based on small project
5 approach, as it appears that they are, those costs are clearly overstated relative to
6 what Qwest would expend if it had reflected the large project approach in its
7 buried cable construction default unit inputs. In a TELRIC analysis, because the
8 assumption of the analysis is that the entire plant will be reconstructed, the
9 appropriate approach is to model costs based upon what an efficient company
10 would incur on a large scale project, not on individual contract prices.

11 **Q. ARE YOU ABLE AT THIS TIME TO DEMONSTRATE TO THE**
12 **COMMISSION THAT QWEST'S ACTUAL UNIT COSTS OF BURIED**
13 **CABLE CONSTRUCTION DIFFER FROM THE UNITS COSTS**
14 **REFLECTED IN QWEST DEFAULT RUNS OF LM2?**

15 A. No. One purpose of AT&T Request 03-117 was to secure actual recent cost detail
16 from Qwest's Arizona CPR records in order to determine if, and if so, by how
17 much, Qwest's actual unit costs for placing buried cable differed from the default
18 values used in LM2. Since Qwest has not provided the requested information, I
19 cannot conduct the investigation necessary to make the required determination.

20 **Q. CAN YOU OFFER THE COMMISSION AN ALTERNATIVE SOURCE**
21 **FOR UNIT COST RELATED TO BURIED CABLE CONSTRUCTION**
22 **ACTIVITIES?**

1 A. Yes. I recommend that the Commission adopt the unit construction costs and
2 other construction-related costs for buried cable shown at Section 6 of the Input
3 Portfolio document supplied with HM5.2a.

4 5. Placement Percentages:

5 **Q. MR. WEISS, WHAT ARE PLACEMENT PERCENTAGES AND HOW**
6 **ARE THEY USED IN LM2?**

7 A. Placement percentages are estimates of the probabilities that any one of the buried
8 cable placement methods, discussed above, is used to construct buried cable plant
9 in each distribution density group and on urban and rural feeder cables.[26] In LM2,
10 placement percentages are used to weight together the various activities involving
11 placement of buried plant.[27] The construction cost is added to buried cable
12 material cost based on this weighting.[28] The weighting is unique to each
13 distribution density group and to urban and rural feeder cable construction.[29]

14 **Q. WHAT CONSTRUCTION ACTIVITIES ARE "WEIGHTED" BY QWEST**
15 **IN ITS LM2?**

16 A. Qwest's proposed default inputs to LM2 include a broad mix of OSP construction
17 activities that basically cover the full range of construction methods currently

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26 PROPRIETARY page 5 of Exhibit RJB-3 included with the testimony of Dick Buckley on behalf of Qwest.

27 Id.

28 Id.

29 Id.

1 available in the industry: directional boring, cut and restore, lay cable, plow,
2 restore sod/gravel, fiber trench, hydro mulch.[30]

3 One of the most expensive methods of placing OSP cited by Qwest is "directional
4 boring," which involves the deployment of high-cost precision lateral drilling
5 machinery. Generally directional boring is used for OSP construction projects
6 that involve placing cable (conduit, etc.) in sections where substantial disruptions
7 to the operation and/or use of critical infrastructure would occur if other, less
8 expensive construction methods were employed. Directional boring can also be
9 deployed in cases where the use of other construction methods could damage,
10 beyond cost-effective repair, existing facilities located near the construction site.

11 Because of its high cost and somewhat unpredictable nature, typically, directional
12 boring is a last resort for telephone OSP construction. Directional boring is NOT
13 the "method of all methods" as Qwest would have us believe. In fact, there have
14 been instances where boring heads have lost their way and damaged or destroyed
15 the plant and equipment of others located near the boring site.

16 Qwest's LM2 default inputs show directional boring as being used in substantial
17 degrees to construct loop plant (primarily distribution) in all areas of the state
18 (rural, suburban, and urban). There is little doubt in my mind that the default
19 assumptions concerning deployment of the directional boring construction
20 method[31] contributes heavily to the high level of the cost results produced by the

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[30] Page 4, PROPRIETARY Exhibit RJB-3 included with the testimony of Dick Buckley on behalf of Qwest.

[31] In very-high density areas where high-rise office buildings are prevalent, 20%; in mid-high density areas where apartment complexes and shopping centers are prevalent, 30%; in urban residential areas, 45%;

Model. I have not personally been responsible for outside plant construction in Arizona. In my own experience, however, Qwest's assumption that, for example, 45 percent of all construction activity in single family housing developments would require the deployment of expensive directional boring, is unfounded. Typically, construction in areas like these is accomplished principally by less expensive trenching techniques. Even Qwest's assumption that < PROP > of construction in rural areas would be accomplished by directional boring is ludicrous. Often, cable in rural areas can be placed by plowing or trenching for a fraction of the cost of directional boring.

Q. WHAT IS THE SOURCE OF QWEST'S ESTIMATES FOR THE PERCENTAGE DISTRIBUTIONS OF BURIED CABLE CONSTRUCTION METHODS?

A. Qwest attributes its estimates to "interviews with outside plant engineers who were responsible for cable rehab work."[32] Qwest also cites its "experience in placing plant for the Broadband trial in Omaha, NE" and "a citywide CATV rebuild in one of the states within the Qwest region" as support for its estimates.[33] This "support" is little more than speculation.

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in suburban residential areas, 20%; and in rural areas, 5%.

[32] Page 5, PROPRIETARY Exhibit RJB-3 included with the testimony of Dick Buckley on behalf of Qwest. Testimony of Dick Buckley, pages 20, 21.

[33] Id.

1 **Q. DID AT&T ATTEMPT TO MORE DEEPLY INVESTIGATE QWEST'S**
2 **CLAIMS REGARDING BURIED CABLE CONSTRUCTION ACTIVITIES**
3 **IN ARIZONA?**

4 A. Yes. AT&T's Information Request 02-067 sought "the most recent
5 documentation available of Qwest's actual loop placement activities in Arizona
6 [including] documents indicating the extent to which Qwest uses trenching,
7 directional boring, plowing, and other placement activities assumed in LoopMod
8 to place loop facilities in the state of Arizona." Typically, Qwest objected to the
9 request claiming that the information is not relevant or likely to lead to discovery
10 of relevant information because Qwest's current activity is not pertinent to
11 modeling a total replacement network.

12 **Q. HAS QWEST CITED VALID REASONS FOR NOT RESPONDING TO**
13 **AT&T'S REQUEST 02-067?**

14 A. No. First, clearly, any current mix of Qwest's buried plant construction methods
15 is pertinent to any question concerning Qwest forward-looking mix of buried
16 plant construction methods. At worst, in both instances (forward-looking or
17 current), plant construction methods are at issue and a substantive response should
18 be provided for that reason alone. At best, the information secured from a
19 substantive response could shed some light for the Commission on the
20 reasonableness and veracity of Qwest's default estimates.

1 **Q. DO YOU HAVE ANY INFORMATION AVAILABLE TO YOU**
2 **REGARDING QWEST'S ACTUAL PRACTICES IN PLACING CABLE**
3 **BY BORING?**

4 A. I have reviewed testimony provided by Qwest on this issue during prior cost
5 proceedings. This testimony does not support Qwest's assumptions in LM2
6 regarding the extent to which cable would be placed using boring activities. For
7 example, a Qwest field engineering operations manager in Washington testified
8 that Qwest chooses to bury or plow cable as a first choice and that boring is used
9 in Washington one percent of the time or less. I have attached this testimony as
10 Exhibit TKM (LM2) – 1. Qwest's construction director for the state of Arizona
11 testified in the prior cost proceeding that Qwest would not bore for any longer
12 distance than was necessary and that, although she could not provide an accurate
13 percentage of the amount of boring conducted in Arizona, Qwest probably used
14 that technique approximately 20 to 30 percent of the time. Consolidated Cost
15 Docket Tr., p. 1588. These estimates are far below the assumptions used by
16 Qwest in its Model.

17 **Q. IS QWEST CORRECT IN ITS CLAIM THAT A TELRIC MODEL**
18 **SHOULD ASSUME THAT PLANT WILL BE RECONSTRUCTED WITH**
19 **ALL OTHER EXISTING INFRASTRUCTURE IN PLACE?**

20 A. Qwest is simply wrong in arguing that the scorched node approach to pricing
21 requires the TELRIC of OSP-intensive UNEs to be developed assuming a costly
22 complete network rebuild through existing infrastructure. That approach, in
23 effect, guarantees that very real insurmountable barriers are erected against other

1 carriers' use of OSP-intensive UNEs to engage Qwest in competition for local
2 exchange services. I believe Qwest's approach is clearly in violation of letter and
3 the spirit of the Communications Act of 1996 and it should, therefore, be rejected
4 by the Commission not merely as reason for Qwest not responding to AT&T's
5 request for information but, more importantly, as an underlying basis for Qwest's
6 cost analyses.

7 Certainly, Qwest's scorched node approach with respect to the allocation of
8 construction methods is at odds with the FCC's general view as to the
9 applicability of the scorched node assumption to computing the OSP portion of
10 UNE costs. In describing its position on the applicability of the scorched node
11 theory to the issue of structure sharing, the FCC observed:

12 We note that, as past of the logical argument that the entire
13 telephone network is to be rebuilt, it is also necessary to
14 assume that the telephone industry will have at least the
15 same opportunity to share the cost of building plant that
16 existed when the plant was first built.[34]

17 The situation described by the FCC in its discussion of structure sharing is no different
18 than that which underpins Qwest's position on the issue of allocating construction
19 methods; the FCC rejected Qwest's concept that scorched node assumption requires the
20 TELRIC costs of OSP to be computed as though all existing infrastructure, except
21 wireline telecommunications plant, was in place and that the telephone plant must be
22 constructed around the existing infrastructure.

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[34] *In the Matter of Federal-State Joint Board on Universal Service*, CC Docket No. 96-45, Tenth Report and Order (rel. October 21, 1999), fn. 504.

1 **Q. HAS THIS COMMISSION REVIEWED AND REJECTED QWEST'S**
2 **ASSUMPTIONS ABOUT PLACEMENT ACTIVITIES IN THE PAST?**

3 A. The Commission did reject Qwest's assumptions regarding placement activities in
4 the prior cost docket, in part because the Commission recognized that Qwest's
5 assumptions regarding the necessity for using that costly boring techniques had no
6 rationale basis. Other Commissions have also reviewed and rejected Qwest's
7 assumptions. For example, the Washington Commission conducted a thorough
8 review of Qwest's placement assumptions in its Docket No. UT-960369. That
9 Commission adopted an assumption that only 5 percent of buried cable
10 installations in developed areas would be placed by boring. The Commission
11 specifically found that the Omaha broadband trial upon which Qwest based the
12 boring assumption in both that proceeding and in this proceeding was "a poor
13 barometer of the type of installation techniques used in Washington state." [35]

14 **Q. ARE THERE ALTERNATIVE, MORE REALISTIC, ESTIMATES OF**
15 **THE PLACEMENT PERCENTAGES THAT THE COMMISSION**
16 **SHOULD RELY ON FOR PURPOSES OF DEVELOPING THE COSTS OF**
17 **OSP-INTENSIVE UNES?**

18 A. Yes. The Commission should refer to Section 6.2 of the Input Portfolio document
19 supplied with HM5.2a for more realistic estimates of buried cable placement
20 method percentages. The inputs to HM5.2a emphasize plowing and trenching as
21 the principal buried cable construction methods and realistically assigns the

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[35] *In the Matter of the Pricing Proceeding for Interconnection, Unbundled Elements, Transport and Termination, and Resale*, Docket No. UT-960369, Eighth Supplemental Order, para. 55.

largest incidence of costly cut and restore activity costs to the more dense DGs 1 and 2.

6. Structure Sharing Percentages:

Q. WHAT IS THE MEANING OF THE TERM "STRUCTURE SHARING" AS IT APPLIES TO QWEST'S LM2?

A. In LM2, the structure sharing variables represent an estimate of that portion of OSP structure costs that could be avoided by Qwest if it was willing to share structure capacity with other entities (e.g., utilities and CATV companies) that also must occupy OSP structures (poles, trenches, etc.) in the normal course of conducting their business.

Q. WHAT IS YOUR UNDERSTANDING OF QWEST'S LM2 DEFAULT POSITION WITH RESPECT TO STRUCTURE SHARING?

A. Qwest's LM2 default values for structure sharing range from Qwest bearing <PROP> percent of aerial structures (poles) to a high of Qwest bearing <PROP> percent of the cost of underground conduit. Qwest assumes that it will bear <PROP> percent of the cost to bury cable any distribution density group. As with many of the other inputs into its cost models, Qwest's position is based principally on opinions of its subject matter experts.

Q. HOW DOES QWEST'S POSITION SQUARE WITH EARLIER FINDINGS BY THE ARIZONA CORPORATION COMMISSION ON THE ISSUE OF STRUCTURE SHARING?

A. In its Order No. 60635 (page 20) in connection with Docket No. U-3021-96-448, et al., this Commission adopted a 50 percent sharing of costs between U S WEST (now Qwest) and other utilities. Accordingly, Qwest's LM2 default assumptions for structure sharing are well out of line with the Commission's position.

Q. SHOULD THE COMMISSION'S FINDING FROM ORDER NO. 60635 AS IT RELATES TO STRUCTURE SHARING CONTINUE TO APPLY TO QWEST?

A. Yes. Qwest has offered no evidence in this case that would support a change in the Commission's position on the issue.

Q. ARE YOU AWARE OF EVIDENCE THAT SUPPORTS THE COMMISSION'S PRIOR DETERMINATION?

A. Yes, the same Qwest engineer who testified regarding the use of boring also provided testimony to the effect that municipalities favor structure sharing by utilities to minimize disruption to the public. See Ex. THW (LM2) – 1 at 87-88. Mr. Denney's testimony provides further evidence and examples of opportunities for structure sharing by Qwest.

7. Component (Material) Costs:

Q. HAS QWEST EXPLAINED THE SOURCE FOR THE MATERIAL COSTS USED IN LM2?

1 A. Qwest explains that cable material costs used in LM2 are "provided by the Qwest
2 network organization" and that "they [the prices] are based on the latest prices
3 Qwest is paying for these components."[36]

4 **Q. DID QWEST PROVIDE ANY OTHER SUPPORT FOR ITS UNIT**
5 **MATERIAL COST ESTIMATES?**

6 A. No. However, AT&T sought such additional detail in its Information Request 03-
7 117 which asks Qwest to describe and explain the development of the cost figures
8 used in Mr. Buckley's Exhibit RJB-3 (PROPRIETARY document titled LOOP
9 MODULE, VERSION 2.0, Default Values) and to provide a copy of all
10 documentation which supports the use of the figures in LM2. Qwest's response to
11 AT&T Request 03-117 consisted of some proprietary schedules that list various
12 items of OSP material and construction activities along with an amount associated
13 with each. No documentation was provided to support the unit prices of material.
14 In addition to the request for additional support for the default prices, AT&T
15 requested actual detailed printout pages from Qwest's Continuing Property
16 Records ("CPR") that would show the price that Qwest actually paid for the
17 material, associated labor, and other required investments during the construction
18 of a recent OSP project that involved the specific items of material. In making
19 these requests for CPR records, AT&T reasoned that actual recent prices paid by
20 Qwest for the material and associated labor, for example, would constitute a
21 reasonable check on Qwest's default cost claims. Qwest's responses to the

[36] Page 8 of the PROPRIETARY Exhibit RJB-3 included with the testimony of Dick Buckley of behalf of Qwest.

1 requests invariably included CPR summary pages, but not the detail that would
2 permit development of the comparison that was AT&T's objective. In short, even
3 in light of AT&T's detailed requests for information on actual prices, Qwest has
4 not provided the information that would enable AT&T to satisfy itself and the
5 Commission that Qwest's material and associated labor and other related costs
6 accurate reflect the default unit costs used in LM2.

7 **Q. ARE YOU IN ANY POSITION AT THIS TIME TO PROVIDE THE**
8 **COMMISSION WITH REASONABLE ESTIMATES OF THESE UNIT**
9 **MATERIAL AND ASSOCIATED LABOR AND OTHER COSTS?**

10 A. No. However, if the Commission requires Qwest to respond fully to AT&T's
11 requests for CPR detail regarding Qwest's unit costs, I would like the opportunity
12 to review Qwest's responses and report my findings to the Commission in
13 supplemental testimony.

14 8. "Grooming"

15 **Q. ARE THERE ANY OTHER LM2 ISSUES THAT YOU WOULD LIKE TO**
16 **ADDRESS AT THIS TIME?**

17 A. Yes. One final input assumption issue deserves comment and response with
18 respect to LM2. I noticed that the Model includes a provision for the analyst to
19 assign "grooming" costs to UNE loops.[37] In the case of UNE loops and TM2, a
20 provision to reflect grooming costs is available to the analyst to account for costs

[37] Grooming is a function that allows efficient use of both incoming and outgoing facilities by process of cross-connection of tributaries.

that Qwest would incur to extract individual voice grade pairs off of integrated pair gain systems before sending those pairs to the switch.

Q. DOES QWEST INCLUDE AN ELEMENT FOR GROOMING IN THE COSTS COMPUTED BY LM2 FOR UNE LOOPS?

A. Yes.

Q. IS QWEST JUSTIFIED IN ASSIGNING GROOMING COSTS TO UNE LOOPS?

A. No. Qwest will not incur grooming costs with respect to UNE loops because CLECs will be purchasing loops in fully integrated DLC systems which are fed directly into the switch without the need for de-multiplexing at the central office. Thus, it will not be necessary for Qwest to engage in grooming activities on behalf of CLECs. In those cases where a UNE loop is provided over physical pairs, since no multiplexing is involved, it follows that no grooming costs will be involved. Finally, in cases where a CLEC purchases UNE-P[38] access from Qwest, no grooming costs should apply even if the UNE-P is provided over Digital Loop Carrier because the UNE-P arrangement interfaces with the switch in the same way as Qwest's own customers interface. For Qwest to assess a grooming charge to UNE-P lines would constitute anticompetitive discriminatory pricing.

[38] An Unbundled Network Element Platform – loop and switching UNEs combined an offered as an integrated package.

In any event, grooming activity is a form of network maintenance for which costs are included in appropriate maintenance expense accounts, the full of costs of which are included in the cost factors that are a subject of my earlier testimony in this docket. Thus, for Qwest to separately include the same charges in its LM2/ICM analyses, the result would be impermissible double-recovery of grooming costs.

C. Testing The Loopmod2 Logic

Q. PLEASE DESCRIBE THE GENERAL PROCESS BY WHICH YOU CRITICALLY EVALUATED LM2.

A. Given Mr. Buckley's description of the model and my understanding of it, LM2 can be viewed as a loop engineering and construction model. That is, LM2 first develops an engineering design and then it proceeds to compute the costs of constructing that design. This is an important distinction because the engineering design portion of the model is affected directly by one certain specific set of engineering input variables (e.g., fill factors, loop lengths, technology assumptions, etc.); the construction portion is affected by the loop design developed in the engineering portion of the model and by a different set of other variables (e.g., cable plant construction methods,[39] material prices, etc.). Recognizing the distinction, an analyst can evaluate each portion of the Model separately. For example, by holding the values of the construction inputs constant, it is possible to test the Model's engineering algorithms to see if they

[39] For example, directional boring, plowing, hand trenching, etc.

respond in a logical fashion to measured changes to the engineering assumptions. This is a technique widely used by engineers to test complex systems. Using this technique, I first tested LM2 at a high level to determine if, as I understand the Model, it produces logical results as compared to results that I would expect to see based on what I know from experience.

Since I know that loop plant costs are sensitive to the type of technology used to provide loops, my first test involved comparing changes in the costs produced by the Model against changes in Qwest's proposed feeder technology default input of 12 Kft.[40] By experience, I know that loops provided using DLC and fiber cable are usually less costly on a per unit basis than loops provided exclusively with metallic cable because of the scale economies exhibited by DLC/fiber cable technology relative to metallic cable technology. Also, based on experience, I know that the length at which the technology cross-over (i.e., the engineer would switch from traditional metallic feeder design to digital/fiber feeder) would occur falls in the range of from 8,500 ft. to 9,500 ft. in distance from the central office. Thus, as my first test of LM2, I changed Qwest's default technology cross-over distance from 12 Kft. to 9 Kft. with the expectation that the loop costs produced by LM2 would decrease. Indeed, the Model did show costs for these loops to fall as I expected.

[40] The "feeder technology default" input refers to that distance from the central office where LM2 would change from designing loops using metallic cable exclusively to using DLC/fiber cable technology.

1 Next, I tested LM2 to determine if it produced loop cost minimums with the
2 technology cross-over point set at 9 Kft.[41] Again, the Model produced the
3 expected result – loop costs are minimized when the feeder technology cross-over
4 point in the Model is set almost precisely at 9Kft.

5 **Q. WHAT MORE DID YOU LEARN FROM THESE TWO INITIAL TESTS**
6 **OF LM2?**

7 A. The most interesting result of the two initial tests was that the costs derived from
8 LM2 are highly and unexpectedly <u>insensitive</u> to changes in the specification of the
9 technology cross-over distance. In fact, specifying the technology cross-over
10 distance at 9 Kft. (25 percent lower than the default distance) produced only a
11 0.30 percent (three-tenths of one percent) reduction in loop cost.[42] From my
12 experience, I expected to observe total cost reductions on the order of from three
13 to four times that percentage. Given the results of these two tests I began to
14 suspect that engineering algorithms used in LM2 were defective.

15 **Q. GIVEN YOUR SUSPICIONS, DID YOU CONDUCT OTHER**
16 **FUNDAMENTAL TESTS OF LM2?**

17 A. Yes. In addition to the initial tests, and given the results obtained from them, I
18 tested the Model's sensitivity to various other engineering input variable changes.
19 For example, leaving all other Qwest default input values inputs constant and

---

[41] This test involved several runs of LM2 at cross-over distances of from 8Kft. to 12Kft. with all other Qwest default variables remaining unchanged.

[42] For a 2-wire UNE loop with the cross-over specified at the default distance of 12Kft., the cost computed by LM2 is $28.96 monthly; with cross-over specified at 9Kft., the cost of a 2-wire loop as computed by LM2 was $28.87 – a difference of only $0.09 per month.

1 changing the default level of feeder fill to 85 percent from its default value of 80
2 percent – an increase of 6.25 percent -- reduced 2-wire loop costs from $28.96,
3 computed from Qwest's default values,[43] to $28.84 computed at the 85 percent
4 feeder fill – a decrease of only 0.40 percent (four tenths of one percent). Given
5 that feeder cables are predominantly metallic in that test, the expectation is that
6 total costs would be more highly influenced by a change in feeder fill.

7 Reasoning that the results of the feeder sensitivity tests may be influenced by the
8 selection of the cross-over distance, I tested LM2 with all inputs, except the cross-
9 over distance and the feeder fill, set at the default values. In this test, feeder fill
10 was set at 85 percent and the cross-over distance was varied between 8 Kft and 12
11 Kft.; it showed that costs continued to be minimized at the 9 Kft. cross-over
12 distance but the magnitude of cost difference between 80 percent feeder fill and
13 85 percent feeder fill did not change appreciably – only $0.04 per month (0.13
14 percent, thirteen one-hundredths of one percent). Similar results were obtained by
15 reducing the default feeder fill from 80 percent to 75 percent. Thus, it appeared
16 that in the LM2 model, a 6.25 percent change in the fill factor for feeder cable
17 yields virtually no change in loop costs, when a finite change would be expected.

18 **Q. DID YOU CONDUCT ANY OTHER TESTS ON THE ENGINEERING**
19 **PORTION OF THE MODEL?**

20 A. Yes. My initial tests focused on the feeder component of loop as it is developed
21 in the engineering portion of the Model. I tested the distribution portion as well.

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[43] See Testimony of Teresa K. Million on behalf of Qwest, Exhibit TKM-02, included on the CD-ROM provided with Ms. Million's testimony.

The default version of Qwest's proposed LM2 loop costs reflects distribution cable provided to customer locations according to a so-called engineering standard of 2 pairs per location in distribution groups 1, 2, and 5, and 3 pairs per location in distribution groups 3 and 4. The results produced from the Model using this engineering standard closely approximate the results obtained when distribution fill factors are set at 0.50 for distribution groups 1, 2, and 5, and 33 percent for distribution groups 3 and 4. Therefore, in assessing the outputs from the Model at different distribution factors, I compare the loop cost results obtained from LM2 using the adjusted distribution fill factors with the results obtained by using Qwest engineering standard defaults.

The magnitude of changes in loop cost due to changes in distribution plant fill should increase as the technology cross-over moves closer to the central office This is so because as the technology cross-over point moves closer to the central office, a smaller portion of the total loop length will be composed of feeder cable and a correspondingly a larger portion of the total loop length will be composed of distribution cable. Of course, as the length of distribution cable increases, the cost impact of changes in distribution fill should be magnified. I tested LM 2 to see if it accurately modeled that result by increasing distribution fill factors by 20 percent in all distribution groups and then I varied the technology cross-over point from the 12 Kft. default distance down to 8 Kft. in 1 Kft.increments. Given these parameters, the results reported out of LM2 showed a virtual constant $0.27 per month decrease in loop costs over the full 4 Kft. range of changes to the technology cross-over distance. Thus, LM2 models a less than one percent

1 decrease in loop costs in response to a 20 percent increase in the distribution fill
2 factor and, equally important, the Model did not exhibit the expected decrease in
3 cost as the technology cross-over moved closer to the central office.

4 As before, these results defy logic because, as a general proposition, distribution
5 investment typically constitutes approximately one-half to one-third of total loop
6 investment cost and changing the fill factor by as much as 20 percent on 33
7 percent to 50 percent of total investment should produce an up to 10 percent
8 change in total monthly recurring cost of loops. Again, as with the engineering
9 input variables for the feeder portion of the loop, LM2 fails to produce logical
10 results.

11 **Q. GIVEN YOUR FINDINGS AS YOU DESCRIBED THEM ABOVE, WHAT**
12 **DO YOU CONCLUDE ABOUT THE VERACITY OF THE**
13 **ENGINEERING PORTION OF LM2?**

14 A. My findings lead me to conclude that the engineering portion of the LM2 Model
15 fails to yield logical estimates of Qwest's costs to produce UNE loops. In fact,
16 given that the Model responds so insensitively and illogically to changes in loop
17 engineering input values, the Model seems to have been constructed to appear
18 quite flexible (e.g., the large number of engineering input variables) but, actually
19 to produce loop cost estimates that fall within some pre-determined range.

20 **Q. ARE YOU ABLE TO ISOLATE ANY PART OF THE ENGINEERING**
21 **PORTIONS OF THE MODEL THAT APPEARS TO BE MOST**
22 **SUSPICIOUS IN THAT REGARD?**

1 A. Yes. As my findings show, the problem of illogical insensitivity appears in both
2 the feeder and distribution portions of the Model. However, I can say that the
3 most surprising illogical results obtained from my analysis of the engineering
4 portion of the model that pertain to the distribution portion of the loop (i.e., the
5 fact that less than one percent change was observed in loop cost with a 20 percent
6 change in the distribution fill factors). This finding leads me to suspect that the
7 logic of the distribution algorithms as being a principal cause of logical
8 inconsistencies in the Model's overall outputs.

9 **Q. BASED ON WHAT YOU KNOW OF THE MODEL AT THIS JUNCTURE,**
10 **WHERE DO YOU BELIEVE THE PROBLEM LIES IN THE**
11 **DISTRIBUTION ALGORITHMS?**

12 A. As I explained when describing my understanding of LM2, the distribution
13 algorithms involve a process by which the engineering design of the distribution
14 plant in each DA is determined by comparing specific characteristics of the DA to
15 the characteristics of five standard distribution area designs. The distribution
16 algorithm then selects one of the five designs as the basis for computing loop
17 costs in the DA.

18 No two DAs in a central office serving area are likely to be sufficiently similar so
19 as to justify the use of some standard engineering design to accurately estimate
20 loop costs for both. Thus, in order to ensure a reasonable degree of accuracy in
21 modeling distribution plant costs for any DA, it is important that the unique
22 characteristics of the DA be accounted-for in the modeling process. This is not
23 possible with LM2 since all DAs evaluated in the LM2 Model fall into one of

only five standard distribution design categories and distribution plant costs for the DA are developed based largely on that selection. If the standard designs are all configured so as to minimize the effect of certain engineering variables (e.g., distribution fills) it is not hard to see how it is possible to produce consistently flawed estimates of distribution costs. Based on the results of my testing, it is the specifications for one or more of the five standard engineering designs that I suspect to be the genesis of significant inaccuracies in LM2.

Q. WERE YOU ABLE TO LOOK INTO LM2 SUFFICIENTLY TO IDENTIFY ONE OR MORE OF THE DISTRIBUTION ENGINEERING STANDARDS AS A SOURCE OF LOGICAL INCONSISTENCIES IN LM2?

A. No. LM2 is an extremely complex program, involving a wide range of input variables and mathematical logic. The Model appears to have been constructed in such a way as to make it quite difficult for anyone not already intimately familiar with it to critically analyze it at the level of detail necessary to identify specific sources of logical inconsistencies. In the model, the standard engineering designs are shown merely as numbers on a worksheet page with no explanation or description of how those numbers were developed. So, at this juncture, it is not possible to focus critically on the standard engineering designs to determine if they are the problem and, if so, to identify the cause(s).

In any event, however, an accurate model of distribution plant costs can only be developed by considering the unique characteristics of the individual areas in which the distribution plant would be placed and that can only be done using a

1 bottom-up approach in the model to literally route distribution plant to individual
2 customer locations. Qwest's standard design approach to distribution plant
3 modeling can hardly be construed, even remotely, as being bottom-up.

4 **Q. IS THERE ANY ASPECT TO THE FEEDER SIDE OF THE MODEL'S**
5 **ENGINEERING PORTION THAT YOU BELIEVE TO BE A SOURCE OF**
6 **CONCERN?**

7 A. Yes. It has long been recognized throughout the wireline telecommunications
8 industry that loops that range in length from 8,500 ft. to 9,500 ft. from the central
9 office are provided most cost effectively over digital loop carrier, when the carrier
10 is designed and operated properly. Even LM2, in its flawed condition, recognizes
11 the significance of that distance. However, LM2 does not fully recognizing the
12 cost effectiveness of loops derived from digital loop carrier and that is a source of
13 significant concern with regard to the feeder side of the Model. At this juncture, I
14 cannot identify the source of this flaw in LM2.

15 **Q. TURNING NOW TO THE CONSTRUCTION PORTION OF THE**
16 **MODEL, HAVE YOU FOUND ANYTHING IN THE CONSTRUCTION**
17 **ALGORITHMS THAT GIVE YOU CONCERN?**

18 A. Yes. While the construction algorithms are far less complex than the engineering
19 algorithms, they are still a source of great concern. Recall that the construction
20 algorithm takes plant information output from the engineering portion of the
21 Model and combines it with unit material and construction costs to produce total
22 loop investment costs. This process is rather straight forward relative to the

complexity of the engineering algorithms but it is the inputs to the construction algorithms that raises concerns.

The most significant inputs to the construction portion of LM2 are plant material costs, plant construction costs (discussed earlier) and the distribution of construction methods. LM2 recognizes a wide range of material price inputs the values of which, according to Qwest, are derived from vendor material prices in the case of cables and loop electronics, and from actual construction contracts in the case of construction costs.

Q. DID AT&T ATTEMPT TO GET BEHIND QWEST'S CABLE MATERIAL COSTS AND THE COSTS OF CONSTRUCTION?

A. Earlier, in connection with my discussion of the unit costs of construction for buried cable, I described AT&T's attempt to go behind Qwest's default estimates. That testimony described AT&T's Request 03-117 and those same comments apply here as well.

Q. ARE THERE ANY OTHER ASPECTS OF LM2 THAT ARE TROUBLING?

A. Yes. Two major problems come to mind. The first revolves the fundamental approach taken by Qwest to define the loop network for TM2. The second is the assumed mix of OSP construction methods reflected in Qwest's LM2.

With LM2, Qwest appears to be attempting to determine its cost to replace its existing embedded loop network using forward-looking technology rather than to define a new network for TELRIC pricing of UNEs based on the so-called

1 scorched node approach to cost studies as advanced by the FCC. Using a
2 scorched node approach to loop costing under TELRIC, only central offices and
3 other wire centers are assumed to remain at their existing locations; the remainder
4 of the loop network should be modeled so as to permit development of the least
5 cost to serve customers from existing central offices and other wire centers.

6 LM2 assumes that existing wire centers remain at their present locations but it
7 also assumes that distribution areas in a forward-looking least cost loop network
8 would be defined as being exactly as they are today in terms of size, location and
9 terminal locations. There is simply no reason to assume that the existing
10 distribution areas in today's forward-looking loop network would be the same as
11 they are in today's embedded loop network. In fact, loop technological advances
12 alone constitute ample reason to expect that they would not be the same. The
13 embedded loop network is the product of years in development during times when
14 loop plant technology was virtually stagnated, and it was during such times that
15 the embedded distribution areas were defined. Today, however, digital
16 multiplexing and fiber transmission technologies have radically altered the
17 forward-looking capabilities of the loop network. Those capabilities of the loop
18 network have expanded to such an extent that, on a forward-looking, least-cost
19 basis, some existing embedded distribution areas would be candidates for
20 consolidation into a single larger DA; other existing embedded distribution area
21 would be downsized or made larger. When that forward-looking approach to
22 defining DAs is incorporated into any loop model and forward-looking

technology is used to compute loop costs, loop cost would decline to more appropriate levels.

Q. IF QWEST'S LOOPMOD2 IS UNSUITABLE FOR USE AS A MEANS TO DEVELOP COST OF UNE LOOPS, WHAT METHOD DO YOU RECOMMEND THE COMMISSION SHOULD USE TO DEVELOP UNE LOOP COSTS?

A. In my view, there is only one reliable UNE loop costing model available in the industry today and that is the HM5.2a that AT&T, Worldcom, and XO Communications are sponsoring in this case. HM5.2a has been the subject of considerable debate in regulatory proceedings at both the Federal and state levels over the years since its initial introduction. As the result of this process, HM5.2a has been modified regularly and to its significant advantage such that it now develops loop costs on a consistently forward-looking basis using the same engineering design procedures and techniques that are employed on loop design in the "real" world. Unlike LM2, the HM5.2a model does not develop distribution costs based on flawed "surrogate" standard distribution area designs; rather, it builds distribution plant to individual customer locations from the bottom up, as I recommend distribution plant should be modeled. HM5.2a (or some variation of it) is becoming an industry standard in itself. Even Mr. Buckley recognizes the broad recognition now enjoyed by HM5.2a when, at page 9 of his testimony, he compares loop investment results produced by HM5.2a with the results produced by LM2. I submit that the resemblance to which Mr. Buckley

1 refers is purely coincidental, being based on two different approaches to the loop

2 cost model problem – one flawed approach, LM2 and a valid one, HM5.2a.

3 **Q. DOES THAT CONCLUDE YOUR TESTIMONY AT THIS TIME?**

4 A. Yes, it does.

Arizona Corporation Commission
DKT. No. T-00000A-00-0194
Direct Testimony of Weiss
Exhibit TKM(LM2)-1

Deposition of: GENIE CERVARICH, 4-18-97

PAGE 1 TO PAGE 111

Pricing Proceeding for Interconnection

Patsy D. Jacoy, CSR, RPR 622-6875

CONDENSED TRANSCRIPT AND CONCORDANCE
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Page 1

(1) BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION
(2) COMMISSION
(3)
(4) In the matter of the Pricing) DOCKET NO. UT-960369
Proceeding for Interconnection,)
(5) Unbundled Elements, Transport)
and Termination, and Resale)
(6))
In the Matter of the Pricing) DOCKET NO. UT-960370
(7) Proceeding for Interconnection,)
Unbundled Elements, Transport)
(8) and Termination, and Resale)
for US WEST COMMUNICATION, INC.)
(9))
In the Matter of the Pricing) DOCKET NO. UT-960371
(10) Proceeding for Interconnection,)
Unbundled Elements, Transport)
(11) and Termination, and Resale)
for GTE NORTHWEST INCORPORATED)
(12)
(13) DEPOSITION UPON ORAL EXAMINATION
(14) OF
(15) GENIE CERVARICH
(16)
(17)
(18)
(19) 9:00 a.m.
(20) April 18, 1997
(21) 2600 Century Square
(22) 1501 Fourth Avenue
(23) Seattle, Washington
(24)
(25)

Page 2

(1) A P P E A R A N C E S
(2) *FOR AT&T:*
(3) *DANIEL WAGGONER*
(4) *Davis Wright Tremaine*
(5) *2600 Century Square*
(6) *1501 Fourth Avenue*
(7) *Seattle, Washington 98101*
(8)
(9) *FOR US WEST:*
(10) *LISA ANDERL*
(11) *US WEST*
(12) *1600 Seventh Avenue, Room 3206*
(13) *Seattle, Washington 98191*
(14)
(15) *FOR MCI METRO & TRA:*
(16) *CLYDE H. MacIVER*
(17) *Miller Nash*
(18) *4400 Two Union Square*
(19) *601 Union Street*
(20) *Seattle, Washington 98101-2352*
(21)
(22) *ALSO PRESENT:*
(23) *David Griffith, UTC*
(24) *Ron Gayman, AT&T*
(25)

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(1) *I N D E X*
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(5) *Mr. Griffith 101*
(6) *Ms. Anderl 102*
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(1) *SEATTLE, WASHINGTON; APRIL 18, 1997*
(2) *9:10 A.M.*
(3) *-oOo-*
(4)
(5)
(6) *GENIE CERVARICH, sworn as a witness*
by the Notary Public,
(7) *testified as follows:*
(8) *EXAMINATION*
(9) *BY MR. WAGGONER:*
(10) Q. Good morning, Ms. Cervarich.
(11) **A. Good morning.**
(12) Q. My name is Dan Waggoner, and I'm a lawyer for
(13) AT&T, and this deposition is being taken pursuant to a
(14) notice to US West. And if you could just state your name
(15) and business address for the record to start, that would be
(16) great.
(17) **A. My name is Genie Cervarich, and my business**
(18) **address is 17 – no, that's my home address – 1313 East**
(19) **Columbia, Room Number 205, Seattle, Washington, 98122.**
(20) Q. And are you employed by US West Communications?
(21) **A. Yes, I am.**
(22) Q. And what is your title?
(23) **A. Manager, field engineering operations.**
(24) Q. Have you ever had your deposition taken before?
(25) **A. No, I haven't.**

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(1) *MR. WAGGONER: Yes, that's a totally*
(2) *different subject.*
(3) Q. You just used the word drops. Could you define
(4) drops for me.
(5) **A. We have aerial and buried drops, and drops are**
(6) **little pieces of wire that usually go from the end of our**
(7) **cable facilities to a home or a building, a structure.**
(8) Q. So it's the last 50 or 100 feet, or whatever
(9) distance it is?
(10) **A. Or a little more.**
(11) Q. And you indicated some drops are defined as
(12) submarine?
(13) **A. Well, we have some, from a permitting**
(14) **perspective, where people live in the middle of lakes, and**
(15) **we've had to put them under water to get to them. They're**
(16) **really the rarity, the odd item.**
(17) Q. Good. In terms of these fiber submarine routes
(18) you were describing, what is the fiber inside when it goes
(19) under the lake?
(20) **A. Pardon?**
(21) Q. I'm imaging some fiber going inside of something
(22) when it goes under the lake.
(23) **A. Right.**
(24) Q. And what is the something it goes inside?
(25) **A. It's in an armor sheath cable. It's usually not**

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(1) **in a pipe.**
(2) Q. So you have an armor sheath on the outside which
(3) is made out of, what, metal of some sort?
(4) **A. Some sort.**
(5) Q. And then multiple conduits inside of that?
(6) **A. Not conduits; the cable is actually inside of it.**
(7) Q. So there's no conduits; it's just the cable
(8) inside the armor sheath?
(9) **A. Right.**
(10) Q. And do you know whether there's dark fiber in
(11) those –
(12) **A. I have no idea.**
(13) Q. Do you share any of those submarine sheath cables
(14) with any other utility or carrier?
(15) **A. I have no idea.**
(16) Q. Let's leave the water behind and move to
(17) underground. How do you define underground? And if
(18) possible, could you distinguish that from buried.
(19) **A. Underground cable is cable that is placed in**
(20) **conduit under the ground. Usually it's multiple conduits,**
(21) **three or more, and usually they're encased in concrete, and**
(22) **exit and enter the conduit via a utility vault.**
(23) Q. When you say they're encased in concrete, could
(24) you describe that a little more. Is the concrete like a
(25) really big tunnel kind of thing or is it a little kind of

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(1) piece of concrete or how does that work?
(2) **A. It's like you have six ducts that are stacked**
(3) **side-by-side, and you have an area around those ducts where**
(4) **you've poured concrete to a certain spec over and under and**
(5) **around to protect the conduit inside, so it's not a huge**
(6) **area, but it's more a protection.**
(7) Q. And how big an area would you be describing
(8) that's the concrete part of this? Four-by-six,
(9) two-by-four? Do you have any feel for that?
(10) **A. It would depend on the number of ducts and it**
(11) **would depend on where you were placing it, what was there.**
(12) Q. Today we're at the corner of Fourth and Pike in
(13) downtown Seattle. Are there underground facilities near
(14) where we are right now?
(15) **A. Yes, that would be correct.**
(16) Q. And are those multiple conduits?
(17) **A. Yes, they are.**
(18) Q. Inside some concrete?
(19) **A. Uh-huh.**
(20) Q. And are those running down Fourth Avenue,
(21) probably? Do you have any idea?
(22) **A. Yeah, we do have ducts on Fourth.**
(23) Q. You said you do have ducts on Fourth?
(24) **A. Uh-huh, conduit.**
(25) Q. And how large would those concrete structures be,

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(1) if you have any idea?
(2) **A. I don't have any idea.**
(3) Q. Do you have any idea how much conduit would be
(4) running through those or anything like that?
(5) **A. (Witness shaking head.)**
(6) Q. Do you have any arrangements to share underground
(7) structure with other utilities?
(8) *MS. ANDERL: Dan, could you clarify whether*
(9) *we are currently doing it or whether we have any formal*
(10) *agreements in place?*
(11) Q. Let's take it one at a time. Do you have any
(12) agreements in place which would allow you to share or other
(13) utilities to share with you your underground structures?
(14) **A. We have a process in place where they –**
(15) Q. Describe the process, then.
(16) **A. There's a group in Denver, and it goes through**
(17) **the market units into that group, and they research and make**
(18) **a decision as to whether we will or won't share those**
(19) **structures.**
(20) Q. So are there occasions that you're aware of in
(21) your geographic area where those underground structures are
(22) shared?
(23) **A. Yes.**
(24) Q. And can you give me some examples of those.
(25) **A. I don't know if there are formal agreements**

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(1) **around this, but in Seattle Center, when I was doing**
(2) **Goodwill down there, we found some Seattle Center cables**
(3) **going through our ducts.**
(4) Q. Now, how about in downtown Seattle today, are you
(5) aware of situations where other utilities or other phone
(6) companies have shared your underground structures?
(7) **A. I'm thinking. I believe there are, but I don't**
(8) **have that information at my fingertips. And I believe it's**
(9) **innerduct structure, not entire structure. Does that make**
(10) **sense?**
(11) Q. Not yet, but we'll try to make it make sense.
(12) What is innerduct structure?
(13) **A. When you have ducts, then you can pull ducts**
(14) **inside that are smaller, and usually you pull them inside of**
(15) **four-inch pipe to create more paths for usually fiber optic**
(16) **cables.**
(17) Q. Let me try and describe what I think you just
(18) said and you can tell me if I've got it right.
(19) **A. Okay.**
(20) Q. There's a concrete structure, and inside of that
(21) are smaller structures of some sort?
(22) **A. Uh-huh, four-inch pipes, usually.**
(23) Q. Four-inch pipes. And what you've described in
(24) terms of sharing is that another carrier gets to put its
(25) four-inch pipe through your concrete structure; is that

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(1) correct?
(2) **A. No, it's usually with – what I believe I said is**
(3) **usually within our four-inch structure there – we have**
(4) **placed innerduct within that four-inch structure, and within**
(5) **that innerduct I believe there are some other carriers in**
(6) **that structure.**
(7) Q. And do you know which –
(8) **A. In downtown.**
(9) Q. And do you know which carriers those are?
(10) **A. No, I don't.**
(11) Q. You mentioned that there was some market
(12) organization in Denver which either authorized or rejected
(13) these sharing opportunities; is that correct?
(14) **A. There's a– what happens is the customer works**
(15) **with their market unit person, their marketeer, to go back**
(16) **to capacity provisioning and come up with a decision around**
(17) **whether there is an opportunity to share those facilities.**
(18) Q. And who would the customer be in that situation?
(19) Another carrier?
(20) **A. Could be.**
(21) Q. Who else could it be?
(22) **A. I do not know.**
(23) Q. Could it be Boeing?
(24) **A. I don't know.**
(25) Q. Who are these people that make the decision in

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(1) Denver whether or not it's okay to share underground
(2) structures?
(3) **A. I believe, I'm not 100 percent sure, that it's**
(4) **within the capacity of provisioning organization.**
(5) Q. And does that ultimately report to
(6) Mr. Bystrzycki?
(7) **A. Yes, it does.**
(8) Q. And do you know who is in charge of this capacity
(9) provisioning group?
(10) **A. That reports up to Harvey Plummer.**
(11) Q. Harvey who?
(12) **A. Plummer.**
(13) Q. And does Mr. Plummer in turn report to
(14) Mr. Bystrzycki?
(15) **A. That's my understanding. It fluctuates a lot,**
(16) **and so – just so you're aware.**
(17) Q. Have you ever been involved in a situation in
(18) which a customer or carrier requested the opportunity to
(19) share underground structure but it was rejected by US West?
(20) **A. No. Let me qualify that. In the last two and a**
(21) **half years, no.**
(22) Q. How about before that?
(23) **A. Before then, no specific examples come to mind.**
(24) Q. Just to get a feel for where underground is used
(25) as opposed to buried, is underground generally used in the

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(1) more dense urban areas?
(2) **A. Yes, that's correct.**
(3) Q. And would that, in the Puget Sound area, be
(4) Seattle, Tacoma and Bellevue?
(5) **A. Yes.**
(6) Q. Can you think of any other instances where
(7) underground is used in this area?
(8) **A. Yeah. We built a tree structure out from our**
(9) **central offices, and we were building that tree structure**
(10) **out usually because the size of the structure, what we have**
(11) **going into each office, grows as you get close to the**
(12) **office, depending on the size of the office. The closer you**
(13) **get the greater the chance that you're going to end up with**
(14) **conduit in the ground feeding out. And so it's not**
(15) **necessarily just based on density. For instance, in**
(16) **Hoodsport we have conduit, a short piece of conduit, but**
(17) **conduit going out for a five vault.**
(18) Q. What's conduit made out of, just to clear that
(19) up?
(20) **A. It depends. It could be wood, it could be – it**
(21) **depends on the status, the age. It could be vitrified clay,**
(22) **wood or PVC.**
(23) Q. Essentially some kind of pipe?
(24) **A. That's correct. It's a path that's underground.**
(25) Q. Is what that's underground?

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(1) **A. Path.**
(2) Q. And so in situations near central offices where
(3) you have a lot of feeder cable coming into and out of the
(4) central office, you sometimes use these underground
(5) structures; is that correct?
(6) **A. That's correct.**
(7) Q. And are you aware of any situations where US West
(8) has shared that conduit near central offices with other
(9) carriers or customers?
(10) **A. Well, with the Telecommunications Act, I know**
(11) **we're placing conduits near central offices for other people**
(12) **to use, co-location opportunities. And also, like in**
(13) **Seattle, when we were AT&T, one large company, we have toll**
(14) **cables and stuff going into east and into main, where**
(15) **everything from that era or time frame all runs together**
(16) **into the CO.**
(17) Q. So in the co-location settings that you're
(18) starting to have under the Telecommunications Act, will
(19) there be actual sharing of underground structure by US West
(20) and other carriers?
(21) **A. That's my understanding, yes, at least that**
(22) **vault.**
(23) Q. Do you have any sense in terms of a percentage
(24) basis of what percent of your underground structure is
(25) shared in the Puget Sound area?

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(1) **A. No sense at all.**
(2) Q. Thank you. Let's turn to buried. And if you
(3) don't mind, could you just define for me what you mean by
(4) trenching.
(5) **A. Trenching is where you use a backhoe or a rock**
(6) **saw or some other means to create a path that remains open**
(7) **so you can then lay the cable inside of it.**
(8) Q. Can you define what you mean by plowing.
(9) **A. It's a specific piece of equipment that you end**
(10) **up putting a reel of cable on and then just heading down the**
(11) **street, where the plow creates the trench and actually goes**
(12) **ahead and does the backfill and stuff and just plow it in.**
(13) Q. So it's a simultaneous process where the same
(14) piece of equipment opens a hole, lays the cable and then
(15) puts the dirt back on top?
(16) **A. You probably have to go back and do restoration,**
(17) **but in the plowing operation, the placement of cable happens**
(18) **at the same time that the trench is being opened.**
(19) Q. And could you just define for me what you mean by
(20) boring.
(21) **A. Boring is where you have a facility that's going**
(22) **underground. You start at one end, and usually you have**
(23) **some kind of directional finder so you can see where it's**
(24) **heading, and it's got a prearranged place at the other end**
(25) **where it's coming out.**

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(1) Q. So I'm imagining something that looks like a big
(2) drill that drills under the ground. Is that a correct
(3) imagining?
(4) **A. Yes, that – well, there's a couple different**
(5) **ways, but that's as good a picture as anything.**
(6) Q. And how big a hole generally is made by this
(7) piece of equipment?
(8) **A. The type of boring that we usually do is for**
(9) **fairly large structures, and so usually we need quite a bit**
(10) **of room for setup and teardown.**
(11) Q. Is that two feet or six feet or half a foot or –
(12) **A. More.**
(13) Q. How much more?
(14) *MS. ANDERL: Dan, let me clarify. Are you*
(15) *talking about the diameter of the hole that's being bored*
(16) *or –*
(17) Q. That's fair. Let's look at both. How big a
(18) diameter hole is being bored?
(19) **A. In most of the cases I'm aware of, they're**
(20) **usually substantial holes, six to nine ducts, so pretty**
(21) **good-sized pipes.**
(22) Q. Is that two feet or six feet, or do you have any
(23) general idea?
(24) **A. 24-inch.**
(25) Q. Total across the whole diameter?

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(1) **A. Diameter, yeah; something large.**
(2) Q. Let's go the other direction. Let's go the
(3) length of the bore. I think you were indicating that it was
(4) fairly long bores that you were doing; is that correct?
(5) **A. Uh-huh.**
(6) Q. And can you give me a –
(7) **A. We've done some – we went under the Chehalis**
(8) **River, which was pretty large and long, and getting**
(9) **underneath there, we've – you want footage?**
(10) Q. Only if you know it.
(11) **A. No. They're not insignificant. Sometimes we do**
(12) **bore under roadways.**
(13) Q. So boring could be as short as six feet or as
(14) long as 150 feet?
(15) **A. I would not think we would bore if it was six**
(16) **feet. I would think that if you were boring it was at least**
(17) **30 feet, probably more.**
(18) Q. And do you have any idea what the maximum –
(19) **A. No.**
(20) Q. – boring distance is?
(21) **A. It would depend on the terrain, the soil.**
(22) Q. Just in terms of again getting a better
(23) understanding of how this happens physically, when you bore
(24) a hole, do you simultaneously put something in there to keep
(25) the hole from falling down and collapsing?

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(1) **A. Yes, you do.**
(2) Q. And what do you put in?
(3) **A. They're – in the ones I've watched, which I've**
(4) **only watched one, they were bringing a plastic sheath in to**
(5) **keep the hole open while they were doing the bore.**
(6) Q. And after they put the plastic sheath in, do they
(7) put anything else in to reinforce the hole?
(8) **A. Yeah, they ended up putting a more form-fitted**
(9) **pipe in through that will keep it, and then the duct is**
(10) **inside the pipe.**
(11) Q. What's the pipe made out of, typically?
(12) **A. Don't know.**
(13) Q. Something hard and strong, I take it?
(14) **A. That would be my guess.**
(15) Q. And then once you've got that pipe in place, what
(16) do you put inside the pipe?
(17) **A. Usually duct structure.**
(18) Q. And what's the duct structure made of?
(19) **A. Usually plastic.**
(20) Q. And inside that what goes?
(21) **A. Cable.**
(22) Q. And would that be either copper or fiber?
(23) **A. That's correct.**
(24) Q. And does US West currently use boring both for
(25) copper and fiber?

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(1) **A. The structures we're putting in usually, on the**
(2) **ones I'm aware of, are for relocation events, where we have**
(3) **currently copper and fiber in the ground or a mix of both,**
(4) **so yes.**
(5) Q. What do you mean by a relocation event?
(6) **A. The one I watched was where they were doing the**
(7) **S-curves in 405, and their pilings were coming down on top**
(8) **of our duct structure, and so we had to relocate our duct**
(9) **structure and go up to the top of a huge hill on the other**
(10) **side, and the only way we could get there was by boring.**
(11) Q. Can you think of any other relocation events
(12) you're aware of where boring has been used?
(13) **A. Yeah, when they were dredging in two waterways**
(14) **that I know of where we had duct structures, we've had to go**
(15) **through and bore to get further underneath the waterway so**
(16) **they could continue on with their dredging projects.**
(17) Q. So is boring a fairly unusual thing to do versus
(18) burying or plowing?
(19) **A. Yes. We bury or plow as a first choice.**
(20) Q. And do you have any idea of the percentage of
(21) time in which US West employs boring versus burying or
(22) plowing?
(23) **A. I can't talk to US West for Washington alone.**
(24) **Due to the terrain that we have, boring is not a first**
(25) **choice method, and based on a conversation I've had with our**

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(1) **contract inspector, I would say it would be one percent of**
(2) **the time or less in Washington State.**
(3) Q. One percent?
(4) **A. Or less in Washington.**
(5) Q. And who's this contract person?
(6) **A. His name is Fran Gough.**
(7) Q. And what does he do?
(8) **A. He is our contract work liaison for Washington**
(9) **State, and what he does is he puts contracts out to bid for**
(10) **our placing crews.**
(11) Q. Well, let's finish the discussion on boring, at
(12) least for now. Do you ever share bored structure with other
(13) carriers or customers that you're aware of?
(14) **A. I can give you a specific.**
(15) Q. Sure.
(16) **A. Okay. We're currently exploring the**
(17) **opportunities to bore over on the peninsula, where we have a**
(18) **cable structure that needs some help, and Washington – no,**
(19) **Cascade Gas is looking to share some of the – of that**
(20) **trench with us. And I don't know if you consider that**
(21) **shared, because with gas what we would do is probably do two**
(22) **bores side-by-side.**
(23) Q. Would it be cheaper to do two bores side-by-side
(24) rather than you just doing your one bore by yourself?
(25) **A. It depends on the environmental and the**

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(1) **technical. And also it's gas. It's not one of the more**
(2) **typical utilities that we would share with.**
(3) Q. What are the more typical utilities that you
(4) would share with?
(5) **A. Power or T.V.**
(6) Q. And are you aware of any sharing of boring
(7) arrangements with either power or T.V.?
(8) **A. No, I'm not.**
(9) Q. If you're going to put in two bores rather than
(10) one bore, what is the advantage of sharing with Cascade Gas
(11) in that situation?
(12) **A. First off, from an impact to the public, we're**
(13) **only impacting the public once, and we like to minimize what**
(14) **we're making happen there. The second issue is from a setup**
(15) **cost, and bringing the equipment in, because it's a fairly**
(16) **large bore, bringing the equipment in to do this bore is**
(17) **fairly expensive. You get to share that, plus core**
(18) **sampling, all those other sorts of things, you get to share**
(19) **the cost.**
(20) Q. So there are a lot of one-time setup type costs
(21) that you can share with them?
(22) **A. Yeah, right.**
(23) Q. Let's turn to plowing. I think fortunately I
(24) sort of understand that one a little bit from a technical
(25) perspective, so I won't ask you to explain that more. Do

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(1) correct in understanding that this is a measurement of
(2) dollars of copper cable rather than feet of copper cable?
(3) **A. That's correct.**
(4) Q. And where it indicates land development
(5) agreement, is that a situation in which US West does not
(6) have to pay for the trenching, but the developer pays for
(7) the trenching?
(8) **A. There's a land development agreement contract**
(9) **that we enter into with the developer where the developer**
(10) **provides the trench, and based on the utilization of the**
(11) **facilities within the trench, we provide a refund of a**
(12) **certain percentage over a five-year period of time.**
(13) Q. Can you explain to me what you mean by a refund
(14) in that situation.
(15) **A. We base the – the developer pays us money up**
(16) **front to provide facilities within the subdivision, and we**
(17) **take that money and rebate it over a five-year period of**
(18) **time based on the utilization within that subdivision.**
(19) Q. Let's focus on one other point first, which is,
(20) in the LDA for Washington State, does the developer itself
(21) have to pay for the physical trench that's created in the
(22) ground?
(23) **A. The developer has to provide the physical trench**
(24) **that's in the ground. I'm unclear about –**
(25) *THE WITNESS: Should I say if I'm unclear,*

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(1) *It's what I think it is, or –*
(2) *MS. ANDERL: If you don't know –*
(3) Q. Let me ask you a question.
(4) *MS. ANDERL: – I'd rather you didn't*
(5) *speculate.*
(6) Q. Do you know how the developer causes this trench
(7) to be created?
(8) **A. Usually with a backhoe.**
(9) Q. And somehow or the other they have to take care
(10) of that being done, correct?
(11) **A. Correct.**
(12) Q. And US West is not financially or otherwise
(13) responsible for the creation of the hole in the ground?
(14) **A. That's correct.**
(15) Q. And does US West ever pay the developer anything
(16) for creating the hole in the ground or the trench?
(17) **A. That's where I'm unclear. I believe we do**
(18) **provide them some dollars back based on the number of**
(19) **utilities that are in the trench, but I'm not sure how that**
(20) **rebates. I'm not clear about this. You really need to talk**
(21) **to the person who does our LDA agreements.**
(22) Q. And who is that?
(23) **A. Jim Christian.**
(24) Q. Jim Christian?
(25) **A. Uh-huh.**

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(1) Q. And where is Mr. Christian located?
(2) **A. In Denver.**
(3) Q. And is he responsible for the LDA's for the
(4) entire region?
(5) **A. He is for Washington.**
(6) *MS. ANDERL: Dan, could I just get a point of*
(7) *clarification here? Ms. Cervarich, a minute ago you said*
(8) *something about providing money back to the developer based*
(9) *on the number of utilities that were in the trench. Is that*
(10) *what you meant to say?*
(11) **A. Again, I'm unclear about the calculations and**
(12) **what the LDA agreement completely entails, and –**
(13) Q. Okay, that's fine. You did indicate that there
(14) is this rebate paid back over five years to the developer,
(15) and you seem to be more clear about that.
(16) **A. Uh-huh.**
(17) Q. Let's take that in pieces, and maybe I can use an
(18) example. Let's assume we have a brand new subdivision with
(19) no houses in it yet, and US West has to come in and install
(20) facilities in the trench that the developer opens. Is that
(21) a correct hypothesis?
(22) **A. That's correct.**
(23) Q. Once US West installs those facilities, does it
(24) charge the developer for US West's costs of installing those
(25) facilities?

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(1) **A. It charges the developers before we do the**
(2) **install.**
(3) Q. And what are you charging the developer for? The
(4) equipment, the labor, the wire, what?
(5) **A. I do not know how they came up with the**
(6) **calculation. I know we calculate it based on the center**
(7) **line footage of the road to determine the amount that we**
(8) **charge.**
(9) Q. And it would be on a per-foot basis then?
(10) **A. Per center line footage, yeah.**
(11) Q. And so making this really simple, let's assume
(12) there's one road into a subdivision. You would measure how
(13) many feet along that road there are down the center?
(14) **A. Uh-huh.**
(15) Q. Is that correct?
(16) **A. That's correct.**
(17) Q. And then you would charge the developer some
(18) amount of money for your putting in the facilities into the
(19) subdivision; is that correct?
(20) **A. That's correct.**
(21) Q. And do you know what that is on a per-foot basis?
(22) **A. No, I don't.**
(23) Q. Do you have even a range that you have any idea
(24) of?
(25) **A. Huh-uh.**

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(1) Q. And that would be Mr. Christian's responsibility,
(2) again?
(3) **A. Correct. We calculate the center line footage,**
(4) **but he actually effects the contract.**
(5) *MS. ANDERL: Dan, to just interject, you may*
(6) *be aware of this and are just seeking to gather what the*
(7) *witness's knowledge is, but a lot of this information I*
(8) *think is in our tariff in Section 4, which covers LDA's.*
(9) *And she just may not have personal knowledge of it, but it's*
(10) *certainly easily out there.*
(11) *MR. WAGGONER: Thank you.*
(12) Q. This rebate over five years that you've talked
(13) about, do you know, is that the complete cost of the
(14) facilities US West has installed that gets rebated to the
(15) developer or is it an incomplete portion?
(16) **A. It's my understanding that it's the complete**
(17) **cost.**
(18) Q. And as far as you know, is that done based on the
(19) percentage of the development that actually gets filled up?
(20) **A. Correct.**
(21) Q. While we're talking about charges to developers
(22) or people building new structures, does US West, as far as
(23) you know, have any charge for line extensions to get from
(24) one area where you have facilities to another area where
(25) somebody wants to do a development?

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(1) **A. Yes.**
(2) Q. And do you know what that is about?
(3) **A. The line extension charge?**
(4) Q. Yes.
(5) **A. I think it's around 80 cents a foot.**
(6) Q. So let me give you a hypothetical. Let's assume
(7) I'm a developer up on the Sammamish plateau and I want to
(8) build a subdivision that's two miles from the nearest phone
(9) facility. Okay?
(10) **A. I believe it's – there's a definitive – and**
(11) **again I'm not 100 percent clear on this – inside the base**
(12) **rate or outside the base rate. It's in the tariff. But I**
(13) **believe the line extension charge is only outside of the**
(14) **base rate area. I'd have to go back and look it up, though.**
(15) Q. Are you telling me that if I'm outside the base
(16) rate area I'll be charged the line extension charge, but if
(17) I'm within the base rate area I won't be?
(18) **A. I'm not clear on that.**
(19) Q. It's just a tariff issue that you don't know
(20) about?
(21) **A. Right.**
(22) Q. Okay, thank you.
(23) **A. Again, we have the tariff handy, so we review it**
(24) **when questions come up.**
(25) Q. That's fine. Let's go back to Exhibit 1. The

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(1) next column is total buried copper footage 1996. Am I
(2) correct in assuming that that's just the amount of feet that
(3) you laid in developer trenches in 1996 in that state?
(4) **A. I don't know that it's trenching; it's total**
(5) **buried.**
(6) Q. That's what I'm trying to find out. The top of
(7) the table or the box refers to developer trenches in 1996,
(8) and I'm trying to understand whether this column, if you
(9) know, is the total amount, regardless of whether it's in
(10) developer trenches.
(11) **A. That's my understanding of the information.**
(12) Q. And the next column would be a subset of that,
(13) which would be the amount not in developer trenches,
(14) correct?
(15) **A. It's an estimated amount based on the percentages**
(16) **from the dollars.**
(17) Q. And then the same thing in the next column would
(18) be the percentage of it that is in developer trenches,
(19) correct?
(20) **A. Correct.**
(21) Q. Do you know whether the footage not in developer
(22) trenches is provided entirely in trenches that are either
(23) dug or exclusively paid for by US West?
(24) **A. No, I don't know.**
(25) Q. Do you know whether there are situations outside

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(1) LDA's where US West obtains trenching from some other party?
(2) **A. Give me an example.**
(3) Q. Okay. Well, we've been discussing the land
(4) development agreement, which is generally for new
(5) subdivisions, correct?
(6) **A. Correct.**
(7) Q. And what I'm trying to do is move outside of that
(8) situation and find out whether outside of that particular
(9) situation there are other arrangements US West has where
(10) somebody else actually digs the trench that US West goes
(11) into.
(12) **A. And do we pay for a piece of that trench or is**
(13) **the trench free?**
(14) Q. Let's find out both of those. Are there those
(15) situations that exist outside of LDA's?
(16) **A. Yes.**
(17) Q. And now let's ask, are those situations where US
(18) West gets the trench for free, at least some of the time?
(19) **A. Yes.**
(20) Q. And what kind of situations –
(21) **A. Infrequently.**
(22) Q. What kinds of situations would those be?
(23) **A. I can think of one that comes to mind, is where a**
(24) **developer comes in – in Washington State the developer and**
(25) **the builders are different, and usually you can go in and**

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(1) **you can get all the permits for a huge LDA project, and**
(2) **rather than call that whole project an LDA, they'll subset**
(3) **it out to developers, okay?**
(4) **And to help expedite it, we might say, instead of**
(5) **saying the entire 3,000 lots is a subdivision and having the**
(6) **developer pay up front, they'll provide us trenching down**
(7) **the main road, and then we'll call each phase a separate**
(8) **LDA. So that trench down the main piece of that**
(9) **subdivision, they would provides us the trench and we would**
(10) **put the pipe and facilities in it, but that's in lieu of**
(11) **doing – does that make sense?**
(12) Q. Yes. You indicated there may be some situations
(13) where in trenching outside of LDA's that US West only pays
(14) for part of the trenching. What would those situations be?
(15) **A. I can think of one specific. City of Bellevue**
(16) **goes on a bi-weekly basis, twice a month, and has a meeting**
(17) **and tells where other people are burying, and pretty much**
(18) **puts it out to the universe that if US West is burying**
(19) **there, anybody else wants to go in, they jump in the trench**
(20) **with, and then you split the cost.**
(21) Q. Do you have any idea what percentage of the time
(22) in this area of trenching outside of LDA's US West shares
(23) the cost of trenching versus –
(24) **A. No, I do not have a percentage. It is not the**
(25) **norm.**

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(1) Q. What's that?
(2) **A. It is not the norm.**
(3) Q. We've talked a fair amount about sharing with
(4) utilities that are in the gas or the power business. Let's
(5) focus for a second on sharing with cable television. How
(6) much of the time does US West share a structure with cable
(7) television?
(8) **A. Virtually all of our LDA's.**
(9) Q. And how about outside of LDA's?
(10) **A. Again, those isolated instances, like City of**
(11) **Bellevue, big projects, usually, I think, that are**
(12) **happening.**
(13) Q. Do you know what percentage of the time cable
(14) television does not share with some other utility in terms
(15) of either poles or buried?
(16) **A. I have no idea.**
(17) Q. Let's go down to the next box or table on
(18) Exhibit 1. That's titled USWC Estimate of Aerial Cable
(19) Placed on Joint Use Poles in 1996. What are joint use
(20) poles?
(21) **A. Poles that they have multiple utilities on them.**
(22) Q. And this is only for Washington State. What does
(23) the percentage of pole usage via US West-owned poles refer
(24) to?
(25) **A. The percentage of poles that we own in US West of**

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(1) **the poles that we're using.**
(2) Q. That are joint use poles?
(3) **A. Correct.**
(4) Q. So that percentage is the percentage of joint use
(5) poles that are owned by US West; is that correct, or is that
(6) the percent of total poles in the state?
(7) **A. One moment, please. Could you restate the**
(8) **question?**
(9) *MS. ANDERL: Dan, off the record.*
(10) (Discussion held off the record.)
(11) Q. If I could just summarize an off-the-record
(12) discussion, and if you could confirm it, is it correct that
(13) this table that we've just been discussing indicates the
(14) percentage of poles owned by US West in the first column,
(15) the percentage of poles owned by somebody else in the second
(16) column, and then it takes those two percentages and
(17) multiplies those times the total aerial copper/fiber footage
(18) provided in 1996 to yield estimates of the total footage on
(19) US West-owned poles versus non-US West-owned poles?
(20) **A. That's my understanding.**
(21) Q. Are all of US West's poles joint use poles as
(22) opposed to sole use poles?
(23) **A. We have some 100 percent use poles.**
(24) Q. And would those be excluded from the universe of
(25) poles we're looking at here?

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(1) **A. The 100 percent poles will be included in the**
(2) **number of US West-owned poles, so if – for the –**
(3) Q. Let me ask: Is it your testimony that the
(4) percentage reflected in the first column is for poles where
(5) nobody else is on those poles?
(6) **A. No, it's for a combination of 100 percent, 50**
(7) **percent owner and 33 percent ownership poles, any percentage**
(8) **where we own a piece of that pole.**
(9) Q. But my point is not about ownership. My point is
(10) about whether there's anybody else on the pole. Does
(11) anything about that percentage tell me whether there's
(12) somebody else on that pole or is it solely about percentage
(13) ownership?
(14) **A. Solely percentage ownership.**
(15) Q. I note in the third column it indicates total
(16) aerial copper/fiber footage in 1996. Do you see that
(17) reference?
(18) **A. Yes, I do.**
(19) Q. Do you have any understanding of what the
(20) relative percentages of copper versus fiber were that were
(21) installed in 1996?
(22) **A. No, I do not.**
(23) Q. But is it correct that US West is still
(24) installing both copper and fiber on poles in 1996?
(25) **A. Correct.**

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(1) you put in replacement poles, you would continue to share
(2) with the power company and the cable television company?
(3) **A. That's correct.**
(4) Q. Let's change the scenario and assume we're in a
(5) developed area. You've got buried facilities as opposed to
(6) aerial facilities and you wanted to either replace or add to
(7) those facilities in a buried situation. How would you go
(8) about doing that?
(9) **A. The same thing. You would evaluate the type of**
(10) **cable you currently had, the customer base or demographics**
(11) **around that area, and then size the new cable to feed those**
(12) **in a distribution situation, and then you would put new**
(13) **cable in the ground. And if you were buried, 99 percent of**
(14) **the time we will remain buried as we go in.**
(15) Q. And does this happen very often, that you would
(16) go in and completely redo a buried outside plant situation
(17) in a developed area?
(18) **A. More and more. As the usage has gone up in the**
(19) **residential neighborhoods, based on what people are**
(20) **requiring, we're having to go into more and more**
(21) **neighborhoods to rebuild them.**
(22) Q. And if you are doing that, what do you do with
(23) the existing plant that's already there, assuming it's
(24) sound?
(25) **A. If the existing plant is sound, usually have a**

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(1) **couple strategies, but you usually come in – with a buried**
(2) **cable you don't – how do I say this? You determine how you**
(3) **can best utilize the existing and supplement it with the new**
(4) **cable. So you may not – if the cable is multiple or**
(5) **dedicated plant, if it's dedicated plant and it's sized**
(6) **appropriately for a cul-de-sac, for instance, but the**
(7) **cul-de-sac feeds down an extended street, you may go halfway**
(8) **down the street and then take the – bypass the first half**
(9) **of the street and provide new feed for the second half of**
(10) **the cul-de-sac. Does that make sense?**
(11) Q. Yes.
(12) **A. Okay.**
(13) Q. So just in terms of the actual burying aspect of
(14) this, would you actually dig up the old trench in this kind
(15) of scenario?
(16) **A. No.**
(17) Q. So would you put in a new trench?
(18) **A. Yes. Usually in these scenarios the cable under**
(19) **ground is usually aged, and so even finding the old trench**
(20) **would be a trick.**
(21) (Discussion held off the record.)
(22) Q. If you are going to go in and create a new trench
(23) to either replace or add to outside plant in a developed
(24) area, would you at that time offer other utilities the
(25) opportunity to use that trench?

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(1) **A. It depends on the nature of the replacement.**
(2) Q. Can you explain that more?
(3) **A. My team is continually dialoguing with our**
(4) **utility and city/county peers, and if you were just going in**
(5) **after one street to get at one isolated clump of – where**
(6) **service capabilities were not existing, usually you would**
(7) **not. That's –**
(8) Q. Just not worth it?
(9) **A. Yeah, it's just not worth the hassle. If you**
(10) **were going in and doing a whole over-build of a structure,**
(11) **an entire neighborhood, you might talk to the other**
(12) **utilities and see if they want to go in as well.**
(13) Q. And do they sometimes go in as well?
(14) **A. Yes, they do.**
(15) Q. Do you have any idea what percentage of the time
(16) they do?
(17) **A. Don't have a percentage.**
(18) Q. I think we talked about this a little bit before,
(19) but when you are dealing with municipalities and counties,
(20) do you have any that you know of that require sharing?
(21) **A. City of Bellevue does.**
(22) Q. Anybody else?
(23) **A. Not on a formal basis. They – most cities and**
(24) **counties, if you're going down a road, do not look favorably**
(25) **upon having the road torn up for various projects throughout**

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(1) **the year, so if they know there's multiple people looking**
(2) **for multiple trace placements down a street, they'll try to**
(3) **connect you together so at least from a public perspective**
(4) **you're not disturbing the people who live around that street**
(5) **multiple times in a given annual year.**
(6) Q. I think we talked about both aerial and buried.
(7) Let's talk about underground for a second. Well, I guess,
(8) first of all, if we're talking about underground facilities,
(9) we're always talking about a developed area, or almost
(10) always; is that correct?
(11) **A. Almost always.**
(12) Q. And if you wanted to add capacity or replace
(13) outside plant in underground structure, how would you do
(14) that?
(15) **A. Well, if the duct structure was totally out of**
(16) **gas, they actually had to dig the street, there's two ways.**
(17) **First off, once you have the underground structure in place**
(18) **you can add capacity just by using the existing ducts that**
(19) **are in the underground structure. Okay? Now, once you've**
(20) **utilized all those ducts, you have a couple different**
(21) **options. You can mine out smaller-sized cables.**
(22) Q. What do you mean by mine out?
(23) **A. Say it's an old wood creosote duct and you think**
(24) **it won't collapse when you pull out the old cable. You**
(25) **could try, if you had an old 300 or 400 in, to pull out the**

BEFORE THE ARIZONA CORPORATION COMMISSION

WILLIAM A. MUNDELL
Chairman
JAMES M. IRVIN
Commissioner
MARC SPITZER
Commissioner

IN THE MATTER OF INVESTIGATION INTO U S WEST COMMUNICATIONS, INC.'S COMPLIANCE WITH CERTAIN WHOLESALE PRICING REQUIREMENTS FOR UNBUNDLED NETWORK ELEMENTS AND RESALE DISCOUNTS	**DOCKET NO. T-00000A-00-0194** **NOTICE OF FILING SUMMARY TESTIMONY OF THOMAS H. WEISS**

AT&T Communications of the Mountain States, Inc., WorldCom, Inc., and XO Arizona, Inc., hereby provides Notice of Filing Summary Testimony of Thomas H. Weiss.

DATED this 25th day of July, 2001.

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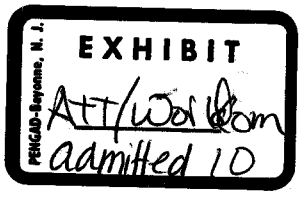

Summary of Direct Testimony of Thomas H. Weiss
AT&T/WorldCom/XO
ACC Docket No. T-00000A-00-0194, Phase II

PURPOSE

In connection with this docket, I have filed two (2) sets of direct testimony on behalf of AT&T Communications of the Mountain States, Inc., WorldCom, Inc. and XO Arizona, Inc.

My initial Direct Testimony was filed on May 16, 2002 and it serves two general purposes. First, I examined Qwest's cost studies related to recurring and non-recurring charges, and I respond to Qwest's witness, Ms. Million, regarding her assertions that Qwest's cost estimates are allegedly Total Element Long Run Incremental Cost ("TELRIC") compliant and that the resultant prices Qwest proposes are purportedly correct. Second, I examine the administrative and technical assumptions that are used in the AT&T/WorldCom Non Recurring Cost Model ("NRCM"). Although Mr. Lathrop explains this model in detail, I address the validity of the assumptions in my testimony.

Subsequently, on May 18, 2001, I filed direct testimony to report and explain the results of my critical evaluation of Qwest's LoopMod2, the model with which Qwest computes its costs of unbundled loop elements.

RECURRING COSTS

I examined Qwest's proposed annual charge factors used throughout its recurring costs analyses; the network architecture and basic equipment investment costs assumed by Qwest in its analyses of the recurring cost; and the loading factors and fill factors used to develop the incremental investment costs that form the basis for Qwest's recurring cost analyses. The results of my cost factor analyses apply to all elements at issue in this docket. However, I offer specific examples of recurring rate proposals only for the following network elements based on Qwest's approach adjusted for changes that recommend to the various Qwest cost factors:

- DS1 Capable Loops (all zones);
- DS3 Capable Loops (all zones);
- Unbundled Direct Interoffice Transport ("UDIT,") for DS0, DS1, DS3, OC3 and OC12 multiplex arrangements; and
- Shared Transport.

From these analyses, I determined Qwest's recurring cost proposals in this case are overstated by approximately 125% relative to my own findings concerning the recurring costs of all interconnection and unbundled network elements.

FCC TELRIC Rules:

My testimony filed on May 16, 2001 includes a discussion of the FCC Rules that pertain to local interconnection and UNE rates. Part of that discussion includes reference to and comment on Section 51.505(d)(4) of the FCC's Rules which states that revenues which subsidize other services may not be considered in developing forward-looking economic costs.

Qwest has argued in this docket that the prices it charges for loops in it retail market are set below the level of "cost" and, therefore, other services subsidize retail provision of the local loop. A question has been raised to the effect that if Qwest's retail loop prices are, in fact, set below the underlying "cost," do those prices violate the FCC's Rules and specifically the rule at Section 51.505(d)(4)?

In my opinion, technically, the prices that Qwest charges for services it provides to end-users at retail do not impact TELRIC costs of network elements. However, if Qwest is correct in its assertion, then to the extent that such subsidies are not provided equally to CLECs, this Commission must move to eliminate the offending subsidies from Qwest's retail rate structure. Should the subsidy arrangement to which Qwest refers be allowed to persist or to be exacerbated by further retail rate reductions, then the CLECs cannot possibly compete with Qwest in the local exchange market and the effort to transition that market from monopoly to competition most certainly will fail.

Also in my testimony filed on May 16, 2001, I recommended that product advertising costs not be reflected in TELRIC developed for local interconnection and UNEs. In rebuttal to my position, Qwest argues that its product advertising expense benefits CLECs by building customer awareness of both Qwest's and the CLECs' products. Based on Qwest's rebuttal position, a question has been raised as to whether the FCC has considered such arguments as Qwest has presented in favor of including product advertising costs in UNE prices and, if not, what would be the FCC's likely position on the issue.

Beginning with its First Report and Order in CC Docket No. 96-98, the FCC has consistently maintained that TELRIC must not include any forward-looking costs for the ILEC to produce an element if that cost would not be incurred by an efficient firm that produced nothing but the element -- a concept that has been memorialized in FCC Rules Section 51.505(c)(2). Obviously, if Qwest was to produce nothing but a given network element and the only market for that element was represented by the CLECs, then Qwest would not have to expend resources to advertise the element. Accordingly, based on Section 51.505(c)(2) of its Rules, I believe that the FCC would excluded Product Advertising expense from the TELRIC of local interconnection and UNEs at issue in this docket.

Finally with respect to TELRIC Rules, in my direct testimony filed on May 16, 2001, I recommended that the TELRIC of an element not include any assignment of cost that represents revenue that may not be collected from Qwest's competitors in the local exchange market. Several questions have been raised with respect to that issue and I respond to them below:

First, I am not aware of any FCC or ACC positions on the issue. Nevertheless, no business with which I am familiar and which operates in a competitive market sets the prices of its products and/or services with a specific allowance for uncollectible revenue included in its price(s). Rather, prices in a competitive market are a function of market supply and customer demand. To the extent that a participant in such a market believes that its experienced level of uncollectible revenue is excessive, it is free to initiate steps designed to correct the problem. One solution would be to require actual offending customers to remit payment in advance of providing products or services; still another solution would be to require offending customers to post performance bonds that would compensate the business in the event that offending customers fail to meet their obligations. For example, utilities have required certain end user customers to advance payment before service is rendered or they require some form of performance bond (e.g., deposits) from end users that have been shown to constitute or that are expected to represent a risk of failing to meet their payment obligations. Qwest could employ either or both of these approaches to offending CLECs, if any, and avoid the broad allocation to all CLECs of the risk for failure of only some CLECs to pay for the local interconnection and UNEs that they use.

NON-RECURRING COSTS

With respect to non-recurring costs, I reviewed Qwest's alleged work time, and the probabilities used to develop non-recurring costs that are attributable to making network elements available for use by Competitive Local Exchange Carriers ("CLECs") and Qwest's non-recurring charges ("NRCs") developed from those activities. From this review, I conclude generally that Qwest's proposals for the costs of non-recurring activities are overstated by between 50% and 70% relative to the true forward-looking costs of processing and completing CLECs' requests for interconnection and unbundled network elements. I recommend that the Commission use the results from the NRCM (described by Mr. Lathrop) to establish Qwest non-recurring charges applicable to local interconnection and UNEs in this docket.

LOOP COSTS

My critical evaluation of Qwest's LoopMod2 model for estimating the cost to provide unbundled loops for use by CLECs reveals that the accuracy of the results reported out of LoopMod2 depend on input assumptions relative to seven (7) key variables (including fill factors, placement methods, and structure sharing) which

influence the cost that ILECs incur to engineer and construct loop plant. I examined Qwest's assumptions with respect to each key variable and I explain that Qwest's analyses overstate the costs of providing unbundled network loops.

Distribution Fill Factors:

Among the LoopMod2 variables that I identified as a key input assumption is distribution fill. The proper designation of distribution fill in any loop cost model is one critical element in properly defining forward-looking loop costs. Should the model specify distribution fill at higher than a reasonable forward-looking level, then loop prices would be set below forward-looking incremental cost and the ILEC runs a risk of not fully recovering its total cost of providing loops. Conversely, if distribution fill is specified too low relative to the proper forward-looking level, CLECs would pay prices that exceed forward-looking incremental cost and they run the risk of facing a severe barrier to their entry into the competitive local exchange telecommunications market.

In this case, I recommend that the average forward-looking fill applicable to distribution plant should be 0.6250 in Density Groups 1, 2, and 5; and 0.6667 in Density Groups 3 and 4. Qwest takes exception to my recommendations arguing: (1) that they would violate the engineering practice that applied as far back in time as 1982, and (2) that they do not reflect Qwest's actual second line take in Arizona in 1998. Obviously, Qwest's citation to distribution plant engineering design guidelines from 19 years ago is an anachronism; the network itself and customer demands on that network have changed so radically since 1982 as to render any reference to 19-year old loop plant designs as being of no value, practical or otherwise, in this or any other debate concerning telecommunications distribution plant. Qwest's reliance on 1998 actual Arizona second line take rates in rebuttal to my position is equally anachronistic; furthermore, it violates a basic tenet of TELRIC pricing which forbids the use of embedded costs to determine TELRIC-based prices. Neither of Qwest's rebuttal arguments on distribution fill factors deserves any weight in this debate.

The rates and charges that result from this docket should reflect forward-looking approaches to network design and to customer demand. As a practical matter, current forward-looking network designs no longer contemplate the deployment or use of copper distribution cables exclusively. Rather, for example, FTTC (Fiber To The Curb) designs currently are accompanying copper distribution plant designs even for local carriers, such as Sprint Communication, that generally have fewer resources than Qwest and that serve customers with generally less complex forms of demand than Qwest's customers. Deployment of FTTC permits a telephone company to postpone additional copper feeder and distribution deployments and, thereby, allows the telephone company to enjoy higher feeder and distribution fills. Unlike Qwest's proposed fill ratios for distribution capacity, my recommendations reflect these modern loop network design realities.

On behalf of regulatory staffs in two (2) states, I have formally recommended and supported a distribution fill factor of 0.6667 in connection with recent proceedings involving the development of interconnection and UNE rates and charges for Verizon Communications, Inc. (formerly known as "Bell Atlantic) in two (2) states: Vermont (VPSB Docket No. 5713) and Rhode Island (RIPUC Docket No. 2681). After extensive hearings, briefings, etc., the VPSB ordered rates and charges for local interconnection and UNEs based largely on my specific recommendations, including, as I recall, my recommendation on distribution fill factor. Also, after extensive hearings in Rhode Island, the RIPUC adopted my recommendations for local interconnection and UNE rates; those recommendations are based on a distribution fill factor of 0.6667. I believe Vermont is similar, in terms of geography and demography, to Arizona.

I should note that my recommended distribution fill factor is higher than the distribution fill realized in the HAI Model filed by AT&T, WorldCom and XO in this proceeding. It is my opinion that the HAI Model is actually conservative in favor of Qwest in its treatment of distribution fill.

Cable Placement Methods:

A major factor impacting loop costs is the assumed means by which cable is placed and supported. With regard to cable placement methods, I recommend that the Commission use the default inputs from the HAI model; that model assumes that between 3% and 5% of distribution cable placement activity in high density areas is undertaken using the directional boring method. The LoopMod2 default inputs be determine loop costs using the directional boring method for distribution and rural feeder cable in 20 percent to 45 percent of placements in Density Groups 1-4, and in 5 percent of placements in Density Group 5 (rural).

In its rebuttal to my testimony on placement methods, Qwest changed its position modestly to reflect no buried cable placements using the boring technique but only with respect to Density Group 5 (rural); Qwest did not advance any different positions than that taken in its direct testimony on the use of the directional boring technique in Density Groups 1-4. While Qwest's "revision" on this issue is a move in the correct direction (at least for the rural density group), it certainly fails to represent the proper forward-looking mix of construction techniques that should apply to loop cost determinations as I discuss them in my direct testimony filed on May 18, 2001. Additionally, my recommendations on cable plant placement methods are in line with those adopted by this Commission in Docket No. U-3021-96-488 et al.; Qwest's proposals are not.

Structure Sharing:

In my direct testimony, I advocate that the Commission continue using its earlier findings on structure sharing percentages (50%) for purposes of defining the cost

of interconnection and UNEs in the instant docket. In support of my position, I cited the testimony of a Qwest witness, Ms. Genie Cervarich, a Qwest field engineering operations manager who supported the same position in connection with a 1997 proceeding in Washington State. My experience as a field engineering manager includes several instances where municipal governments required all utilities in small to medium-size towns in southeastern states to bury plant in shared trenches to the degree permitted by the National Electric Safety Code. Additionally, from my work as a consultant before the New York Public Service Commission, I know that, in New York City there is an absolute requirement that utilities share underground structures (principally conduit) in the city. Thus, requirements by municipal governments for utilities to share structures extensively are not something new; they have been in place for years.

Logic of the LoopMod2 Algorithms and Comparison with the HAI Model:

As part of my analysis of LoopMod2, I conducted a series of tests on that model to ascertain whether it produces changes in loop cost results that could reasonably be expected given measured changes in the inputs to the model. The results of this portion of my analysis lead me to conclude that engineering algorithms that comprise LoopMod2 are likely to contain logical and/or computational errors that render the model useless to the purpose for which it was intended. In this portion of my direct testimony, I conclude that the only reliable model available for use in defining the forward-looking costs of unbundled loops in this docket is the HAI 5.2a model.

Qwest takes issue with my analysis and conclusions regarding the logic of LoopMod2 output results arguing that my criticisms are meaningless. In responding to my position, Qwest compares my conclusions from testing the sensitivity of LoopMod2 with its own conclusions derived from its tests of the HAI 5.2a model. One of Qwest's specific findings is that there is virtually no change in loop costs when the analyst tests the output of either model (LoopMod or HAI 5.2a) against changes in the assumed copper/fiber cross-over point. The fact is that the percentage change in loop cost derived from HAI 5.2a with a given percentage change in the distance from the central office to the cross-over point is (as I would expect) over four-times (4X) the percentage change derived from LoopMod2, given that the same percentage change in cross-over distance is assumed for each of the competing models. In its rebuttal, Qwest reports similar results from other similar analyses of HAI 5.2a; in each case, the HAI model produced results that are more in line with my experience than results that are produced by LoopMod2.

In its direct case, Qwest claims that the results produced by LoopMod2 are "within a zone of reasonableness," with that zone being defined as the results produced by each of the more well-known loop cost models that circulate in the industry. Of course, Qwest's characterization of the LoopMod2 results

necessarily means that loop cost results reported from any one of the models in Qwest's listing can be considered as being "reasonable." The issue is not whether the results can be considered as falling within a "reasonable" range. Rather, the issue is whether the process used to produce the results is a logical one that yields consistently logical results, given realistic changes in applicable input assumptions. In my opinion with respect to that issue, as I explain in my direct testimony, the HAI 5.2a model stands head-and-shoulders above LoopMod2.

As to regulatory acceptance, the HAI models have enjoyed significant success. By design, the HAI models have evolved to be relied-upon, in whole or in part, to define forward –looking costs for UNEs, including loops in local interconnection and UNE proceedings throughout Qwest's operating territory; in addition to Arizona, the HAI model (or one of its predecessors) has received acceptance Colorado, Idaho, Iowa, Minnesota, Montana, Nebraska, New Mexico, North Dakota, Utah and Washington. Further, the structure of the HAI model forms a basis for the FCC Synthesis Model (SM). The Commission's adoption of HAI 5.2a in connection with this docket will produce reasonable rates and charges that operate fairly to compensate Qwest for the costs that it incurs to make local interconnection and UNEs available for use by CLECs and, equally important, the resulting rates and charges will promote the development of real competition for telecommunications services in Arizona.

BEFORE THE ARIZONA CORPORATION COMMISSION

WILLIAM A. MUNDELL
CHAIRMAN
JIM IRVIN
COMMISSIONER
MARC SPITZER
COMMISSIONER

IN THE MATTER OF INVESTIGATION) INTO U S WEST COMMUNICATIONS,) INC.'S COMPLIANCE WITH CERTAIN) WHOLESALE PRICING REQUIREMENTS) FOR UNBUNDLED NETWORK) ELEMENTS AND RESALE DISCOUNTS)	**DOCKET NO. T-00000A-00-0194**

DIRECT TESTIMONY OF

REX KNOWLES

ON BEHALF OF

THE JOINT CASE OF

AT&T COMMUNICATIONS OF THE MOUNTAIN STATES, INC.,

WORLDCOM, INC. AND XO ARIZONA, INC.

NON-PROPRIETARY VERSION

May 16, 2001

PENGAD-Bayonne, N. J.
EXHIBIT
ATT/WorldCom
admitted 11

Q. PLEASE STATE YOUR NAME, EMPLOYER, AND BUSINESS ADDRESS.

A. My name is Rex Knowles. I am a Vice President Regulatory for XO Communications, 111 East Broadway, Suite 1000, Salt Lake City, Utah 84111.

I. BACKGROUND

Q. PLEASE IDENTIFY THE PARTIES ON WHOSE BEHALF YOU ARE TESTIFYING.

A. I offering testimony on behalf of the joint case of AT&T Communications of the Mountain States, Inc., WorldCom, Inc. and XO Arizona, Inc. XO Arizona, Inc., f/k/a NEXTLINK Arizona, Inc. ("XO"), is a competitive local exchange company ("CLEC") that provides facilities-based local and long distance telecommunications services in Arizona in competition with Qwest Corporation, f/k/a U S WEST Communications, Inc. ("Qwest").

Q. WHAT ARE YOUR RESPONSIBILITIES WITH XO?

A. I am responsible for all regulatory, legislative, municipal, and incumbent local exchange carrier ("ILEC") initiatives on behalf of XO and other affiliates in several western states, including Arizona and other states in the Qwest region.

Q. WHAT IS YOUR BUSINESS AND EDUCATION BACKGROUND?

A. I graduated from Portland State University in Portland, Oregon, with a degree in Business Administration/Finance Law in 1989. I was employed by United Telephone of the

Northwest from 1989 to 1993 as a regulatory staff assistant and product manager responsible for incremental cost studies and creation and implementation of extended area service ("EAS") and 911. From 1993 to 1996, I was employed by Central Telephone of Nevada as manager of revenue planning and research and was responsible for supervising cost study preparation and developing and implementing regulatory reform, including opening the local exchange market to competition and alternative forms of regulation for ILECs. I joined the XO organization in 1996 and have been in my current position with the company since Spring 2000.

Q. HAVE YOU PREVIOUSLY TESTIFIED IN OTHER REGULATORY PROCEEDINGS?

A. Yes, I have testified on a variety of costing, pricing, and policy issues in proceedings in Washington, Utah, and Arizona.

Q. WHAT IS THE PURPOSE OF YOUR RESPONSE TESTIMONY?

A. The purpose of my response testimony is to address Qwest's proposed rates for collocation and field verification for conduit occupancy. Many of Qwest's proposed prices are grossly inflated and patently unreasonable. Qwest bases its proposed collocation rates on assumptions that are unsubstantiated or bear no relationship to reality or forward-looking costing principles. I address some of these assumptions and propose that Qwest's rates for entrance facilities, space construction, and terminations be

established at substantially lower levels comparable to the rates recently established by the Washington Utilities and Transportation Commission. With respect to field verification, I recommend that the Commission reject any such charge or, alternatively, that the charge be substantially reduced to reflect costs reasonably incurred and attributable to the CLEC requesting the conduit occupancy.

In addition, I address reciprocal compensation, specifically the applicability of tandem rates and reciprocal compensation for traffic bound for Internet Service Providers ("ISPs") within a local calling area. I explain that once the Commission concludes that a CLEC switch should be treated as a tandem for reciprocal compensation, the tandem rate applies, even for traffic that originates at a Qwest end office. I also discuss that the FCC recently issued an order that takes jurisdiction over the issue of compensation for ISP-bound traffic from state commissions, but in the event that order is stayed or otherwise rendered ineffective during the pendency of this proceeding, I provide a factual basis on which the Commission should conclude that reciprocal compensation should be paid for such traffic.

II. COLLOCATION

Q. WHAT CONCERNS DOES XO HAVE WITH THE COLLOCATION RATE PROPOSALS SPONSORED BY QWEST?

A. XO has both general and specific concerns. In general, Qwest relies on inaccurate

assumptions and unsubstantiated information that serve only to inflate the costs Qwest incurs to provide collocation. Qwest purports to base many of its cost estimates on the results of 41 collocation jobs undertaken by Qwest throughout its region. None of those jobs, however, were undertaken in Qwest's Arizona central offices, and Qwest has provided no evidence to demonstrate that the costs Qwest incurred in the other states is representative of its costs in Arizona. The 41 collocation jobs, moreover, were all cageless collocation jobs and thus cannot be used to support Qwest's cost estimates for entrance facilities or cage construction. Again, the sample of collocation jobs on which Qwest relies for cage construction costs includes no Arizona central offices and Qwest refused to provide more Arizona-specific information or any explanation of how Qwest's cost estimates in other states accurately reflect its costs in Arizona.

Specifically, I address four elements in Qwest's collocation rate proposal, each of which are substantially overstated: (1) entrance facilities; (2) space construction/dc power; (3) DS-0, DS-1, and DS-3 terminations; and (4) CLEC-to-CLEC Connections.

Entrance Facilities

Q. WHAT IS QWEST'S PROPOSAL WITH RESPECT TO ENTRANCE FACILITIES?

A. "Entrance facilities" is the element that enables a CLEC to connect its collocated equipment with the rest of its network. Fiberoptic cable from the CLEC's network is

routed through the point of interconnection ("POI") between the companies' networks, into the Qwest central office, and over cable racking to the CLEC's collocation space. Qwest offers CLECs the option of having Qwest provide the fiber from the POI to the collocation space (Standard Shared or Cross-Connection Entrance Facilities) or having Qwest pull CLEC-provided fiber from the POI to the collocation space (Express Fiber Entrance Facilities). Qwest proposes the following charges for each type of entrance facility:

Type	Non-recurring	Recurring
Standard Shared (per fiber)	$1,232.89	$ 15.17
Cross Connect (per fiber)	$1,658.09	$ 22.75
Express (per cable)	$8,783.09	$240.26

Q. WHY IS XO OPPOSED TO QWEST'S PROPOSED RATES FOR ENTRANCE FACILITIES?

A. On their face, Qwest's proposed prices are exorbitant. Qwest's proposed charges for Express Fiber Entrance Facilities of $8,783.09 (nonrecurring) and $240.26 (recurring) are *seven and 32 times higher* than the $1,201.16 (nonrecurring) and $7.47 (recurring) rates Qwest proposed for the same element in Washington. Using Qwest's standard minimum of 12 fibers, Qwest proposes prices for Standard Shared and Cross Connect Entrance Facilities between $19,897.08 and $14,794.68 (nonrecurring) and between $273.00 and $182.04 (recurring) – as much as *16 times higher* than the Express Fiber Entrance Facilities charges Qwest proposed in Washington. In addition, Qwest's proposed charges

for Entrance Facilities are several times higher than the comparable rates in Qwest's FCC tariff.

Even Qwest's proposals in this proceeding are inconsistent. Qwest proposes nonrecurring charges for interconnection Entrance Facilities – which provide the functional equivalent of collocation Entrance Facilities when used for interconnection – of $92.18 (nonrecurring) and $218.84 (recurring) for DS-1 facilities and $486.15 (nonrecurring) and $414.26 (recurring) for DS-3 facilities. Interconnection entrance facilities have higher recurring charges but the nonrecurring charges for collocation entrance facilities are up to *13 times higher* on a per fiber basis and do not include the electronics associated with DS-1 or DS-3 facilities.

Q. WHAT IS THE BASIS FOR THESE DISCREPANCIES?

A. Unfortunately, Qwest does not provide sufficient information to explain why its proposed rates are so much higher. At least some of the discrepancy, however, is attributable to the assumptions on which Qwest relies to calculate its proposed rates. Qwest, for example, assumes that entrance facility costs will be shared among only <PROP> collocating CLECs. Information that Qwest provided in response to AT&T's data requests indicates that an average of approximately <PROP> CLECs collocate in each Qwest central office in which at least one CLEC is collocated in Arizona. Modifying just this assumption in Qwest's cost study to reflect this Arizona-specific information would reduce Qwest's

1 proposed rates by over 50%.

2

3 Even more significantly, a substantial portion of Qwest's proposed charges for Entrance
4 Facilities are the costs associated with constructing a manhole outside the central office
5 that is dedicated to the use of CLECs (the "CLEC POI"), rather than assuming that the
6 CLECs will use the existing manhole used by all carriers, including Qwest, to route fiber
7 and copper cables through "manhole 0" into the Qwest central office. CLECs do not
8 need their own manhole, and Qwest's insistence on assuming a manhole dedicated to
9 CLECs serves only to inflate its collocation cost estimates. Even in those circumstances
10 in which space in Qwest's existing manholes is legitimately exhausted, Qwest will need
11 to construct an additional manhole for its own use, as well as the use of other carriers, the
12 cost of which should be shared among all carriers, including Qwest, not just among
13 CLECs. Accordingly, the Commission should refuse to permit Qwest to include the costs
14 for a dedicated manhole in its cost estimates for Entrance Facilities.

15

16 Finally, the cost of fiber does not justify the significantly higher rates Qwest proposes for
17 Standard Shared and Cross Connect Entrance Facilities. Qwest includes not only fiber
18 costs for these elements, but additional facilities, including fiber distribution panels and
19 cross connects dedicated to CLEC use. Qwest, however, fails to explain why such
20 additional facilities are necessary when Qwest provides the fiber but are not necessary

when the CLEC provides the fiber. The only difference between the rates for Express Fiber and other types of Entrance Facilities, therefore, should be the cost of the fiber.

Space Construction/DC Power

Q. WHAT DOES QWEST PROPOSE FOR SPACE CONSTRUCTION?

A. Qwest has bundled together several collocation elements into a single element called "Space Construction." These elements include constructing the collocation cage or equipment racks for cageless collocation and providing dc power, ac outlets, grounding, lighting, and HVAC. Qwest has contended that this new mega-element was developed in response to CLEC desires for more predictable and less confusing collocation pricing. While I agree that CLECs, as well as the FCC, have raised concerns about pricing collocation elements on an individual case basis ("ICB") or a "per foot" or other incremental basis, bundling several elements into one does not address those concerns. To the contrary, bundling only frustrates CLECs' attempts to determine exactly what they are paying for. Qwest only heightens this concern by failing to provide any explanation of how it calculates or otherwise supports its cost estimates for the activities in this combined element.

Q. HAVE YOU MADE AN EVALUATION BASED ON THE INFORMATION THAT IS AVAILABLE?

A. Yes, including information provided to the Washington Commission. Qwest's proposes

rates of $51,675.14 (nonrecurring) and $94.30 (recurring) for a 100 square foot cage and one 60 amp feed for dc power, while Verizon proposed nonrecurring charges of $8,423.58 and recurring charges of $149.88 for approximately the same elements in Washington.[1] Even though Verizon's recurring charges are higher than Qwest's proposed recurring charges, Qwest's nonrecurring charges are several times higher than Verizon's proposed rates and impose most of those costs up front, rather than over time.

Q. WHAT ACCOUNTS FOR THESE DIFFERENCES?

A. Currently available information suggests several contributing factors. Generally with respect to both caged and cageless collocation, Qwest presumably constructed its collocation cost study consistently, and accordingly would have developed its Space Construction costs – particularly the grounding and ac and dc power costs – using the same assumptions it used to estimate Entrance Facilities costs, *e.g.*, <PROP> collocators per central office and approximately half of the cable racking dedicated to those <PROP> collocators. These assumptions, rather than the reality of approximately <PROP> collocators per central office, would improperly inflate Qwest's Space Construction cost estimates just as they inflate the Entrance Facilities cost estimates. Qwest's cost

[1] The corresponding Verizon elements are Cage Enclosure ($5,693.57 nonrecurring), DC Power ($2,730.01 nonrecurring), and Environmental Conditioning ($73.35 recurring). In addition, a portion of Verizon's recurring charge for DC Power would correspond to the costs included in Qwest's Space Construction element, which I have estimated by subtracting Qwest's proposed recurring charges for Power Plant and Power Usage from the Verizon rate ($512.93 - $436.40 = $76.53).

estimates also inflate the following individual sub-components of its proposed space preparation charge.

Cage construction. Cage construction, including dust protection for surrounding equipment and installation of lighting and electrical outlets, costs less than $5,000 based on contractor invoices that Qwest provided during a costing proceeding in Utah. The cost estimates Qwest used to develop the rate for the Space Construction for caged collocation are more than double that amount.

Power cabling. Qwest uses a deficient method of determining costs for ac and dc power. Qwest averages cost data from five central offices – none of which is in Arizona – to develop a per foot price for power cables and installation. Qwest then multiplies this per foot price by an assumed distance. In the case of dc power feeds, the assumed distance is between the collocation space and the battery distribution fuse board ("BDFB"), essentially an intermediate circuit breaker, (for runs of 60 amps or less) or the main power distribution board ("PDB") for the central office (for runs of 60 amps or more).

There are several problems with this methodology. First, Qwest provides no information to demonstrate that the average of the cost estimates of the five central offices that Qwest

selected are representative of the costs Qwest incurs in Arizona. Qwest refused to provide Arizona specific information that could be used to make such a determination in response to AT&T requests, claiming that such an effort would be too burdensome. Accordingly, XO can only assume that Qwest either cannot or will not provide the information necessary to determine Arizona-specific costs. Qwest's power cable and installation cost estimates, therefore, bear no demonstrable relationship to the costs Qwest incurs in Arizona.

Qwest similarly has not provided any information about the lengths of power cables installed between the BDFB or PDB and the collocation spaces in its Arizona central offices to substantiate its distance assumptions. Again, Qwest refused to provide the information on collocation in its Arizona central offices that could be used to make a state-specific cost estimate. Data that Qwest provided in a previous cost proceeding in Washington, however, indicated that the distance between the PDB and the collocation space on which Qwest bases its cost estimate is approximately 48% longer than the actual average distance between those points in Qwest's Washington central offices. Correspondingly, Qwest's cost estimates based on an average price per foot multiplied by the assumed distance were overstated by almost half in Washington and are likely similarly overstated in Arizona.

Miscellaneous. In addition, Qwest identifies costs (apparently included in the rate for cageless but not for caged collocation) for largely unidentified "Miscellaneous," items, and for "Cable Hole" – essentially costs incurred to open and close holes through which cables pass between floors and walls when installing new cables. These costs, however, should already be included in the costs to install dc power, Bay Construction, Aerial Support, Cable Racking, or other facilities, resulting in double recovery of these costs.

Engineering. With respect to engineering costs Qwest proposes to recover costs in its Space Construction elements for caged and cageless collocation, Qwest simply averages costs identified as "Engineering" allegedly incurred in various unidentified jobs without presenting any evidence of the nature of these costs or how they were incurred. The level of these costs is several times higher than the engineering rate of $1,129.00 that Verizon charges in Washington. XO engineers also inform me that engineering costs should not exceed $2,000 per collocation job, which is also significantly less than Qwest proposes to recover as part of its Space Construction element.

Quote Preparation. Similarly, Qwest proposes a Quote Preparation Fee for both caged and cageless collocation, but states, "If contract has provisions to collect and retain a Quote Preparation fee, that fee would be deducted from the space construction charge." The only support Qwest provides for the level of this proposed charge is a single cost

figure, without any explanation of how that figure was calculated, much less a justification for the level of that figure. Verizon imposes no such fee, and neither should Qwest. If the Commission permits Qwest to impose a Quote Preparation Fee, that fee should not exceed the Engineering costs discussed above, and no Engineering fee should be charged if the requesting CLEC accepts Qwest's quote or otherwise authorizes Qwest to proceed with collocation construction and provisioning.

Terminations

Q. WHAT HAS QWEST PROPOSED FOR TERMINATIONS?

A. Terminations are the elements necessary to connect a CLEC's collocated equipment with ILEC unbundled loops, including DS-1 and DS-3 loops. Qwest proposes to install cables from the CLEC collocation space to blocks on an intermediate distribution frame ("IDF"). Qwest will then run cross connects on the IDF to access DS-1 or DS-3 loops or to the COSMIC frame to access DS-0 (voice grade) loops. In sharp contrast to its proposal to combine multiple elements into Space Construction, Qwest proposes to replace the element formerly called Expanded Interconnection Channel Termination ("EICT") with four Termination subelements: (1) Cable; (2) Cable Placement; (3) Block (DS-0), Panel (DS-1) or Connector (DS-3); and (4) Block, Panel or Connector Placement. Each of these subelements, in turn, has two sets of nonrecurring and recurring charges, one per block and one per termination. The total of the non recurring subelement prices

for DS-0 is $1,345.58 per block and $19.80 per termination. Nonrecurring rates for 28 DS-1 terminations would be $1,265.35 (or $141.45 per termination), while the rates for a single DS-3 termination would total $663.41.

Q. HOW DO THESE RATES COMPARE TO VERIZON'S RATES IN WASHINGTON?

A. Consistent with other collocation elements, Qwest's proposed rates are significantly higher than the Verizon rates in Washington. The nonrecurring charges for 100 DS-0 terminations for Verizon total $622.24 – less than half the rates Qwest has proposed. Qwest's proposed rates are also more than double Verizon's rates for 28 DS-1 terminations ($595.32) and almost double a single DS-3 termination ($370.39).

Q. CAN XO ACCOUNT FOR THESE DISCREPANCIES?

A. No, we cannot. The information that accompanies Qwest's proposals does nothing more than give conclusory cost numbers without providing any data on how those numbers were developed. Once again, I would expect Qwest's unrealistic assumptions of <PROP> collocators per central office and exaggerated cable lengths to be contributing factors. In its petition for reconsideration of the Washington Commission order requiring Qwest to charge no more than Verizon for terminations, Qwest asserted that Qwest believed, based on Verizon's cost estimates, that Verizon uses different (and less costly) facilities. XO and AT&T engineers, however, have informed me that for the equipment

that Qwest uses in its central offices, these terminations should be no more than the rates that Verizon charges and that the Washington Commission adopted as a ceiling on Qwest's rates.

CLEC-to-CLEC Connections

Q. WHAT CONCERNS DOES XO HAVE WITH QWEST'S PROPOSED RATES FOR CLEC-TO-CLEC CONNECTIONS?

A. XO has multiple concerns with Qwest's proposal. CLEC-to-CLEC Connections allows a CLEC collocated in a Qwest wire center to connect collocated equipment either to its own collocated equipment located elsewhere in the wire center or to another CLEC's collocated equipment. Often, such equipment is located only a short distance away because Qwest generally groups collocating CLECs together within the wire center. Accordingly, connection of collocated equipment should be simple and inexpensive in the majority of circumstances. Unfortunately, Qwest appears to assume otherwise.

XO's first concern is that we could not find any cost study or other support for the rates Qwest proposed for the various elements associated with these connections in the testimony and exhibits Qwest previously filed. Ms. Million addresses Qwest's collocation cost study, but neither the original collocation cost study nor Ms. Million's supplemental direct testimony includes any reference to the costs for CLEC-to-CLEC Connections. Accordingly, Qwest has failed to provide a factual basis on which the

Commission could adopt Qwest's proposed rates.

XO's second concern is the charges Qwest has proposed are inconsistent with its Statement of Generally Available Terms ("SGAT"). The SGAT distinguishes between CLEC-to-CLEC Connections that require cable racking and those that can be provided using existing cable racking. According to Mr. Kennedy, Qwest's proposed charge for "Design Engineering & Installation" "covers order processing, development of the price quote, and hours to engineer and install cable racking." A CLEC ordering CLEC-to-CLEC Connections that can use existing cable racking thus apparently will be required to pay not just a minimal order processing charge but a charge to recover the costs of preparing a quote, engineering, and installing cable racking that Qwest will not undertake.

Finally, the rates Qwest has proposed are unreasonable on their face. Without a more complete explanation of the activities Qwest undertakes with respect to each CLEC-to-CLEC Connection element, Qwest's proposed charges of $1,353.22 to engineer central office cross-connections and $425.99 to open and close an existing cable hole are excessive. Charging a higher recurring rate for cable racking for a DS-1 connection than a DS-3 connection also is inherently illogical because the fiber used for both types of connections should be the same.

III. FIELD VERIFICATION

Q. HAVE YOU REVIEWED QWEST'S PROPOSAL FOR FIELD VERIFICATION FEES FOR CONDUIT OCCUPANCY?

A. I am aware that Qwest proposes to charge a fee of $464.31 per manhole to verify space availability in Qwest conduit to which a CLEC requests access, but I did not see a cost study supporting this proposed rate among the Qwest cost studies provided to my counsel. However, I have reviewed the field verification cost study Qwest provided in Washington and assume that Qwest's proposal in Arizona was developed consistent with the methodology and assumptions included in the Washington study. I have also consulted with an XO outside plant engineer about conduit field verifications.

Q. WHAT IS YOUR EVALUATION OF QWEST'S PROPOSAL?

A. Qwest's proposal is unreasonable in several respects. First, no field verification should be necessary for access to Qwest conduit. Unlike utility poles to which multiple parties have access (e.g., power and cable television companies), only Qwest has access to its conduits. The review of Qwest's records during the inquiry (for which Qwest proposes a separate charge), therefore, should be all that is required to verify the availability of space in the conduit. Accordingly, the Commission should not authorize Qwest to charge for field verification in addition to an inquiry fee.

To the extent that Qwest may counter that it does not maintain adequate records of its

1 outside plant to rely solely on a review of those records, CLECs should not be required to
2 pay Qwest's record keeping costs. Most of the time that Qwest estimates to be necessary
3 for a field verification is devoted to Qwest's own inspection, including making technical
4 drawings of its conduits and revising its records accordingly. Undertaking such efforts in
5 conjunction with activities required by the CLEC may be more efficient for Qwest, but
6 the CLEC does not cause Qwest to incur the costs of inspecting and mapping its own
7 network and thus is not responsible for Qwest's recovery of those costs. Inspection of a
8 manhole to verify that sufficient space exists for the CLEC to occupy Qwest conduit in
9 that manhole should take no more than two hours, which is far less time than Qwest
10 estimates.
11
12 Finally, Qwest does not actually inspect every manhole along the route the CLEC has
13 requested. Rather, XO's experience has been that Qwest inspects the manhole on either
14 end of the route, but not the manholes in between. Even if this experience does not
15 reflect Qwest's standard practice, inspection of every manhole should not be necessary.
16 At a minimum, Qwest should not need to verify conduit space in more than every other
17 manhole along the route the CLEC has requested.
18
19 Accordingly, XO recommends that the Commission reject Qwest's proposal to impose a
20 field verification charge for conduit occupancy. If the Commission permits Qwest to

impose such a charge, however, XO recommends that the charge be no higher than the cost of two hours of engineer time and that the charge apply to no more than half of the manholes on the conduit route requested by the CLEC.

IV. RECIPROCAL COMPENSATION

Q. WHAT ISSUES DOES XO HAVE WITH RESPECT TO QWEST'S PROPOSALS ON RECIPROCAL COMPENSATION?

A. XO has two issues: (1) the applicable rate when the CLEC switch is determined to be a tandem for reciprocal compensation purposes; and (2) reciprocal compensation for ISP-bound traffic.

Q. WHAT RATE SHOULD APPLY WHEN THE CLEC SWITCH IS CONSIDERED TO BE A TANDEM FOR RECIPROCAL COMPENSATION PURPOSES?

A. The tandem rate should apply in all circumstances. Qwest witness Larry Brotherson proposes that the tandem rate should apply only when the parties are exchanging traffic at the Qwest tandem, and that the end office rate should apply when the traffic is exchanged via direct trunking to a Qwest end office. Such a proposal is self-serving and inconsistent with FCC requirements.

FCC Rule 51.711(a)(3) requires the ILEC to compensate the CLEC at the tandem rate if the CLEC's switch "serves a geographic area comparable to the area served by the

1 incumbent LEC's tandem switch," without any limitation on whether direct trunking
2 exists between the CLEC switch and the ILEC end office. If the CLEC switch serves a
3 geographic area comparable to the area served by the ILEC tandem, the CLEC is
4 terminating traffic within that area regardless of whether the ILEC delivers the traffic
5 through its tandem or directly from the end office. Stated differently, it is irrelevant
6 whether the traffic *originates* from a Qwest end office or a Qwest tandem – the CLEC
7 *terminates* that traffic to its customers located anywhere within the local calling area, *i.e.*,
8 the area comparable to the geographic area served by the Qwest tandem.
9
10 Mr. Brotherson ignores this reality, as typified by the lack of any willingness to apply his
11 proposed "symmetry" in reciprocal compensation to Qwest. Qwest generally considers
12 CLEC switches to be the equivalent of a Qwest end office switch, but Mr. Brotherson
13 does not suggest symmetrical reciprocal compensation at the end office rate when the
14 CLEC delivers traffic to a Qwest tandem. Undoubtedly, Mr. Brotherson would contend
15 that Qwest is obligated to terminate traffic delivered to its tandem anywhere within the
16 tandem serving area and thus should be compensated accordingly. That same argument
17 applies to traffic delivered to a CLEC switch for termination within a comparable serving
18 area, whether Qwest delivers that traffic at its tandem or via direct trunks from its end
19 office. A CLEC entitled to receive the tandem interconnection rate thus is entitled to
20 receive that rate for *all* traffic it terminates.

Q. WHAT RATE SHOULD APPLY TO ISP-BOUND TRAFFIC?

A. The FCC recently issued an order in which it concluded that ISP-bound traffic is jurisdictionally interstate, established a compensation mechanism, and preempted state commission consideration of this issue. As long as this order remains valid and effective, the Commission should not act inconsistently with this order. The Commission thus must reject Qwest's proposal that such traffic be subject to bill and keep.

Q. WHAT IS THE STATUS OF THE FCC ORDER?

A. The release date is April 27, 2001. I am not aware that any party has appealed the order, but an appeal is likely. XO generally would not recommend that the Commission take any further action on this issue in this proceeding even if the order is appealed, but if the Commission decides otherwise, it should still reject Qwest's bill and keep proposal.

Q. WHY?

A. XO interconnects and exchanges telecommunications traffic with Qwest under the terms and conditions of a Commission-approved interconnection agreement. Those terms and conditions include reciprocal compensation for the exchange of local traffic, including traffic delivered to ISPs. XO provides local telecommunications service to ISPs and other business customers, and XO delivers calls made by Qwest's end users to XO's customers. XO, therefore, is entitled to reciprocal compensation for delivering these calls within a local calling area, regardless of whether XO's customer is an ISP or any other

purchaser of XO local telecommunications service.

Q. HOW DO XO AND QWEST EXCHANGE TELECOMMUNICATIONS TRAFFIC?

A. XO and Qwest exchange traffic over interconnection trunk groups. Each type of traffic – local, toll, transit, and ancillary (directory assistance, operator services, 911/E-911, etc.) – is segregated onto its own trunk group. A trunk group is one or more connections or "trunks" between Qwest's tandem or end office switch and XO's switch, most often via equipment that XO has collocated in the Qwest central office.

Qwest and XO use local interconnection trunks to exchange local traffic. Local traffic generally includes calls between customers with seven digit telephone numbers that are rated within the same local calling area, including any extended area service ("EAS") area. Qwest does not order any trunks from XO and requires that XO order from Qwest all local interconnection trunks for the traffic exchanged between the companies to the extent Qwest facilities are needed. Qwest refers to the exchange of local traffic as Local Interconnection Service ("LIS") and trunks used to exchange such traffic as LIS trunks.

Q. HOW DOES XO ROUTE TRAFFIC ORIGINATED BY QWEST CUSTOMERS THAT IS BOUND TO ISPs SERVED BY XO?

A. ISPs are among the customers to whom XO provides local exchange service and XO routes traffic to them as it does to other local exchange customers. XO assigns seven

1 digit telephone numbers to these customers as part of their local service, just as other
2 customers are assigned seven digit telephone numbers. XO, however, assigns telephone
3 numbers to ISPs from a block of numbers it reserves specifically for customers with
4 critical telecommunications needs (referred to as an NXX code, the "NXX" referring to
5 the first three digits of the telephone number). XO makes such numbering assignments to
6 enable it more easily to identify and monitor the flow of traffic to these customers.
7
8 XO has requested that Qwest route calls from its customers to be transported and
9 terminated to these NXX codes via specific trunks within the local interconnection trunk
10 groups. These specific trunks are LIS trunks and are part of the local interconnection
11 trunk groups over which XO and Qwest exchange local traffic. ISP customers have
12 critical telecommunications needs, and XO has requested dedicated trunks within the
13 local interconnection trunk group to minimize any potential for call blocking. The traffic
14 routed over these trunks is delivered to XO's customers the same as the other local traffic
15 carried on the local interconnection trunk group, *i.e.*, via XO's switch to the customer
16 premises.
17
18 XO routes calls from its customers to the seven digit numbers Qwest has assigned to its
19 customers – including any ISPs – over the local interconnection trunk groups if the
20 telephone numbers of the XO and Qwest customers are rated within the same local

calling area. Qwest, however, has not requested that XO dedicate any of these trunks to traffic routed to a specific NXX code or telephone numbers. I therefore am not aware that Qwest routes and delivers calls from XO customers to Qwest's ISP customers in the same local calling area any differently than Qwest routes and delivers calls to any other Qwest customers.

Q. DO XO AND QWEST CURRENTLY PAY RECIPROCAL COMPENSATION TO EACH OTHER FOR DELIVERING ISP-BOUND TRAFFIC?

A. Yes, at least with respect to minute of use charges (the parties have yet to resolve their differences over proper apportioning of the costs of interconnection facilities).

Q. WHY DOES XO BELIEVE THAT THE COMMISSION SHOULD CONTINUE TO REQUIRE PAYMENT OF RECIPROCAL COMPENSATION FOR ISP-BOUND TRAFFIC?

A. Reciprocal compensation, as the term implies, compensates each interconnecting carrier for its costs to transport and terminate calls originated by the other carrier's customers within the same local calling area. Even Qwest concedes that interconnecting carriers incur costs to deliver calls bound for their ISP customers. When XO delivers calls from Qwest's customers to XO's ISP customers, XO is entitled to compensation from Qwest for the costs of providing this service to Qwest, just as Qwest is entitled to compensation for its costs of delivering traffic originated by XO's customers within the same local calling area. If the FCC's April 27 order for some reason is not binding on the Commission, therefore, the Commission should require the payment of reciprocal

1 compensation for ISP-bound traffic.

2

3 **Q. DOES THAT CONCLUDE YOUR TESTIMONY?**

4 **A.** Yes, it does.

BEFORE THE ARIZONA CORPORATION COMMISSION

WILLIAM A. MUNDELL
Chairman
JAMES M. IRVIN
Commissioner
MARC SPITZER
Commissioner

IN THE MATTER OF INVESTIGATION INTO U S WEST COMMUNICATIONS, INC.'S COMPLIANCE WITH CERTAIN WHOLESALE PRICING REQUIREMENTS FOR UNBUNDLED NETWORK ELEMENTS AND RESALE DISCOUNTS	)	**DOCKET NO. T-00000A-00-0194** **NOTICE OF FILING SUMMARY TESTIMONY OF REX KNOWLES**

AT&T Communications of the Mountain States, Inc., WorldCom, Inc., and XO Arizona, Inc., hereby provides Notice of Filing Summary Testimony of Rex Knowles.

DATED this 25th day of July, 2001.

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EXHIBIT
AT&T/WorldCom
admitted 13

Summary of Rex Knowles' Testimony
XO/AT&T/WorldCom
ACC Docket No. T-00000A-00-0194, Phase II

Rex Knowles' testimony on behalf of XO, AT&T, and WorldCom addresses appropriate rate levels for collocation in Qwest central offices, including CLEC-to-CLEC connections, as well as rates for field verifications of conduit space availability in Qwest manholes. Many of Qwest's proposed prices are grossly inflated and patently unreasonable. Qwest bases its proposed collocation rates on assumptions that are unsubstantiated or bear no relationship to reality or forward-looking costing principles. The testimony addresses some of these assumptions and proposes that Qwest's field verification rate, CLEC-to-CLEC connections, and collocation rates for entrance facilities, space construction (including cage or cageless rack construction, dc power installation, and engineering), and terminations be established at substantially lower levels. Qwest in its rebuttal testimony proposes to modify (in most cases to lower) some of these rates, but those modifications fail to result in reasonable rates.

Entrance Facilities. Entrance Facilities provide the fiber connection between the CLEC's outside plant network and the equipment it has collocated in the Qwest central office. Qwest has proposed rates for Entrance Facilities that are several times higher than the $1,201.16 nonrecurring and $7.47 recurring charges that Qwest proposed for one type of Entrance Facilities (Express Fiber) in Washington. The discrepancy is attributable, at least in part, to Qwest's unrealistic assumptions that the manholes, conduit, and cable racking used to provide these facilities are dedicated to the use of only 3 CLECs, rather than shared with additional CLECs and Qwest itself. Qwest's modified rates continue to incorporate these assumptions, as well as the assumption that conduit outside the central office will be placed individually, rather than as part of a construction project to place multiple conduits simultaneously.

Space Construction. Space Construction is the combination of cage (or cageless space) construction, power cable installation, and engineering. The costs Qwest estimates to provide each of these component parts are substantially overstated. The cage construction costs, including costs for convenience ac outlets and overhead lighting, are over twice the amount Qwest has paid for cage construction in Utah. Qwest's power cabling cost estimates are not Arizona-specific but were developed by estimating costs in a sample of five central offices without any demonstration that each of these central offices represents one fifth of the central offices in Arizona. Qwest provided some Arizona-specific data on power cable lengths in its rebuttal testimony that it had refused to provide in discovery but has not modified its cost estimates to incorporate that data. Qwest provided no data on the tasks and time estimates associated with its estimate of $10,000 in engineering costs, which are five times higher than an XO engineer estimated that collocation engineering should cost.

Terminations. Terminations provide the connection between the CLEC's collocated equipment and the location where the CLEC accesses unbundled network elements. Qwest proposes to charge rates that are more than twice the rates the Washington Utilities and Transportation Commission found reasonable based on the charges proposed by another ILEC for the same functionality. This Commission should similarly conclude that Qwest's rates are excessive and should reduce them accordingly.

CLEC-to-CLEC Connections. CLEC-to-CLEC connections provide a connection between a CLEC's noncontiguous collocation spaces or between two different CLECs' collocation spaces in a Qwest central office. Qwest merely provides the route for the connection, and the CLEC must install the connections. Qwest proposes rates that are excessive for what Qwest provides, even at the revised levels in its rebuttal testimony, due in large part to Qwest's

assumption that it will be required to engineer and construct additional cable racking 5% of the time. No new cable racking should ever be required, and Qwest produced no evidence to demonstrate the contrary. Accordingly, Qwest should be authorized to charge no more than the $244.82 nonrecurring and no recurring rates that Qwest formerly charged for such connections in its Arizona central offices.

Field Verifications. Qwest proposes to charge approximately $500 per manhole to physically inspect each manhole along a conduit route to verify that space is available in Qwest conduits for CLECs to lease. Qwest imposes a separate charge to check its outside plant records, which is all that would be required if Qwest kept adequate records. Accordingly, no charge for field verification should be imposed. If the Commission authorizes Qwest to impose such a charge, however, the rate should be calculated at no more than two hours of engineering time for every other manhole along a proposed route. The time Qwest has estimated in excess of that amount is designed for Qwest to update its own records on other conduits in the manholes and should not be charged to the requesting CLEC.

BEFORE THE ARIZONA CORPORATION COMMISSION

WILLIAM A. MUNDELL
Chairman
JAMES M. IRVIN
Commissioner
MARC SPITZER
Commissioner

IN THE MATTER OF	)	
INVESTIGATION INTO QWEST	)	
CORPORATION'S COMPLIANCE	)	
WITH CERTAIN WHOLESALE	)	DOCKET NO. T-00000A-00-0194
PRICING REQUIREMENTS FOR	)	
UNBUNDLED NETWORK ELEMENTS	)	
AND RESALE DISCOUNTS	)	

DIRECT TESTIMONY OF

MICHAEL HYDOCK

ON BEHALF OF THE JOINT CASE OF

AT&T COMMUNICATIONS OF THE MOUNTAIN STATES, INC.,

WORLDCOM, INC. AND

XO ARIZONA, INC.

MAY 18, 2001

PENGAD-Bayonne, N. J.
EXHIBIT
AT/WorldCom
admitted 74

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1 **I. BACKGROUND AND PURPOSE OF TESTIMONY**

2 **Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

3 A. My name is Michael Hydock. My business address is 1875 Lawrence Street, Denver,
4 Colorado 80202.

5 **Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?**

6 A. I am employed by AT&T as a district manager in the local services and access
7 management organization. My responsibilities include a variety of local telephony-
8 related duties, including the negotiation of interconnection contract agreements and the
9 analysis of the underlying issues in these agreements. I have also analyzed local
10 exchange carriers' intrastate costing and pricing methodologies and studies. As an expert
11 witness, I have submitted testimony on local issues within AT&T's western region. I
12 have previously submitted testimony in regulatory or legislative hearings in Arizona,
13 Colorado, Iowa, Minnesota, Montana, Nebraska, Oregon, Utah, and Washington on
14 behalf of AT&T, or my previous employer, MCI WorldCom.

15 **Q. PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND.**

16 A. I graduated from Rutgers University in 1975 with a Bachelor of Arts degree in
17 Economics. I received a Masters of Economics from the graduate school at Georgetown
18 University in 1977, and have completed my Ph.D. coursework and comprehensive
19 examinations. I have also completed various training seminars offered by MCI
20 WorldCom and AT&T in marketing, telecommunications, network, and costing methods
21 in the telecommunications field.

22 **Q. PLEASE DESCRIBE YOUR WORK EXPERIENCE.**

23 A. I began my career with AT&T in 1981 in the Accounts and Finance department of AT&T

Long Lines. During that time I spent five years doing economic forecasts to support network and business planning. From 1986 to 1990, I was employed by AT&T in its Eastern Region working on intrastate and federal regulatory and access planning issues.

In 1990 I began working for MCI in its Federal Regulatory Department. In that group I was responsible for developing MCI regulatory policy on a variety of issues, including access and universal service. In 1994 I moved to the MCImetro start-up venture where I performed regulatory and business analysis to support the development of MCI's local business. In 1995 I transferred to the Western Region where I managed local competition policy for MCI's Law and Public Policy group in the Western Region. During the period 1995 to 1999 I provided regulatory and business support for the negotiation and arbitration of Interconnection Agreements ("ICAs") that MCI was developing with Qwest. I became closely involved with a variety of costing dockets in the Western Region, and testified at a number of hearings.

In 1999, I accepted my current position as District Manager, ICA Negotiations in the Western Region of AT&T.

II. EXECUTIVE SUMMARY, ORGANIZATION OF CASE AND SUMMARY OF PRICING RECOMMENDATIONS

Q. PLEASE STATE THE PURPOSE OF YOUR TESTIMONY AND SUMMARIZE YOUR MAJOR RECOMMENDATIONS.

A. The purpose of my testimony is to frame the policy and pricing recommendations that AT&T, WorldCom, Inc. ("WorldCom") and XO Arizona, Inc. (the "Joint Invervenors") urge the Arizona Corporation Commission ("ACC") to follow in this docket. These recommendations are based on an analysis of the new rates and cost support filed by

Qwest in this docket, in conjunction with a re-assessment of the rates adopted by this Commission in previous dockets. This testimony summarizes the structure of the case and provides an overview of the witnesses and their subject areas; financial and operational model input analysis, collocation cost and rate analysis, HAI Model results, nonrecurring cost and rate analysis, and finally, the economics of UNE-P and the state of competition in Arizona. Joint Intervenors put forth the following policy and pricing recommendations at rate element detail. The major recommendations include:

1) Qwest must provide cost-based loop rates that reflect all current information for new rate elements and updated information regarding rate elements previously established by the ACC. Factors such as capacity utilization and growth, more refined cost input factors, sales of exchanges, capital structure factors, Qwest/U S WEST merger efficiencies, and other issues must be considered in developing loop and other UNE rates.

2) True deaveraging must be implemented for Qwest's loop prices in the course of this docket.

3) Qwest's switching rate needs to be reexamined to account for the productivity gains in switching equipment over the last five years and it also needs to be adjusted for Qwest's intent to bifurcate signaling cost recovery and feature cost recovery from the switching element. For example, Qwest has lowered its proposed switching port charge, but has also proposed to institute a variety of fees for switching features that swamp the switching charge reduction.

4) Qwest's proposed collocation costs and price/rate structures need to be re-designed and lowered. Qwest has included costs in the nonrecurring rate element that are excessive, inefficient, and result in discriminatory prices for collocators.

5) Non-recurring charges must be based on forward-looking efficient practices, not on unreasonable inefficient practices as assumed in the Qwest non-recurring cost estimates.

Q. PLEASE IDENTIFY THE WITNESSES WHO WILL TESTIFY IN THIS PROCEEDING AND SUMMARIZE THE NATURE OF THEIR TESTIMONY.

A. In this docket, AT&T, WorldCom and XO will present testimony from several witnesses who have examined the Qwest testimony, cost support and pricing recommendations. The following is a description of the structure of the testimony filed in this case by witnesses representing these companies.

FINANCIAL AND OPERATIONAL MODEL INPUTS:

Thomas Weiss's testimony will demonstrate that significant changes need to be made to current and proposed Qwest rates, based on such factors as capital structure and underlying support costs. Mr. Weiss provides extensive engineering and business analysis of the expense and investment cost factors employed by Qwest in their cost models. Mr. Weiss also analyzes Qwest's proposed cost of capital, as well as such engineering related inputs as fill factors. Mr. Weiss makes a number of recommendations based on his analysis in order to bring Qwest's proposed and existing recurring and non-recurring rates for specific rate elements in line with FCC requirements.

1 **ENGINEERING MODEL INPUTS- QWEST'S LOOPMOD2:**

2 Thomas Weiss's LoopMod2 testimony reports the results of his analysis of Qwest's
3 LoopMod2, the model with which Qwest computes its costs of unbundled loop elements.
4 The results of his analysis conclude that Loopmod2 is unsuitable for use as a means to
5 develop the cost of UNE loops.

6 **SWITCHING AND SIGNALING:**

7 Richard Chandler's testimony provides an evaluation of the engineering basis for the
8 pricing of Unbundled Packet Switching (UPS) and a critique of the circuit switching and
9 signaling elements proposed by Qwest in Arizona. Qwest's proposed rate elements for
10 packet switching, contrary to the purpose of the Telecommunications Act of 1996, would
11 not permit a new entrant to offer competitive services, effectively impeding technological
12 innovation. In addition, Qwest has failed to support its proposed switching rate element
13 prices to any satisfactory extent and its proposals should be rejected by the ACC.
14 Qwest's signaling model cannot be used to verify the validity of the proposed signaling
15 prices because critical inputs are undocumented. As a result, the proposed signaling rate
16 element prices cannot be determined to be either reasonable or appropriate, and the rate
17 elements should be rejected.

18 **COLLOCATION COST AND RATE ANALYSIS:**

19 Roy Lathrop presents testimony that illustrates the anti-competitive pricing Qwest
20 proposes for collocation services. In his testimony, Mr. Lathop demonstrates that
21 Qwest's proposed rates for collocation are excessive, the collocation arrangements
22 burden CLECs with avoidable inefficiencies, and some of the collocation charges
23 imposed by Qwest recover costs for elements not used by collocators.

In addition, Rex Knowles presents an analysis of Qwest's collocation cost model and describes some of the defects in that model that inflate Qwest's proposed collocation rates.

HAI MODEL PRESENTATION:

Douglas Denney presents testimony on pricing of unbundled network elements ("UNEs"). Specifically, Mr. Denney presents the HAI model recommendations for UNE prices in this docket. Mr. Denney presents the Joint Intervenors' recommendations for a cost-based deaveraging of UNE loop rates to place the distribution of rates more in line with actual differences in density cost structures.

NONRECURRING COST AND RATE ANALYSIS:

Roy Lathop presents the joint AT&T-WorldCom nonrecurring cost model. This model presents a methodology for determining the costs of nonrecurring services on a forward-looking, most efficient basis. This contrasts with the current NRC estimates of Qwest, which are based on existing and often inefficient and non-forward looking practices. The end result is that CLECs are forced to underwrite Qwest's current inefficiencies by paying charges in excess of forward looking, efficient costs.

ECONOMICS OF UNBUNDLED NETWORK PLATFORM:

Mr. Joseph Gillan, an economic witness providing testimony on behalf of AT&T and WorldCom, reviews the current state of market entry strategies using UNEs to enter the local market in Arizona. Based upon pricing evidence presented by Mr. Gillan in his testimony, it is apparent that Arizona consumers will never experience long-term competition from market entrants using strategy based on the unbundled network element platform ("UNE-P"). Mr. Gillan makes several recommendations to this Commission

that would remove the economic and technological/provisioning barriers to allowing CLECs an economically viable and rational opportunity to use UNE-P as a strategy for market entry.

RESALE:

It is important that this Commission set a resale discount rate that complies with the Telecommunications Act and properly calculates those costs that Qwest can avoid in providing services on a wholesale basis. The Joint Intervenors do not believe that Qwest's proposal meets these requirements. Nevertheless, the Joint Intervenors' resources in this proceeding are limited, and they are not able for this reason to present a witness who will evaluate Qwest's proposal or provide an alternate proposal on behalf of the Joint Intervenors.

Q. PLEASE SUMMARIZE THE PRICING AND POLICY RECOMMENDATIONS YOU ARE PRESENTING IN THIS CASE.

A. A summary of the specific pricing proposals that the Joint Intervenors are making for services and elements at issue in this proceeding is contained in the attached Exhibit AT&T MH-1. Through testimony presented in this case, the Joint Intervenors have the following general policy and pricing recommendations.

1) The ACC must require Qwest to provide cost-based loop rates that reflect all current information and updated information since the ACC first reviewed these rates in 1997. Factors such as capacity utilization, more refined cost input factors, sales of exchanges, capital structure factors, Qwest/U S WEST merger efficiencies, and other issues as described later in my testimony and in the testimony of Mr. Weiss must be used to update Qwest's loop, and other UNE

prices. The Joint Intervenors estimate that such a reduction will fall in the 50% percent range. These factors have been incorporated into the Joint Intervenors' proposed loop and other UNE rates. The current statewide average loop rate of $21.98 has not and will not lead to the development of any significant competition in Arizona.

2) True deaveraging must be implemented for Qwest's loop prices in the course of this docket. Current structures for deaveraging permit Qwest to charge CLECs the same rate for a loop, regardless whether that loop is in downtown Phoenix, close-in suburbs, or in less densely populated areas in the Phoenix valley. Most of Qwest's access lines in Arizona are in cities and suburban areas. The deaveraged zones must allow for meaningful competition, by basing them on the proper cost distribution.

3) Qwest's switching rate must be reviewed to account for the productivity gains in switching equipment over the last five years. In addition, this rate needs to be adjusted for Qwest's intent to bifurcate signaling cost recovery from the switching element. In contrast, the Commission must reject Qwest's proposal to adopt non-cost based switching rates in some areas of Arizona.

4) The proposed collocation costs and price/rate structures of Qwest need to be re-designed and lowered. Qwest has included costs in the nonrecurring rate element that are excessive, inefficient, and result in discriminatory prices for collocators.

5) Non-recurring charges must be based on forward-looking efficient practices, not on unreasonable inefficient practices as assumed in the Qwest non-recurring cost estimates.

III. SUMMARY OF UNE PRICING STANDARDS UNDER THE ACT AND THE ARIZONA CORPORATION COMMISSION'S COST AND PRICING DECISIONS

Q. WHAT SPECIFIC CHECKLIST ITEM ADDRESSES QWEST'S OBLIGATIONS RELATED TO THE PRICING OF UNBUNDLED NETWORK ELEMENTS?

A. Section 271(c)(2)(B)(ii) of the Telecommunications Act of 1996 states:

COMPETITIVE CHECKLIST--Access or interconnection provided or generally offered by a Bell operating company to other telecommunications carriers meets the requirements of this subparagraph if such access and interconnection includes each of the following:

> (ii) Nondiscriminatory access to network elements in accordance with the requirements of Sections 251(c)(3) and 252(d)(1).

Under this checklist item, Qwest must provide nondiscriminatory access to network elements to new entrants at prices that meet the requirements of Section 252(d)(1) of the Act.

Q. WHAT ARE THE PRICING REQUIREMENTS FOR UNBUNDLED NETWORK ELEMENTS CONTAINED IN SECTION 252(D)(1) OF THE ACT?

A. Section 252(d)(1) of the Act states that rates for network elements "(A) shall be (i) based on the cost (determined without reference to a rate-of-return or other rate-based proceeding) of providing the interconnection or network element . . . and (ii) nondiscriminatory, and (B) may include a reasonable profit." The FCC has concluded that the Act requires costs to be set based upon Total Element Long Run Incremental Costs ("TELRIC").[1] Specifically, the *Local Competition Order* states:

[1] *In the Matter of Implementation of the Local Competition Provisions in the Telecommunications Act of 1996*, CC Docket No. 96-98, First Report and Order, FCC 96-325 (Released Aug. 8, 1996), at ¶ 678 ("*Local Competition Order*").

> [W]e conclude here that prices for interconnection and unbundled elements pursuant to Sections 251(c)(2), 251(c)(3), and 252(d)(1), should be set at forward-looking long-run economic cost. In practice, this will mean that prices are based on the TSLRIC of the network element, which we will call Total Element Long Run Incremental Cost (TELRIC), and will include a reasonable allocation of forward-looking joint and common costs.[2]

The courts have also supported a TELRIC-based costing methodology. As one federal court has explained:

> [A forward-looking] methodology . . . facilitates rapid entry into the local telephone market and thereby serves the overriding and principal goal of the Act . . . . On the other hand, basing rates on historical [or embedded] costs would severely undercut new entrants . . . . For all these reasons, it is apparent that the [forward-looking] methodology . . . not only comports with the [Telecommunication Act], it is compelled by it.[3]

The FCC's pricing rules, which had been vacated by the United States Court of Appeals for the Eighth Circuit on jurisdictional grounds at the time of this Commission's last cost and pricing docket, were reinstated by the January 25, 1999 decision of the United States Supreme Court. These rules, therefore, are binding on this Commission when determining whether Qwest's UNE prices are cost-based in compliance with the Act.[4] Additionally, economists almost uniformly agree that a "cost-based" methodology means one that is based on forward-looking economic cost and is the appropriate methodology to lead to the development of competition in the local exchange market in Arizona.[5]

Q. DOES THE REINSTATEMENT OF THE FCC PRICING RULES HAVE AN IMPACT IN EVALUATING QWEST'S PRICES FOR UNES,

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[2] *Id*, ¶ 672.
[3] *Southwestern Bell Telephone Co.* v. *AT&T Communications, Inc* , No. A 97-CA132 SS, slip op. at 24 (W.D. TX. Aug. 31, 1998).
[4] *AT&T Corp. v. Iowa Utilities Board*, 119 S. Ct. 721 (1999) ("*Iowa Utils. Bd. III*").
[5] *Local Competition Order*, ¶ 630.

1 **INTERCONNECTION, COLLOCATION, NRCS AND RESALE?**

2 A. Yes. The FCC rules conclusively establish that interconnection and UNE rates may not
3 be based on Qwest's embedded costs and, consequently, that the Commission erred to the
4 extent that it used embedded costs in setting certain of the inputs used to calculate loop
5 prices. The FCC expressly concluded that network element prices should be set at
6 forward-looking economic cost-based on the TELRIC of the element and that embedded
7 or historical cost must not be included in a TELRIC analysis.[6] The FCC was "not
8 persuaded by incumbent LEC arguments that prices for interconnection and unbundled
9 network elements must or should include any difference between the embedded costs
10 they have incurred to provide those elements and their current economic costs."[7] Thus, in
11 its regulations, the FCC specified that network element prices must be set based on
12 forward-looking economic costs, that those prices must be measured based on the use of
13 the most efficient technology currently available, the lowest cost network configuration,
14 and that embedded costs may not be considered.[8]

15 **A. <u>Economic and Business Analysis of the Interaction Between Pricing and</u>**
16 **<u>Competition</u>**

17 **Q. CAN YOU BRIEFLY EXPLAIN HOW THESE PRICING RULES IMPACT THE**
18 **LEVEL OF COMPETITION IN ARIZONA?**

19 A. While sometimes confusing in the abstract, the TELRIC pricing principles are nothing
20 more than the application of free market pricing principles to an environment where free
21 markets do not exist. Most industries in this country have significant amounts of
22 competition so that no one party can dictate pricing to consumers of the product.

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[6] *Id*, ¶¶ 621, 672-673.
[7] *Id*, ¶ 705.
[8] 47 C.F.R. §§ 51.503(b)(1), 51.505(b)(1), 51.505(d)(1).

1 Consumers, when faced with multiple sources, will search for the lowest price for a given
2 product with a set of characteristics (quality, availability, features). Producers will be
3 forced to provide pricing at or below its competitors for that product with the same vector
4 of characteristics. Most importantly, producers will attempt to utilize the latest
5 technology and latest prices from its own suppliers to keep driving its prices lower for
6 that product with a defined set of characteristics. A useful example is the market for
7 desktop computers. In that case the typical customer has a product need represented by a
8 vector of characteristics for a computer, and the customer has a variety of producers to
9 choose from. Producers attempt to court that customer by providing computers with a
10 menu of characteristics at a price that is competitive with respect to other producers'
11 prices. By providing similar quality products at prices that are lower than their
12 competitors, producers can expand market share and profits.

13 Since the producers can avail themselves of the same component supply chains,
14 manufacturing locations and processes, and labor inputs, there is a fierce drive for
15 efficiency in that industry. Once some new level of efficiency develops in the production
16 process, it allows the first producer that implements it to reduce prices and capture more
17 market share and profit. Quickly the new efficiency works through the industry and all
18 producers implement it and lower product prices to a new level. Any producer that fails
19 to do that faces loss of sales and ultimate failure in the industry. Examples of the type of
20 efficiency introduction run the gamut from input price reductions (lower cost per memory
21 chip), new manufacturing techniques or location (migration to offshore manufacturing) to
22 distribution improvements (Web-based sales sites). In the end, pricing to customers
23 reflects the most current production process and set of input process at a given point in

1 time. Older inventory is written down to reflect new prices for current products in the
2 case of the goods market. In the case of the services market, new price points are
3 established for the service.

4 With TELRIC, the Congress and FCC were attempting to provide a pricing methodology
5 that would mimic the competitive markets pricing behavior – the lack of a competitive
6 market for local exchange products and services required a "second best" pricing
7 solution. Such an external solution was required since the incumbent local exchange
8 company (ILEC) is generally the only source of supply for services required by CLECs.
9 While in the long run alternative technologies might erode the monopoly position of
10 many of the ILECs services and offerings, for the foreseeable future (especially for the
11 CLEC planning horizon) the ILEC is the only source of supply. So in developing
12 TELRIC principles, the thrust was to require ILECs to sell services to CLECs at rates that
13 reflected the current states of input prices, technology, provisioning techniques, etc. If
14 this does not occur, the ILEC essentially discriminates against its wholesale customers by
15 charging them prices that are higher than the ILEC's own resource costs for the similar
16 service. In the long run, such a practice would damage CLEC financial performance and
17 move them into the telecommunications company graveyard.[9]

18 **Q. IS IT THE JOINT INTERVENOR'S OPINION THAT COMPETITION CAN**
19 **FLOURISH UNDER THE EXISTING DOCKET U-3021-96-448 RATES AND THE**
20 **PROPOSED NEW RATES FROM QWEST IN THIS DOCKET?**

21 A. More than likely, the existing and newly proposed rates will certainly not accelerate

[9] A host of emerging telecommunication firms, such as ICG Communications, RhythmsNet, Jato, and NorthPoint has either gone out of business or are in severe financial situations.

1 UNE-P based competition in the Arizona market. As discussed more fully in the
2 testimony of Mr. Gillan, the level of charges any CLEC would need to pay Qwest for the
3 rental of components of its network would not allow CLECs to match, much less price
4 below, Qwest for residential retail service. Moreover, the price squeeze is even more
5 drastic than demonstrated by Mr. Gillan's analysis, as that analysis does not even include
6 nonrecurring costs and other CLEC costs, like customer acquisition and advertising,
7 customer support functions, and billing costs. Reductions in the existing UNE and
8 Qwest's proposed rates would generally improve the financial analysis of entering the
9 market for residential customers and would also favor the development of UNE-P based
10 strategies for business market entry as well.

11 **Q. HOW DO THE UNE RATES IN ARIZONA INHIBIT COMPETITION?**

12 A. UNE prices set above cost limit mass-market competition, as explained in the testimony
13 of Mr. Gillan. Since it is unlikely for a competitor to duplicate Qwest's entire network in
14 the near term, properly priced UNEs at economic cost can facilitate competitive entry.
15 Mr. Gillan demonstrates that the current UNE rates make mass entry unprofitable. A
16 reduction of these rates to properly calculated TELRIC rates, as the Joint Intervenor's
17 recommend, would increase the potential margins of UNE-P based entry beyond the
18 negative margins that exist currently. Given Qwest's current aggregate financial
19 position, it would appear reductions in the UNE rates to economic costs, or TELRIC
20 would not damage Qwest's financial health.[10]

21 **Q. CAN YOU SUMMARIZE WHAT COSTS CLECS FACE WHEN ATTEMPTING**

[10] *See* Qwest press release dated 1/24/2001 at www.qwest.com/about/media/pressroom Full proforma 2000 compared to proforma 1999: EBITDA grew more than 17 percent to $7.4 billion, Revenue grew more than 14 percent to $19 billion, EPS increased over 50 percent to $0.59 from $0.39.

1 **TO ENTER THE MARKET USING A UNE-P BASED STRATEGY?**

2 A. In the first instance, the CLEC must purchase a loop, a switch port, and shared transport
3 from Qwest. The charges for the loop, port and switch features are on a flat monthly
4 basis, but switching and the shared transport rates are based on the number of minutes the
5 CLEC subscriber uses on a monthly basis. A high volume user, for example, will require
6 a CLEC to reimburse Qwest at a higher level than a low volume user. In addition, Qwest
7 is requiring the CLEC to pay additional monthly fees for the ability to offer switch-based
8 features such as call waiting and caller ID. Although the cost of such features should be
9 part and parcel of the switching port element, Qwest is attempting to recover these
10 charges through other rate elements. Finally, Qwest will charge the CLEC nonrecurring
11 charges for UNE-P provisioning, OS/DA routing set-up, and recurring and non-recurring
12 charges for signaling and charges for billing.

13 In addition, the CLEC will need to account for its own costs associated with advertising,
14 customer acquisition and retention, billing and payments, engineering oversight, OS/DA,
15 and overall administration of customer accounts. The sum total of the direct charges the
16 CLEC pays to Qwest for element leases and set-up, and the internal costs it faces to win
17 customers and service their accounts comprise the total costs CLECs incur in rolling out
18 UNE-P based competition.

19 **B. <u>Evaluation of Nonrecurring Charges</u>**

20 **Q. WHY IS IT IMPORTANT TO EVALUATE THE EFFECT OF NONRECURRING**
21 **CHARGES ON THE DEVELOPMENT OF LOCAL COMPETITION?**

22 A. It is important to evaluate nonrecurring charges because, as stated by the FCC in its *Local*

1 *Competition Order*, NRCs can be an insurmountable barrier to entry if they are
2 excessive.[11]

3 **Q. WHY IS THE PRICING FOR NRCS IMPORTANT FOR THE DEVELOPMENT**
4 **OF COMPETITIVE ALTERNATIVES TO QWEST'S TELECOMMUNICATION**
5 **SERVICES?**

6 A. Two main concerns are present in the NRC issue for pricing. First, the actual total of the
7 charges must relate directly to the efficiently incurred costs performed for the service.
8 Second, the structure of the prices to recover these costs must recognize the underlying
9 nature of the costs, as well as the marketplace realities the new entrant faces.

10 As a first condition for the proper pricing policy for NRCs, the costs[12] of these one-time
11 activities and the rates charged CLECs for these activities must be equal. If Qwest is able
12 to overcharge CLECs for these one time cost events, then it essentially costs the CLEC
13 more to provision a customer's service than it does for Qwest to service the same
14 customer. For example, if Qwest's nonrecurring charge for deploying UNE-P is 25
15 percent greater than the economic costs faced in that deployment, the CLEC either has a
16 lower margin on the service than Qwest, or the CLEC must charge a higher rate to its
17 end-user customer. The testimonies of Mr. Lathrop and Mr. Weiss will directly address
18 these issues.

19 The second condition for nonrecurring cost recovery and the proper pricing structure
20 involves the relationship between the timing of the costs and the timing of the charges.

---

[11] *Local Competition Order*, ¶ 749.
[12] "Cost" in this context includes a reasonable allocation of forward-looking joint and common costs and a reasonable profit.

1 This is most important in developing competitive alternatives to the existing services of
2 Qwest.

3 It must be remembered that today Qwest holds virtually the entire residential customer
4 base in Arizona, and a vast majority of the business base. CLECs, on the other hand,
5 must attempt to migrate customers away from Qwest, to their services. It would be
6 extremely difficult for CLECs to win over customers if those customers are faced with
7 high initial costs to transfer their services. Those customers would be faced with the
8 decision of paying nothing to stay with their incumbent provider, or paying some level of
9 nonrecurring charges to shift their services to a new entrant. Under such a structure, the
10 CLEC has very little ability to recover the nonrecurring charges Qwest is assessing
11 against them. Passing along the nonrecurring charges to new customers may minimize
12 the ability to entice customers to switch, and failure to pass along those charges leaves
13 the CLEC with lower, if any, margins. If CLECs embed those costs into the recurring
14 rates paid by end-user customers, CLECs run the risk of not recovering those charges if
15 the customer migrates back to the incumbent, or to another carrier, before full recovery
16 occurs.

17 Clearly Qwest has an incentive to maximize the level of nonrecurring charges in order to
18 hamper competition. That is why this Commission must strive to minimize the recovery
19 of costs through upfront charges. As stated above, the premise of TELRIC pricing is to
20 emulate the pricing levels and structure that would be in place if markets were fully
21 competitive. Under conditions that approach a competitive market, it is unlikely that any
22 market participant would seek to recover nonrecurring costs through one-time fees to new
23 customers. A quick examination of the wireless industry shows that although companies

have significant costs associated with attracting customers from other providers, the charges assessed against new customers are minimal. Unfortunately, CLECs are in a market where there is one provider of network elements for the bulk of the end user population and that provider has the power to determine the structure and level of nonrecurring charges.

In summary, it is the Joint Intervenor's recommendation that Qwest recover only TELRIC-based costs from its nonrecurring charges, and that costs be truly nonrecurring for that type of recovery. It must be remembered that many nonrecurring tasks are actually performed on a regular basis and TELRIC-based cost recovery could occur from recurring charges as well. Costs incurred by Qwest run in a full continuum in terms of their regularity and timing. Moreover, this Commission should not forget that Qwest recovers the one time costs associated with provisioning a loop to a customer's home over the entire life of that loop. Likewise, the cost recovery of setting up a collocation space or the set up charges for a transport circuit can be recovered through the monthly recurring charges for those elements, if monthly recurring charges are structured appropriately to prevent Qwest from recovering more than the forward-looking costs it actually incurs to provide the elements.

Q. WHAT GUIDANCE AND CAUTION HAS THE FCC PROVIDED FOR NONRECURRING CHARGES?

A. The FCC has made a number of comments on nonrecurring charges:

- The imposition of "...nonrecurring charges for recurring costs could pose a barrier to entry because these charges may be excessive..."[13]

[13] *Local Competition Order*, ¶ 747.

- The states may "...require incumbent LECs in an arbitrated agreement to recover nonrecurring costs, costs that are incurred only once, through recurring charges over a reasonable period of time."[14]

- The state commissions are required to "...take steps to ensure that incumbent LECs do not recover nonrecurring costs twice and that nonrecurring charges are imposed equitably among entrants."[15]

- The state commissions are required to "...ensure that nonrecurring charges imposed by incumbent LECs are equitably allocated among entrants..."[16]

Additionally, the FCC allowed the recovery of nonrecurring charges though a recurring charge. FCC Rule § 51.507(e) states:

> State commissions may, where reasonable, require incumbent LECs to recover nonrecurring costs through recurring charges over a reasonable period of time. Nonrecurring charges shall be allocated efficiently among requesting telecommunications carriers, and shall not permit an incumbent LEC to recover more than the total forward-looking economic cost of providing the applicable element.[17]

With the Supreme Court decision reinstating the FCC's pricing rules, these rules and the guidelines set forth in the *Local Competition Order* are binding when establishing prices for interconnection and unbundled network elements, including nonrecurring charges.

Q. WHAT PRICING METHODOLOGY SHOULD BE USED IN DETERMINING THE RATES FOR NRCS?

A. Nonrecurring charges should be developed using the same binding FCC costing and pricing methodology applied to recurring rates. NRCs should be based on forward-looking economic cost principles that are defined as the sum of TELRIC plus a reasonable allocation of forward-looking common cost. TELRIC must be based on an

[14] *Id*, ¶ 749.
[15] *Id*, ¶ 750.
[16] *Id*, ¶ 751.
[17] 47 C.F.R. § 51.507(e).

1 efficient network configuration and use a forward-looking cost of capital and

2 depreciation rates.[18]

3 State commissions in other jurisdictions have supported this. For example, in a

4 nonrecurring cost proceeding in Oregon, the Commission stated:

> 5 In summary, the Commission finds that the nonrecurring costs
> 6 adopted in this docket should be based on the same TSLRIC
> 7 methodology used to develop recurring building block costs
> 8 (UNEs) and prices. Nonrecurring costs should not be based on the
> 9 ILECs' historic, embedded costs.[19]

10 Additionally, the Oregon Commission found NRCs should be based on an automated

11 system using electronic OSS.[20] The Commission stated:

> 12 In addition to concluding that the technology to produce fully
> 13 automated interfaces is available, it is clear that such interfaces
> 14 must be implemented if new entrants are to have a meaningful
> 15 opportunity to compete in the local exchange markets. In our
> 16 estimation, it is reasonable to assume that a well-managed and
> 17 maintained OSS will allow unbundled element orders to flow
> 18 through at the 98 percent rate recommended by Ms. Petti.
> 19 Accordingly, we find that the revised nonrecurring cost studies
> 20 developed in accordance with this order should incorporate this
> 21 level of flow through for all electronically submitted orders.[21]

22 The prices for NRCs proposed in Qwest's SGAT do not meet these criteria. The majority

23 are based on Qwest's unverified cost estimates and these are not forward-looking

24 economic costs as required by the FCC.

25 **Q. ARE THERE SPECIFIC EXAMPLES OF NONRECURRING CHARGES THAT**

26 **APPEAR TO BE EXCESSIVE?**

27 A. While the bulk of the analysis on NRCs can be found in the testimony of Mr. Roy

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[18] *Id*, § 51.505(b).
[19] *Oregon Order* at 59.
[20] *Id.* at 69.
[21] *Id.*, at 70-71.

1 Lathrop, the sponsor of the AT&T/WorldCom NRC model, a few charges are worth
2 highlighting in light of the previous discussion. For example, the cageless collocation
3 quote fee is $4,380.68. This is the fee Qwest would like to charge collocators who wish
4 to place a rack of equipment in Qwest's central office. This fee is ostensibly for the costs
5 Qwest incurs in preparing the cost estimate for the collocator for using the space. Such a
6 charge appears on its face to be excessive, given that the placement of collocation
7 equipment is rather routine and has been performed hundreds of time by Qwest. One
8 would expect that such quote preparation activities would be more efficient in terms of
9 the time and labor that is devoted to such a function. After appropriate adjustments made
10 by Mr. Lathrop, the Joint Intervenor's proposal for this rate element is $857.13.
11 Examples of other rates that would place financial constraints on the development of
12 UNE based competition include Qwest's proposed $120.90 charge for the NRC
13 associated with subloop, and the $144.93 charge associated with the provisioning of a
14 line side switch port. These are only meant to be selected examples. The Joint
15 Intervenors present alternative charges that are based on more efficient practices in the
16 testimony of Mr. Lathrop.

17 **C. <u>Loop Conditioning</u>**

18 **Q. IF ASKED TO PROVIDE AN EXAMPLE OF ONLY *ONE* NRC THAT COULD**
19 **HAVE THE EFFECT OF PREVENTING UNE-BASED COMPETITION FOR**
20 **THE PROVISION OF XDSL SERVICES, WHAT WOULD IT BE?**

21 A. Obviously any prohibitively priced NRC could have the effect of preventing competition
22 generally. Specifically, however, the extinction of xDSL competition is assured if
23 incumbents are allowed to continue to impose massive nonrecurring charges for line

1 conditioning. Qwest's current ($114.80 per line) and proposed ($649.98 per binder
2 group) prices are so excessive that it would take literally *years* for a CLEC to recover
3 those costs from its own customers. Furthermore, these charges are egregious not only
4 because of their sheer magnitude, but also because they constitute a naked attempt to
5 recover the cost of Qwest's network upgrades solely to the detriment of its competitors.

6 **Q. ISN'T IT TRUE THAT THE FCC HAS ALLOWED FOR ILEC LOOP**
7 **CONDITIONING COST RECOVERY?**

8 A. Yes, but the FCC's allowance is conditional and lacks clear guidance. As a result,
9 pricing across the states reflects a range of inquiry and degrees of fidelity with TELRIC
10 requirements.

11 For example, in the Line Sharing Order, the FCC stated that the ILEC may recover its
12 cost of line conditioning--where permitted presumably where permitted by state
13 commission order.[22] Second, in the UNE Remand Order, the FCC stated that LECs could
14 recover the costs of conditioning, but at prices and structures that are consistent with FCC
15 pricing principles for nonrecurring costs.[23] In doing so, however, the FCC also
16 recognized that "incumbent LECs may have an incentive to inflate the charge for
17 conditioning and thereby create a barrier to [competitive LECs] offering xDSL
18 services"[24]. Again, the inference is that state commissions will be the decision makers
19 about whether or not such charges are warranted in the first instance.

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[22] In the Matter of Deployment of Wireline Services Offering Advanced Telecommunications Capability, et. al., CC Docket 98-147, et. al., Third Report and Order in CC Docket No. 98-147 Fourth Report and Order in CC Docket No. 96-98, Released December 9, 1999, at ¶ 148 ("Line Sharing Order").
[23] In the Matter of Implementation of the Local Competition Provisions of the Telecommunications Act of 1996, CC Docket No. 96-98, Third Report and Order and Fourth Further Notice of Proposed Rulemaking, Released November 5, 1999 at ¶ 194 ("UNE Remand Order").
[24] Id.

1 **Q. DO CHARGES FOR LOOP CONDITIONING INDICATE A FUNDAMENTAL**

2 **MISAPPLICATION OF TELRIC?**

3 A. Yes. Under the FCC's TELRIC rules, the relevant costs are, in pertinent part, those of the

4 "reconstructed local network [that] will employ the most efficient technology."[25]

5 Therefore, Qwest may only recover from new entrants the costs that it would incur if it

6 had constructed the local network from the ground up using the most efficient design and

7 technology. ILECs, including Qwest, generally concede that such a network would not

8 contain *any* line disturbers (e.g., load coils, bridge taps, repeaters, etc.).[26]

9 **Q. HAVE SOME OF STATES REJECTED THE LOOP CONDITIONING NRC FOR**

10 **THE REASONS YOU HAVE PROVIDED THE ACC?**

11 A. Yes. Minnesota, consistent with forward-looking network and cost principles, has

12 determined that loop conditioning is not appropriate in a forward-looking network, and

13 thus, has disallowed any cost recovery for loop conditioning.[27] Oregon found Qwest to

14 be double recovering the cost of line conditioning -- once in an NRC and again in the

15 recurring loop cost. The commission recognized that "the labor costs associated with

16 unbundling loops are currently included in the maintenance factor used to develop

17 recurring costs." As a result, the Oregon Commission also disallowed Qwest's proposed

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[25] *Local Competition Order* ¶685.

[26] Public Notice, *Mpwer Communications Corp., Files Petition for Expedited Declaratory Ruling on TELRIC Pricing Standards for Loop Conditioning Charges,* CCB/CPD No. 01-06 (released March 12, 2001) *See* comments of Bell South and Verizon

[27] In the Matter of a Generic Investigation of U S West Communications, Inc.'s Cost of providing Interconnection and Unbundled Network Elements, et.al., Docket No. P-442,5321,3167,466,421/CI-96-1540, et.al., Order Granting Reconsideration, Setting Prices and Ordering Compliance Filing, Proceeding, March 15, 2000, at 6.

1 NRC for loop conditioning and in doing so reduced it from $597.61 to $0.00.[28] Utah has
2 likewise disallowed line conditioning charges.[29]

3 **Q. HAS LOOP CONDITIONING HAD A DISCERNABLE EFFECT ON THE**
4 **DEVELOPMENT OF XDSL COMPETITION?**

5 A. It appears so. The anti-competitive barrier to entry is plainly evident in the marketplace;
6 competition for xDSL service is minimal and competing providers have been financially
7 crippled. Data LECs are already quickly disappearing even as Qwest itself boldly touts
8 the risks to consumers inherent in selecting a competitor for DSL service.[30]

9 **Q. WHAT SHOULD BE THE PRICE OF LOOP CONDITIONING?**

10 A. There should be no charge for loop conditioning. There is no justification for this rate
11 element or its rate in a forward-looking network. The only practical effect of such a
12 charge, regardless of magnitude, is to saddle CLEC customers, in the event there are any,
13 with upgrades to the ILEC network and /or to prevent competition with the ILEC in the
14 first instance. Moreover, if the charge has been "hidden" in the maintenance factor used
15 to develop recurring loop costs, as appears to be the case, the rate proposed by Qwest in
16 Arizona -- $649.98 -- constitutes blatant double recovery.

17 **Q. ARE THERE ANY NRCS PROPOSED BY QWEST FOR THE FIRST TIME IN**
18 **THIS PROCEEDING THAT ARE SPECIFICALLY DESIGNED TO PREVENT**

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[28] Oregon Public Utility Commission Order No. 98-444 in Dockets Nos. UT-138 and UT-139, entered November 13, 1998. An electronic copy of this decision is available at http://www.puc.state.or.us/orders/1998ords/98-444.htm#_Toc435505293.
[29] In the Matter of an Investigation Into Collocation and Expanded Interconnection, Docket No. 94-999-01 Phase III Part C Report and Order, June 2, 1999 at 13.
[30] Attached to this testimony as Exhibit AT&T MH-2 is the copy of a recent advertising campaign for QWEST's DSL service.

1 **FACILITIES-BASED COMPETITION IN ARIZONA?**

2 A. Yes. Qwest has proposed a quote preparation fee of $1,631.67 for a Field Connection
3 Point (FCP). This rate element is specifically targeted to prevent facilities based
4 competition from reaching Arizonans currently living in multiple dwelling units (MDUs).

5 **Q. WHAT IS A FIELD CONNECTION POINT AND WHY WOULD IT PREVENT**
6 **FACILITIES-BASED COMPETITION?**

7 A. As proposed by Qwest, a FCP is simultaneously a *dictated* single point of interconnection
8 (SPOI) and an *intermediate* distribution frame to be constructed *solely for CLECs*
9 wishing to access on-premises wiring located in multiple dwelling or multi-tenant
10 buildings.[31] As such, it is problematic on two levels. First, as a Qwest-dictated SPOI, it
11 flies in the face of the FCC's mandate that interconnection be permitted at any technically
12 feasible point.[32] Second, it is entirely *unnecessary* from a network standpoint, thus it is by
13 definition, discriminatory, hence anti-competitive. Said differently, it imposes material
14 and labor costs on CLECs (and their customers) that ILECs avoid when serving their own
15 retail customers. Moreover it creates, again unnecessarily, additional points of network
16 failure.

17 **Q. WHAT WOULD BE THE IMPACT ON CONSUMER CHOICE IN ARIZONA IF**
18 **THE FCP AND ITS PROPOSED RATE WERE ADOPTED?**

19 A. Potentially, Qwest's proposal could deny approximately 30% of Arizona's residential
20 households a choice of local service provider.

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[31] On-premises wiring is that last few feet of wiring at a customer's location that is owned or controlled by Qwest. It is *not* the case that in all instances this wire is owned or controlled by Qwest. It may in fact be owned by the ILEC, the building owner, or the resident. More about this under the discussion of recurring rates proposed in this docket.
[32] UNE Remand at ¶ 207.

1 **Q. 30% OF ARIZONA'S RESIDENTIAL HOUSEHOLDS IS SIGNIFICANT.**

2 **PLEASE EXPLAIN FURTHER.**

3 A. Certainly. It is no secret that thus far, average consumers are the "losers" in the effort to

4 open local markets to competition. There is, however, one significant group of

5 *residential* consumers that are correctly identified by the FCC as ripe for competition --

6 those inhabiting multiple dwelling units (MDUs).[33] In fact, according to the most

7 recently published U.S. Census data, 29% of households nationwide are in MDUs.

8 Currently, there are about 105 million residential households in the United States, which

9 means that more than 30 million households are located in MDUs.[34] In Arizona, there

10 are approximately .5 million households in MDUs.[35]

11 **Q. WHAT IS THE DIFFERENCE BETWEEN A SPOI, AS CONTEMPLATED BY**

12 **THE FCC, AND THE FCP AS RECOMMENDED BY QWEST?**

13 A. Technically none. The distinction, however, is whether Qwest can unilaterally dictate the

14 use of an SPOI (a) whether or not a SPOI is *requested* by the CLEC or (b) need for a

15 SPOI arises because there is not currently a single point of interconnection that can

16 feasibly be accessed by a requesting carrier.[36] Nevertheless, the use of the SPOI or any

17 other technically feasible point of interconnection, is the choice of the competitor not the

18 dictate of the incumbent. Clearly this is embodied in the language of 47 CFR 51.319

19 (a)(2)(E), "This obligation [to provide a SPOI] is in addition to the incumbent LEC's

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[33] In the Matter of Promotion of Competitive Networks in Local Telecommunications Markets, et. al., WT Docket No. 99-17, et. al., First Report and Order and Further Notice of Proposed Rulemaking in WT Docket No. 99-217, Fifth Report and Order and Memorandum Opinion and Order in CC Docket No. 96-98, and Fourth Report and Order and Memorandum Opinion and Order in CC Docket No. 88-57, Released October 25, 2000 at ¶ 12-23 ("Building Access Order").

[34] U.S. Census Bureau, Historical Census of Housing Tables, Units in Structure.

[35] Id.

[36] UNE Remand Order at § 226.

1 obligation to provide nondiscriminatory access to subloops at any technically feasible
2 point."[37]

3 **Q. MAY QWEST UNILATERALLY DEPLOY A SPOI AND THEN REQUIRE**
4 **THAT A CLEC UTILIZE AND/OR PAY FOR THE ARRANGEMENT?**

5 A. No. Not unless the CLEC has agreed to use the SPOI.

6 **Q. WHY IS THE FCP AS DICTATED BY QWEST UNNECESSARY?**

7 A. As a general rule, a CLEC, for example will seek to access the on-premises wiring
8 element at the first cross-connect device on the facility after the facility crosses the
9 property line.[38] Generally, the cross connection device that a CLEC would access will be
10 on the exterior of the building or in the telecommunications room within the building,
11 typically the basement.

12 **IV. RE-EXAMINATION OF DOCKET NO. U-3021-96-448 ET. AL. RATES**

13 **Q. WHY SHOULD THIS COMMISSION RESET THE UNE RATES ESTABLISHED**
14 **IN DOCKET NO. U3021-96-448 *ET AL*?**

15 A. There are a number of reasons this Commission should reset the UNE rates established in
16 U-3021-96-448 *et al*:

17 1) The current unbundled network element rates are above cost and inhibit
18 competition. This issue is discussed more fully in Mr. Gillan's testimony.

19 2) The Decision by the Commission that established these rates is almost four years
20 old, and the underlying data contained in the Qwest models that were filed in

[37] 47 C.F.R. §51.319(a)(2)(E).
[38] The name given to the cross connection device is not really important (i.e., whether or not it is a NID or the Minimum Point of Entry (MPOE) because a cross-connection device has been declared a technically feasible point for subloop access. See UNE Remand Order, ¶ 206.

support of those rates are at least five years old. Dramatic changes have occurred in the telecommunications industry and in the state of Arizona that would affect UNE cost estimates:

- Demand on Qwest's network has increased dramatically, thereby lowering per unit costs of many elements. In Arizona, it is apparent that population, number of access lines, and densities have grown since the mid-1990's.
- Qwest has experienced significant cost reductions through productivity gains and efficiencies. These take the form of normal technological advances as well as discrete events like the sale of rural exchanges and scale efficiencies from the Qwest/U S WEST merger.
- Normal economies of scale and reduced input prices stemming from telecommunication product and service companies must be examined for the impact they have on Qwest UNE costs.
- The inputs modified by the Commission in U-3021-96-448 resulted in an overstatement of cost.
- The current deaveraged zones do not reflect the true density-related costs of providing telephone services, and as such do not promote efficient competition.

Q. HOW DO THE ARIZONA UNE RATES FOR THESE ELEMENTS COMPARE TO THE RATES FOR OTHER STATES IN QWEST REGION?

A. The chart below compares the UNE rates for loop, switch port, switch usage, and shared transport across Qwest's region. The rates in Arizona should be among the lowest in the region. Arizona is the largest state in terms of customer loops.[39] While it may be the case that Qwest does have some rural, high cost territory left in Arizona, it has sold much of that territory and currently has a sale pending for an additional 38 wire centers in Arizona. Moreover, the bulk of the access lines and resulting investment can be found in the metropolitan areas of the Phoenix valley and Tucson. As such, Qwest's actual concentration of capital investment in Arizona reflects a more urban-orientated dispersion

[39] FCC Statistics of Common Carriers, Table 5-1, August 2000.

than a rural one. In fact, according to 1992 Census figures, Arizona had 87 percent of its population residing in urban areas.[40] That concentration is one of the highest in the nation, higher than Maryland, Connecticut, Pennsylvania, Ohio, and Texas. Arizona ranks among the highest in both UNE loop and UNE switching usage costs. Arizona's switch port charges are also high when features charges are factored into the analysis.

UNE Rate Comparison – Qwest Region					
	Loop	Switch Port	Includes Features?	Switch Usage	Shared Transport
Arizona[1]	$21.98	$1.61	Yes	$0.00280	N/A
Rank	3rd highest	2nd highest-most include Features		6th highest	
Colorado	$20.65	$1.15	No	$0.00283	N/A
Idaho	$25.52	$1.34	Yes	$0.00290	N/A
Iowa[2]	$20.15	$1.15	No	$0.00213	$0.00134
Minnesota	$17.87	$1.08	Yes	$0.00181	$0.00148
Montana[3]	$27.41	$1.45	Yes	$0.00290	N/A
Nebraska	$15.79	$1.95	Yes	$0.00300	N/A
New Mexico	$20.50	$1.38	Yes	$0.00111	$0.00034
North Dakota	$19.75	$1.27	Yes	$0.00250	N/A
Oregon	$15.00	$1.14	No	$0.00133	N/A
South Dakota	$21.09	$1.84	No	$0.00347	N/A
Utah	$16.45	$0.92	No	$0.00246	N/A
Washington	$18.16	$1.34	Yes	$0.00120	$0.00066[4]
Wyoming	$25.65	$1.53	No	$0.00375	N/A
[1] Currently has a docket open that will revisit these rates.					
[2] The Courts remanded these rates back to the Commission determining that they do not comply with TELRIC.					
[3] Currently has a docket open that is revisiting these rates.					
[4] If shared transport is purchased at a DS0 capacity the rate is $0.00217					

[40] *The Sprawling of America In Defense of the Dynamic City*, Samuel R. Staley, Ph.D., Reason Public Policy Institute, February 1999.

1 **Q. HOW DO THE UNE RATES IN ARIZONA INHIBIT COMPETITION?**

2 A. UNE prices set above forward-looking economic cost limit mass-market competition, as
3 explained in the testimony of Mr. Gillan. Since it is unlikely for a competitor to duplicate
4 Qwest's network in the near future, properly priced UNEs can facilitate competitive
5 entry. Mr. Gillan demonstrates that the current UNE rates make mass entry unprofitable.
6 This is an indication that the current rates are set too high, since Qwest is quite profitable.

7 **Q. DON'T THE JOINT INTERVENORS SIMPLY WANT UNE RATES THAT ARE**
8 **AS LOW AS POSSIBLE?**

9 A. No. It is in the industry's interest to have UNE rates properly set based on economic
10 cost, but not below. Below cost UNEs would send the wrong pricing signals to industry
11 participants and distort investment vs. lease decisions. Cost based rates properly reflect
12 the underlying economic cost and send the appropriate signals to CLECs on the most
13 efficient method of entry. Prices that are set too high, not only inhibit mass-market
14 competition, but also can send the wrong economic signals to the market on the most
15 efficient entry strategies. It is in the interest of efficient competition to price UNEs based
16 on their underlying economic cost.

17 **Q. ARE THE RATES ESTABLISHED BY THE COMMISSION IN DOCKET NO. U-**
18 **3021-96-448 RIPE FOR REVIEW?**

19 A. Yes. The Commission Order in Docket No. U-3021-96-448 was adopted almost four
20 years ago in January of 1998, based on arbitrations held in late 1996. The cost studies
21 used by Arizona in decision U-3021-96-448 are one of the oldest setting current UNE
22 rates in the region.

1 An old decision by itself would not be a sufficient reason to review UNE rates. The
2 evidence here, however, is that much has changed over the past few years in
3 telecommunications market, and in Arizona. UNE-based competition has failed to
4 rapidly develop, in large part due to UNE rates that are priced above cost.[41] Updated
5 UNE cost estimates will result in lower costs because demand has significantly increased
6 in this state. Qwest has executed sales of exchanges and has plans to complete more
7 sales of high cost exchanges. As sales are completed, Qwest's average UNE costs fall
8 due to the removal of high cost properties. Also, such sales would have impacts on any
9 TELRIC-based distribution of deaveraged rates. UNE cost estimates should decrease due
10 to productivity and efficiency gains that Qwest has experienced. All of these factors
11 combined demonstrate that the present network element prices do not comply with
12 TELRIC.

13 **A. <u>Growth in Demand</u>**

14 **Q. HOW DOES THE PHENOMENAL GROWTH EXPERIENCED IN ARIZONA**
15 **AFFECT UNE COST ESTIMATES?**

16 A. Costs in the telecommunications industry are largely driven by the volumes placed over
17 the network. The cost of virtually every non-usage sensitive component in the network is
18 reduced, on a per line basis, as the number of revenue producing lines increases.
19 Likewise the cost of virtually every usage sensitive component decreases, on a per minute
20 basis, as more minutes are placed on the network.
21 Arizona is one of the fastest growing states in the country and the fastest in Qwest's

[41] In addition, Qwest until mid-2000 exercised every opportunity to preclude CLECs from ordering UNE-P, arguing that it was not responsible for providing combined UNEs.

1 region. Qwest's switched line counts have increased by more than a half million lines, or
2 than 23%, since the end of year 1996 -- the period on which previous cost studies were
3 based. Special access line counts have almost doubled, increasing by 78%[42], in that time
4 period. In addition, the FCC determined that approximately 65 percent of all new
5 residential line growth is due to a customer ordering a second line.[43] The additional costs
6 of a second line are almost zero since the pathways and facilities are already in place.
7 Accompanied by the growth in line counts has been a growth in minutes. From 1996 to
8 2000, growth in minutes over the Qwest network has been approximately 60 percent.
9 This level of growth would decrease the per-unit costs of switching and transport costs.[44]

10 **B. <u>Sale of Exchanges</u>**

11 **Q. WHAT IS THE COST IMPACT OF QWEST'S PENDING SALE OF**
12 **EXCHANGES TO CITIZENS?**

13 A. Qwest is in the process of selling a number of wire centers to Citizens. These wire
14 centers account for 5.7% of Qwest's total lines, but 14.7% of Qwest's total cost. When
15 this sale is complete, Qwest's loop cost should be adjusted to account for the fact that
16 Qwest no longer operates these relatively high cost exchanges.

17 **C. <u>Productivity and Efficiency Gains</u>**

18 **Q. WOULD YOU EXPECT TO SEE COSTS FALL OVER TIME DUE TO**
19 **INCREASES IN PRODUCTIVITY?**

20 A. Yes. Productivity is the measure of output relative to inputs. Reductions in input prices,

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[42] Line count growth data is taken from ARMIS reports 43-08.
[43] *In the Matter of Federal-State Joint Board on Universal Service*, CC Docket No. 96-45, Order (Adopted December 7, 2000, at ¶ 12.
[44] FCC ARMIS Reports, 1996, 1999, Estimated 2000.

1 increased productivity from inputs, and more efficient use of inputs will cause
2 productivity to increase. Input prices for fiber cable and electronic equipment, including
3 switches have been falling.

4 The FCC, under its price cap regulation of Qwest and other large local exchange carriers,
5 has recognized that LECs have become more productive over time.[45] The FCC used a
6 productivity factor, called the X-factor, to adjust the prices of baskets of access services
7 offered by incumbent carriers, such as Qwest. The most recent productivity factor
8 adopted by the FCC was 6.5% annually. This would result in total productivity gains
9 since the prior cost order of 28.6%. Adjusting this for inflation (approximately 2.5% per
10 year) as was done under the FCC's price cap regulation, the net productivity gains would
11 be 4% a year or 17.0% compounded over the last four years. While these productivity
12 measures were part of the interstate access regulatory mechanism, the productivity
13 measures relate to many items important in this docket, including switching and
14 transport/interconnection. Moreover, the X-factor was used by the FCC to deal with LEC
15 recovery of the interstate portion of the loop.

16 Some of these gains in productivity can be seen in a review of Qwest's ARMIS data.
17 Network Operations Expenses[46] across Qwest's region fell by about 30% per line from
18 1996 to 2000. Qwest's Network Expense[47] fell by approximately 8%. Network service

[45] The price cap regulation rules were replaced with the recent CALLS proposal. The CALLS proposal also recognizes that ILECs will experience significant productivity gains.
[46] This includes expenses on Engineering, Network Administration, Plant Operations Administration, Power, Provisioning, and Testing.
[47] This includes the accounts of Digital Electronic Switching, Circuit Equipment, Central Office Transmission, Public Telephone Terminal Equipment, Other Terminal Equipment, Poles, Aerial Cable, Underground Cable, Buried Cable, Intra Building Network Cable, Aerial Wire and Conduit.

1 expense[48] decreased by almost 30% and variable overhead accounts[49] fell by 7% despite
2 a 60% increase in Legal and External Relations expenses.

3 **Q. HAS QWEST PRODUCED ESTIMATES OF ITS OVERALL MERGER**
4 **EFFICIENCIES?**

5 A. Yes. In its press release announcing the merger on July 18, 1999, Qwest and U S WEST
6 made the following statement:

> 7 The combined company expects to realize revenue synergies of
> 8 $12 billion over a five- and-one-half-year period after closing.
> 9 There also would be financial and operational scale and scope
> 10 through lower unit costs realized by serving an expanding base of
> 11 more than 29 million customers, including U.S. and European
> 12 multinational firms. It is expected that the combination will be
> 13 accretive to Qwest's earnings per share in the first year following
> 14 completion of the transaction.[50]

15 Qwest's costs and resulting UNE prices should reflect the results of the efficiencies
16 gained and lower unit costs related to the merger.

17 **Q. WHAT WOULD BE THE ESTIMATED IMPACT OF THE CHANGES**
18 **EXPERIENCED IN ARIZONA ON THE COMMISSION'S PREVIOUS**
19 **DECISION FOR APPROPRIATE LOOP COSTS AND OTHER UNE COSTS?**

20 A. The combination of changes in costs due to line growth, sale of exchanges, productivity,
21 and increased efficiencies due to the merger could result in a reduction in the
22 Commission's estimated range for the appropriate loop cost of up to 40%. The Joint
23 Intervenors would expect to this Commission to find the range of loop costs to be much
24 lower than it found in 1998. Cost for other UNEs should also decrease significantly.

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[48] This includes aircraft, motor vehicles, and tools and other work equipment.
[49] This includes Accounting & Finance, Executive, External Relations, Human Resources, Information Management, Legal, Other General & Administrative, Planning, Procurement and Research & Development.
[50] Qwest Press Release, Qwest Communications International, Inc., July 18, 1999.

V. REBUTTAL ISSUES TO NEW QWEST RATES AND COSTS

Q. WHAT PRICING ISSUES WILL YOU ADDRESS WITH RESPECT TO THE NEW RATES FILED BY QWEST IN THIS CASE?

A. Overall I will raise questions with respect to these prices in several areas: (a) cost support for these proposed new rates and rate elements; (b) the inability of CLECs to track the relationship between these new rates and the underlying costs that are already recovered under the existing rates; (c) and what appear to be the establishment of a precedent that will enable Qwest to double-recover the effects of inflation in future UNE cost proceedings

A. Cost Support for Qwest's New Rates

Q. WHAT ARE THE CURRENT PRICES PROPOSED BY QWEST FOR UNES, INTERCONNECTION AND COLLOCATION?

A. That is not entirely clear. The problem is this price list is inconsistent with Qwest's Exhibit A price list in the Arizona 271 proceeding, Docket No. T-00000B-97-238. The inconsistencies are in the rates themselves and in rate design. To demonstrate the problem, attached to my testimony is Exhibit MH-1. This exhibit provides the rates from Qwest's Arizona 271 proceeding in column one and in column two, the rates attached to Ms. Arnold's testimony provided in this proceeding. There are numerous inconsistencies in rates and it is unclear how this will be resolved. It appears that as the Arizona 271 proceeding continues, this will be an ongoing issue as Qwest updates rates and rate elements throughout the 271 process.

The purpose of this docket is to establish prices for UNEs, interconnection and collocation in accordance with the requirements of Sections 251(c)(3) and 252(d)(1)

which require nondiscriminatory access to network elements in order to establish Qwest's compliance with Section 271(c)(2)(B)(ii). It is unclear how this can be done with the current and ongoing inconsistencies between Qwest's proposed rates in this docket and the Arizona 271 proceeding.

Q. MOST OF THE SGAT RATES QWEST PROPOSES ARE IDENTICAL TO OR HIGHER THAN THE CORRESPONDING VALUES APPROVED IN THE PREVIOUS COST PROCEEDING. IS IT REASONABLE TO EXPECT THAT A CONTEMPORARY TELRIC STUDY WOULD PRODUCE COSTS IDENTICAL TO OR HIGHER THAN THOSE IT WOULD HAVE PRODUCED FOUR YEARS PREVIOUSLY?

A. No. It is beyond reason to expect that a TELRIC study completed using current investment and expense figures for a forward-looking network would produce the same or higher results as a corresponding study four years ago. Over the intervening four years since these rates were established, the market for telecommunications equipment has expanded profoundly. As Mr. Gillan's testimony notes, nearly $60 billion has been invested in CLECs alone, and this total augments the very large continuing investments the ILECs have made in network equipment.

Not only has a buyers' market existed for telecommunications equipment since the 1998 rates were approved, performance of network electronic equipment such as switches and transmission devices have greatly increased. Switches, for example, benefit from the same advances in processor technology that have profoundly improved the performance of personal computers over the past several years. Improved performance naturally results in lower operating costs and furthermore can lead to reduced investment. Qwest's

1 insistence on stagnant and inflated prices in the face of favorable equipment markets and
2 declining operating costs is at best unrealistic.

3 **Q. HAS QWEST FILED ANY DATA SUGGESTING THAT INVESTMENTS HAVE**
4 **DECLINED SINCE THE PREVIOUS ACC ORDER?**

5 A. Yes. Exhibits filed in support of the current Qwest testimony show that many
6 investments have decreased from their previous values. Digital cross connect (DCS)
7 investment, for example, has dropped by more than fifty percent. As another example,
8 underground fiber cable investment per foot has dropped about ten percent. Both of these
9 investments affect loop as well as transmission costs, yet the SGAT rates proposed by
10 Qwest in this proceeding do not reflect these decreases.

11 **Q. ARE THERE FACTORS INCLUDED IN QWEST'S EARLIER COST STUDIES**
12 **OR ITS STUDIES PURPORTING TO SUPPORT THE SGAT RATES THAT ARE**
13 **NOT FORWARD-LOOKING?**

14 A. Yes. The FCC has issued a Report and Order (the "Inputs Order") specifying the inputs
15 to be used in its Synthesis Model.[51] The values specified in the Order result from an
16 extensive investigation of appropriate investments, operating expenses, and other cost-
17 related parameters to be used in the computation of forward-looking service costs. A
18 wide range of entities, including ILECs (Bell companies as well as independents),
19 CLECs, IXCs, equipment vendors, and others participated in the workshops held by the
20 FCC to consider suitable input values. Among other items, the FCC considered outside
21 plant design, switching and interoffice equipment and facilities, and general support

[51] *In the Matter of Federal-State Joint Board on Universal Service*, CC Docket No. 96-45, Tenth Report and Order, and *In the Matter of Forward-Looking Mechanism for High Cost Support for Non-Rural LECs*, CC Docket No. 97-160, (released November 2, 1999).

facilities (GSF) and expense issues in its input development process. In its set of outside plant parameters, the Order specifies fill factors for distribution and feeder cables. Cable fill factors, when used in a cost model, control the fraction of spare wire pairs or fiber strands in feeder and distribution cables needed to accommodate testing and repair as well as some nominal amount of growth. As the FCC notes in its Inputs Order:

> If cable fill factors are set too high, the cable will have insufficient capacity to accommodate small increases in demand or service outages. In contrast, if cable fill factors are set too low, the network could have considerable excess capacity. While carriers may choose to build excess capacity for a variety of reasons, it is necessary to determine the appropriate cable fill factors for use in the federal mechanism. We also explained that, if the fill factors are too low, the resulting excess capacity would increase the model's cost estimates to levels higher than an efficient firm's costs, potentially resulting in excessive universal service support payments.[52]

Loop costs are very sensitive to changes in fill factors, particularly those for distribution cables, as one might expect. The distribution fill factors for copper cable used by Qwest are considerably lower than the FCC's values. Qwest's failure to use appropriately forward-looking fill factors, particularly those specified by a neutral agency, leads to unsupportable high loop UNE prices.

Q. WHAT OTHER EXAMPLES ARE THERE OF VALUES USED BY QWEST IN THEIR COST STUDIES THAT DIFFER FROM THE FCC'S FORWARD-LOOKING VALUES?

A. There are numerous differences between the FCC's forward-looking values and those advanced by Qwest in support of its SGAT rates. Aside from fill factors, however, one

[52] Id., ¶ 186.

of the most important examples is structure sharing.

Structure sharing refers to the fact that outside plant "structures" such as poles, conduit, and trenches often simultaneously support cables owned by various service providers, including telephone companies (ILECs as well as CLECs), cable television system operators, electric utility companies, and possibly others. The fact that multiple entities share these facilities means that the cost of constructing and maintaining them should properly be shared by all such entities.

The investment in structure typically exceeds the corresponding investment in a single carrier's cable installed on the structure. Loop costs are thus very sensitive to changes in structure sharing assumptions. As is the case with cable fill factors, Qwest's structure sharing values used in the exhibits supporting its SGAT testimony are generally lower than those specified by the FCC. This is particularly true in the higher density zones, where structure investment per foot can be quite large. Once again, Qwest's failure to use agreed-upon forward-looking values causes them to propose unnecessarily high loop UNE prices.

Q. THE TELRIC DEFINITION SPECIFIES THAT THE MODELED NETWORK BE "FORWARD-LOOKING." IS THERE ANY EVIDENCE THAT QWEST DOES NOT BASE ITS COST STUDIES ON FORWARD-LOOKING NETWORK DESIGNS AND TECHNOLOGIES?

A. The Qwest cost studies and models are very difficult to analyze. In particular, the cost models are nearly inscrutable. Qwest's LoopMod2, for example, is poorly documented and would require an inordinate amount of time for a cost model expert to analyze and understand its calculations and algorithms thoroughly. Nonetheless, the LoopMod2

contains inputs for non-forward-looking network components. Although it is very difficult to tell how, or even whether, these inputs are used, it is clear that a truly forward-looking model would not even contemplate such inputs.

Furthermore, there is some evidence in the LoopMod2 User Manual[53] that the loop network addressed by the model includes characteristics of the embedded network, which is not forward-looking. The Manual itself provides only a summary description of how the model estimates loop plant investments and costs. The descriptions contain insufficient detail for an outside analyst to determine the model's functions, and the model itself is almost impossible to decipher. Despite the poor documentation, however, it appears that the model uses some characteristics of the embedded network, such as maximum loop length and the number and size of "entrance terminals" in existing distribution areas (DAs) as bases for the calculation of plant investment.[54]

Just the fact that existing DAs are used as a basis for modeling plant investment suggests that the model attempts to reproduce, at least in part, the embedded network. A truly forward-looking model would not rely on existing DA definitions and instead would define its own. The use of existing maximum loop lengths and entrance terminal configurations also does not comport with the definition of forward-looking plant design. Again, a model that is inherently forward-looking will generally produce loop lengths and terminal configurations, among other loop network features, different from those in the embedded network.

[53] "Loop Module (LoopMod) User Manual," Version 2, July 2000.
[54] Id., p 1.8.

1 Additionally, the testimony of Thomas Weiss provides considerably more detail on the
2 inherent problems identified by the Joint Intervenors with the Qwest cost studies and
3 models.

4 **B. <u>Inconsistencies Between Qwest's Prior Cost Models and Those In This Proceeding</u>**

5 **Q. ARE THERE ANY INCONSISTENCIES IN THE PROPOSED SGAT PRICES IN**
6 **COMPARISON WITH THE U-3021-96-448 *ET AL* ORDERED RATES?**

7 A. Qwest's proposed price for end office switch usage set forth in the SGAT exhibits only a
8 minimal decrease from the 1996 rate. This in itself is inconsistent with the changes in the
9 switching equipment market and technology that I noted earlier. Beyond that, however,
10 the SGAT rates proposed by Qwest now include a price for signaling message
11 formulation to be assessed per call. In order to set up an interoffice call, a switch
12 processor must formulate and respond to Signaling System 7 messages to communicate
13 with the destination switch to establish a trunk connection and otherwise manage the call
14 (applying call progress tones, etc.). In the past, the cost for such message processing has
15 been included in the overall switch usage cost, expressed as a per minute quantity. The
16 SGAT now includes a signaling message formulation charge to be assessed per
17 terminating call at Qwest service switching points (end office or tandem switches
18 equipped for SS7 signaling).[55]

19 Because Qwest has not presented enough evidence to ascertain how the switch cost
20 model has been modified to exclude the costs of signaling, the presence of a separate
21 charge for signaling message formulation makes it possible that Qwest will double-

[55] SGAT, p. 168. The rate element specifically pertains to ISUP messages. ISUP, an abbreviation for ISDN User Part, refers to the part of the SS7 protocol structure that is concerned with "call control," or the establishment and routing of telephone calls between switches.

recover its costs for signaling message processing, because these costs were previously included in the calculation of the usage charge.[56] The switch usage charge rate element needs to be separated into corresponding prices for originating and terminating calls, with the usage charge for terminating traffic adjusted to account for the explicit signaling message formulation rate element. Beyond that, both the originating and terminating usage charges must be recalculated using current investment and expense data for forward-looking switching equipment and operating functions.

C. Vertical Features

Q. WHAT IS QWEST'S POSITION ON VERTICAL FEATURES?

A. Qwest contends that a CLEC must order vertical features as separate unbundled network elements and is unwilling to include them with the purchase of the local switching UNE. Qwest is proposing prices for over 130 separate features with rates ranging from $0.07 to $60.34 on a recurring basis and as high as $2.090.41 in nonrecurring charges. In the previous cost docket in Arizona, the Commission rejected Qwest's proposal and established that features should be included with the local switching element, setting the switching port rate at $1.61.[57]

Q. IS QWEST'S PRICING POSITION ON VERTICAL FEATURES IN COMPLIANCE WITH THE LAW?

A. No. Qwest's position on the pricing of vertical features is not cost-based and is not in

[56] On May 7th, 2000, in job number AZ2001-010[?], Qwest introduced new signaling elements as part of a switched access filing in Arizona. Included in this filing Qwest also filed for lower switching rates in order to make the filing revenue neutral for Qwest. Qwest has also made a similar filing in several other states (Colorado, Washington and Iowa) within its territory.

[57] *In the Matter of the Petition of AT&T Communications of the Mountain States, Inc for Arbitration with U S WEST Communications, Inc. of Interconnection Rates, Terms and Conditions Pursuant to 47 U S C § 252(b) of the Telecommunications Act et al*, Docket No. U-2428-96-448, *et al.*, Opinion and Order, Decision No. 60635, Appendix A, (Arizona Corp. Comm., January 30, 1998) (dis. op. Commissioner Renz D. Jennings).

1 compliance with the Act, the FCC rules, the Eighth Circuit's July 17, 1997 opinion, or
2 the Supreme Court's January 1999 decision. Qwest continues to ignore the law, orders
3 and court precedent.

4 **Q. PLEASE EXPLAIN WHY VERTICAL FEATURES PRICING IS IMPORTANT.**

5 A. Vertical features are currently among the most popular and profitable of all local services.
6 Features such as Call Waiting and Caller ID provide consumers with desired flexibility,
7 convenience and choice in the telecommunication services they receive. High demand
8 for those features, coupled with the fact that, on a "usage" basis, vertical features are
9 extremely inexpensive for an ILEC to provide, makes them at present extraordinarily
10 profitable. To compete in the local exchange markets, the Joint Intervenors and other
11 CLECs must be able to offer vertical features as cost-effectively as Qwest. Putting
12 competitors on the same footing as Qwest would tend to reduce the supernormal margins
13 presently priced into these services.

14 The best way to put Qwest and its potential local exchange competitors on an equal basis
15 is to require Qwest to make available all of the switch's functionality, including all of its
16 vertical features, at a single, cost-based price. This corresponds to the way in which
17 Qwest purchases vertical feature functionality from equipment vendors. However,
18 Qwest's position is that vertical features are not included in the price of the switching
19 UNE.

20 The local switching investment included as an input to the HAI model includes all the
21 features and functionality associated with vertical features. Therefore, the local
22 switching port rate proposed by the Joint Intervenors includes the cost associated with
23 vertical features. Mr. Denney provides further information related to the HAI model.

1 **Q. WHAT IS THE FCC'S POSITION ON VERTICAL FEATURES?**

2 A. Vertical features are to be incorporated into the functionality and price provided in the
3 local switching element. The Local Competition Order is very clear on this subject. The
4 Order states:

> 5 We define the local switching element to encompass line-side and
> 6 trunk-side facilities plus the features, functions, and capabilities of
> 7 the switch… . Thus when a requesting carrier purchases the
> 8 unbundled *local switching element, it obtains all switching*
> 9 *features in a single element on a per-line basis*. Therefore, we find
> 10 that vertical switching features are part of the unbundled local
> 11 switching element.[58]

12 **Q. HAS THE FCC POSITION BEEN REVIEWED BY THE EIGHTH CIRCUIT AND**
13 **THE SUPREME COURT?**

14 A. Yes. The Eighth Circuit's opinion issued July 17, 1997, reinforced the appropriateness of
15 the FCC conclusions that vertical features are network elements to be unbundled, not
16 "services" which will only be available under a resale scenario. The opinion states,
17 "After reviewing the relevant provisions of the Act, we believe that the FCC reasonably
18 concluded that features qualify as network elements that are subject to these unbundling
19 requirements of the Act."[59] The Court, therefore, left standing the FCC Rule that the
20 vertical features are included in the unbundled switching element. This was again
21 reinforced by the Supreme Court which found:

> 22 [v]ertical features, such as caller I.D., are "functions….provided by
> 23 means of the switch, and thus fall squarely within the statutory
> 24 definition. We agree with the Eighth Circuit that the
> 25 Commission's application of the "network element" definition is
> 26 eminently reasonable.[60]

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[58] *Local Competition Order*, ¶¶ 412-413; 47 C.F.R. § 51.319(c) (emphasis added).
[59] *Iowa Utils. Bd. v. FCC*, 120 F.3d 753 (8th Cir. 1997), *amended on reh'g* 135 F.3d 535 (Oct. 14, 1997), at 808; *aff'd in rel part Iowa Utils Bd.* III, *10.
[60] *Iowa Utils Bd III* at 734.

1 **Q. HAS THE UNITED STATES DEPARTMENT OF JUSTICE ADDRESSED THE**
2 **IMPORTANCE OF NONDISCRIMINATORY PRICING AND ACCESS TO**
3 **VERTICAL FEATURES?**

4 A. Yes. In the *DOJ Evaluation of BellSouth-Louisiana's Second Section 271 Application,*
5 the DOJ found excessive charges for vertical features to be a deficiency which could
6 seriously impair the ability of CLECs to compete in the local exchange market.[61] The
7 DOJ's Evaluation stated, "[A] number of other states, including states within the
8 BellSouth region, have rejected the concept of imposing a separate charge for vertical
9 features, concluding that the costs of most or all of these features are adequately
10 recovered through port charges in the range of $2-$3 (or lower)."[62]

11 The port charge for an analog line side port in Qwest's SGAT is $1.33, $11.19 for a
12 digital line side port, $16.98 for a DS0 trunk port and $59.28 for a digital trunk port.
13 These rates are significantly higher than the range supported by the DOJ, and yet, the rate
14 still does not include vertical features. The DOJ also expressed concern that "competitors
15 wishing to offer services that use BellSouth's unbundled switching and vertical features
16 are being competitively disadvantaged by unreasonably high prices for those unbundled
17 elements."[63] The DOJ's comments on vertical features demonstrate that
18 nondiscriminatory access to, and pricing of, vertical features is a critical issue in
19 evaluating a Section 271 application.

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[61] *DOJ Evaluation of BellSouth's Louisiana Second Section 271 Application* at 19.
[62] *Id.* at 24.
[63] *DOJ Evaluation of BellSouth's Louisiana Second Section 271 Application* at 25.

1 **D. <u>Transport</u>**

2 **Q. ARE THERE PROBLEMS WITH QWEST'S PROPOSALS FOR ITS**

3 **TRANSPORT ELEMENT?**

4 A. Yes. Qwest is proposing in both its SGAT and its pricing proposal in the instant docket

5 that unbundled transport be split into two mandatory elements: extended unbundled

6 dedicated interoffice transport (E-UDIT) and unbundled dedicated interoffice transport

7 (UDIT). Despite the fact that the FCC has mandated that dedicated transport is a single

8 UNE, Qwest's proposal essentially requires CLECs to purchase two distinct UNEs and to

9 pay a combined rate that is in excess of the costs of the single element.

10 For example, assume that a CLEC has a single central office and Qwest has two central

11 offices, one two miles from the CLEC office and one that is ten miles away from the

12 original Qwest office. For ease of description, assume these offices are named "A" and

13 "B" respectively. Under the proposed tariff, if a CLEC desires transport from its office to

14 Qwest office B, a total of twelve miles, it must purchase E-UDIT from the CLEC office

15 to Qwest office A (the closest Qwest office), then purchase UDIT from Qwest office A to

16 Qwest office B. The problem is not only that there are two orders to place, and two

17 circuits to identify. More importantly the CLEC is forced into a discriminatory pricing

18 arrangement. For the E-UDIT, the rate proposed by Qwest is a flat-rated charge per

19 month, while the UDIT charge is of the typical fixed and distance sensitive charge that is

20 utilized for transport services. Under the Qwest proposal, it is likely the CLEC would

21 pay more for the twelve miles of transport using the Qwest required structure than if

1 Qwest had a single fixed and distance sensitive rate for any type of transport. Essentially,
2 Qwest is proposing two distinct rates and rate structure for the same service. All transport
3 should be priced at the same structure to preclude this type of discrimination.

4 **Q. WHAT ARE SOME OF THE OTHER PROBLEMS RELATED TO PRICING**
5 **WHICH YOU HAVE IDENTIFIED IN THE QWEST ARIZONA SGAT?**

6 A. In addition to the many concerns previously stated, there are additional problems with the
7 pricing contained in the SGAT that contribute to its non-compliance with Act and the
8 FCC's pricing rules which require rejection by this Commission.

9 One of the major deficiencies in the Qwest SGAT is its incompleteness. There are
10 nineteen rates listed as individual case basis (ICB) in the SGAT price list; rates that will
11 have to be determined at some future, unknown point in time, or will be dictated by
12 Qwest to CLECs, as CLECs attempt to place orders for facilities covered by ICB pricing.
13 The prices listed as ICB include: Construction Charges for Interconnection; Central
14 Office Security Infrastructure; Construction Charges for Field Connection Point;
15 Reclassification Charge for Line Sharing; Unbundled Customer Controlled
16 Rearrangement Element for DS1 Port, DS3 Port, Dial Up Access, Attendant Access and
17 Virtual Ports, Customized Routing, Advanced Intelligent Network, Line Information
18 Database, Concentration Capability for Enhanced Extended Loop and Make Ready work
19 for Access to Poles, Ducts, Conduits and Rights of Way.

20 Both the FCC and the DOJ have rejected ICB pricing as an unacceptable pricing

1 mechanism.[64] ICB pricing essentially removes the oversight of pricing and cost
2 determination from this Commission, and places price determination in the hands of the
3 monopoly provider of services. ICB pricing also disrupts the market mechanism; as it
4 precludes CLECs from knowing what facilities will cost until they approach Qwest for
5 price quotes. Even then CLECs cannot be assured that facilities of one type will be
6 approximately the same cost.

7 One of the most critical elements that Qwest has placed in the ICB arena is customized
8 routing. Any CLEC that enters the marketplace in Arizona in Qwest territory using a
9 UNE-P strategy will have to engage Qwest in negotiations before ever knowing what the
10 total cost of providing a UNE-P based product will be. This occurs since Qwest is no
11 longer required to provide operator service or directory assistance as a UNE, and the
12 CLEC will be required to have customized routing in order to provide some other means
13 of integrating operator service and directory assistance into its UNE-P offering. The
14 Commission should reject Qwest's SGAT because it fails to set forth firm prices for
15 many important services.

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[64] *Application of BellSouth Corporation, et al Pursuant to Section 271 of the Communications Act of 1934, as amended, To Provide In-Region, InterLATA Services in South Carolina*, CC Docket No. 97-208, Memorandum Opinion and Order, FCC 97-418 (rel. Dec. 24, 1997) at ¶ 204. ("We find BellSouth's SGAT deficient because its collocation rates do not include any rates for the space preparation fee. That component of cost is left to further negotiation on an individual case basis. The absence of any space preparation rates creates uncertainty for new entrants and requires further negotiation, undermining the premise of an SGAT, which is to contain sufficiently specific terms and conditions such that checklist items are generally offered and available to all interested carriers at concrete terms, rather than left largely to future negotiation."). *Second Application of BellSouth Corporation, BellSouth Telecommunications, Inc and BellSouth Long Distance, Inc. for Provision of In-Region, InterLATA Services in Louisiana*, CC Docket No. 98-121, Evaluation of the United States Department of Justice, (Aug. 19, 1998) at 22. (The DOJ Evaluation of BellSouth-Louisiana's Second 271 application concluded, "the absence of reasonable and predictable prices for collocation may deter or delay entry." The DOJ Evaluation also stated, "[b]oth the Department and the [FCC] specifically identified BellSouth's use of indeterminate collocation prices, to be negotiated at some future time, as a ground for rejection.")

1 **E. Potential Double-Count of Inflation**

2 **Q. WHAT ARE YOUR CONCERNS ABOUT DOUBLE-COUNTING OF**

3 **INFLATION?**

4 A. In most cost studies, inflation in prices is accounted for in the nominal cost of capital.

5 This figure includes the real cost of capital, as well as a hedge amount for inflation.

6 Double counting for inflation can occur if investments in telephone plant that serve as

7 inputs to the cost models are grown from some previous year using some sort of inflation

8 index. Apart from concerns about using an indexed investment base as a means of

9 calculating efficient forward-looking costs, it is possible that Qwest has included a

10 double-count of inflation into its TELRIC calculations in this proceeding.[65] In the event

11 that the double count is not present in this re-benchmarking of UNE rates, then it is

12 possible that future benchmarking of the UNE rates would include this double counting.

13 **Q. HOW COULD QWEST'S UNE-BASED CALCULATIONS IMPROPERLY**

14 **DOUBLE-COUNT THE EFFECTS OF INFLATION?**

15 A. The cost of capital established by the Commission in U-3021-96-448, and employed by

16 Qwest here are "nominal" costs of capital. Nominal costs of capital compensate investors

17 not only for the time value of money and business and financial risk, but also for the

18 effects of inflation. In establishing updated UNE rates, indexing the investment base

19 incorporates inflation in cost-based UNEs twice, once as a component of the nominal cost

20 of capital and once as an increase in the investment unit prices employed by the cost

21 model.

[65] Based upon my review of the material filed with Qwest in the ICM model, it is unclear where the investment amounts were derived, and therefore it is impossible at this juncture to ascertain whether double counting occurred.

1 **Q. WHY DO PARTIES RELY ON NOMINAL COSTS OF CAPITAL (WHICH**
2 **INCLUDE COMPENSATION FOR INFLATION) RATHER THAN REAL COSTS**
3 **OF CAPITAL (WHICH DO NOT INCLUDE COMPENSATION FOR**
4 **INFLATION)?**

5 A. Nominal costs of capital are more easily calculated, because they can be derived directly
6 from data observable in financial markets. But if nominal costs of capital are employed
7 in establishing cost-based prices for UNEs, unit prices for material and labor used to
8 develop the total network investment must be "locked in" for future time periods at the
9 levels initially established by the Commission.

10 An alternative approach would be to calculate cost-based prices for UNEs by applying
11 the real cost of capital to investment levels that are allowed to increase periodically with
12 inflation. This is conceptually more consistent with the competitive market standard, and
13 it would have the additional advantage of facilitating the calculation of forward-looking
14 costs when future technological breakthroughs need to be reflected in TELRIC
15 calculations. On the other hand, such an approach would be somewhat unwieldy because
16 it would require the Commission to estimate a real cost of capital, and would require that
17 UNE rates increase periodically to reflect the effects of inflation on the underlying
18 investments.

19 What clearly would be inappropriate would be to apply the *nominal* cost of capital to
20 network investment levels that *are also allowed to increase* to reflect the effects of
21 inflation because, as I stated above, Qwest would thereby be compensated *twice* for the
22 effects of inflation.

Q. CAN YOU PROVIDE A SIMPLE EXAMPLE OF THE TWO ALTERNATIVE METHODS OF CAPITAL RECOVERY YOU DESCRIBE ABOVE?

A. Consider an example in which an initial investment of $1,000,000 is required to construct a forward-looking network, employing the following assumptions:

- economic life is 10 years;
- nominal cost of capital is 10%;
- inflation rate is 4%; and
- real cost of capital is 5.77% (1.10 / 1.04 - 1).

These assumptions would result in the following two cost recovery patterns that, over the life of the network, both have a present value equal to the initial investment in the network.

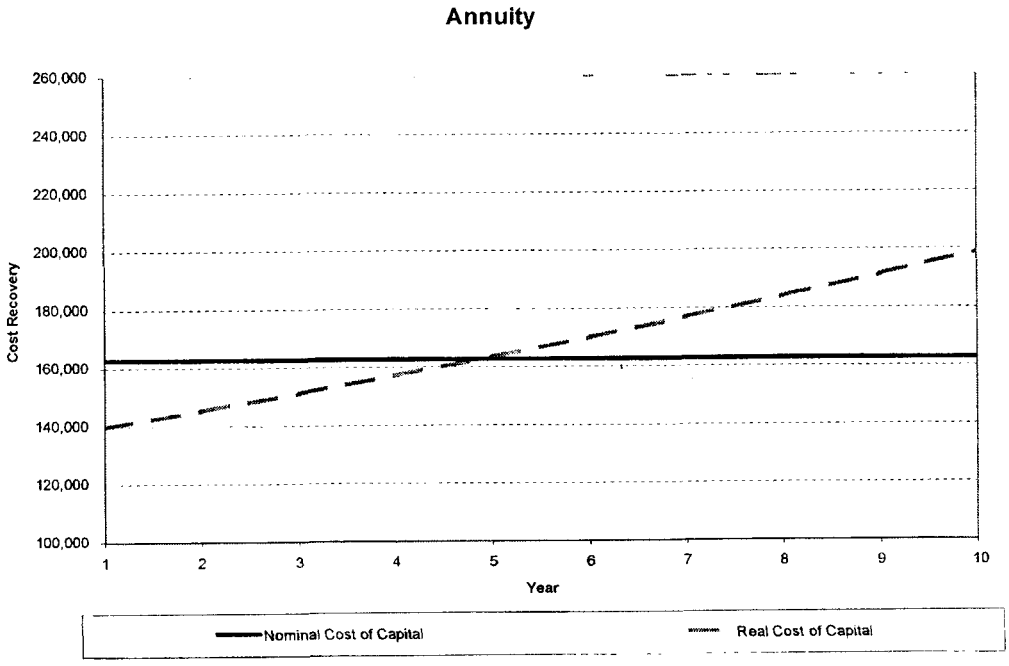
Table 1

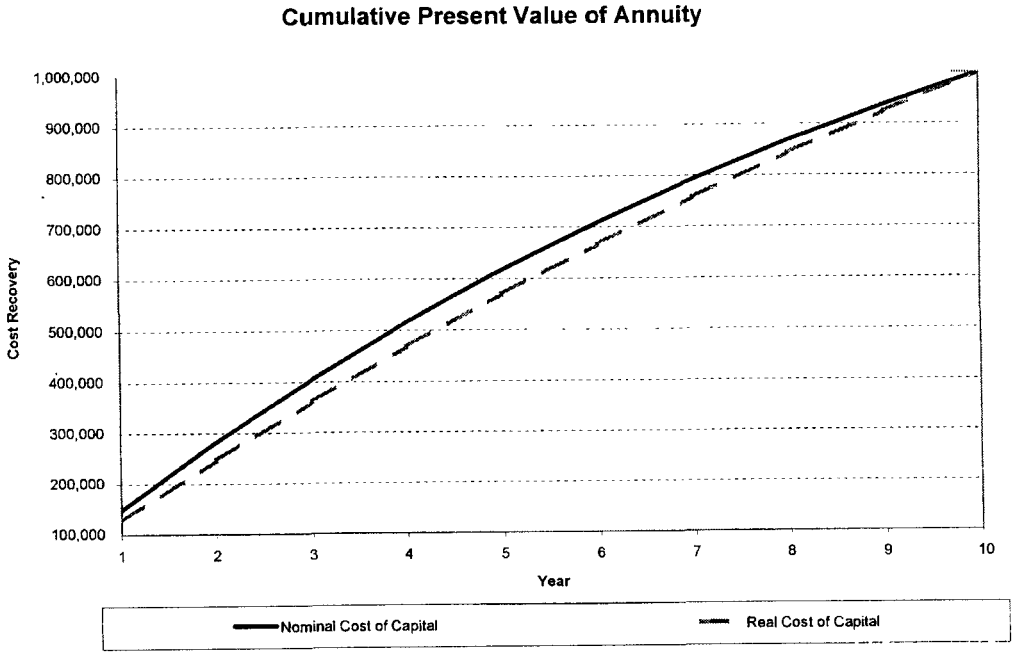
Year	Nominal Cost of Capital					Real Cost of Capital				
	Annuity	Inflation Factor	Inflated Annuity	Present Value Factor	PV of Annuity	Annuity	Inflation Factor	Inflated Annuity	Present Value Factor	PV of Annuity
1	$ 162,745	N/A	$ 162,745	0 9091	$ 147,950	$ 134,386	1 0400	$ 139,762	0 9091	$ 127,056
2	162,745	N/A	162,745	0.8264	134,500	134,386	1.0816	145,352	0.8264	120,126
3	162,745	N/A	162,745	0 7513	122,273	134,386	1 1249	151,166	0 7513	113,574
4	162,745	N/A	162,745	0.6830	111,157	134,386	1.1699	157,213	0.6830	107,379
5	162,745	N/A	162,745	0 6209	101,052	134,386	1 2167	163,502	0 6209	101,522
6	162,745	N/A	162,745	0.5645	91,866	134,386	1.2653	170,042	0 5645	95,984
7	162,745	N/A	162,745	0 5132	83,514	134,386	1 3159	176,843	0 5132	90,749
8	162,745	N/A	162,745	0.4665	75,922	134,386	1.3686	183,917	0.4665	85,799
9	162,745	N/A	162,745	0 4241	69,020	134,386	1 4233	191,274	0 4241	81,119
10	162,745	N/A	162,745	0.3855	62,745	134,386	1.4802	198,925	0.3855	76,694
TOTAL					$ 1,000,000					$ 1,000,000

The above table illustrates that either (1) calculating an annuity based on the nominal cost of capital fully recovers the initial $1,000,000 investment over the 10-year period, or (2) calculating an annuity based on the real cost of capital, and then inflating the annuity

each year at the appropriate inflation rate fully recovers the initial $1,000,000 investment over the 10-year period.[66] The following charts illustrate these two recovery patterns:

Chart 1





[66] Under either approach, the nominal discount rate is used to calculate cumulative present value because the cash flows being discounted (shown in the "Inflated Annuity" column) incorporate the effects of inflation.

The above charts illustrate the point that although both cost recovery patterns result in the same $1,000,000 present value at the end of the asset's life (recover the fill initial network investment), the use of the nominal cost of capital would allow the ILECs to recover more of their initial investment earlier in the network's life than would the use of the real cost of capital. As a result, if the nominal cost of capital is used and ILECs are nevertheless allowed to submit "updated" material and labor prices before year 10 (in year 5, for example), they will have over-recovered the total investment made to construct the network being used to develop TELRIC.

The inflation double-count implicit in Qwest's approach is illustrated in the following example, which assumes that an ILEC uses a nominal cost of capital *and* seeks new UNE rates each year to reflect the effects of inflation on asset and labor unit prices.

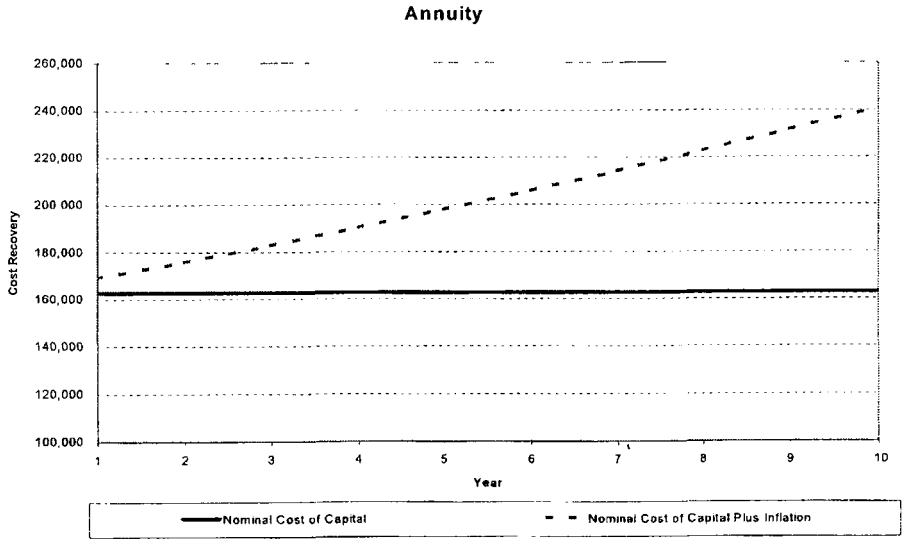
Table 2

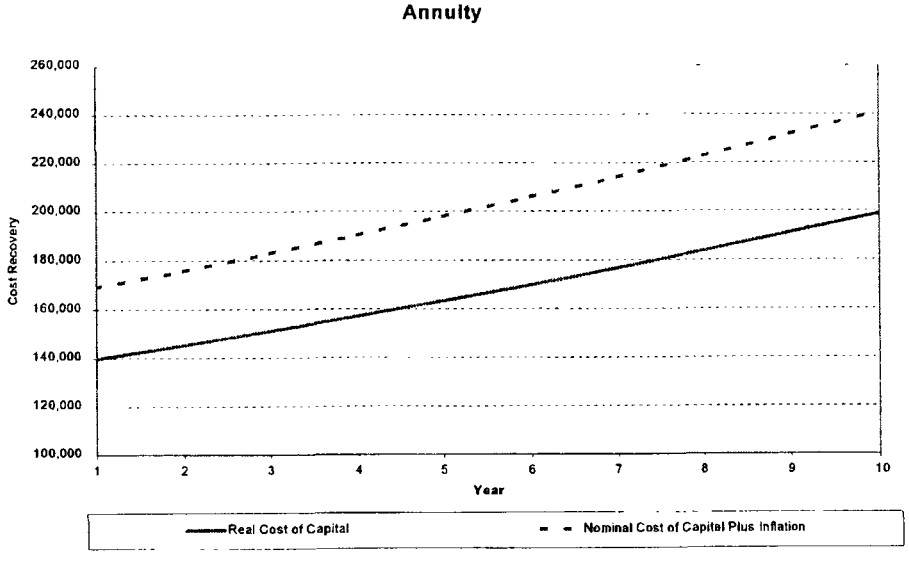
Year	Nominal Cost of Capital (From Table 1)		Real Cost of Capital (From Table 1)		Nominal Cost of Capital Plus Inflation For Material and Labor				
	Annuity	PV of Annuity	Annuity	PV of Annuity	Annuity	Inflation Factor	Inflated Annuity	Present Value Factor	PV of Annuity
1	$ 162,745	$ 147,950	$ 139,762	$ 127,056	$ 162,745	1 0400	$ 169,255	0 9091	$ 153,868
2	162,745	134,500	145,352	120,126	162,745	1.0816	176,025	0.8264	145,476
3	162,745	122,273	151,166	113,574	162,745	1 1249	183,066	0 7513	137,541
4	162,745	111,157	157,213	107,379	162,745	1.1699	190,389	0.6830	130,038
5	162,745	101,052	163,502	101,522	162,745	1 2167	198,005	0 6209	122,945
6	162,745	91,866	170,042	95,984	162,745	1.2653	205,925	0.5645	116,239
7	162,745	83,514	176,843	90,749	162,745	1 3159	214,162	0 5132	109,899
8	162,745	75,922	183,917	85,799	162,745	1.3686	222,728	0.4665	103,904
9	162,745	69,020	191,274	81,119	162,745	1 4233	231,637	0 4241	98,237
10	162,745	62,745	198,925	76,694	162,745	1.4802	240,903	0.3855	92,879
TOTAL		$ 1,000,000		$ 1,000,000					$ 1,211,026

In Table 2 Qwest would over-recover their initial investment by more than 21 percent if they were allowed to use the nominal cost of capital *and* adjust the material and labor

prices for the effects of inflation. The following charts also help to illustrate this point:

Chart 2





The solid lines on the above charts reflect the annual revenues needed to allow the ILECs to fully recover their investment and to earn their cost of capital. The approach apparently being proposed by Qwest, represented by the dashed lines, would allow the company to recover *more* than the full economic cost of the network. The difference between the two sets of lines on each of the above graphs represents the amount that ILECs would over recover in each year, under the assumptions we have employed, if they

were allowed both to use a nominal cost of capital *and* to inflate the underlying unit prices each year. Even if underlying unit prices for equipment and installation labor were not updated each year, but only periodically (every third year, for example), over-recovery would still occur.

Q. WHAT ARE THE IMPLICATIONS OF THIS DISCUSSION FOR THE COST-BASED UNE PRICES THAT THE COMMISSION WILL CALCULATE IN FUTURE PROCEEDINGS?

A. The Commission must calculate the capital component of recurring costs in a manner that avoids compensating ILECs twice for inflation. As noted above, this can be done *either* (1) by using the initially-adopted material unit prices and labor rates in establishing the total network investment, and applying the appropriate nominal cost of capital, or (2) by using current material unit prices and labor rates and applying the real cost of capital (which would then require that UNE rates be adjusted in subsequent years to reflect the effects of inflation on underlying material and labor unit prices). Thus, it is important for this Commission to recognize that, once UNE rates are established, it is not appropriate to adjust the investment base to account for inflation because inflation is already included in the cost of capital.

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes.

AT&T/WORLDCOM/XO JOINT PRICING PROPOSAL

	(1)		(2)		(3)		(4)	
	T-00000B-97-238		T-00000-00-0194		U-3021-96-448		Joint AT&T/	
	271		Testimony of		U-3021-96-448- et. al.		Worldcom/XO	
	All Rates		Maureen Arnold		Current Rates		Pricing Proposal	
	Exhibit A 2/12/2001		Exhibit MA-1A 4/16/01				Joint Proposal	
	Recurring	NRC	Recurring	NRC	Recurring	NRC	Recurring	NRC
INTERCONNECTION								
Entrance Facilities								
DS1	$89.42	$256.87	$92.18	$218.84	$89.42	$256.87	$0.00	$0.00
DS3	$357 16	$256.87	$486.15	$414.26	$357.16	$256.87	$0.00	$0.00
Direct Trunked Transport								
DS0					$5.05			
DS0 Over 0 to 8 Miles - Fixed							$12.40	
DS0 Over 0 to 8 Miles - per mile							$0.06	
DS0 Over 8 to 25 Miles - Fixed							$12.41	
DS0 Over 8 to 25 Miles - per mile							$0.06	
DS0 Over 25 to 50 Miles - Fixed							$12.43	
DS0 Over 25 to 50 Miles - per mile							$0.05	
DS0 Over 50 Miles - Fixed							$12.41	
DS0 Over 50 Miles - per mile							$0.03	
DS1 Over 0 to 8 Miles - Fixed	$35.98		$33.05		$35.98		$21.22	
DS1 Over 0 to 8 Miles - per mile	$0.65		$1.56		$0.65		$0.86	
DS1 Over 8 to 25 Miles - Fixed	$35.99		$33.33		$35.99		$21.38	
DS1 Over 8 to 25 Miles - per mile	$0.94		$1.26		$0.94		$0.70	
DS1 Over 25 to 50 Miles - Fixed	$36.00		$33.81		$36.00		$21.66	
DS1 Over 25 to 50 Miles - per mile	$1.75		$2.28		$1.75		$1.27	
DS1 Over 50 Miles - Fixed	$36.00		$33.78		$36.00		$21.64	
DS1 Over 50 Miles - per mile	$1.57		$1.19		$1.59		$0.67	
DS3 Over 0 to 8 Miles - Fixed	$243.17		$210.28		$243.17		$142.72	
DS3 Over 0 to 8 Miles - per mile	$13.32		$65.55		$13.32		$42.03	
DS3 Over 8 to 25 Miles - Fixed	$246.16		$213.45		$246.15		$142.69	
DS3 Over 8 to 25 Miles - per mile	$15.90		$20.30		$15.90		$13.70	
DS3 Over 25 to 50 Miles - Fixed	$250.66		$196.74		$250.66		$133.59	
DS3 Over 25 to 50 Miles - per mile	$22.91		$25.43		$22.91		$16.22	
DS3 Over 50 Miles - Fixed	$249.26		$207.61		$249.26		$140.93	
DS3 Over 50 Miles - per mile	$22.49		$17.49		$22.49		$11.00	
Multiplexing								
DS3 to DS1 per system	$196.85	$164.00	$246.64	$267.45	$196.85	$164.00	$172.65	$187.22

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	All Rates		Maureen Arnold		Current Rates		Pricing Proposal	
	Exhibit A 2/12/2001		Exhibit MA-1A 4/16/01				Joint Proposal	
	Recurring	NRC	Recurring	NRC	Recurring	NRC	Recurring	NRC
Local Traffic								
End office call termination, per minute of use	$0.0028		$0.002207				$0.00121	
Tandem Switched Transport								
Tandem switching, per minute of use	$0.0014		$0.001653		$0.0014		$0.00052	
Tandem Transmission								
Over 0 to 8 Miles - Fixed, per mou	$0.00088		$0.000485				$0.000340	
Over 0 to 8 Miles - per mile			$0.000045				$0.000032	
Over 8 to 25 Miles - Fixed, per mou	$0.00088		$0.000494				$0.000346	
Over 8 to 25 Miles - per mile			$0.000023				$0.000016	
Over 25 to 50 Miles - Fixed, per mou	$0.00088		$0.000477				$0.000334	
Over 25 to 50 Miles - per mile			$0.000012				$0.000008	
Over 50 Miles - Fixed, per mou	$0.00088		$0.000461				$0.000323	
Over 50 Miles - per mile			$0.000004				$0.000003	
Trunk Nonrecurring Charges								
DS1 Interface, First Trunk		$323.03		$353.67				$7.60
DS1 Interface, Each Additional Trunk		$10.21		$5.90				
DS1 Disconnect								$0.53
DS3 Interface, First Trunk		$331.71		$360.45				$7.60
DS3 Interface, Each Additional Trunk		$18.27		$12.69				
DS3 Disconnect								$0.53
DS1 Trunk Rearrangement								
First Trunk				$176.84				
Each Additional Trunk				$2.95				
DS3 Trunk Rearrangement								
First Trunk				$180.23				
Each Additional Trunk				$6.35				
Miscellaneous Charges			Qwest's AZ Switched Access Tariff					
Expedite Charge (LIS Trunks)	Qwest's AZ Sw Acc Tariff 5.2.2		Section 5.2.2 + LIS Nonrecurring Charges				$0.00	$0.00
Cancellation Charge (LIS Trunks)	Qwest's AZ Sw Acc Tariff 5.2.3		Qwest's AZ Switched Access Tariff Section 5.2.3 + LIS Nonrecurring				$0.00	$0.00
Construction Charges	ICB	ICB	ICB - See SGAT Section 19.0				$0.00	$0.00
IntraLATA Toll Traffic	Qwest's AZ Switched Access Tariff		Qwest's AZ Switched Access Tariff					

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	All Rates		Maureen Arnold		Current Rates		Pricing Proposal	
	Exhibit A 2/12/2001		Exhibit MA-1A 4/16/01				Joint Proposal	
	Recurring	NRC	Recurring	NRC	Recurring	NRC	Recurring	NRC
Transit Traffic								
Exchange Service (EAS/Local) Transit	$0.00932							
Local Transit Assumed Mileage			9 Miles					
IntraLATA Toll	Qwest's AZ Switched Access Tariff		Qwest's AZ Switched Access Tariff					
IntraLATA Toll Assumed Mileage			9 Miles					
Jointly Provided Switched Access	Qwest's AZ Switched Access Tariff		Qwest's AZ Switched Access Tariff					
Category 11 Mechanized Record Charge, per Record	$0.0025		$0.001819					
Local Transit			See Tandem Switching & Tandem Transmission Rates					
LIS EICT (when used for collocation)								
DS1	$4.28	$256.87	$10.24	$161.70	$4.28	$256.87	$0.00	$0.00
DS3	$14.98	$269.78	$47.99	$357 12	$14.98	$269.78	$0.00	$0.00
Interconnection Tie Pairs (ITP) (Optional)								
Per DS1			$1.58				$0.00	
Per DS3			$15.92				$0.00	
Channel Regeneration (Optional)								
DS1 Regneration			$9.45	$480.05				$0.00
DS3 Regneration			$34.16	$1,807.55				$0.00
COLLOCATION								
ADMINISTRATION								
Quote Preparation Fee		$1,381.54				$1,381.54	$0.00	$857.13
Augment QPF							$0.00	$214.28
CROSS CONNECT ENTRANCE FACILITY PER FIBER PAIR								
Standard per Fiber pair			$15.17	$1,232.89			$8.58	$736.94
Cross Connect per Fiber			$22.75	$1,658.09			$12.57	$991.10
Express per Cable			$240.26	$8,783.09			$133.66	$5,249.97
Element Group 1, per fiber pair	$1.52	$1,184.74			$1.52	$1,184.74		
Entrance Facility - Element Group 2								
Manhole, per Month, per Manhole	$13.81				$13.81			
Handhold, per Month, per Handhold	$7.61				$7.61			
Conduit/Innerduct POI to vault, per foot	$0.21				$0.21			
Core drill, per occurrence		$181.57				$181.57		

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	All Rates		Maureen Arnold		Current Rates		Pricing Proposal	
	Exhibit A 2/12/2001		Exhibit MA-1A 4/16/01				Joint Proposal	
	Recurring	NRC	Recurring	NRC	Recurring	NRC	Recurring	NRC
Riser, vault to equipment, per foot	$0.24				$0.24			
Fiber Optic cable, per 24, per fott	$0.03				$0.03			
Fiber placement in conduit & riser, per foot	$0.83					$0.83		
Copper 25 pair, per foot	$0.006				$0.006			
Copper placement conduit & reser, per foot	$0.83					$0.83		
Coax placement, per foot	$0.10				$0.10			
Cable Splicing								
Fiber - Per Set-Up		$375.40		$474.74		$375.40		$425.66
Per Fiber Spliced		$15.79		$37.95		$15.79		$34.03
Per Splice - Copper		$45.64				$45.64		
Power Plant Usage Per Amp per Month	$12.89				$12.89			
Power Plant, per amp <60 amps			$11.36				$9.56	
>60 amps							$7.45	
=60 amps							$8.19	
Power Usage Less Than 60 Amps, per Amp			$3.69				$3.31	
Power Usage More Than 60 Amps, per Amp			$7.37				$6.61	
Average Power Usage Drain Power Average Current per Amp per Month								
120 V			$19.26				$16.85	
208 V, Single Phase			$33.38				$29.20	
208 V, Three Phase			$57.75				$50.52	
240 V, Single Phase			$38.52				$33.69	
240 V, Three Phase			$66.64				$58.29	
480 V, Three Phase			$133.28				$116.58	
Power Feed Installation Charge Per Circuit								
20 Amp Feed	$0.21	$ 59.14			$0.21	$59.14		
40 Amp Feed	$0.29	$ 80.69			$0.29	$80.69		
60 Amp Feed	$0.35	$ 95.34			$0.35	$95.34		
100 Amp Feed	$0.22	$ 133.28						
200 Amp Feed	$0.35	$ 208.78						
300 Amp Feed	$0.48	$ 288.33						
400 Amp Feed	$0.62	$ 372.89						

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	All Rates		Maureen Arnold		Current Rates		Pricing Proposal	
	Exhibit A 2/12/2001		Exhibit MA-1A 4/16/01				Joint Proposal	
	Recurring	NRC	Recurring	NRC	Recurring	NRC	Recurring	NRC
AC Power Feed, per Watt, p.1 Month	$0.03				$0.03			
AC Power Feed, per foot per A&B Feeder								
20 Amp, Single Phase	$0.02	$9.78	$0.0146	$7.98			$0.0109	$7 16
20 Amp, Three Phase	$0.02	$11.08	$0.0181	$9.90			$0.0135	$8.87
30 Amp, Single Phase	$0.02	$10.21	$0.0157	$8.61			$0.0117	$7.72
30 Amp, Three Phase	$0.02	$12.38	$0.0216	$11.82			$0.0161	$10.60
40 Amp, Single Phase	$0.02	$11.23	$0.0185	$10.12			$0.0138	$9.07
40 Amp, Three Phase	$0.02	$13.82	$0.0254	$13.93			$0.0189	$12.49
50 Amp, Single Phase	$0.02	$12.52	$0.0219	$12.01			$0.0163	$10.76
50 Amp, Three Phase	$0.03	$15.74	$0.0306	$16.76			$0.0228	$15.03
60 Amp, Single Phase	$0.02	$13.58	$0.0248	$13.58			$0.0185	$12.17
60 Amp, Three Phase	$0.03	$17 46	$0.0352	$19.29			$0.0266	$17.30
100 Amp, Single Phase	$0.03	$15.78	$0.0307	$16.81			$0.0229	$15.07
100 Amp, Three Phase	$0.04	$22.18	$0.0479	$26.24			$0.0357	$23.53
Inspector Labor, per Half Hour								
Regular Hours Rate		$24.49		$31.18		$24.49		$28.60
After Hours Rate, minimum 3 hours		$36.24		$38.96		$36.24		$36.82
Interconnection Tie Pair (ITP)								
Per DS1			$1.58				$1.33	
Per DS3			$15.92				$13.39	
EICT Channel Termination								
2 wire					$0.44	$383.30	$0.00	$0.00
4 wire					$0.86	$383.30	$0.00	$0.00
DS1 EICT					$4.28	$256.87	$0.00	$0.00
DS3 EICT					$14.98	$269.78	$0.00	$0.00
Channel Regeneration								
DS1 Regeneraton	$6.30		$9.45	$480.05	$6.30		$0.00	$0.00
DS3 Regeneration	$41.32		$34.16	$1,807.55	$41.32		$0.00	$0.00
Collocation Termination - DS0								

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	All Rates		Maureen Arnold		Current Rates		Pricing Proposal	
	Exhibit A 2/12/2001		Exhibit MA-1A 4/16/01				Joint Proposal	
	Recurring	NRC	Recurring	NRC	Recurring	NRC	Recurring	NRC
Block Termination	$1.29	$636.68						
Per Termination	$0.01	$5.19						
Cable Placement per 100 Pair Block, OR			$0.5701	$243.35			$0.4327	$218.19
Cable Placement per Termination			$0.0107	$4.57			$0.0081	$4.09
Cable per 100 Pair Block, OR			$0.7333	$313.03			$0.5567	$280.66
Cable per Termination			$0.0100	$4.29			$0.0076	$3.84
Blocks per 100 Pair Block, OR			$1.2786	$545.80			$0.7897	$398.15
Blocks per Termination			$0.00175	$7.48			$0.0108	$5.45
Block Placement Per 100 Pair Block, OR			$0.5913	$252.40			$0.4488	$226.30
Block Placement per Termination			$0.0081	$3.46			$0.0061	$3.10
Collocation Termination - DS1								
Block Termination	$0.78	$465.73						
Per Termination	$0.02	$12.29						
Cable Placement per 28 DS1s, OR			$0.7386	$404.75			$0.5504	$362.90
Cable Placement per Termination			$0.0794	$43.52			$0.0592	$39.02
Cable per 28 DS1s, OR			$0.6594	$361.38			$0.4914	$324.02
Cable per Termination			$0.0709	$38.86			$0.0528	$34.84
Panel per 28 DS1s , OR			$0.7525	$412.86			$0.5607	$369.72
Panel per Termination			$0.0908	$49.78			$0.0677	$44.63
Panel Placement per 28 DS1s, OR			$0.1576	$86.36			$0.1174	$77 43
Panel Placement per Termination			$0.0169	$9.29			$0.0126	$8.33
Collocation Termination - DS3								
Block Termination	$0.43	$254.90						
Per Termination	$0.31	$186.25						
Cable Placement per Termination			$0.3007	$164.79			$0.2241	$147.75
Cable per Termination			$0.4258	$233.36			$0.3173	$209.23
Panel/Connector per Termination			$0.4388	$240.45			$0.3270	$215.58
Panel/Connector Placement per Termination			$0.0453	$24.81			$0.0337	$22.24
Security								
Per Employee, per Card	$6.40		$0.87				$0.77	
Card Access Per employee, per Office			$8.07				$7.01	
Central Office Security Infrastructure	ICB	ICB						

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	All Rates		Maureen Arnold		Current Rates		Pricing Proposal	
	Exhibit A 2/12/2001		Exhibit MA-1A 4/16/01				Joint Proposal	
	Recurring	NRC	Recurring	NRC	Recurring	NRC	Recurring	NRC
Central Office Clock Synchronization								
Synchronization – Composite Clock, per Port	$8.32		$7.70				$6.48	
Space Availability Report								
Per Office				$333.55				
Space Reservation				25% of collocation charge				
Space Option			Under Development					
VIRTUAL								
Quote Preparation Fee				$4,380.68		$1,381.54		$857 13
Inspection Labor, per Half Hour								
Regular Hours Rate						$24.49		$28.60
After Hours Rate						$36.24		$36.82
Maintenance Labor, per Half Hour								
Regular Hours Rate		$22.20		$27.97		$22.20		$25.08
After Hours Rate		$31.57		$37.43		$31.57		$33.56
Training Labor, per Half Hour								
Regular Hours Rate		$23.95		$27.97		$23.95		$25.08
Equipment Bay, recurring, per Shelf	$6.41		$3.75		$6.41		$3.16	
Engineering Labor, per Half Hour								
Regular Hours Rate		$24.55		$30.18		$24.55		$27.06
After Hours Rate		$35.25		$38.96		$35.25		$34.93
Installation Labor, per Half Hour								
Regular Hours Rate		$23.73		$31.89		$23.73		$28.60
After Hours Rate		$33.20		$41.07		$33.20		$36.82

AT&T/WORLDCOM/XO JOINT PRICING PROPOSAL

	(1)		(2)		(3)		(4)	
	T-00000B-97-238		T-00000-00-0194		U-3021-96-448		Joint AT&T/	
	271		Testimony of		U-3021-96-448- et. al.		Worldcom/XO	
	All Rates		Maureen Arnold		Current Rates		Pricing Proposal	
	Exhibit A 2/12/2001		Exhibit MA-1A 4/16/01				Joint Proposal	
	Recurring	NRC	Recurring	NRC	Recurring	NRC	Recurring	NRC
[redacted]			$3.96				$2.87	
Zone 1	$2.75							
Zone 2	$2.26							
Zone 3	$2.06							
[redacted]								
20A Power Feed, per feed			$10.09	$5,528.47			$7 47	$4,923.58
30A Power Feed, per feed			$11.53	$6,316.35			$8.44	$5,567 14
40A Power Feed, per feed			$14.06	$7,706.09			$9.85	$6,491.53
60A Power Feed, per feed			$17.54	$9,613.92			$12.04	$7,935.89
[redacted]								
[redacted]				$4,380.68				$857.13
[redacted]	ICB	ICB						
5 year payments (recurring for 5 yrs)							$39.80	
on-going maintenance							$2.52	
[redacted]	ICB	ICB						
2 Bays and 1 - 40A Power Feed			$54.42	$29,823.10				
Adjustment for 20A Initial Power Feed			($3.97)	($2,177.62)				
Adjustment for 30A Initial Power Feed			($2.54)	($1,389.75)				
Adjustment for 40A Initial Power Feed			Included in Space Construction					
Adjustment for 60A Initial Power Feed			$3.48	$1,907.82				
Adjustment for Each Additional Bay			$5.52	$6,024.83				
Each Additional 20A Power Feed			$10.09	$5,628.47				
Each Additional 30A Power Feed			$11.53	$6,316.35				
Each Additional 40A Power Feed			$14.06	$7,706.09				
Each Additional 60A Power Feed			$17.54	$9,613.92				
[redacted]			$3.96				$2.87	
Zone 1	$2.75							
Zone 2	$2.26							
Zone 3	$2.06							
[redacted]								

AT&T/WORLDCOM/XO JOINT PRICING PROPOSAL

		(1)		(2)		(3)		(4)	
		T-00000B-97-238		T-00000-00-0194		U-3021-96-448		Joint AT&T/	
		271		Testimony of		U-3021-96-448- et. al.		Worldcom/XO	
		All Rates		Maureen Arnold		Current Rates		Pricing Proposal	
		Exhibit A 2/12/2001		Exhibit MA-1A 4/16/01				Joint Proposal	
		Recurring	NRC	Recurring	NRC	Recurring	NRC	Recurring	NRC
[redacted]					$4,763.06				$857.13
[redacted]		ICB	ICB						
[redacted]		ICB	ICB						
Cage- Up to 100 Sq. Ft	5 yr payments			$94.30	$51,675.14			$68.46	
	maintenance							$4.34	
Cage- 101- 200 Sq. Ft	5 yr payments			$97.85	$53,623.79			$80.68	
	maintenance							$5.12	
Cage- 201- 300 Sq. Ft	5 yr payments			$100.62	$55,139.10			$89.79	
	maintenance							$5.69	
Cage- 301- 400 Sq. Ft	5 yr payments			$104.08	$5,708.08			$97 18	
	maintenance							$6.16	
Adjustment for 20A Initial Power Feed				($15.14)	($8,444.49)				
Adjustment for 30A Initial Power Feed				($14.03)	($7,687.98)				
Adjustment for 40A Initial Power Feed				($11.14)	($6,106.39)				
Adjustment for 100A Initial Power Feed				$17.06	$9,348.19				
Adjustment for 200A Initial Power Feed				$54.46	$29,843.97				
Adjustment for 300A Initial Power Feed				$99.92	$54,756.39				
Adjustment for 400A Initial Power Feed				$153.68	$84,219.54				
Each Additional 20A Power Feed				$12.73	$6,973.86				
Each Additional 30A Power Feed				$14.11	$7,730.36				
Each Additional 40A Power Feed				$16.99	$9,311.95				
Each Additional 60A Power Feed				$28.14	$15,418.34				
Each Additional 100A Power Feed				$45.19	$24,766.54				
Each Additional 200A Power Feed				$82.59	$45,262.31				
Each Additional 300A Power Feed				$128.05	$70,174.74				
Each Additional 400A Power Feed				$181.82	$99,637.89				
20A Power Feed								$9.42	$6,213.88
30A Power Feed								$10.34	$6,818.67
40A Power Feed								$11.92	$7,860.61
60A Power Feed								$18.86	$12,435.06
100A Power Feed								$30.17	$19,889.62
200A Power Feed								$59.69	$39,357.31
300A Power Feed								$92.93	$61,272.79
400A Power Feed								$129.03	$85,076.72

AT&T/WORLDCOM/XO JOINT PRICING PROPOSAL

ATT Exhibit MH-1

	(1)		(2)		(3)		(4)	
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	271		Testimony of		U-3021-96-448- et. al.		Worldcom/XO	
	All Rates		Maureen Arnold		Current Rates		Pricing Proposal	
	Exhibit A 2/12/2001		Exhibit MA-1A 4/16/01				Joint Proposal	
	Recurring	NRC	Recurring	NRC	Recurring	NRC	Recurring	NRC
Engineering								$6,454.35
Augment Engineering								$3,227.17
Floor Space Lease per Square Foot			$3.96					$2.87
Rent w/maintenance per foot zone 1	$2.75							
Rent w/maintenance per foot zone 2	$2.26							
Rent w/maintenance per foot zone 3	$2.06							
Grounding								
2/0 AWG - per Foot	$0.1194	$5.97	$0.0230	$12.59			$0.0171	$11.29
1/0 AWG - per Foot	$0.1763	$8.82	$0.0382	$20.96			$0.0285	$18.79
4/0 AWG - per Foot	$0.2096	$10.48	$0.0435	$23.81			$0.0324	$21.35
350 kcmil - per Foot	$0.3228	$16.14	$0.0603	$33.04			$0.0449	$29.62
500 kcmil - per Foot	$0.3765	$18.83	$0.0672	$36.81			$0.0501	$33.01
750 kcmil – per Foot	$0.4672	$23.36	$0.1029	$56.40			$0.0767	$50.57
Humidification per Fee per Phys foot Space	$28.03				$28.03			
ICDC Collocation			See Note 1	See Note 1				
Adjacent Collocation		ICB	ICB	ICB				
REMOTE COLLOCATION & REMOTE ADJ COLLOCATION		ICB	ICB	ICB				
CLEC to CLEC Connections								
CLEC to CLEC Quote Preparation Fee		$1,052.79						
Design Engineering & Installation – No Cables		$3,770.95		$1,353.22				$641.89
Cable Racking (Per Foot)								
DS0	$0.1378		$0.17316				$0.15324	
DS1	$0.1492		$0.18388				$0.16211	
DS3	$0.1229		$0.15906				$0.14155	
Virtual Connections (Connections only; No Cables)								
DS0 (Per 100 Connections)		$272.99		$223.03				$199.97
DS1 (Per 28 Connections)		$121.34		$101.73				$91.21

AT&T/WORLDCOM/XO JOINT PRICING PROPOSAL

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	271		Testimony of		U-3021-96-448- et. al.		Worldcom/XO	
	All Rates		Maureen Arnold		Current Rates		Pricing Proposal	
	Exhibit A 2/12/2001		Exhibit MA-1A 4/16/01				Joint Proposal	
	Recurring	NRC	Recurring	NRC	Recurring	NRC	Recurring	NRC
DS3 (Per 1 Connection)		$12.72		$8.80				$7.89
Cable Hole (if Applicable)		$439.32		$425.99				$381.95
CLEC to CLEC Cross-Connection				$255.25				
UNBUNDLED NETWORK ELEMENTS (UNES)								
Interconnection Tie Pairs (ITP)-Per Termination								
DS0 2-wire	ICB	ICB	$0.51				$0.00	$0.00
DS0 4-wire	ICB	ICB	$0.51				$0.00	$0.00
DS1 Per each Termination	ICB	ICB	$1.58				$0.00	$0.00
DS3 Per each Termination	ICB	ICB	$15.92				$0.00	$0.00
Unbundled Loops								
2 Wire Voice Grade		See Section 9.2.4			$21.98		$10.10	
Zone 1	$18.96		$23.07		$18.96		$7.34	
Zone 2	$34.94		$28.64		$34.94		$11.23	
Zone 3	$56.63		$42.14		$56.53		$32.06	
4 Wire Voice Grade		See Section 9.2.4			$22.90		$13.13	
Zone 1	$19.88		$46.63				$9.54	
Zone 2	$35.86		$57.76				$14.60	
Zone 3	$57.45		$84.76				$41.68	
Non-loaded Loops								
2 Wire Non-loaded Loop		See Sections 9.2.4 & 9.2.2.3						
Zone 1	$18.96		$23.07				$7.34	
Zone 2	$34.94		$28.64				$11.23	
Zone 3	$56.53		$42.14				$32.06	
4 Wire Non-loaded Loop		See Sections 9.2.4 & 9.2.2.3						
Zone 1	$19.88		$46.63				$9.54	
Zone 2	$35.86		$57.76				$14.60	
Zone 3	$57 45		$84.76				$41.68	
Cable Unloading/Bridge Tap Removal		$114.80		$649.98		$114.80		$0.00

AT&T/WORLDCOM/XO JOINT PRICING PROPOSAL

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	271		Testimony of		U-3021-96-448- et. al.		Worldcom/XO	
	All Rates		Maureen Arnold		Current Rates		Pricing Proposal	
	Exhibit A 2/12/2001		Exhibit MA-1A 4/16/01				Joint Proposal	
	Recurring	NRC	Recurring	NRC	Recurring	NRC	Recurring	NRC
Basic Rate ISDN /XDSL/ADSL Capable Loops		See Sections 9.2.4 & 9.2.2.3						
Zone 1	$18.96		$23.07				$7.34	
Zone 2	$34.94		$28.64				$11.23	
Zone 3	$56.53		$42.14				$32.06	
DS1 Capable Loop	$106.87	See Sections 9.2.5 & 9.2.2.3					$43.35	
Zone 1			$89.89				$42.37	
Zone 2			$90.46				$42.62	
Zone 3			$100.30				$47.07	
HDSL 4 Wire (DS1) - Equipped Loop							$33.69	
DS3 Capable Loop	$1,152.00	See Sections 9.2.5 & 9.2.2.3					$516.73	
Zone 1			$954.79				$479.23	
Zone 2			$967.83				$490.19	
Zone 3			$1,189.60				$648.11	
2 Wire Extension Technology	$6.75		$5.93		$6.75		$0.00	
DS0 - Loop Installation Charges	See recurring charge in Sections 9.2.1 - 9.2.3 above							
Basic Installation								
Residence 2-wire		$40.92		$87.91		$40.92		
Business - 2 wire		$45.92		$87.91		$45.92		
POTS/ISDN BRI Migration (UNE Loop)								$1.76
POTS/ISDN BRI Installation (UNE Loop)								$1.70
POTS/ISDN BRI Disconnect (UNE Loop)								$1.53
Residence 4-wire		$41.81		$87.91		$41.82		
Business 4-wire		$46.92		$87.91		$46.92		
4 Wire Migration (UNE Loop)								$18.42
4 Wire Install (UNE Loop)								$9.83
4 Wire Disconnect (UNE Loop)								$7.85
Each Additional Loop				$75.74				

AT&T/WORLDCOM/XO JOINT PRICING PROPOSAL

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	271		Testimony of		U-3021-96-448- et. al.		Worldcom/XO	
	All Rates		Maureen Arnold		Current Rates		Pricing Proposal	
	Exhibit A 2/12/2001		Exhibit MA-1A 4/16/01				Joint Proposal	
	Recurring	NRC	Recurring	NRC	Recurring	NRC	Recurring	NRC
Basic Installation with Performance Testing								
First Loop		$146.06		$191.45				
Each Additional Loop		$89.26		$137.36				
Coordinated Installation with Cooperative Testing								
First Loop		$238.09		$231.24				
Each Additional Loop		$197.97		$137.36				
Coordinated Installation without Cooperative Testing								
First Loop		$111.33		$94.96				
Each Additional Analog Loop		$94.31		$82.79				
Coordinated Installation with Cooperative Testing - No Dispatch								
First Loop		$214.88						
Each Additional Loop		$153.78						
Basic Installation with Cooperative Testing								
First Loop				$191.45				
Each Additional Loop				$137.36				
DS1 Loop Installation Charges	See recurring charges in Sections 9.2.1 - 9.2.3 above							
Basic Installation								
First Loop		$149.62		$143.52				$23.40
Each Additional Loop		$117.63		$110.31				
Migration								$32.27
Disconnect								$16.25
Basic Installation with Performance Testing								
First Loop		$341.96		$276.96				
Each Additional Loop		$286.80		$202.83				
Coordinated Installation with Cooperative Testing								
First Loop		$381.19		$316.75				
Each Additional Analog Loop		$325.44		$202.83				

AT&T/WORLDCOM/XO JOINT PRICING PROPOSAL

	(1)		(2)		(3)		(4)	
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	271		Testimony of		U-3021-96-448- et. al.		Worldcom/XO	
	All Rates		Maureen Arnold		Current Rates		Pricing Proposal	
	Exhibit A 2/12/2001		Exhibit MA-1A 4/16/01				Joint Proposal	
	Recurring	NRC	Recurring	NRC	Recurring	NRC	Recurring	NRC
Coordinated Installation without Cooperative Testing								
First Loop		$154.59		$152.59				
Each Additional Loop		$122.60		$119.37				
Basic Installation with Cooperative Testing								
First Loop				$276.96				
Each Additional Loop				$202.83				
DS3 Loop Installation Charges	See related monthly recurring charges in Sections 9.2.1 - 9.2.3 above							
Basic Installation								
First Loop		$149.62		$143.52				$17.89
Each Additional Loop		$117.63		$110.31				
Migration				-				$30.79
Disconnect								$10.06
Basic Installation with Performance Testing or w/cooperative testing								
First Loop		$341.96		$276.96				
Each Additional Loop		$286.80		$202.83				
Coordinated Installation with Cooperative Testing								
First Loop		$381.19		$316.75				
Each Additional Analog Loop		$325.44		$202.83				
Coordinated Installation without Cooperative Testing								
First Loop		$154.59		$152.59				
Each Additional Loop		$122.60		$119.37				
Basic Installation with Cooperative Testing								
First Loop				$276.96				
Each Additional Loop				$202.83				
Subloop								
2-Wire Non Loaded Distribution Loop	ICB	ICB						

AT&T/WORLDCOM/XO JOINT PRICING PROPOSAL

ATT Exhibit MH-1

	(1)		(2)		(3)		(4)	
	T-00000B-97-238		T-00000-00-0194		U-3021-96-448		Joint AT&T/	
	271		Testimony of		U-3021-96-448- et. al.		Worldcom/XO	
	All Rates		Maureen Arnold		Current Rates		Pricing Proposal	
	Exhibit A 2/12/2001		Exhibit MA-1A 4/16/01				Joint Proposal	
	Recurring	NRC	Recurring	NRC	Recurring	NRC	Recurring	NRC
2-Wire Analog Distribution Loop	$15.33	$119.19		$120.90	$15.33	BFR		
Zone 1			$15.85				$3.31	
Zone 2			$21.57				$6.64	
Zone 3			$35.23				$21.40	
Each Additional		$54.48		$55.26				
2 Wire Migration at the FDI								$20.86
2 Wire Disconnect at the FDI								$20.07
4-Wire Non Loaded Distribution Loop	ICB	ICB						
4-Wire Analog Distribution Loop	ICB	ICB						
Zone 1			$31.70				$4.30	
Zone 2			$43.14				$8.63	
Zone 3			$70.46				$27.82	
4 Wire Migration at the FDI								$56.77
4 Wire Disconnect at the FDI								$34.77
2-Wire Loop Feeder								
Zone 1							$0.80	
Zone 2							$1.15	
Zone 3							$4.16	
4-Wire Loop Feeder								
Zone 1							$1.04	
Zone 2							$1.50	
Zone 3							$5.41	
2-Wire Loop Concentration								
Zone 1							$2.78	
Zone 2							$2.98	
Zone 3							$6.04	
4-Wire Loop Concentration								
Zone 1							$3.61	
Zone 2							$3.87	
Zone 3							$7.85	
Building Cable		Under Development						
Intrabuilidng Cable Loop, Per Pair			$1.24					
On Premises Wire							$0.2955	

AT&T/WORLDCOM/XO JOINT PRICING PROPOSAL

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	271		Testimony of		U-3021-96-448- et. al.		Worldcom/XO	
	All Rates		Maureen Arnold		Current Rates		Pricing Proposal	
	Exhibit A 2/12/2001		Exhibit MA-1A 4/16/01				Joint Proposal	
	Recurring	NRC	Recurring	NRC	Recurring	NRC	Recurring	NRC
DS1 Capable Feeder Loop	$90.13	$375.40		$292.08				
DS1 Each Additional Capable Feeder Loop		$303.66		$218.54				
Zone 1			$77.43					
Zone 2			$78.01					
Zone 3			$87.85					
Channelized DS1 Virtual Feeder to RT Install								$17.81
Channelized DS1 Virtual Feeder to RT Disconnect								$13.88
OSS	ICB	ICB						
Trouble Isolation Charge		Under Development						
FDI Field Connection Point		ICB						
Field Connection Point								
Feasibility Fee/Quote Preparation Fee		$1,654.26		$1,631.67				$0.00
Construction Fee		ICB		ICB				$0.00
Line Sharing								
Shared Loop, per Loop	$5.00	$71.80	$5.00	$37.54				
OSS - Per Line - Per Month			$2.74					
OSS, per Order	Under Development							
Reclassification Charge		ICB		ICB				
Splitter Shelf Charge	$5.92	$584.11						
Splitter TIE Cable Connections								
Option 1A	$6.45	$3,894.22						
Option 1B	$6.69	$4,036.28						
Option 2A	$2.14	$1,292.66						
Option 2B	$3.83	$2,309.64						
Option 3A	$2.19	$1,322.85						
Option 3B	$4.49	$2,711.59						
POTS Splitter Options								
Splitter in the Common Area								
Data to 410 Block			$8.57	$3,175.97			$5.25	$2,847.60
Data Direct to CLEC			$8.99	$3,333.21			$5.51	$2,988.58
Splitter on the IDF								
Data to 410 Block			$2.73	$1,010.84			$1.67	$906.32
Data Direct to CLEC			$5.11	$1,892.62			$3.13	$1,696.93

AT&T/WORLDCOM/XO JOINT PRICING PROPOSAL

	(1)		(2)		(3)		(4)	
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	271		Testimony of		U-3021-96-448- et. al.		Worldcom/XO	
	All Rates		Maureen Arnold		Current Rates		Pricing Proposal	
	Exhibit A 2/12/2001		Exhibit MA-1A 4/16/01				Joint Proposal	
	Recurring	NRC	Recurring	NRC	Recurring	NRC	Recurring	NRC
Splitter on the MDF								
Data to 410 Block			$2.81	$1,039.82			$1.72	$923.31
Data Direct to CLEC			$6.03	$2,233.08			$3.69	$2,002.20
Additional Testing			See Misc. charges Section 9.2.7					
Splitter shelf charge			$6.63	$531.91			$5.17	$476.91
POTS Splitter Charge - Per Spjlitter			Pass through charge to CLEC					
Engineering		$1,328.07		$1,274.63				$571.42
Trouble Isolation Charge		Under Development						$0.00
Network Interface Device (NID)	$0.58	$30.00	$1.44	$68.49	$0.58	$30.00	$0.45	$38.68
Zone 1							$0.44	
Zone 2							$0.46	
Zone 3							$0.47	
Unbundled Dedicated Interoffice Transport (UDIT)								
DS0 UDIT		$293.55		$306.61				
DS0 Over 0 to 8 Miles - Fixed	$5.05		$20.93		$5.05		$12.40	
DS0 Over 0 to 8 Miles - per mile	$0.00		$0.14		$0.00		$0.06	
DS0 Over 8 to 25 Miles - Fixed	$5.05		$20.95		$5.05		$12.41	
DS0 Over 8 to 25 Miles - per mile	$0.00		$0.12		$0.00		$0.06	
DS0 Over 25 to 50 Miles - Fixed	$5.05		$20.99		$5.05		$12.43	
DS0 Over 25 to 50 Miles - per mile	$0.00		$0.13		$0.00		$0.05	
DS0 Over 50 Miles - Fixed	$5.05		$20.94		$5.05		$12.41	
DS0 Over 50 Miles - per mile	$0.00		$0.06		$0.00		$0.03	
DS1 UDIT		$302.91		$351.39				$7.60
DS1 Over 0 to 8 Miles - Fixed	$35.98		$33.05		$35.98		$21.22	
DS1 Over 0 to 8 Miles - per mile	$0.65		$1.56		$0.65		$0.86	
DS1 Over 8 to 25 Miles - Fixed	$35.99		$33.33		$35.99		$21.38	
DS1 Over 8 to 25 Miles - per mile	$0.94		$1.26		$0.94		$0.70	
DS1 Over 25 to 50 Miles - Fixed	$36.00		$33.81		$36.00		$21.66	
DS1 Over 25 to 50 Miles - per mile	$1.75		$2.28		$1.75		$1.27	
DS1 Over 50 Miles - Fixed	$36.00		$33.78		$36.00		$21.64	
DS1 Over 50 Miles - per mile	$1.51		$1.19		$1.59		$0.67	
DS1 Interoffice Transport - Disconnect								$0.53

AT&T/WORLDCOM/XO JOINT PRICING PROPOSAL

	(1)		(2)		(3)		(4)	
	T-00000B-97-238		T-00000-00-0194		U-3021-96-448		Joint AT&T/	
	271		Testimony of		U-3021-96-448- et. al.		Worldcom/XO	
	All Rates		Maureen Arnold		Current Rates		Pricing Proposal	
	Exhibit A 2/12/2001		Exhibit MA-1A 4/16/01				Joint Proposal	
	Recurring	NRC	Recurring	NRC	Recurring	NRC	Recurring	NRC
DS3 UDIT		$302.91		$351.39				$7.60
DS3 Over 0 to 8 Miles - Fixed	$243.17		$210.28		$243.17		$142.72	
DS3 Over 0 to 8 Miles - per mile	$13.32		$65.55		$13.32		$42.03	
DS3 Over 8 to 25 Miles - Fixed	$246.16		$213.45		$246.15		$142.69	
DS3 Over 8 to 25 Miles - per mile	$15.90		$20.30		$15.90		$13.70	
DS3 Over 25 to 50 Miles - Fixed	$250.66		$196.74		$250.66		$133.59	
DS3 Over 25 to 50 Miles - per mile	$22.91		$25.43		$22.91		$16.22	
DS3 Over 50 Miles - Fixed	$249.26		$207.61		$249.26		$140.93	
DS3 Over 50 Miles - per mile	$22.49		$17 49		$22.49		$11.00	
DS3 Interoffice Transport - Disconnect								$0.53
OC3 UDIT		$331.92		$351.39				
OC-3 Over 0 to 8 Miles - Fixed	$868.65		$794.64				$582.00	
OC-3 Over 0 to 8 Miles - per mile	$262.58		$252.46				$170.97	
OC-3 Over 8 to 25 Miles - Fixed	$875.83		$801.21				$586.30	
OC-3 Over 8 to 25 Miles - per mile	$75.28		$67.90				$47.12	
OC-3 Over 25 to 50 Miles - Fixed	$836.86		$765.56				$563.07	
OC-3 Over 25 to 50 Miles - per mile	$96.00		$92.37				$61.62	
OC-3 Over 50 Miles - Fixed	$867.72		$788.37				$577.92	
OC-3 Over 50 Miles - per mile	$60.02		$57.09				$36.76	
OC-12 UDIT		$331.92		$351.39				
OC-12 Over 0 to 8 Miles - Fixed	$2,457.02		$2,247.68				$1,665.13	
OC-12 Over 0 to 8 Miles - per mile	$88.38		$87.64				$54.45	
OC-12 Over 8 to 25 Miles - Fixed	$2,457.02		$2,247.68				$1,665.13	
OC-12 Over 8 to 25 Miles - per mile	$93.78		$85.54				$56.69	
OC-12 Over 25 to 50 Miles - Fixed	$2,457.02		$2,247.68				$1,665.13	
OC-12 Over 25 to 50 Miles - per mile	$100.38		$98.38				$61.35	
OC-12 Over 50 Miles - Fixed	$2,457.02		$2,247.68				$1,665.13	
OC-12 Over 50 Miles - per mile	$118.80		$115.44				$72.38	
Above OC-12 UDIT			ICB	ICB				
Common Transport per minute per leg					$0.00088			
Extended Unbundled Dedicated Interoffice Transport								

AT&T/WORLDCOM/XO JOINT PRICING PROPOSAL

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	271		Testimony of		U-3021-96-448- et. al.		Worldcom/XO	
	All Rates		Maureen Arnold		Current Rates		Pricing Proposal	
	Exhibit A 2/12/2001		Exhibit MA-1A 4/16/01				Joint Proposal	
	Recurring	NRC	Recurring	NRC	Recurring	NRC	Recurring	NRC
DS1 E-UDIT	$57.21	$68.86	$59.13	$409.62			$0.00	$0.00
DS3 E-UDIT	$227.61	$379.33	$335.36	$409.62			$0.00	$0.00
OC-3 E-UDIT	$1,022.12	$834.05	$734.07	$409.62			$0.00	$0.00
OC-12 E-UDIT	$1,358.64	$1,566.17	$1,377.93	$409.62			$0.00	$0.00
Above OC-12 E-UDIT			ICB	ICB			$0.00	$0.00
DS0 UDIT Low Side Channelization	$14.99							
Low Side Channel Performance			$13.90					
Low Side Channel Performance with Multiplexing			$8.87					
DS1/DS0 Low Side Channelization	$8.55	$231.47						
Multiplexing DS3 to DS1	$196.85	$164.00	$246.64		$196.85	$164.00		
Multiplexing DS1 to DS0	$200.08	$230.93	$229.32		$200.08			
UDIT M1-3 Multiplexing				$2,558.27				
UDIT MI-O Multiplexing High Side				$272.49				
UDIT M1-0 Multiplexing Low Side			$8.87	$238.79				
UDIT Rearrangement								
Single Office		$233.03		$175.49				
Dual Office		$260.02		$218.11				
High Capacity Single Office				$237.35				
High Capacity Dual Office				$264.86				
Unbundled Dark Fiber (UDF)								
Single Strand Increments (Available May 31, 2001)			Under Development	Under Development				
Initial Records Inquiry (IRI)								
Simple		$161.00		$158.80				
Complex		Under Development		$202.48				
Mid-Point Structure Inquiry (MPSI)		$205.28						
Field Verification and Quote Preparation (FVQP)		$1,499.33		$1,478.86				$0.00
Field Verification		Under Development		Under Development				$0.00
UDF-IOF Charges								
Order Charge per PR/Route/Order		$568.94		$561.17				
Order Charge ea Addl. Pr/Same Route		$248.67		$270.70				

AT&T/WORLDCOM/XO JOINT PRICING PROPOSAL

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	271		Testimony of		U-3021-96-448- et. al.		Worldcom/XO	
	All Rates		Maureen Arnold		Current Rates		Pricing Proposal	
	Exhibit A 2/12/2001		Exhibit MA-1A 4/16/01				Joint Proposal	
	Recurring	NRC	Recurring	NRC	Recurring	NRC	Recurring	NRC
Termination, Fixed per Pr./Office	$8.60							
Termination-Wire Center-2 Per Pair			$7.57					
Fiber Transport, per Mile	$88.75		$88.52					
Fiber Cross-Connect Per Pr.	$4.78	$21.76	$4.20	$21.46				$8.64
Fiber Disconnect								$9.44
UDF-Loop Charges								
Order Charge per Pr./Route/Order		$568.94		$561.17				
Order Charge ea Addl. Pr/Same Route		$248.67		$270.70				
Termination, Fixed Per Pr./Office	$7.85		$7.84					
Termination Fixed Per Pr./Prem.	$7.03		$6.97					
Fiber Transport, per Route/Per Pr.	$131.85							
UDF Loop - Per Fiber Loop			$122.02					
Fiber Cross-Connect Per Pr.	$4.78	$21.76	$4.20	$21.46				$8.64
Fiber Disconnect								$9.44
Extended Unbundled Dark Fiber (E-UDF)								
Order Charge per Pr./Route/Order		$568.04		$561.17				
Order Charge ea Addl. Pr.Same Route		$248.67		$270.70				
Termination, Fixed Per Pr./Office	$7.85							
Termination at Wire Center, 2 per Pair			$7.84					
Termination Fixed Per Pr./Prem.	$7.03		$6.97					
Fiber Transport, per Route/Per Pr.	$131.85							
E-UDF Fiber (Per pair)			$122.02					
Fiber Cross-Connect Per Pr.	$4.78	$21.76	$4.20	$21.46				
Shared Transport								
Per Minute of Use - TELRIC Based Rate	$0.0012008		$0.001573				$0.000074	
Unbundled Customer Controlled Rearrangement Element (UUCRE)								
DS1 Port	ICB	ICB	ICB	ICB				
DS3 Port	ICB	ICB	ICB	ICB				
Dial Up Access	ICB		ICB	ICB				
Attendant Access	ICB		ICB	ICB				
Virtual Ports		ICB	ICB	ICB				
Local Tandem Switching								

AT&T/WORLDCOM/XO JOINT PRICING PROPOSAL

	(1)		(2)		(3)		(4)	
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	271		Testimony of		U-3021-96-448- et. al.		Worldcom/XO	
	All Rates		Maureen Arnold		Current Rates		Pricing Proposal	
	Exhibit A 2/12/2001		Exhibit MA-1A 4/16/01				Joint Proposal	
	Recurring	NRC	Recurring	NRC	Recurring	NRC	Recurring	NRC
DS1 Local Message Trunk Port		$337.96	$59.28	$219.99			$41.50	$17.81
DS1 Local Message Trunk Port - Disconnect								$13.12
Trunk Group - First Trunk		$278.91		$210.14				
Message Trunk Group – Each Additional Trunk		$8.64						
DS1 Trunk Group-Each Additional Trunk-Per Order				$24.38				
Per minute of use	$0.0014		$0.002453		$0.0014		$0.00052	
Local Switching								
Local Switching - TELRIC Based Rates								
Analog Line Side Port, First Port	$1.61	$42.58	$1.33	$144.93	$1.61	$42.58	$0.90	$1.68
Analog Line Side Port, Each Additional	$0.00	$0.00	$1.33	$95.34				
Analog Line Side Port, Disconnect								$1.57
Local Usage, per Minute of Use	$0.0071		$0.002684		$0.0028		$0.00121	
Line Port (DS0, Analog, ISLU) Disconnect								
10XXX Direct Dialed Blocking			$0.08				$0.00	$0.00
Account Codes - per system			$7.56	$79.66			$0.00	$0.00
Attendant Access Line - per station line			$0.08	$1.15			$0.00	$0.00
Audible Message Waiting			$0.13	$1.01			$0.00	$0.00
Authorization Codes - per system			$3.25	$238.25			$0.00	$0.00
Auto Call Back			$0.08				$0.00	$0.00
Automatic Line			$0.07	$0.34			$0.00	$0.00
Automatic route selection - Common Equip per sys			$2.20	$2,090.41			$0.00	$0.00
Blocking of pay per call services			$0.10				$0.00	$0.00
Bridging			$0.07				$0.00	$0.00
Call Drop			$0.07	$0.34			$0.00	$0.00
Call Exclusion - Automatic			$0.07	$1.01			$0.00	$0.00
Call Exclusion - Manual			$0.07	$0.67			$0.00	$0.00
Call Forward Don't Answer - All Calls			$0.13				$0.00	$0.00
Call Forwarding Incoming Only			$0.08				$0.00	$0.00
Call Forwarding Intra Group Only			$0.08				$0.00	$0.00
Call Forwarding Variable Remote	$0.1128		$0.11				$0.00	$0.00
Call Forwarding Busy Line	$0.1386						$0.00	$0.00
Call Forwarding : Busy Line (Expanded)			$0.09				$0.00	$0.00
Call Forwarding : Busy Line (External)			$0.09				$0.00	$0.00

AT&T/WORLDCOM/XO JOINT PRICING PROPOSAL

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	271		Testimony of		U-3021-96-448- et. al.		Worldcom/XO	
	All Rates		Maureen Arnold		Current Rates		Pricing Proposal	
	Exhibit A 2/12/2001		Exhibit MA-1A 4/16/01				Joint Proposal	
	Recurring	NRC	Recurring	NRC	Recurring	NRC	Recurring	NRC
Call Forwarding : Busy Line (External) Don't Answer			$0.15				$0.00	$0.00
Call Forwarding : Busy Line (Overflow)			$0.09				$0.00	$0.00
Call Forwarding : Busy Line (Overflow) Don't Answer			$0.15				$0.00	$0.00
Call Forwarding : Busy Line (Programmable)			$0.10				$0.00	$0.00
CF Busy Line Don't Answer Programmable - Svc Establishment				$15.59			$0.00	$0.00
CF Busy Line Don't Answer Programmable - per line				$1.01			$0.00	$0.00
Call Forwarding : Busy Line Don't Answer (Expanded)			$0.15	$37.75			$0.00	$0.00
Call Forwarding Don't Answer	$0.1696		$0.13	$37.75			$0.00	$0.00
Call Forwarding : Don't Answer (Expanded)			$0.13				$0.00	$0.00
Call Forwarding Don't Answer (Programable)			$0.13				$0.00	$0.00
Call Forwarding: Variable	$0.1414		$0.10				$0.00	$0.00
Call Forwarding: Variable no call complete option			$0.10				$0.00	$0.00
Call Hold	$0.0568		$0.08				$0.00	$0.00
Call Hold/3-Way/Call Transfer			$0.33				$0.00	$0.00
Call Park (Basic - Store & Retrieve)	$0.1289		$0.09				$0.00	$0.00
Call Pickup	$0.0577		$0.08				$0.00	$0.00
Call Transfer	$0.2166		$0.33				$0.00	$0.00
Call Waiting Dial Originating			$0.08				$0.00	$0.00
Call Waiting Indication - per timing state			$0.47	$1.01			$0.00	$0.00
Call Waiting Originating			$0.09				$0.00	$0.00
Call Waiting Terminating - All Calls			$0.12				$0.00	$0.00
Call Waiting Terminating - Incoming Only			$0.12				$0.00	$0.00
Call Waiting/Cancel Call Waiting	$0.1330		$0.14				$0.00	$0.00
CENTREX Common Equipment				$1,200.97			$0.00	$0.00
CENTREX Management System (CMS)			$0.60				$0.00	$0.00
CENTREX Plus DID Numbers per number			$0.12				$0.00	$0.00
CENTREX Plus to CENTREX Plus			$5.49				$0.00	$0.00
CENTREX Plus to IC Carrier			$5.49				$0.00	$0.00
CENTREX Plus to PBX/Key Blocked			$5.49				$0.00	$0.00
CENTREX Plus to PBX/Key Non-Blocked			$5.49				$0.00	$0.00
CFBL - All Calls			$0.09				$0.00	$0.00
CBL - Incoming Only			$0.09	$37.75			$0.00	$0.00
CFDA Incoming Only			$0.08	$37.75			$0.00	$0.00
CLASS - Anonymous Call Rejection	$0.3937		$0.34				$0.00	$0.00
CLASS - Call Waiting ID	$0.0519		$0.11				$0.00	$0.00
CLASS - Calling Name & Number	$0.1915		$0.43				$0.00	$0.00

AT&T/WORLDCOM/XO JOINT PRICING PROPOSAL

ATT Exhibit MH-1

	(1)		(2)		(3)		(4)	
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	271		Testimony of		U-3021-96-448- et. al.		Worldcom/XO	
	All Rates		Maureen Arnold		Current Rates		Pricing Proposal	
	Exhibit A 2/12/2001		Exhibit MA-1A 4/16/01				Joint Proposal	
	Recurring	NRC	Recurring	NRC	Recurring	NRC	Recurring	NRC
CLASS - Calling Number Delivery	$0.0808		$0.10				$0.00	$0.00
CLASS - Calling Number Delivery Blocking	$0.3822		$0.35				$0.00	$0.00
CLASS - Continuous Redial	$0.5008		$0.30	$1.26			$0.00	$0.00
CLASS - Last Call Return	$0.4258		$0.10	$1.26			$0.00	$0.00
CLASS - Priority Calling	$1.0829		$0.19	$1.20			$0.00	$0.00
CLASS - Selective Call Forwarding	$0.9206		$0.17	$1.26			$0.00	$0.00
CLASS - Selective Call Rejection	$1.7651		$0.23	$1.20			$0.00	$0.00
Common Equipment per 1.544 mbps facility (DS1)			$60.34				$0.00	$0.00
Conference Calling - Meet Me			$14.60	$42.29			$0.00	$0.00
Conference Calling - Preset			$10.68	$42.29			$0.00	$0.00
Custom Ringing First Line (Short/Long/Short)			$0.09				$0.00	$0.00
Custom Ringing First Line (Short/Short)			$0.09				$0.00	$0.00
Custom Ringing First Line (Short/Short/Long)			$0.09				$0.00	$0.00
Custom Ringing Second Line (Short/Long/Short)			$0.09				$0.00	$0.00
Custom Ringing Second Line (Short/Short)			$0.09				$0.00	$0.00
Custom Ringing Second Line (Short/Short/Long)			$0.09				$0.00	$0.00
Custom Ringing Third Line (Short/Long/Short)			$0.08				$0.00	$0.00
Custom Ringing Third Line (Short/Short)			$0.08				$0.00	$0.00
Custom Ringing Third Line (Short/Short/Long)			$0.08				$0.00	$0.00
Data Call Protection (DMS 100)			$0.07				$0.00	$0.00
Dir Sta Sel/Busy Lamp Fld per arrangement			$1.83	$0.34			$0.00	$0.00
Directed Call Pickup with Barge-in			$0.18	$20.08			$0.00	$0.00
Directed Call Pickup without Barge-in			$0.10	$20.08			$0.00	$0.00
Distinctive Ring/Distinctive Call Waiting			$0.09	$40.14			$0.00	$0.00
Distinctive Ringing	$0.0797		$0.09				$0.00	$0.00
EBS - Set Interface - per station line			$1.44				$0.00	$0.00
Executive Busy Overide			$0.08				$0.00	$0.00
Expensive Route Warning Tone - per system			$0.07	$71.60			$0.00	$0.00
Facility Restriction Level - per system			$0.07	$44.05			$0.00	$0.00
Feature Display			$0.07				$0.00	$0.00
Group Intercom			$0.16	$0.45			$0.00	$0.00
Hot Line - per line			$0.13	$1.01			$0.00	$0.00
Hunting Multiposition Circular Hunting			$0.27				$0.00	$0.00
Hunting Multiposition Hunt Queuing			$0.23	$38.42			$0.00	$0.00
Hunting Multiposition Series Hunting			$0.27				$0.00	$0.00
Hunting Multiposition with Announcement in Queue			$3.20	$38.42			$0.00	$0.00

AT&T/WORLDCOM/XO JOINT PRICING PROPOSAL

ATT Exhibit MH-1

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	271		Testimony of		U-3021-96-448- et. al.		Worldcom/XO	
	All Rates		Maureen Arnold		Current Rates		Pricing Proposal	
	Exhibit A 2/12/2001		Exhibit MA-1A 4/16/01				Joint Proposal	
	Recurring	NRC	Recurring	NRC	Recurring	NRC	Recurring	NRC
Hunting Multiposition with Music in Queue			$1.14	$40.57			$0.00	$0.00
Incoming Calls Barred			$0.08				$0.00	$0.00
International direct Dial Blocking			$0.09				$0.00	$0.00
ISDN Short Hunt			$0.58	$1.69			$0.00	$0.00
Line Side Answer Supervision			$0.09				$0.00	$0.00
Loudspeaker Paging - per trunk group			$21.96	$175.77			$0.00	$0.00
Make Busy Arrangements - per group			$0.36	$0.67			$0.00	$0.00
Make Busy Arrangements - per line			$0.15	$0.67			$0.00	$0.00
Message Center - per main station line			$0.07	$0.34			$0.00	$0.00
Message Waiting Indication A/V	$0.0662		$0.13				$0.00	$0.00
Message Waiting Visual			$0.13	$0.34			$0.00	$0.00
Music On Hold - per system			$22.87	$23.03			$0.00	$0.00
Network Speed Call			$0.07				$0.00	$0.00
Night Service Arrangement			$0.08				$0.00	$0.00
Outgoing Calls Barred			$0.08				$0.00	$0.00
Outgoing Trunk Queuing			$0.13				$0.00	$0.00
Privacy Release			$0.08	$0.47			$0.00	$0.00
Query Time			$0.25	$0.34			$0.00	$0.00
Speed Calling 1 Digit Controller			$0.08				$0.00	$0.00
Speed Calling 1 Digit User			$0.08				$0.00	$0.00
Speed Calling 1# List Individual			$0.08				$0.00	$0.00
Speed Calling 2 Digit Controller			$0.08				$0.00	$0.00
Speed Calling 2 Digit User			$0.08				$0.00	$0.00
Speed Calling 2# List Individual			$0.08				$0.00	$0.00
Speed Calling 30 Number			$0.08				$0.00	$0.00
Speed Calling 8 Number			$0.08				$0.00	$0.00
Speed Call Long-Customer Change	$0.0654						$0.00	$0.00
Station Camp-On Service - per main station			$8.51	$0.34			$0.00	$0.00
Station Dial Conferencing (6 way)	$1.0508		$1.71				$0.00	$0.00
Station Message Detail Recording (SMDR)			$0.18				$0.00	$0.00
Three Way Calling	$0.0963		$0.33				$0.00	$0.00
Time and Date Display			$0.18				$0.00	$0.00
Time of Day Control for ARS - per system			$0.07	$125.28			$0.00	$0.00
Time of Day NCOS Update			$0.08	$0.54			$0.00	$0.00
Time of Day Routing - per line			$0.13	$0.51			$0.00	$0.00
Toll Restriction Service			$0.08				$0.00	$0.00

AT&T/WORLDCOM/XO JOINT PRICING PROPOSAL

ATT Exnibit MH-1

	(1)		(2)		(3)		(4)	
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	271		Testimony of		U-3021-96-448- et. al.		Worldcom/XO	
	All Rates		Maureen Arnold		Current Rates		Pricing Proposal	
	Exhibit A 2/12/2001		Exhibit MA-1A 4/16/01				Joint Proposal	
	Recurring	NRC	Recurring	NRC	Recurring	NRC	Recurring	NRC
Trunk Answer Any Station			$0.08				$0.00	$0.00
Trunk Verification from Designated Station			$0.07	$0.39			$0.00	$0.00
UCD in Hunt Group - per line			$8.23	$0.67			$0.00	$0.00
UCD with Music After Delay			$5.45				$0.00	$0.00
CMS - System Establishment - Initial Installation				$967.37			$0.00	$0.00
CMS - System Establishment - Subsequent Installation				$483.69			$0.00	$0.00
CMS - Packet Control Capability, per System				$483.69			$0.00	$0.00
SMDR-P - Service Establishment Charge, Initial Installation				$337.82			$0.00	$0.00
SMDR-P Archived Data				$176.52			$0.00	$0.00
Class - Call Trace (per occurrence)				$2.40			$0.00	$0.00
Feature Changes								$0.28
Subsequent Order Charge		$12.75		$13.51				
Digital Line Side Port (Supporting BRI ISDN)								
First Port and each additional port	$13.73	$277.13	$11.19	$218.41				
DS0 Analog Trunk Port	ICB	ICB						
First Port		$120.33	$16.98	$122.58	$1.61	$42.58	$0.90	$1.68
Each Additional		$27.93	$16.98	$28.45				
Digital Trunk Ports								
DS1 Local Message Trunk Port		$337.96	$59.28				$41.50	$17.81
DS1 Local Message Trunk Port - Disconnect								$13.12
Message Trunk Group, First Trunk		$278.91		$208.23				
Message Trunk Group, Each Additional		$8.64		$50.62				
DS1 PRI ISDN Trunk Port	$289.94	$680.85	$238.22	$645.72				
DS1 DID Trunk Port			$3.52	$211.81				
Local Switching - Market Based Rates								
Analog Line Side Port, First Port	Under Developmnet						$0.00	$0.00
Each Additional Port (ordered concurrently with an unbundled loop)	Under Developmnet						$0.00	$0.00
Vertical Features	Under Developmnet						$0.00	$0.00
Call Hold	Under Developmnet						$0.00	$0.00

AT&T/WORLDCOM/XO JOINT PRICING PROPOSAL

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	271		Testimony of		U-3021-96-448- et. al.		Worldcom/XO	
	All Rates		Maureen Arnold		Current Rates		Pricing Proposal	
	Exhibit A 2/12/2001		Exhibit MA-1A 4/16/01				Joint Proposal	
	Recurring	NRC	Recurring	NRC	Recurring	NRC	Recurring	NRC
Call Transfer	Under Developmnet						$0.00	$0.00
Three Way Calling	Under Developmnet						$0.00	$0.00
Call Pickup	Under Developmnet						$0.00	$0.00
Call Waiting/Cancel Call Waiting	Under Developmnet						$0.00	$0.00
Distinctive Ringing	Under Developmnet						$0.00	$0.00
Speed Call Long - Customer Change	Under Developmnet						$0.00	$0.00
Station Dial Conferencing (6-way)	Under Developmnet						$0.00	$0.00
Call Forwarding Busy Line	Under Developmnet						$0.00	$0.00
Call Forwarding Don't Answer	Under Developmnet						$0.00	$0.00
Call Forwarding Variable	Under Developmnet						$0.00	$0.00
Call Forwarding Variable Remote	Under Developmnet						$0.00	$0.00
CLASS - Call Waiting ID	Under Developmnet						$0.00	$0.00
CLASS - Calling Name & Number	Under Developmnet						$0.00	$0.00
CLASS - Calling Number Delivery	Under Developmnet						$0.00	$0.00
CLASS - Calling Number Delivery Blocking	Under Developmnet						$0.00	$0.00
CLASS - Continuous Redial	Under Developmnet						$0.00	$0.00
CLASS - Last Call Return	Under Developmnet						$0.00	$0.00
CLASS - Priority Calling	Under Developmnet						$0.00	$0.00
CLASS - Selective Call Forwarding	Under Developmnet						$0.00	$0.00
CLASS - Selective Call Rejection	Under Developmnet						$0.00	$0.00
CLASS - Anonymous Call Rejection	Under Developmnet						$0.00	$0.00
Call Park (Store & Retrieve)	Under Developmnet						$0.00	$0.00

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	271		Testimony of		U-3021-96-448- et. al.		Worldcom/XO	
	All Rates		Maureen Arnold		Current Rates		Pricing Proposal	
	Exhibit A 2/12/2001		Exhibit MA-1A 4/16/01				Joint Proposal	
	Recurring	NRC	Recurring	NRC	Recurring	NRC	Recurring	NRC
Message Waiting Indication A/V	Under Developmnet						$0.00	$0.00
Subsequent Order Charge		Under Development						
Digital Line Side Port (Supporting BRI ISDN)	Under Development							
First Port		Under Development						
Each Additional Port		Under Development						
Digital Trunk Ports								
DS1 Local Message Trunk Port		Under Development						
DS1 Digital Trunk, Install								
DS1 Digital Trunk, Disconnect								
Message Trunk Group, First Trunk		Under Development						
Message Trunk Group, Each Additional		Under Development						
DS1 PRI ISDN Trunk Port		Under Development						
Customized Routing								
Development of Custom Line Class Code-DA or OS Routing Only		ICB		ICB				
Installation Charge, per Switch-DA or OS Routing Only		ICB		ICB				
All Other Custom Routing	ICB	ICB	ICB	ICB				
Common Channel Signaling/SS7								
Entrance Facility DS1, Electrical					$89.42	$560.88		
Subsequent						$560.88		
Entrance Facility DS3, Electrical					$357.16			
Direct Link Transport								
DS1 - over 0 to 8					$35.98	$0.65		
DS1 - over 8 to 25					$35.99	$0.94		
DS1 - over 25 to 50					$36.00	$1.75		
DS1 - over 50					$36.00	$1.59		
DS3 - over 0 to 8					$243.17	$13.32		

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	271		Testimony of		U-3021-96-448- et. al.		Worldcom/XO	
	All Rates		Maureen Arnold		Current Rates		Pricing Proposal	
	Exhibit A 2/12/2001		Exhibit MA-1A 4/16/01				Joint Proposal	
	Recurring	NRC	Recurring	NRC	Recurring	NRC	Recurring	NRC
DS3 - over 8 to 25					$246.15	$15.90		
DS3 - over 25 to 50					$250.66	$22.91		
DS3 - over 50					$249.26	$22.49		
Multiplexing								
DS1 to DS0					$200.08			
DS3 to DS1					$196.85			
CCSAC STP Port	$425.00	ICB	$260.09	$438.36				
CCSAC Options Activation Charge								
Basic Translations								
First Activation, per order		$107.17		$114.83				
Each Additional Activation, per		$7.32		$9.53				
CCSAC Options Database Translations								
First Activation per order		$121.82		$133.90				
Each additional Activation per order		$43.95		$57.20				
Signal Formulation, ISUP, Per Call Set-Up Requ	$0.00198		$0.0020817					
Signal Transport, ISUP, Per Call Set-Up Request	$0.00145		$0.0013398					
Signal Transport, TCAP, per Data Request	$0.00047		$0.0002974					
Signal Switching, ISUP, Per Call Set-Up Request	$0.00146		$0.0009411					
Signal Switching, TCAP, Per Data Request	$0.00048		$0.0005910					
STP per message					$0.00005		$0.00005	
SCP per message					$0.00100		$0.00020	
CCS Link - First Link						$464.94		
CCS Link - Each Additional Link						$147.60		
Signaling Link								
First Link, DSO					$24.85		$27.45	$22.21
Additional Link, DS0					$24.85			
SS7 Links (DS0) Disconnect								$6.33
SS7 Links (DS1) Install								$20.94
SS7 Links (DS1) Disconnect								$5.73
SS7 STP global title translations 'A Link' only Install								$27.69
SS7 STP global title translations 'A Link' only Disconnect								$27.69
SS7 STP message transfer part 'A Link' only (port) Install								$19.63
SS7 STP message transfer part 'A Link' only (port) Disconnect								$18.82

AT&T/WORLDCOM/XO JOINT PRICING PROPOSAL

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	271		Testimony of		U-3021-96-448- et. al.		Worldcom/XO	
	All Rates		Maureen Arnold		Current Rates		Pricing Proposal	
	Exhibit A 2/12/2001		Exhibit MA-1A 4/16/01				Joint Proposal	
	Recurring	NRC	Recurring	NRC	Recurring	NRC	Recurring	NRC
Advanced Intelligent Network (AIN)								
AIN Customized Services (ACS)		ICB		ICB				
AIN Platform Access (APA)	ICB	ICB	ICB	ICB				
AIN Query Processing, per Query	ICB		ICB					
Line Information Database (LIDB)								
LIDB Storage		No Charge		No Charge				
Line Validation Administration System Access (LVAS)		ICB		ICB				
LIDB Line Record Initial Load								
Up to 20,000 Line Records		$2,601.00		$2,601.00				
Over 20,000 Line Records		ICB		ICB				
Mechanized Service Account Update, per Addition or Updat	ICB			ICB				
Individual Line Record Audit		ICB		ICB				
Account Group Audit		ICB		ICB				
Expedited Request Charge for Manual Updates		ICB		ICB				
LIDB Query Service, per Query	$0.003540		$0.0009621	See 9.13.2.2				
Fraud Alert Notification, per Alert	No Charge		No Charge	-				
8XX Database Query Service								
Basic Query, per Query	$0.000949		$0.02000723	See 9.13.2.2				
POTS Translation	$0.000001		$0.00000057					
Call Handling & Destination Feature	$0.000004		$0.00000172					
ICNAM, Per Query	$0.016		$0.000849	See 9.13.2.2				
Construction Charges	ICB	ICB		ICB			$0.00	$0.00
Miscellaneous Elements								
Additional Engineering – Basic		$29.76		$31.70			$0.00	$0.00
Additional Engineering – Overtime		$38.41		$39.21			$0.00	$0.00
Additional Labor Installation – Overtime		$8.46		$9.01			$0.00	$0.00
Additional Labor Installation – Premium		$16.93		$18.02			$0.00	$0.00
Additional Labor Other – Basic		$25.97		$27.63			$0.00	$0.00
Additional Labor Other – Overtime		$34.78		$36.90			$0.00	$0.00
Additional Labor Other – Premium		$43.55		$46.19			$0.00	$0.00
Testing and Maintenance – Basic		$27.58		$29.35			$0.00	$0.00
Testing and Maintenance – Overtime		$36.90		$39.21			$0.00	$0.00
Testing and Maintenance – Premium		$46.23		$49.06			$0.00	$0.00

AT&T/WORLDCOM/XO JOINT PRICING PROPOSAL

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	All Rates		Maureen Arnold		Current Rates		Pricing Proposal	
	Exhibit A 2/12/2001		Exhibit MA-1A 4/16/01				Joint Proposal	
	Recurring	NRC	Recurring	NRC	Recurring	NRC	Recurring	NRC
Maintenance of Service – Basic		$25.97		$27.63			$0.00	$0.00
Maintenance of Service – Overtime		$34.76		$36.90			$0.00	$0.00
Maintenance of Service – Premium		$43.55		$46.19			$0.00	$0.00
Additional COOP Acceptance Testing – Basic		$27.58		$29.35			$0.00	$0.00
Additional COOP Acceptance Testing – Overtime		$36.90		$39.21			$0.00	$0.00
Additional COOP Acceptance Testing – Premium		$46.23		$49.06			$0.00	$0.00
NonScheduled COOP Testing - Basic		$27.58		$29.35			$0.00	$0.00
NonScheduled COOP Testing – Overtime		$36.90		$39.21			$0.00	$0.00
NonScheduled COOP Testing – Premium		$46.23		$49.06			$0.00	$0.00
NonScheduled Manual Testing – Basic		$27.58		$29.35			$0.00	$0.00
NonScheduled Manual Testing – Overtime		$36.90		$39.21			$0.00	$0.00
NonScheduled Manual Testing – Premium		$46.23		$49.06			$0.00	$0.00
Cooperative Scheduled Testing – Loss				$0.08			$0.00	$0.00
Cooperative Scheduled Testing – C-Message Noise				$0.08			$0.00	$0.00
Cooperative Scheduled Testing – Balance				$0.33			$0.00	$0.00
Cooperative Scheduled Testing – Gain Slope				$0.08			$0.00	$0.00
Cooperative Scheduled Testing – C-Notched Noise				$0.08			$0.00	$0.00
Manual Scheduled Testing – Loss				$0.17			$0.00	$0.00
Manual Scheduled Testing – C-Message Noise				$0.17			$0.00	$0.00
Manual Scheduled Testing – Balance				$0.66			$0.00	$0.00
Manual Scheduled Testing – Gain Slope				$0.17			$0.00	$0.00
Manual Scheduled Testing – C-Notched Noise				$0.17			$0.00	$0.00
Additional Dispatch		$82.17		$84.23			$0.00	$0.00
Date Change		$12.70		$10.36			$0.00	$0.00
Design Change		$58.67		$73.78			$0.00	$0.00
Expedite Charge		ICB		ICB			$0.00	$0.00
Cancellation Charge		ICB		ICB			$0.00	$0.00
Channel Regeneration								
DS1 Regeneration			$9.45	$480.05			$0.00	$0.00
DS3 Regeneration			$34.16	$1,807.55			$0.00	$0.00
UNE Platform								
UNE-P Platform Pots New/Existing								
New								
Mechanized, First		$68.72						
Mechanized, Each Additional		$17.67						
Manual, First		$84.78						
Manual, Each Additional		$19.04						

AT&T/WORLDCOM/XO JOINT PRICING PROPOSAL

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	271		Testimony of		U-3021-96-448- et. al.		Worldcom/XO	
	All Rates		Maureen Arnold		Current Rates		Pricing Proposal	
	Exhibit A 2/12/2001		Exhibit MA-1A 4/16/01				Joint Proposal	
	Recurring	NRC	Recurring	NRC	Recurring	NRC	Recurring	NRC
Existing								
Mechanized, First		$7.57						
Mechanized, Each Additional		$1.42						
Manual, First		$16.74						
Manual, Each Additional		$2.79						
UNE-P New Connection								
UNE-P POTS Mechanized, First				$55.31				
UNE-P POTS Mechanized, Each Additional				$15.87				
UNE-P POTS Manual, First				$82.11				
UNE-P POTS Manual, Each Additional				$18.44				
UNE-P Conversion								
UNE-P POTS,CENTREX, PAL, PBX								
Mechanized, First		Under Development		$0.68				$0.28
Mechanized, Each Additional		Under Development		$0.14				
Migration								$0.28
Disconnect								$0.28
UNE-P POTS,CENTREX, PAL, PBX								
Manual,First		Under Development		$16.21				
Manual, Each Additional		Under Development		$2.70				
UNE-P PBX DID								
First		Under Development		$20.61				
Each Additional		Under Development		$3.12				
UNE-P ISDN BRI								
First		Under Development		$15.09				$0.28
Each Additional		Under Development		$3.12				
Migration								$0.28
Disconnect								$0.28
UNE-P ISDN PRI, DSS per DS1 Facility		Under Development		$51.00				
UNE-P ISDN PRI, DSS Trunk								

AT&T/WORLDCOM/XO JOINT PRICING PROPOSAL

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	All Rates		Maureen Arnold		Current Rates		Pricing Proposal	
	Exhibit A 2/12/2001		Exhibit MA-1A 4/16/01				Joint Proposal	
	Recurring	NRC	Recurring	NRC	Recurring	NRC	Recurring	NRC
First		Under Development		$18.77				
Each Additional		Under Development		$3.12				
UNE-Combination Private Line								
DS0/DS1/DS3/OCN/Integrated T-1 Existing Service		Under Development		$40.87				
Enhanced Extended Loop (EEL)								
EEL Link								
DS0 2-Wire		$305.93		$249.10				
DS0, Each Additional				$217.86				
Zone 1	$18.96						$7.34	
Zone 2	$34.94						$11.23	
Zone 3	$56.53						$32.06	
DS0 4-Wire		$305.93						
Each Additional		$213.97						
Zone 1	$19.88						$9.54	
Zone 2	$35.86						$14.60	
Zone 3	$57.45						$41.68	
DS1	$106.87	$355.72		$306.85			$43.35	
Zone 1							$42.37	
Zone 2							$42.62	
Zone 3							$47.07	
Each Additional		$246.52		$261.17				
DS3	$1,152.00	$380.43		$331.21			$516.73	
Zone 1							$479.23	
Zone 2							$490.19	
Zone 3							$648.11	
Each Additional		$271.22		$285.53				
EEL C		$41.43						
EEL Transport								
DS0 EEL Transport				$306.61				$6.50
DS0 Over 0 to 8 Miles - Fixed	$5.05		$20.93				$12.40	
DS0 Over 0 to 8 Miles - per mile	$0.00		$0.14				$0.06	
DS0 Over 8 to 25 Miles - Fixed	$5.05		$20.95				$12.41	
DS0 Over 8 to 25 Miles - per mil	$0.00		$0.12				$0.06	

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	All Rates		Maureen Arnold		Current Rates		Pricing Proposal	
	Exhibit A 2/12/2001		Exhibit MA-1A 4/16/01				Joint Proposal	
	Recurring	NRC	Recurring	NRC	Recurring	NRC	Recurring	NRC
DS0 Over 25 to 50 Miles - Fixed	$5.05		$20.99				$12.43	
DS0 Over 25 to 50 Miles - per m	$0.00		$0.13				$0.05	
DS0 Over 50 Miles - Fixed	$5.05		$20.94				$12.41	
DS0 Over 50 Miles - per mile	$0.00		$0.06				$0.03	
Migration								$18.88
Disconnect								$5.98
DS1 EEL Transport				$351.39				$6.79
DS1 Over 0 to 8 Miles - Fixed	$35.98		$33.05				$21.22	
DS1 Over 0 to 8 Miles - per mile	$0.65		$1.56				$0.86	
DS1 Over 8 to 25 Miles - Fixed	$35.99		$33.33				$21.38	
DS1 Over 8 to 25 Miles - per mil	$0.94		$1.26				$0.70	
DS1 Over 25 to 50 Miles - Fixed	$36.00		$33.81				$21.66	
DS1 Over 25 to 50 Miles - per m	$1.75		$2.28				$1.27	
DS1 Over 50 Miles - Fixed	$36.00		$33.78				$21.64	
DS1 Over 50 Miles - per mile	$1.59		$1.19				$0.67	
Migration								$19.12
Disconnect								$6.56
DS3 EEL Transport				$351.39				
DS3 Over 0 to 8 Miles - Fixed	$243.17		$210.28				$142.72	
DS3 Over 0 to 8 Miles - per mile	$13.32		$65.55				$42.03	
DS3 Over 8 to 25 Miles - Fixed	$246.15		$213.45				$142.69	
DS3 Over 8 to 25 Miles - per mil	$15.90		$20.30				$13.70	
DS3 Over 25 to 50 Miles - Fixed	$250.66		$196.74				$133.59	
DS3 Over 25 to 50 Miles - per m	$22.91		$25.43				$16.22	
DS3 Over 50 Miles - Fixed	$249.26		$207.61				$140.93	
DS3 Over 50 Miles - per mile	$22.49		$17.49				$11.00	
Multiplexing								
Multiplexing DS1 to DS0	$200.08	$230.93	$229.32	$267.45			$160.52	$187.22
Multiplexing DS3 to DS1	$196.85	$164.00	$246.64	$267 45			$172.65	$187.22
DS1 Transport Mux				$257.04				
DS3 Transport Mux				$257.04				
DS0 Channel Performance								
DS0 Low Side Channelization	$14.99		$13.90					
DS1/DS0 MUX, Low Side Channelization	$8.55		$8.87	$238.79				

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	Recurring	NRC	Recurring	NRC	Recurring	NRC	Recurring	NRC
Concentration Capability	ICB	ICB	ICB					
Unbundled Packet Switching								
Customer Channel			$24.39					
Customer Channel and Shared Distribution Loop				$59.87				
Customer Channel and Unbundled Distribution Loop				$126.62				
Customer Channel and CLEC ProvidedLoop				$59.87				
DSLAM	ICB	ICB						
Virtual Transport	ICB	ICB						
Unbundled Packet Switch Loop Capability	ICB	ICB						
Unbundled Packet Switch Interface Port								
DS3 Interface	ICB	ICB	$216.14	$226.51				
DS1 Interface	ICB	ICB	$140.24	$226.51				
Unbundled Pack Switch DSLAM Functionality	ICB	ICB	$21.09					
[illegible]								
[illegible]			New York Method					
Number Ported		$4.47						
Service Establishment per route, per switch		$20.65				$20.65		
Service Establishment, Per Ported Number						$4.47		
Service Establishment , additional number ported or changes to existing number, per number ported		$3.32				$3.32		
Coordinated Out of Hours Cut – Non-Sunday/Holiday		$59.73 per hr. per person						
Coordinated Out of Hours Cut – Sunday/Holiday		$73.74 per hr. per person						
[illegible]								
LNP Queries	See Qwest FCC Tariff # 1		See FCC Tariff #1 20.3.1 & 20.3.3.					
LNP Managed Cuts								
Standard Managed Cuts per person per 1/2 hour				$27.31				
Overtime Managed Cuts per person per 1/2 hour				$35.43				
Premium Managed Cust per person per 1/2 hour				$43.49				
[illegible]	No Charge		No Charge					
[illegible]								

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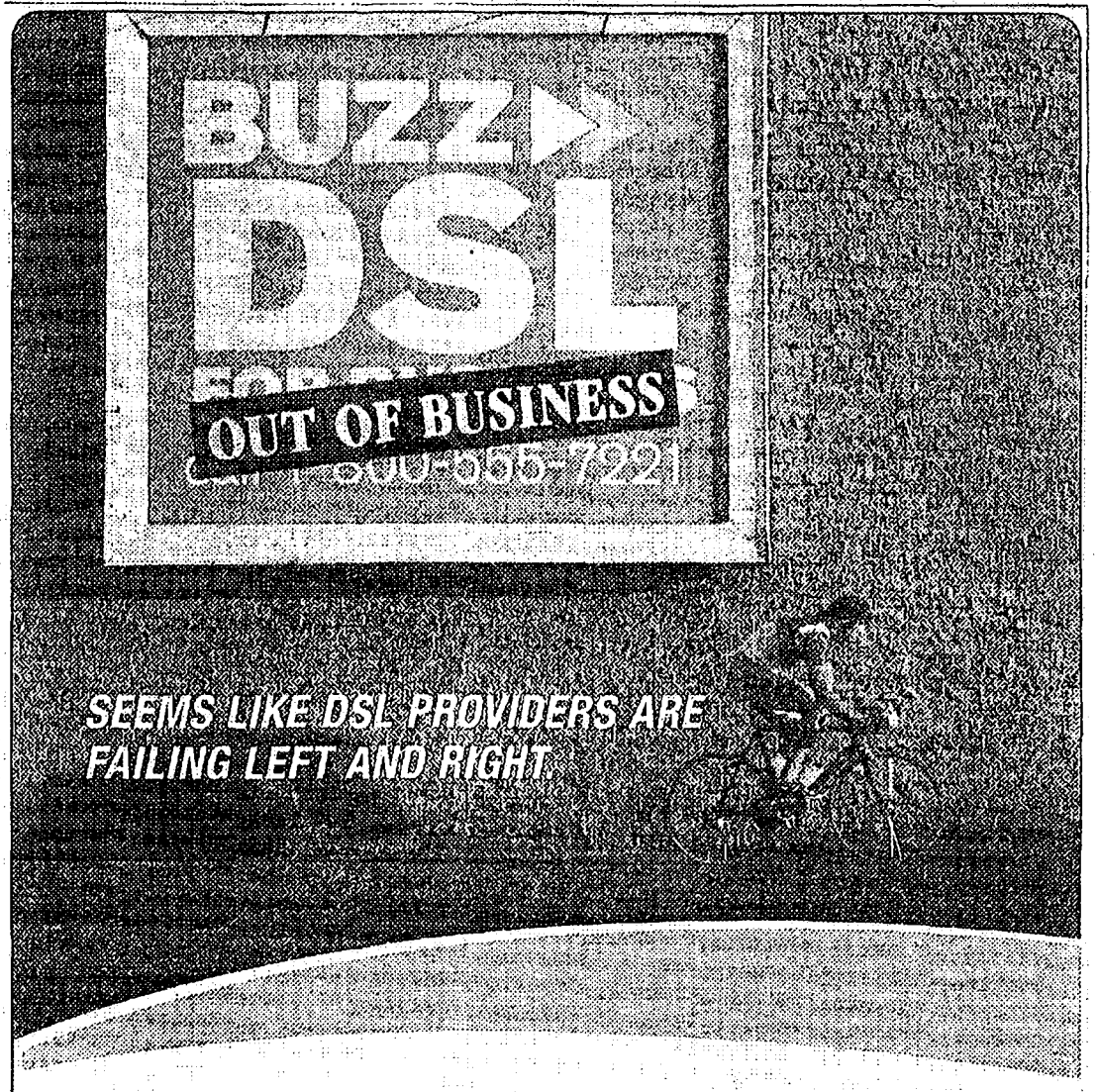
	Recurring	NRC	Recurring	NRC	Recurring	NRC	Recurring	NRC
Primary Listing	No Charge		No Charge					
Premium/Privacy Listings	Exc Tar rates, less wholesale disc		Exc Tar rates, less wholesale disc					
Directory Assistance: Facility Based Providers								
Local Directory Assistance, per Call	$0.34		$0.34			$0.28		
National Directory Assistance, per Call	$0.360		$0.385					
Call Branding, Set- Up and Recording		$10,500.00		$10,500.00				
Loading Brand /Per Switch		$175.00		$175.00				
Call Completion Link, per call	$0.09		$0.085					
Directory Assistance List Information								
Initial Database Load per Listing	$0.025		$0.025					
Reload of Database, per Listing	$0.020		$0.020					
Daily Updates, per Listing	$0.500		$0.025					
One-time Set-Up Fee, per Hour	$75.24			$82.22				
Media Charges for File Delivery								
Electronic Transmission	$0.002		$0.0010					
Tapes (charges only apply if this is selected as t	$30.00/tape		$30.00					
Shipping Charges (for tape delivery)	ICB		ICB					
Toll and Assistance - Operator Services: Facility Based Providers								
Option A - per message								
Operator Handled Calling Card	$1.45		$0.36					
Machine Handled Calling Card	$0.60		$0.46					
Station Call	$1.50		$0.18					
Person Call	$3.50		$0.84					
Connect to Directory Assistance	$0.75		$2.05					
Busy Line Verify, per call	$1.95		$0.55		$0.72			
Busy Line Interrupt	$2.05		$0.72		$0.87			
Operator Assistance, per call	$0.50		$0.87					
Option B - per operator work section and computer handled calls								
Operator Handled, per Operator Work Second	$0.028		$0.0181					
Machine Handled, per call	$0.25		$0.13					
Call Branding, Set-Up & Recording		$10,500.00		$10,500				
Loading Brand/Per Switch		$175.00		$175				

AT&T/WORLDCOM/XO JOINT PRICING PROPOSAL

	(1)		(2)		(3)		(4)	
	T-00000B-97-238		T-00000-00-0194		U-3021-96-448		Joint AT&T/	
	271		Testimony of		U-3021-96-448- et. al.		Worldcom/XO	
	All Rates		Maureen Arnold		Current Rates		Pricing Proposal	
	Exhibit A 2/12/2001		Exhibit MA-1A 4/16/01				Joint Proposal	
	Recurring	NRC	Recurring	NRC	Recurring	NRC	Recurring	NRC
Access to Qwest's Poles, Conduit and Rights of Way								
Pole Inquiry Fee, per Mile		$326.04		$321.59				
Innerduct Inquiry Fee, per Mile		$391.91		$386.56				
ROW Inquiry Fee				$142.86				
ROW Document Preparation				$142.86				
Field Verification Fee, pr Pole		$36.21		$35.72				$0.00
Field Verification Fee, per Manhole		$470.74		$464.31				$0.00
Planner Verification, per Manhole				$15.93				$0.00
Manhole Verification Inspector, per Manhole				$285.73				$0.00
Manhole Make Ready Inspector, per Manhole				$428.59				
Make-Ready Work, per Foot Innerduct		$3.00						
Pole Attachment Fee, per Foot, per Year	$4.29		$4.34					
Innerduct Occupancy Fee, per Foot, per Year	$0.36		$0.37					
Operational Support Systems								
Development & Enhancements, per Order		Under Development						
Ongoing Maintenance, per Order	Under Development							
Daily Usage Record File, per Record	$0.001100		$0.0007616					
Trouble Isolation Charge		Section 13 Qwest's AZ Exchange & Network Services Catalog	Section 13 Qwest's AZ Exchange & Network Services Catalog					
Bona Fide Request Process								
Processing Fee		$2,128.00		$2,400.07			$0.00	$0.00

NOTE - Rates developed using the current Qwest wire centers. Qwest is in the process of selling 38 wire centers. Once the sale is complete rates will need to be adjusted.

EXHIBIT ATT-MH-2



MAKE SURE YOURS ISN'T ONE OF THEM.

Qwest DSL Pro Deluxe™ $50	FIRST 60 DAYS FREE FREE activation $100 modem mail-in rebate
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ride the light

Qwest.

Qwest DSL Pro Deluxe™ is $50.00 a month and may not be compatible with all computer configurations; other high speed line products also available. Most Qwest Service Offices are DSL equipped; availability depends on your distance from the Service Office and technical phone line qualifications. Home phone lines will not be 640K capable due to distance from the Service Office; other technical phone line qualifications may prevent you from receiving the maximum 640K speed. Charges for telephone line, external modem and Internet Access Provider are additional. Free offer is a waiver of non recurring activation fee and first two months of service fee. Rebate is in the form of a $100 check issued 1-6 weeks after the customer returns coupon sent after 90 days of service with purchase of an Intel 2100 internal modem or a Cisco 678 external modem. Offer is for new customers only and is not valid with any other offers and expires 3/31/01. Other restrictions and limitations apply. ©2001 Qwest Communications International Inc.

CERTIFICATE OF SERVICE

I certify that the original and 10 copies of the Testimony of Michael Hydock on behalf of AT&T Communications of the Mountain States, Inc., WorldCom, Inc., and XO Arizona, Inc. in Docket No. T-00000A-00-0194 were sent by overnight delivery on May 17, 2001 to:

Arizona Corporation Commission
Docket Control - Utilities Division
1200 West Washington Street
Phoenix, AZ 85007

and a true and correct copy was sent by overnight delivery on May 17, 2001 to:

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BEFORE THE ARIZONA CORPORATION COMMISSION

WILLIAM A. MUNDELL
Chairman
JAMES M. IRVIN
Commissioner
MARC SPITZER
Commissioner

IN THE MATTER OF INVESTIGATION INTO U S WEST COMMUNICATIONS, INC.'S COMPLIANCE WITH CERTAIN WHOLESALE PRICING REQUIREMENTS FOR UNBUNDLED NETWORK ELEMENTS AND RESALE DISCOUNTS	)	**DOCKET NO. T-00000A-00-0194** **NOTICE OF FILING SUMMARY TESTIMONY OF MICHAEL HYDOCK**

AT&T Communications of the Mountain States, Inc., WorldCom, Inc., and XO Arizona, Inc., hereby provides Notice of Filing Summary Testimony of Michael Hydock.

DATED this 25th day of July, 2001.

DAVIS WRIGHT TREMAINE LLP

By _____

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EXHIBIT
AT&T/WorldCom
admitted 15

Summary of Michael Hydock's Testimony
AT&T/WorldCom/XO
ACC Docket No. T-00000A-00-0194, Phase II

Mr. Hydock provides a summary of the specific pricing proposals that AT&T, WorldCom and XO ("Joint Intervenors") are making for services and elements at issue in this proceeding. Mr. Hydock's testimony serves to frame the Joint Intervenors' case with respect to pricing and policy analysis. Mr. Hydock summarizes the Joint Intervenors' case and provides the pricing recommendations that follow from the technical witnesses' analyses. Mr. Hydock also discusses the appropriate pricing and policy framework the ACC should follow with respect to this case. Specifically, Mr. Hydock's testimony recommends:

1) The ACC must require Qwest to provide cost-based loop rates that reflect all current information and updated information since the ACC first reviewed these rates in 1997. Factors such as capacity utilization, more refined cost input factors, capital structure factors, Qwest/U S WEST merger efficiencies, and other issues as described in my testimony and in the testimony of Mr. Weiss must be used to update Qwest's UNE prices. These factors have been incorporated into the Joint Intervenor's proposed loop and other UNE rates. The Joint Intervenors estimate that such a reduction will result in a rate for the UNE loop that is approximately 50% percent lower than that adopted in the prior cost proceeding. The current statewide average loop rate of $21.98 has not and will not lead to the development of any significant competition in Arizona.

2) True deaveraging must be implemented for Qwest's loop prices in the course of this docket. Current structures for deaveraging permit Qwest to charge CLECs the same rate for a loop, regardless whether that loop is in downtown Phoenix, close-in suburbs, or in less densely populated areas in the Phoenix valley. Most of Qwest's access lines in Arizona are in cities and suburban areas. The deaveraged zones must allow for meaningful competition, by basing prices on the proper cost distribution.

3) The proposed collocation costs and price/rate structures of Qwest need to be re-designed and lowered. Qwest has included costs in the nonrecurring rate element that are excessive, inefficient, and result in discriminatory prices for collocators.

4) Non-recurring charges must be based on forward-looking efficient practices, not on unreasonable inefficient practices as assumed in the Qwest non-recurring cost estimates.

An updated price list incorporating these recommendations is attached as Exhibit MH-1R.

Testimony of Michael Hydock
ACC Docket No. T-00000A-00-0194
Exhibit MH-1R
(Revised Exhibit MH-1)

AT&T/WORLDCOM/XO JOINT PRICING PROPOSAL

	(2) T-00000A-00-0194 Testimony of Maureen Arnold				(4) Revised Joint AT&T/ Worldcom/XO	
	Exhibit MA-1A 4/16/01		Exhibit MA-1R2 7/17/01		Joint Proposal	
	Recurring	NRC	Recurring	NRC	Recurring	NRC
INTERCONNECTION						
Entrance Facilities						
DS1	$92.18	$218.84	$86.70	$219.79	$0.00	$0.00
DS3	$486.15	$414.26	$458.43	$416.07	$0.00	$0.00
Direct Trunked Transport						
DS0						
DS0 Over 0 to 8 Miles - Fixed					$12.40	
DS0 Over 0 to 8 Miles - per mile					$0.06	
DS0 Over 8 to 25 Miles - Fixed					$12.41	
DS0 Over 8 to 25 Miles - per mile					$0.06	
DS0 Over 25 to 50 Miles - Fixed					$12.43	
DS0 Over 25 to 50 Miles - per mile					$0.05	
DS0 Over 50 Miles - Fixed					$12.41	
DS0 Over 50 Miles - per mile					$0.03	
DS1 Over 0 to 8 Miles - Fixed	$33.05		$31.14		$21.22	
DS1 Over 0 to 8 Miles - per mile	$1.56		$1.45		$0.86	
DS1 Over 8 to 25 Miles - Fixed	$33.33		$31.40		$21.38	
DS1 Over 8 to 25 Miles - per mile	$1.26		$1.18		$0.70	
DS1 Over 25 to 50 Miles - Fixed	$33.81		$31.87		$21.66	
DS1 Over 25 to 50 Miles - per mile	$2.28		$2.14		$1.27	
DS1 Over 50 Miles - Fixed	$33.78		$31.83		$21.64	
DS1 Over 50 Miles - per mile	$1.19		$1.12		$0.67	
DS3 Over 0 to 8 Miles - Fixed	$210.28		$197.32		$142.72	
DS3 Over 0 to 8 Miles - per mile	$65.55		$61.17		$42.03	
DS3 Over 8 to 25 Miles - Fixed	$213.45		$200.35		$142.69	
DS3 Over 8 to 25 Miles - per mile	$20.30		$18.78		$13.70	
DS3 Over 25 to 50 Miles - Fixed	$196.74		$184.41		$133.59	
DS3 Over 25 to 50 Miles - per mile	$25.43		$23.73		$16.22	
DS3 Over 50 Miles - Fixed	$207.61		$194.79		$140.93	
DS3 Over 50 Miles - per mile	$17.49		$16.34		$11.00	
Multiplexing						
DS3 to DS1 per system	$246.64	$267.45	$232.15	$268.62	$172.65	$187.22
Local Traffic						
End office call termination, per minute of use	$0.002207		$0.002143		$0.00121	
Tandem Switched Transport						
Tandem switching, per minute of use	$0.001653		$0.001589		$0.00052	

AT&T/WORLDCOM/XO JOINT PRICING PROPOSAL

	(2) T-00000A-00-0194 Testimony of Maureen Arnold				(4) Revised Joint AT&T/ Worldcom/XO Joint Proposal	
	Exhibit MA-1A 4/16/01		Exhibit MA-1R2 7/17/01			
	Recurring	NRC	Recurring	NRC	Recurring	NRC
Tandem Transmission						
Over 0 to 8 Miles - Fixed, per mou	$0.000485		$ 0.0004560		$0.000340	
Over 0 to 8 Miles - per mile	$0.000045		$ 0.0000428		$0.000032	
Over 8 to 25 Miles - Fixed, per mou	$0.000494		$ 0.0004650		$0.000346	
Over 8 to 25 Miles - per mile	$0.000023		$ 0.0000212		$0.000016	
Over 25 to 50 Miles - Fixed, per mou	$0.000477		$ 0.0004480		$0.000334	
Over 25 to 50 Miles - per mile	$0.000012		$ 0.0000109		$0.000008	
Over 50 Miles - Fixed, per mou	$0.000461		$ 0.0004330		$0.000323	
Over 50 Miles - per mile	$0.000004		$ 0.0000039		$0.000003	
Trunk Nonrecurring Charges						
DS1 Interface, First Trunk		$353.67		$355.22		$7.60
DS1 Interface, Each Additional Trunk		$5.90		$5.93		
DS1 Disconnect						$0.53
DS3 Interface, First Trunk		$360.45		$362.03		$7.60
DS3 Interface, Each Additional Trunk		$12.69		$12.75		
DS3 Disconnect						$0.53
DS1 Trunk Rearrangement						
First Trunk		$176.84		$177.61		
Each Additional Trunk		$2.95		$2.97		
DS3 Trunk Rearrangement						
First Trunk		$180.23		$181.02		
Each Additional Trunk		$6.35		$6.38		
Miscellaneous Charges						
Expedite Charge (LIS Trunks)	Section 5.2.2 + LIS Nonrecurring Charges		Section 5.2.2 + LIS Nonrecurring Charges		$0.00	$0.00
Cancellation Charge (LIS Trunks)	Section 5.2.3 + LIS Nonrecurring Charges		Section 5.2.3 + LIS Nonrecurring Charges		$0.00	$0.00
Construction Charges	ICB - See SGAT Section 19.0		ICB		$0.00	$0.00
IntraLATA Toll Traffic	Qwest's AZ Switched Access Tariff		Qwest's AZ Switched Access Tariff			
Transit Traffic						
Exchange Service (EAS/Local) Transit						
Local Transit Assumed Mileage	9 Miles		9 Miles			
IntraLATA Toll	Qwest's AZ Switched Access Tariff		Qwest's AZ Switched Access Tariff			
IntraLATA Toll Assumed Mileage	9 Miles		9 Miles			
Jointly Provided Switched Access	Qwest's AZ Switched Access Tariff		Qwest's AZ Switched Access Tariff			
Category 11 Mechanized Record Charge, per Record	$0.001819		$0.001827			
Local Transit	See Tandem Switching & Tandem Transmission Rates					
LIS EICT (when used for collocation)						
DS1	$10.24	$161.70	$0.00	$0.00	$0.00	$0.00
DS3	$47.99	$357.12	$0.00	$0.00	$0.00	$0.00

AT&T/WORLDCOM/XO JOINT PRICING PROPOSAL

	(2) T-00000A-00-0194 Testimony of Maureen Arnold				(4) Revised Joint AT&T/ Worldcom/XO	
	Exhibit MA-1A 4/16/01		Exhibit MA-1R2 7/17/01		Joint Proposal	
	Recurring	NRC	Recurring	NRC	Recurring	NRC
Interconnection Tie Pairs (ITP) (Optional)						
Per DS1	$1.58				$0.00	
Per DS3	$15.92				$0.00	
Channel Regeneration (Optional)						
DS1 Regeneration	$9.45	$480.05				$0.00
DS3 Regeneration	$34.16	$1,807.55				$0.00
COLLOCATION						
ALL COLLOCATION						
Quote Preparation Fee					$0.00	$857.13
Augment QPF					$0.00	$214.28
Collocation Entrance Facility, per fiber pair						
Standard per Fiber pair	$15.17	$1,232.89	$16.01	$627.99	$8.16	$736.94
Cross Connect per Fiber	$22.75	$1,658.09	$16.17	$735.39	$12.23	$991.10
Express per Cable	$240.26	$8,783.09	$276.84	$9,198.71	$129.83	$5,249.97
Element Group 1, per fiber pair						
Entrance Facility - Element Group 2						
Manhole, per Month, per Manhole						
Handhold, per Month, per Handhold						
Conduit/Innerduct POI to vault, per foot						
Core drill, per occurrence						
Riser, vault to equipment, per foot						
Fiber Optic cable, per 24, per fott						
Fiber placement in conduit & riser, per foot						
Copper 25 pair, per foot						
Copper placement conduit & reser, per foot						
Coax placement, per foot						
Cable Splicing						
Fiber - Per Set-Up		$474.74		$476.82		$425.66
Per Fiber Spliced		$37.95		$38.12		$34.03
Per Splice - Copper						
-48 Volt DC Power Usage, per Ampere, per Month						
Power Plant, per amp <60 amps	$11.36		$10.94		$10.85	
>60 amps					$7.18	
=60 amps					$8.46	
Power Usage Less Than 60 Amps, per Amp	$3.69		$3.70		$3.31	
Power Usage More Than 60 Amps, per Amp	$7.37		$7.41		$6.61	

AT&T/WORLDCOM/XO JOINT PRICING PROPOSAL

	(2) T-00000A-00-0194 Testimony of Maureen Arnold				(4) Revised Joint AT&T/ Worldcom/XO	
	Exhibit MA-1A 4/16/01		Exhibit MA-1R2 7/17/01		Joint Proposal	
	Recurring	NRC	Recurring	NRC	Recurring	NRC
AC Power Feed (Backup Power)						
AC Power Feed – per Amp, per Month						
120 V	$19.26		$19.03		$16.62	
208 V, Single Phase	$33.38		$32.98		$28.80	
208 V, Three Phase	$57.75		$57.06		$49.83	
240 V, Single Phase	$38.52		$38.06		$33.23	
240 V, Three Phase	$66.64		$65.84		$57.49	
480 V, Three Phase	$133.28		$131.68		$114.99	
-48 Volt DC Power Cable, per foot Per A & B Feeder						
20 Amp Feed						
40 Amp Feed						
60 Amp Feed						
100 Amp Feed						
200 Amp Feed						
300 Amp Feed						
400 Amp Feed						
AC Power Feed, per Watt, per Month						
AC Power Feed, per foot per A&B Feeder						
20 Amp, Single Phase	$0.0146	$7.98	$0.0117	$8.02	$0.0109	$7.16
20 Amp, Three Phase	$0.0181	$9.90	$0.0145	$9.94	$0.0135	$8.87
30 Amp, Single Phase	$0.0157	$8.61	$0.0126	$8.64	$0.0117	$7.72
30 Amp, Three Phase	$0.0216	$11.82	$0.0173	$11.87	$0.0161	$10.60
40 Amp, Single Phase	$0.0185	$10.12	$0.0149	$10.16	$0.0138	$9.07
40 Amp, Three Phase	$0.0254	$13.93	$0.0204	$13.99	$0.0189	$12.49
50 Amp, Single Phase	$0.0219	$12.01	$0.0176	$12.06	$0.0163	$10.76
50 Amp, Three Phase	$0.0306	$16.76	$0.0246	$16.84	$0.0228	$15.03
60 Amp, Single Phase	$0.0248	$13.58	$0.0199	$13.63	$0.0185	$12.17
60 Amp, Three Phase	$0.0352	$19.29	$0.0283	$19.38	$0.0266	$17.30
100 Amp, Single Phase	$0.0307	$16.81	$0.0247	$16.88	$0.0229	$15.07
100 Amp, Three Phase	$0.0479	$26.24	$0.0385	$26.36	$0.0357	$23.53

AT&T/WORLDCOM/XO JOINT PRICING PROPOSAL

	(2) T-00000A-00-0194 Testimony of Maureen Arnold				(4) Revised Joint AT&T/ Worldcom/XO	
	Exhibit MA-1A 4/16/01		Exhibit MA-1R2 7/17/01		Joint Proposal	
	Recurring	NRC	Recurring	NRC	Recurring	NRC
Inspector Labor, per Half Hour						
Regular Hours Rate		$31.18		$32.03		$28.60
After Hours Rate, minimum 3 hours		$38.96		$41.25		$36.82
Interconnection Tie Pairs (ITP)						
Per DS1	$1.58				$1.28	
Per DS3	$15.92				$12.91	
EICT Channel Termination						
2 wire					$0.00	$0.00
4 wire					$0.00	$0.00
DS1 EICT					$0.00	$0.00
DS3 EICT					$0.00	$0.00
Channel Regneration						
DS1 Regeneraton	$9.45	$480.05	$1.97	$480.53	$0.00	$0.00
DS3 Regeneration	$34.16	$1,807.55	$6.09	$1,817.89	$0.00	$0.00
Collocation Terminations - DS0						
Block Termination						
Per Termination						
Cable Placement per 100 Pair Block, OR	$0.5701	$243.35	$0.48	$244.42	$0.4327	$218.19
Cable Placement per Termination	$0.0107	$4.57	$0.01	$4.59	$0.0081	$4.09
Cable per 100 Pair Block, OR	$0.7333	$313.03	$0.62	$314.40	$0.5567	$280.66
Cable per Termination	$0.0100	$4.29	$0.01	$4.31	$0.0076	$3.84
Blocks per 100 Pair Block, OR	$1.2786	$545.80	$1.08	$548.18	$0.7897	$398.15
Blocks per Termination	$0.00175	$7.48	$0.01	$7.51	$0.0108	$5.45
Block Placement Per 100 Pair Block, OR	$0.5913	$252.40	$0.50	$253.50	$0.4488	$226.30
Block Placement per Termination	$0.0081	$3.46	$0.01	$3.47	$0.0061	$3.10
Collocation Terminations - DS1						
Block Termination						
Per Termination						
Cable Placement per 28 DS1s, OR	$0.7386	$404.75	$0.59	$406.52	$0.5504	$362.90
Cable Placement per Termination	$0.0794	$43.52	$0.06	$43.71	$0.0592	$39.02
Cable per 28 DS1s, OR	$0.6594	$361.38	$0.53	$362.96	$0.4914	$324.02
Cable per Termination	$0.0709	$38.86	$0.06	$39.03	$0.0528	$34.84
Panel per 28 DS1s , OR	$0.7525	$412.86	$0.61	$414.16	$0.5607	$369.72
Panel per Termination	$0.0908	$49.78	$0.07	$50.00	$0.0677	$44.63
Panel Placement per 28 DS1s, OR	$0.1576	$86.36	$0.13	$86.74	$0.1174	$77.43
Panel Placement per Termination	$0.0169	$9.29	$0.01	$9.33	$0.0126	$8.33

AT&T/WORLDCOM/XO JOINT PRICING PROPOSAL

	(2) T-00000A-00-0194 Testimony of Maureen Arnold				(4) Revised Joint AT&T/ Worldcom/XO	
	Exhibit MA-1A 4/16/01		Exhibit MA-1R2 7/17/01		Joint Proposal	
	Recurring	NRC	Recurring	NRC	Recurring	NRC
Collocation Terminations - DS3						
Block Termination						
Per Termination						
Cable Placement per Termination	$0.3007	$164.79	$0.24	$165.51	$0.2241	$147.75
Cable per Termination	$0.4258	$233.36	$0.34	$234.38	$0.3173	$209.23
Panel/Connector per Termination	$0.4388	$240.45	$0.35	$241.50	$0.3270	$215.58
Panel/Connector Placement per Termination	$0.0453	$24.81	$0.04	$24.92	$0.0337	$22.24
Security						
Per Employee, per Card	$0.87		$0.86		$0.77	
Card Access Per employee, per Office	$8.07		$7.90		$7.01	
Central Office Security Infrastructure			ICB	ICB		
Central Office Clock Synchronization						
Synchronization – Composite Clock, per Port	$7.70		$7.42		$6.25	
Space Availability Report						
Per Office		$333.55		$335.01		
Space Reservation		25% of collocation charge		25% of collocation charge		
Space Option	Under Development		Under Development	Under Development		

AT&T/WORLDCOM/XO JOINT PRICING PROPOSAL

	(2) T-00000A-00-0194 Testimony of Maureen Arnold				(4) Revised Joint AT&T/ Worldcom/XO	
	Exhibit MA-1A 4/16/01		Exhibit MA-1R2 7/17/01		Joint Proposal	
	Recurring	NRC	Recurring	NRC	Recurring	NRC
VIRTUAL						
Quote Preparation Fee		$4,380.68		$4,399.84		$857.13
Inspector Labor, per Half Hour						
Regular Hours Rate						$28.60
After Hours Rate						$36.82
Maintenance Labor, per Half Hour						
Regular Hours Rate		$27.97		$28.10		$25.08
After Hours Rate		$37.43		$37.60		$33.56
Training Labor, per Half Hour						
Regular Hours Rate		$27.97		$28.10		$25.08
Equipment Bay -recurring, per Shelf	$3.75		$3.61		$3.16	
Engineering Labor, per Half Hour						
Regular Hours Rate		$30.18		$32.03		$27.06
After Hours Rate		$38.96		$41.25		$34.93
Installation Labor, per Half Hour						
Regular Hours Rate		$31.89		$30.31		$28.60
After Hours Rate		$41.07		$39.13		$36.82
Floor Space Lease, per Square Foot	$3.96		$3.69		$2.87	
Zone 1						
Zone 2						
Zone 3						
48 Volt DC Power Cables						
20A Power Feed, per feed	$10.09	$5,528.47	$8.11	$5,552.65	$7.47	$4,923.58
30A Power Feed, per feed	$11.53	$6,316.35	$9.27	$6,343.97	$8.44	$5,567.14
40A Power Feed, per feed	$14.06	$7,706.09	$11.31	$7,739.80	$9.85	$6,491.53
60A Power Feed, per feed	$17.54	$9,613.92	$14.11	$9,655.97	$12.04	$7,935.89
CAGELESS COLLOCATION						
Quote Preparation Fee		$4,380.68		$4,399.84		$857.13

AT&T/WORLDCOM/XO JOINT PRICING PROPOSAL

	(2) T-00000A-00-0194 Testimony of Maureen Arnold				(4) Revised Joint AT&T/ Worldcom/XO	
	Exhibit MA-1A 4/16/01		Exhibit MA-1R2 7/17/01		Joint Proposal	
	Recurring	NRC	Recurring	NRC	Recurring	NRC
Space Construction						
5 year payments (recurring for 5 yrs)					$48.23	
On-going maintenance					$3.06	
Each additional bay beyond two (recurring for 5 yrs)					$6.74	
On-going maintenance for additional bays					$0.43	
Space Construction (Standard 40 Amp Power Feed)						
2 Bays and 1 - 40A Power Feed	$54.42	$29,823.10	$43.77	$29,953.55		
Adjustment for 20A Initial Power Feed	($3.97)	($2,177.62)	($3.20)	($2,187.15)		
Adjustment for 30A Initial Power Feed	($2.54)	($1,389.75)	($2.04)	($1,395.83)		
Adjustment for 40A Initial Power Feed	Included in Space Construction					
Adjustment for 60A Initial Power Feed	$3.48	$1,907.82	$2.80	$1,916.17		
Adjustment for Each Additional Bay	$5.52	$6,024.83	$4.44	$3,038.06		
Each Additional 20A Power Feed	$10.09	$5,628.47	$8.11	$5,552.65	$7.47	$4,923.58
Each Additional 30A Power Feed	$11.53	$6,316.35	$9.27	$6,343.97	$8.44	$5,567.14
Each Additional 40A Power Feed	$14.06	$7,706.09	$11.31	$7,739.80	$9.85	$6,491.53
Each Additional 60A Power Feed	$17.54	$9,613.92	$14.11	$9,655.97	$12.04	$7,953.89
Floor Space Lease, per Square Foot	$3.96		$3.69		$2.87	
Zone 1						
Zone 2						
Zone 3						
CAGED COLLOCATION Quote Preparation Fee		$4,763.06		$4,783.90		$857.13
Space Construction (Standard 60 Amp Power Feed)						
Site Preparation						
Cage- Up to 100 Sq. Ft 5 yr payments	$94.30	$51,675.14	$75.84	$51,901.16	$84.71	
maintenance					$5.37	
Cage- 101- 200 Sq. Ft 5 yr payments	$97.85	$53,623.79	$78.70	$53,858.34	$99.83	
maintenance					$6.33	
Cage- 201- 300 Sq. Ft 5 yr payments	$100.62	$55,139.10	$80.92	$55,380.28	$111.11	
maintenance					$7.04	
Cage- 301- 400 Sq. Ft 5 yr payments	$104.08	$5,708.08	$83.71	$57,287.56	$120.25	
maintenance					$7.62	
Adjustment for 20A Initial Power Feed	($15.14)	($8,444.49)	($12.39)	($8,481.43)		

AT&T/WORLDCOM/XO JOINT PRICING PROPOSAL

	(2) T-00000A-00-0194 Testimony of Maureen Arnold				(4) Revised Joint AT&T/ Worldcom/XO Joint Proposal	
	Exhibit MA-1A 4/16/01		Exhibit MA-1R2 7/17/01			
	Recurring	NRC	Recurring	NRC	Recurring	NRC
Adjustment for 30A Initial Power Feed	($14.03)	($7,687.98)	($11.28)	$7,721.61		
Adjustment for 40A Initial Power Feed	($11.14)	($6,106.39)	($8.96)	($6,133.10)		
Adjustment for 100A Initial Power Feed	$17.06	$9,348.19	$13.72	$9,389.08		
Adjustment for 200A Initial Power Feed	$54.46	$29,843.97	$43.80	$29,974.50		
Adjustment for 300A Initial Power Feed	$99.92	$54,756.39	$80.36	$54,995.90		
Adjustment for 400A Initial Power Feed	$153.68	$84,219.54	$123.60	$84,587.92		
Each Additional 20A Power Feed	$12.73	$6,973.86	$10.24	$7,004.36		
Each Additional 30A Power Feed	$14.11	$7,730.36	$11.35	$7,764.18		
Each Additional 40A Power Feed	$16.99	$9,311.95	$13.67	$9,352.68		
Each Additional 60A Power Feed	$28.14	$15,418.34	$22.63	$15,485.78		
Each Additional 100A Power Feed	$45.19	$24,766.54	$36.35	$24,874.87		
Each Additional 200A Power Feed	$82.59	$45,262.31	$66.43	$45,460.29		
Each Additional 300A Power Feed	$128.05	$70,174.74	$102.99	$70,481.68		
Each Additional 400A Power Feed	$181.82	$99,637.89	$146.23	$100,073.71		
20A Power Feed					$9.42	$6,213.88
30A Power Feed					$10.34	$6,818.67
40A Power Feed					$11.92	$7,860.61
60A Power Feed					$18.86	$12,435.06
100A Power Feed					$30.17	$19,889.62
200A Power Feed					$59.69	$39,357.31
300A Power Feed					$92.93	$61,272.79
400A Power Feed					$129.03	$85,076.72
Engineering						$6,454.35
Augment Engineering						$3,227.17
Floor Space Lease, per Square Foot	$3.96		$3.69			$2.87
Rent w/maintenance per foot zone 1						
Rent w/maintenance per foot zone 2						
Rent w/maintenance per foot zone 3						
Grounding						
2/0 AWG - per Foot	$0.0230	$12.59	$0.02	$12.65	$0.0146	$9.60
1/0 AWG - per Foot	$0.0382	$20.96	$0.03	$21.05	$0.0250	$16.48
4/0 AWG - per Foot	$0.0435	$23.81	$0.03	$23.92	$0.0279	$18.38
350 kcmil - per Foot	$0.0603	$33.04	$0.05	$33.18	$0.0428	$28.22
500 kcmil - per Foot	$0.0672	$36.81	$0.05	$36.97	$0.0461	$30.42
750 kcmil – per Foot	$0.1029	$56.40	$0.08	$56.65	$0.0745	$48.09

AT&T/WORLDCOM/XO JOINT PRICING PROPOSAL

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	Exhibit MA-1A 4/16/01		Exhibit MA-1R2 7/17/01		Joint Proposal	
	Recurring	NRC	Recurring	NRC	Recurring	NRC
Humidification per Leased Physical Space						
ICDF COLLOCATION	See Note 1	See Note 1	ICB	ICB		
ADJACENT &ADJACENT REMOTE COLLOCATION	ICB	ICB	ICB	ICB		
REMOTE COLLOCATION	ICB	ICB	Under Development	Under Development		
CLEC-to-CLEC Connections						
CLEC to CLEC Quote Preparation Fee						
Design Engineering & Installation – No Cables		$1,353.22		$791.63		$641.89
Cable Racking (Per Foot)						
DS0	$0.17316		$0.17261		$0.15324	
DS1	$0.18388		$0.18290		$0.16211	
DS3	$0.15906		$0.15906		$0.14155	
Virtual Connections (Connections only; No Cables)						
DS0 (Per 100 Connections)		$223.03		$224.01		$199.97
DS1 (Per 28 Connections)		$101.73		$102.17		$91.21
DS3 (Per 1 Connection)		$8.80		$8.84		$7.89
Cable Hole (if Applicable)		$425.99		$442.49		$381.95
CLEC to CLEC Cross-Connection		$255.25		$256.37		
UNBUNDLED NETWORK ELEMENTS (UNES)						
Interconnection Tie Pairs (ITP)–Per Termination						
DS0 2-wire	$0.51		$0.48		$0.00	$0.00
DS0 4-wire	$0.51				$0.00	$0.00
DS1 Per each Termination	$1.58		$1.52		$0.00	$0.00
DS3 Per each Termination	$15.92		$15.33		$0.00	$0.00

AT&T/WORLDCOM/XO JOINT PRICING PROPOSAL

	(2) T-00000A-00-0194 Testimony of Maureen Arnold				(4) Revised Joint AT&T/ Worldcom/XO	
	Exhibit MA-1A 4/16/01		Exhibit MA-1R2 7/17/01		Joint Proposal	
	Recurring	NRC	Recurring	NRC	Recurring	NRC
Unbundled Loops						
2 Wire Voice Grade					$10.10	
Zone 1	$23.07		$16.89		$7.34	
Zone 2	$28.64		$22.57		$11.23	
Zone 3	$42.14		$34.34		$32.06	
Unbundled Loop Grooming (2 wire)			$1.59			
4 Wire Voice Grade					$13.13	
Zone 1	$46.63		$33.76		$9.54	
Zone 2	$57.76		$45.12		$14.60	
Zone 3	$84.76		$68.66		$41.68	
Unbundled Loop Grooming (4 wire)			$3.64			
Non-loaded Loops						
2 Wire Non-loaded Loop						
Zone 1	$23.07		$16.89		$7.34	
Zone 2	$28.64		$22.57		$11.23	
Zone 3	$42.14		$34.34		$32.06	
4 Wire Non-loaded Loop						
Zone 1	$46.63		$33.76		$9.54	
Zone 2	$57.76		$45.12		$14.60	
Zone 3	$84.76		$68.66		$41.68	
Cable Unloading/Bridge Tap Removal		$649.98		$652.83		$0.00
Basic Rate ISDN /XDSL/ADSL Capable Loops						
Zone 1	$23.07		$16.89		$7.34	
Zone 2	$28.64		$22.57		$11.23	
Zone 3	$42.14		$34.34		$32.06	
DS1 Capable Loop					$43.35	
Zone 1	$89.89		$84.48		$42.37	
Zone 2	$90.46		$84.57		$42.62	
Zone 3	$100.30		$91.39		$47.07	
HDSL 4 Wire (DS1) - Equipped Loop					$33.69	
Remote Terminal Upgrade (Loops served on DLC feeder)					$0.14	

AT&T/WORLDCOM/XO JOINT PRICING PROPOSAL

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	Recurring	NRC	Recurring	NRC	Recurring	NRC
DS3 Capable Loop					$516.73	
Zone 1	$954.79		$897.72		$479.23	
Zone 2	$967.83		$899.73		$490.19	
Zone 3	$1,189.60		$1,053.66		$648.11	
2 Wire Extension Technology	$5.93		$4.13		$0.00	
Unbundled Loop Grooming (2 wire) Extension Technology			$1.60			
DS0 - Loop Installation Charges						
Basic Installation						
Residence 2-wire		$87.91		$88.29		
Business - 2 wire		$87.91		$76.07		
POTS/ISDN BRI Migration (UNE Loop)						$1.76
POTS/ISDN BRI Installation (UNE Loop)						$1.70
POTS/ISDN BRI Disconnect (UNE Loop)						$1.53
Residence 4-wire		$87.91				
Business 4-wire		$87.91				
4 Wire Migration (UNE Loop)						$18.42
4 Wire Install (UNE Loop)						$9.83
4 Wire Disconnect (UNE Loop)						$7.85
Each Additional Loop		$75.74				
Basic Installation with Performance Testing						
First Loop		$191.45		$192.29		
Each Additional Loop		$137.36		$137.97		
Coordinated Installation with Cooperative Testing						
First Loop		$231.24		$232.25		
Each Additional Loop		$137.36		$137.97		
Coordinated Installation without Cooperative Testing						
First Loop		$94.96		$95.38		
Each Additional Analog Loop		$82.79		$83.16		
Coordinated Installation with Cooperative Testing - N	Dispatch					
First Loop						
Each Additional Loop						

AT&T/WORLDCOM/XO JOINT PRICING PROPOSAL

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	Recurring	NRC	Recurring	NRC	Recurring	NRC
Basic Installation with Cooperative Testing						
First Loop		$191.45		$192.29		
Each Additional Loop		$137.36		$137.97		
DS1 Loop Installation Charges						
Basic Installation						
First Loop		$143.52		$144.15		$23.40
Each Additional Loop		$110.31		$110.79		
Migration						$32.27
Disconnect						$16.25
Basic Installation with Performance Testing						
First Loop		$276.96		$278.18		
Each Additional Loop		$202.83		$203.72		
Coordinated Installation with Cooperative Testing						
First Loop		$316.75		$318.14		
Each Additional Analog Loop		$202.83		$203.72		
Coordinated Installation without Cooperative Testing						
First Loop		$152.59		$153.26		
Each Additional Loop		$119.37		$119.90		
Basic Installation with Cooperative Testing						
First Loop		$276.96		$278.18		
Each Additional Loop		$202.83		$203.72		
DS3 Loop Installation Charges						
Basic Installation						
First Loop		$143.52		$144.15		$17.89
Each Additional Loop		$110.31		$110.79		
Migration						$30.79
Disconnect						$10.06
Basic Installation with Performance Testing or w/cooperative testing						
First Loop		$276.96		$278.18		
Each Additional Loop		$202.83		$203.72		

AT&T/WORLDCOM/XO JOINT PRICING PROPOSAL

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	Recurring	NRC	Recurring	NRC	Recurring	NRC
Coordinated Installation with Cooperative Testing						
First Loop		$316.75		$318.14		
Each Additional Analog Loop		$202.83		$203.72		
Coordinated Installation without Cooperative Testing						
First Loop		$152.59		$153.26		
Each Additional Loop		$119.37		$119.90		
Basic Installation with Cooperative Testing						
First Loop		$276.96		$278.18		
Each Additional Loop		$202.83		$203.72		
Subloop						
2-Wire Non Loaded Distribution Loop						
2-Wire Analog Distribution Loop		$120.90		$121.43		
Zone 1	$15.85		$12.12		$3.31	
Zone 2	$21.57		$17.33		$6.64	
Zone 3	$35.23		$29.72		$21.40	
Each Additional		$55.26		$55.50		
2 Wire Migration at the FDI						$20.86
2 Wire Disconnect at the FDI						$20.07
4-Wire Non Loaded Distribution Loop						
4-Wire Analog Distribution Loop						
Zone 1	$31.70				$4.30	
Zone 2	$43.14				$8.63	
Zone 3	$70.46				$27.82	
4 Wire Migration at the FDI						$56.77
4 Wire Disconnect at the FDI						$34.77
2-Wire Loop Feeder						
Zone 1					$0.80	
Zone 2					$1.15	
Zone 3					$4.16	
4-Wire Loop Feeder						
Zone 1					$1.04	
Zone 2					$1.50	
Zone 3					$5.41	

AT&T/WORLDCOM/XO JOINT PRICING PROPOSAL

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	Recurring	NRC	Recurring	NRC	Recurring	NRC
2-Wire Loop Concentration						
Zone 1					$2.78	
Zone 2					$2.98	
Zone 3					$6.04	
4-Wire Loop Concentration						
Zone 1					$3.61	
Zone 2					$3.87	
Zone 3					$7.85	
Building Cable						
Intrabuilidng Cable Loop, Per Pair	$1.24		$1.19			
On Premises Wire					$0.2955	
DS1 Capable Feeder Loop		$292.08		$293.36		
DS1 Each Additional Capable Feeder Loop		$218.54		$219.50		
Zone 1	$77.43		$72.62			
Zone 2	$78.01		$72.71			
Zone 3	$87.85		$79.53			
Channelized DS1 Virtual Feeder to RT Install						$17.81
Channelized DS1 Virtual Feeder to RT Disconnect						$13.88
OSS						
Trouble Isolation Charge						
FDI Field Connection Point						
Field Connection Point						
Feasibility Fee/Quote Preparation Fee		$1,631.67		$1,638.81		$0.00
Construction Fee		ICB		ICB		$0.00
Line Sharing						
Shared Loop, per Loop	$5.00	$37.54	$5.00	$37.71		
OSS - Per Line - Per Month	$2.74		$2.68			
OSS, per Order						
Reclassification Charge		ICB		ICB		
Splitter Shelf Charge						
Splitter TIE Cable Connections						
Option 1A						
Option 1B						
Option 2A						

AT&T/WORLDCOM/XO JOINT PRICING PROPOSAL

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	Recurring	NRC	Recurring	NRC	Recurring	NRC
Option 2B						
Option 3A						
Option 3B						
POTS Splitter Options						
Splitter in the Common Area						
Data to 410 Block	$8.57	$3,175.97	$5.82	$3,189.86	$5.25	$2,847.60
Data Direct to CLEC	$8.99	$3,333.21	$6.11	$3,347.79	$5.51	$2,988.58
Splitter on the IDF						
Data to 410 Block	$2.73	$1,010.84	$1.85	$1,015.26	$1.67	$906.32
Data Direct to CLEC	$5.11	$1,892.62	$3.47	$1,900.90	$3.13	$1,696.93
Splitter on the MDF						
Data to 410 Block	$2.81	$1,039.82	$1.91	$1,044.37	$1.72	$923.31
Data Direct to CLEC	$6.03	$2,233.08	$4.09	$2,242.86	$3.69	$2,002.20
Additional Testing	See Misc. charges Section 9.2.7					
Splitter shelf charge	$6.63	$531.91	$4.77	$537.89	$5.17	$476.91
POTS Splitter Charge - Per Spjlitter	Pass through charge to CLEC		Pass through charge to CLEC			
Engineering		$1,274.63		$1,280.21		$571.42
Trouble Isolation Charge						$0.00
Network Interface Device (NID)	$1.44	$68.49	$1.39	$68.79	$0.45	$38.68
Zone 1					$0.44	
Zone 2					$0.46	
Zone 3					$0.47	
Unbundled Dedicated Interoffice Transport (UDIT)						
DS0 UDIT		$306.61		$307.95		
DS0 Over 0 to 8 Miles - Fixed	$20.93		$19.27		$12.40	
DS0 Over 0 to 8 Miles - per mile	$0.14		$0.13		$0.06	
DS0 Over 8 to 25 Miles - Fixed	$20.95		$19.29		$12.41	
DS0 Over 8 to 25 Miles - per mile	$0.12		$0.12		$0.06	
DS0 Over 25 to 50 Miles - Fixed	$20.99		$19.33		$12.43	
DS0 Over 25 to 50 Miles - per mile	$0.13		$0.12		$0.05	
DS0 Over 50 Miles - Fixed	$20.94		$19.28		$12.41	
DS0 Over 50 Miles - per mile	$0.06		$0.06		$0.03	

AT&T/WORLDCOM/XO JOINT PRICING PROPOSAL

		(2) T-00000A-00-0194 Testimony of Maureen Arnold				(4) Revised Joint AT&T/ Worldcom/XO	
		Exhibit MA-1A 4/16/01		Exhibit MA-1R2 7/17/01		Joint Proposal	
		Recurring	NRC	Recurring	NRC	Recurring	NRC
DS1 UDIT			$351.39		$352.92		$7.60
	DS1 Over 0 to 8 Miles - Fixed	$33.05		$31.14		$21.22	
	DS1 Over 0 to 8 Miles - per mile	$1.56		$1.45		$0.86	
	DS1 Over 8 to 25 Miles - Fixed	$33.33		$31.40		$21.38	
	DS1 Over 8 to 25 Miles - per mile	$1.26		$1.18		$0.70	
	DS1 Over 25 to 50 Miles - Fixed	$33.81		$31.87		$21.66	
	DS1 Over 25 to 50 Miles - per mile	$2.28		$2.14		$1.27	
	DS1 Over 50 Miles - Fixed	$33.78		$31.83		$21.64	
	DS1 Over 50 Miles - per mile	$1.19		$1.12		$0.67	
	DS1 Interoffice Transport - Disconnect						$0.53
DS3 UDIT			$351.39		$352.92		$7.60
	DS3 Over 0 to 8 Miles - Fixed	$210.28		$197.32		$142.72	
	DS3 Over 0 to 8 Miles - per mile	$65.55		$61.17		$42.03	
	DS3 Over 8 to 25 Miles - Fixed	$213.45		$200.35		$142.69	
	DS3 Over 8 to 25 Miles - per mile	$20.30		$18.78		$13.70	
	DS3 Over 25 to 50 Miles - Fixed	$196.74		$184.41		$133.59	
	DS3 Over 25 to 50 Miles - per mile	$25.43		$23.73		$16.22	
	DS3 Over 50 Miles - Fixed	$207.61		$194.79		$140.93	
	DS3 Over 50 Miles - per mile	$17.49		$16.34		$11.00	
	DS3 Interoffice Transport - Disconnect						$0.53
OC3 UDIT			$351.39		$352.92		
	OC-3 Over 0 to 8 Miles - Fixed	$794.64		$655.37		$582.00	
	OC-3 Over 0 to 8 Miles - per mile	$252.46		$205.64		$170.97	
	OC-3 Over 8 to 25 Miles - Fixed	$801.21		$660.44		$586.30	
	OC-3 Over 8 to 25 Miles - per mile	$67.90		$66.12		$47.12	
	OC-3 Over 25 to 50 Miles - Fixed	$765.56		$633.02		$563.07	
	OC-3 Over 25 to 50 Miles - per mile	$92.37		$86.07		$61.62	
	OC-3 Over 50 Miles - Fixed	$788.37		$650.60		$577.92	
	OC-3 Over 50 Miles - per mile	$57.09		$60.95		$36.76	

AT&T/WORLDCOM/XO JOINT PRICING PROPOSAL

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	Exhibit MA-1A 4/16/01		Exhibit MA-1R2 7/17/01		Joint Proposal	
	Recurring	NRC	Recurring	NRC	Recurring	NRC
OC-12 UDIT		$351.39		$352.92		
OC-12 Over 0 to 8 Miles - Fixed	$2,247.68		$1,837.87		$1,665.13	
OC-12 Over 0 to 8 Miles - per mile	$87.64		$97.75		$54.45	
OC-12 Over 8 to 25 Miles - Fixed	$2,247.68		$1,837.87		$1,665.13	
OC-12 Over 8 to 25 Miles - per mile	$85.54		$94.58		$56.69	
OC-12 Over 25 to 50 Miles - Fixed	$2,247.68		$1,837.87		$1,665.13	
OC-12 Over 25 to 50 Miles - per mile	$98.38		$106.76		$61.35	
OC-12 Over 50 Miles - Fixed	$2,247.68		$1,837.87		$1,665.13	
OC-12 Over 50 Miles - per mile	$115.44		$122.10		$72.38	
Above OC-48 UDIT	ICB	ICB	Under Development	Under Development		
Common Transport per minute per leg						
Extended Unbundled Dedicated Interoffice Transport						
DS1 E-UDIT	$59.13	$409.62	$55.78	$411.42	$0.00	$0.00
DS3 E-UDIT	$335.36	$409.62	$317.26	$411.42	$0.00	$0.00
OC-3 E-UDIT	$734.07	$409.62	$692.68	$411.42	$0.00	$0.00
OC-12 E-UDIT	$1,377.93	$409.62	$1,301.75	$411.42	$0.00	$0.00
Above OC-12 E-UDIT	ICB	ICB			$0.00	$0.00
DS0 UDIT Low Side Channelization						
Low Side Channel Performance	$13.90		$11.52			
Low Side Channel Performance with Multiplexing	$8.87					
DS1/DS0 Low Side Channelization						
Multiplexing DS3 to DS1	$246.64		$232.15	$2,569.47		
Multiplexing DS1 to DS0	$229.32		$210.68	$273.68		
UDIT M1-3 Multiplexing		$2,558.27				
UDIT MI-O Multiplexing High Side		$272.49				
UDIT M1-0 Multiplexing Low Side	$8.87	$238.79				
DS1 to DS0, Low side			$7.35	$239.83		

AT&T/WORLDCOM/XO JOINT PRICING PROPOSAL

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	Exhibit MA-1A 4/16/01		Exhibit MA-1R2 7/17/01		Joint Proposal	
	Recurring	NRC	Recurring	NRC	Recurring	NRC
UDIT Rearrangement						
Single Office		$175.49		$219.07		
Dual Office		$218.11		$176.26		
High Capacity Single Office		$237.35		$266.02		
High Capacity Dual Office		$264.86		$238.39		
Unbundled Dark Fiber (UDF)						
Single Strand Increments (Available May 31, 2001)	Under Development	Under Development	Under Development	Under Development		
Initial Records Inquiry (IRI)						
Simple		$158.80		$159.49		
Complex		$202.48		$203.37		
Mid-Point Structure Inquiry (MPSI)						
Field Verification and Quote Preparation (FVQP)		$1,478.86		$1,485.33		$0.00
Field Verification		Under Development	Under Development	Under Development		$0.00
UDF-IOF Charges						
Order Charge per PR/Route/Order		$561.17		$563.63		
Order Charge ea Addl. Pr/Same Route		$270.70		$271.89		
Termination, Fixed per Pr./Office						
Termination-Wire Center-2 Per Pair	$7.57		$6.77			
Fiber Transport, per Mile	$88.52		$83.07			
Fiber Cross-Connect Per Pr.	$4.20	$21.46	$4.03	$21.56		$8.64
Fiber Disconnect						$9.44
UDF-Loop Charges						
Order Charge per Pr./Route/Order		$561.17		$563.63		
Order Charge ea Addl. Pr/Same Route		$270.70		$271.89		
Termination, Fixed Per Pr./Office	$7.84		$7.01			
Termination Fixed Per Pr./Prem.	$6.97		$6.42			
Fiber Transport, per Route/Per Pr.						
UDF Loop - Per Fiber Loop	$122.02		$110.86			
Fiber Cross-Connect Per Pr.	$4.20	$21.46	$4.03	$21.56		$8.64
Fiber Disconnect						$9.44
Extended Unbundled Dark Fiber (E-UDF)						
Order Charge per Pr./Route/Order		$561.17		$563.63		
Order Charge ea Addl. Pr.Same Route		$270.70		$271.89		
Termination, Fixed Per Pr./Office						
Termination at Wire Center, 2 per Pair	$7.84		$7.01			
Termination Fixed Per Pr./Prem.	$6.97		$6.42			
Fiber Transport, per Route/Per Pr.						
E-UDF Fiber (Per pair)	$122.02		$110.86			
Fiber Cross-Connect Per Pr.	$4.20	$21.46	$4.03	$21.56		

AT&T/WORLDCOM/XO JOINT PRICING PROPOSAL

	(2) T-00000A-00-0194 Testimony of Maureen Arnold				(4) Revised Joint AT&T/ Worldcom/XO	
	Exhibit MA-1A 4/16/01		Exhibit MA-1R2 7/17/01		Joint Proposal	
	Recurring	NRC	Recurring	NRC	Recurring	NRC
Shared Transport						
Per Minute of Use - TELRIC Based Rate	$0.001573		$0.001519		$0.000074	
Unbundled Customer Controlled Rearrangement Element (UUCRE)						
DS1 Port	ICB	ICB	ICB	ICB		
DS3 Port	ICB	ICB	ICB	ICB		
Dial Up Access	ICB	ICB	ICB			
Attendant Access	ICB	ICB	ICB			
Virtual Ports	ICB	ICB		ICB		
Local Tandem Switching						
DS1 Local Message Trunk Port	$59.28	$219.99	$56.98	$220.95	$41.50	$17.81
DS1 Local Message Trunk Port - Disconnect						$13.12
Trunk Group - First Trunk		$210.14		$211.06		
Message Trunk Group – Each Additional Trunk						
DS1 Trunk Group-Each Additional Trunk-Per Order		$24.38		$24.29		
Per minute of use	$0.002453		$0.002376		$0.00052	
Local Switching						
Local Switching - TELRIC Based Rates						
Analog Line Side Port, First Port	$1.33	$144.93	$1.28	$145.57	$0.90	$1.68
Analog Line Side Port, Each Additional	$1.33	$95.34	$1.28	$95.75		
Analog Line Side Port, Disconnect						$1.57
Local Usage, per Minute of Use	$0.002684		$0.002599		$0.00121	
Line Port (DS0, Analog, ISLU) Disconnect						
10XXX Direct Dialed Blocking	$0.08		$0.08		$0.00	$0.00
Account Codes - per system	$7.56	$79.66	$7.27	$80.01	$0.00	$0.00
Attendant Access Line - per station line	$0.08	$1.15	$0.08	$1.16	$0.00	$0.00
Audible Message Waiting	$0.13	$1.01	$0.13	$1.01	$0.00	$0.00
Authorization Codes - per system	$3.25	$238.25	$3.13	$239.29	$0.00	$0.00
Auto Call Back	$0.08		$0.08		$0.00	$0.00

AT&T/WORLDCOM/XO JOINT PRICING PROPOSAL

	(2) T-00000A-00-0194 Testimony of Maureen Arnold				(4) Revised Joint AT&T/ Worldcom/XO	
	Exhibit MA-1A 4/16/01		Exhibit MA-1R2 7/17/01		Joint Proposal	
	Recurring	NRC	Recurring	NRC	Recurring	NRC
Automatic Line	$0.07	$0.34	$0.07	$0.34	$0.00	$0.00
Automatic route selection - Common Equip per sys	$2.20	$2,090.41	$2.12	$2,099.56	$0.00	$0.00
Blocking of pay per call services	$0.10		$0.10		$0.00	$0.00
Bridging	$0.07		$0.08		$0.00	$0.00
Call Drop	$0.07	$0.34	$0.07	$0.34	$0.00	$0.00
Call Exclusion - Automatic	$0.07	$1.01	$0.07	$1.01	$0.00	$0.00
Call Exclusion - Manual	$0.07	$0.67	$0.07	$0.67	$0.00	$0.00
Call Forward Don't Answer - All Calls	$0.13		$0.13		$0.00	$0.00
Call Forwarding Incoming Only	$0.08		$0.08		$0.00	$0.00
Call Forwarding Intra Group Only	$0.08		$0.08		$0.00	$0.00
Call Forwarding Variable Remote	$0.11		$0.11		$0.00	$0.00
Call Forwarding Busy Line					$0.00	$0.00
Call Forwarding : Busy Line (Expanded)	$0.09		$0.09		$0.00	$0.00
Call Forwarding : Busy Line (External)	$0.09		$0.09		$0.00	$0.00
Call Forwarding : Busy Line (External) Don't Answer	$0.15		$0.15		$0.00	$0.00
Call Forwarding : Busy Line (Overflow)	$0.09		$0.09		$0.00	$0.00
Call Forwarding : Busy Line (Overflow) Don't Answer	$0.15		$0.15		$0.00	$0.00
Call Forwarding : Busy Line (Programmable)	$0.10		$0.10		$0.00	$0.00
CF Busy Line Don't Answer Programmable - Svc Establishment		$15.59		$15.66	$0.00	$0.00
CF Busy Line Don't Answer Programmable - per line		$1.01		$1.01	$0.00	$0.00
Call Forwarding : Busy Line Don't Answer (Expanded	$0.15	$37.75	$0.15	$37.92	$0.00	$0.00
Call Forwarding : Don't Answer	$0.13	$37.75	$0.13	$37.92	$0.00	$0.00
Call Forwarding : Don't Answer (Expanded)	$0.13		$0.13		$0.00	$0.00
Call Forwarding : Don't Answer (Programable)	$0.13		$0.13		$0.00	$0.00
Call Forwarding: Variable	$0.10		$0.10		$0.00	$0.00
Call Forwarding: Variable no call complete option	$0.10		$0.10		$0.00	$0.00
Call Hold	$0.08		$0.08		$0.00	$0.00
Call Hold/3-Way/Call Transfer	$0.33		$0.32		$0.00	$0.00
Call Park (Basic - Store & Retrieve)	$0.09		$0.09		$0.00	$0.00
Call Pickup	$0.08		$0.08		$0.00	$0.00
Call Transfer	$0.33		$0.32		$0.00	$0.00
Call Waiting Dial Originating	$0.08		$0.08		$0.00	$0.00
Call Waiting Indication - per timing state	$0.47	$1.01	$0.46	$1.01	$0.00	$0.00

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	Recurring	NRC	Recurring	NRC	Recurring	NRC
Call Waiting Originating	$0.09		$0.09		$0.00	$0.00
Call Waiting Terminating - All Calls	$0.12		$0.11		$0.00	$0.00
Call Waiting Terminating - Incoming Only	$0.12		$0.11		$0.00	$0.00
Call Waiting/Cancel Call Waiting	$0.14		$0.14		$0.00	$0.00
CENTREX Common Equipment		$1,200.97		$1,206.23	$0.00	$0.00
CENTREX Management System (CMS)	$0.60		$0.60		$0.00	$0.00
CENTREX Plus DID Numbers per number	$0.12		$0.11		$0.00	$0.00
CENTREX Plus to CENTREX Plus	$5.49		$5.28		$0.00	$0.00
CENTREX Plus to IC Carrier	$5.49		$5.28		$0.00	$0.00
CENTREX Plus to PBX/Key Blocked	$5.49		$5.28		$0.00	$0.00
CENTREX Plus to PBX/Key Non-Blocked	$5.49		$5.28		$0.00	$0.00
CFBL - All Calls	$0.09		$0.09		$0.00	$0.00
CBL - Incoming Only	$0.09	$37.75	$0.09	$37.92	$0.00	$0.00
CFDA Incoming Only	$0.08	$37.75	$0.08	$37.92	$0.00	$0.00
CLASS - Anonymous Call Rejection	$0.34		$0.33		$0.00	$0.00
CLASS-Call Trace			$2.39		$0.00	$0.00
CLASS - Call Waiting ID	$0.11		$0.10		$0.00	$0.00
CLASS - Calling Name & Number	$0.43		$0.41		$0.00	$0.00
CLASS - Calling Number Delivery	$0.10		$0.10		$0.00	$0.00
CLASS - Calling Number Delivery Blocking	$0.35		$0.34		$0.00	$0.00
CLASS - Continuous Redial	$0.30	$1.26	$0.23	$1.26	$0.00	$0.00
CLASS - Last Call Return	$0.10	$1.26	$0.10	$1.27	$0.00	$0.00
CLASS - Priority Calling	$0.19	$1.20	$0.19	$1.20	$0.00	$0.00
CLASS - Selective Call Forwarding	$0.17	$1.26	$0.16	$1.26	$0.00	$0.00
CLASS - Selective Call Rejection	$0.23	$1.20	$0.23	$1.20	$0.00	$0.00
Common Equipment per 1.544 mbps facility (DS1)	$60.34		$58.01		$0.00	$0.00
Conference Calling - Meet Me	$14.60	$42.29	$14.03	$42.47	$0.00	$0.00
Conference Calling - Preset	$10.68	$42.29	$10.27	$42.47	$0.00	$0.00
Custom Ringing First Line (Short/Long/Short)	$0.09		$0.09		$0.00	$0.00
Custom Ringing First Line (Short/Short)	$0.09		$0.09		$0.00	$0.00
Custom Ringing First Line (Short/Short/Long)	$0.09		$0.09		$0.00	$0.00
Custom Ringing Second Line (Short/Long/Short)	$0.09		$0.09		$0.00	$0.00
Custom Ringing Second Line (Short/Short)	$0.09		$0.09		$0.00	$0.00
Custom Ringing Second Line (Short/Short/Long)	$0.09		$0.09		$0.00	$0.00
Custom Ringing Third Line (Short/Long/Short)	$0.08		$0.08		$0.00	$0.00
Custom Ringing Third Line (Short/Short)	$0.08		$0.08		$0.00	$0.00
Custom Ringing Third Line (Short/Short/Long)	$0.08		$0.08		$0.00	$0.00
Data Call Protection (DMS 100)	$0.07		$0.07		$0.00	$0.00

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	Recurring	NRC	Recurring	NRC	Recurring	NRC
Dir Sta Sel/Busy Lamp Fld per arrangement	$1.83	$0.34	$1.76	$0.34	$0.00	$0.00
Directed Call Pickup with Barge-in	$0.18	$20.08	$0.18	$20.16	$0.00	$0.00
Directed Call Pickup without Barge-in	$0.10	$20.08	$0.10	$20.16	$0.00	$0.00
Distinctive Ring/Distinctive Call Waiting	$0.09	$40.14	$0.09	$40.31	$0.00	$0.00
Distinctive Ringing	$0.09		$0.09		$0.00	$0.00
EBS - Set Interface - per station line	$1.44		$1.39		$0.00	$0.00
Executive Busy Overide	$0.08		$0.08		$0.00	$0.00
Expensive Route Warning Tone - per system	$0.07	$71.60	$0.07	$71.91	$0.00	$0.00
Facility Restriction Level - per system	$0.07	$44.05	$0.07	$44.24	$0.00	$0.00
Feature Display	$0.07		$0.08		$0.00	$0.00
Group Intercom	$0.16	$0.45	$0.15	$0.46	$0.00	$0.00
Hot Line - per line	$0.13	$1.01	$0.13	$1.01	$0.00	$0.00
Hunting Multiposition Circular Hunting	$0.27		$0.26		$0.00	$0.00
Hunting Multiposition Hunt Queuing	$0.23	$38.42	$0.22	$38.59	$0.00	$0.00
Hunting Multiposition Series Hunting	$0.27		$0.26		$0.00	$0.00
Hunting Multiposition with Announcement in Queue	$3.20	$38.42	$3.08	$38.59	$0.00	$0.00
Hunting Multiposition with Music in Queue	$1.14	$40.57	$1.10	$40.57	$0.00	$0.00
Incoming Calls Barred	$0.08		$0.08		$0.00	$0.00
International direct Dial Blocking	$0.09		$0.09		$0.00	$0.00
ISDN Short Hunt	$0.58	$1.69	$0.56	$1.70	$0.00	$0.00
Line Side Answer Supervision	$0.09		$0.09		$0.00	$0.00
Loudspeaker Paging - per trunk group	$21.96	$175.77	$21.11	$176.53	$0.00	$0.00
Make Busy Arrangements - per group	$0.36	$0.67	$0.35	$0.67	$0.00	$0.00
Make Busy Arrangements - per line	$0.15	$0.67	$0.14	$0.67	$0.00	$0.00
Message Center - per main station line	$0.07	$0.34	$0.07	$0.34	$0.00	$0.00
Message Waiting Indication A/V	$0.13		$0.13		$0.00	$0.00
Message Waiting Visual	$0.13	$0.34	$0.13	$0.34	$0.00	$0.00
Music On Hold - per system	$22.87	$23.03	$21.99	$23.13	$0.00	$0.00
Network Speed Call	$0.07		$0.08		$0.00	$0.00
Night Service Arrangement	$0.08		$0.08		$0.00	$0.00
Outgoing Calls Barred	$0.08		$0.08		$0.00	$0.00
Outgoing Trunk Queuing	$0.13		$0.13		$0.00	$0.00
Privacy Release	$0.08	$0.47	$0.08	$0.47	$0.00	$0.00

AT&T/WORLDCOM/XO JOINT PRICING PROPOSAL

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	Recurring	NRC	Recurring	NRC	Recurring	NRC
Query Time	$0.25	$0.34	$0.24	$0.34	$0.00	$0.00
Speed Calling 1 Digit Controller	$0.08		$0.08		$0.00	$0.00
Speed Calling 1 Digit User	$0.08		$0.08		$0.00	$0.00
Speed Calling 1# List Individual	$0.08		$0.08		$0.00	$0.00
Speed Calling 2 Digit Controller	$0.08		$0.08		$0.00	$0.00
Speed Calling 2 Digit User	$0.08		$0.08		$0.00	$0.00
Speed Calling 2# List Individual	$0.08		$0.08		$0.00	$0.00
Speed Calling 30 Number	$0.08		$0.08		$0.00	$0.00
Speed Calling 8 Number	$0.08		$0.08		$0.00	$0.00
Speed Call Long-Customer Change					$0.00	$0.00
Station Camp-On Service - per main station	$8.51	$0.34	$8.18	$0.34	$0.00	$0.00
Station Dial Conferencing (6 way)	$1.71		$1.64		$0.00	$0.00
Station Message Detail Recording (SMDR)	$0.18		$0.18		$0.00	$0.00
Three Way Calling	$0.33		$0.32		$0.00	$0.00
Time and Date Display	$0.18		$0.18		$0.00	$0.00
Time of Day Control for ARS - per system	$0.07	$125.28	$0.07	$125.82	$0.00	$0.00
Time of Day NCOS Update	$0.08	$0.54	$0.08	$0.54	$0.00	$0.00
Time of Day Routing - per line	$0.13	$0.51	$0.13	$0.52	$0.00	$0.00
Toll Restriction Service	$0.08		$0.08		$0.00	$0.00
Trunk Answer Any Station	$0.08		$0.08		$0.00	$0.00
Trunk Verification from Designated Station	$0.07	$0.39	$0.07	$0.39	$0.00	$0.00
UCD in Hunt Group - per line	$8.23	$0.67	$7.92	$0.67	$0.00	$0.00
UCD with Music After Delay	$5.45		$5.24		$0.00	$0.00
CMS - System Establishment - Initial Installation		$967.37		$971.60	$0.00	$0.00
CMS - System Establishment - Subsequent Installatio		$483.69		$485.80	$0.00	$0.00
CMS - Packet Control Capability, per System		$483.69		$485.80	$0.00	$0.00
SMDR-P - Service Establishment Charge, Initial Instal ation		$337.82		$339.30	$0.00	$0.00
SMDR-P Archived Data		$176.52		$177.29	$0.00	$0.00
Class - Call Trace (per occurrence)		$2.40			$0.00	$0.00

AT&T/WORLDCOM/XO JOINT PRICING PROPOSAL

	(2) T-00000A-00-0194 Testimony of Maureen Arnold				(4) Revised Joint AT&T/ Worldcom/XO	
	Exhibit MA-1A 4/16/01		Exhibit MA-1R2 7/17/01		Joint Proposal	
	Recurring	NRC	Recurring	NRC	Recurring	NRC
CLASS - Call Waiting ID					$0.00	$0.00
CLASS - Calling Name & Number					$0.00	$0.00
CLASS - Calling Number Delivery					$0.00	$0.00
CLASS - Calling Number Delivery Blocking					$0.00	$0.00
CLASS - Continuous Redial					$0.00	$0.00
CLASS - Last Call Return					$0.00	$0.00
CLASS - Priority Calling					$0.00	$0.00
CLASS - Selective Call Forwarding					$0.00	$0.00
CLASS - Selective Call Rejection					$0.00	$0.00
CLASS - Anonymous Call Rejection					$0.00	$0.00
Call Park (Store & Retrieve)					$0.00	$0.00
Message Waiting Indication A/V					$0.00	$0.00
Subsequent Order Charge						
Digital Line Side Port (Supporting BRI ISDN)						
First Port						
Each Additional Port						
Digital Trunk Ports						
DS1 Local Message Trunk Port						
DS1 Digital Trunk, Install						
DS1 Digital Trunk, Disconnect						
Message Trunk Group, First Trunk						
Message Trunk Group, Each Additional						
DS1 PRI ISDN Trunk Port						
Customized Routing						
Development of Custom Line Class Code-DA or OS Routing Only		ICB		ICB		
Installation Charge, per Switch-DA or OS Routing Only		ICB		ICB		
All Other Custom Routing	ICB	ICB	ICB	ICB		

AT&T/WORLDCOM/XO JOINT PRICING PROPOSAL

	(2) T-00000A-00-0194 Testimony of Maureen Arnold				(4) Revised Joint AT&T/ Worldcom/XO Joint Proposal	
	Exhibit MA-1A 4/16/01		Exhibit MA-1R2 7/17/01			
	Recurring	NRC	Recurring	NRC	Recurring	NRC
Feature Changes						$0.28
Subsequent Order Charge		$13.51		$13.57		
Digital Line Side Port (Supporting BRI ISDN)						
First Port and each additional port	$11.19	$218.41	$10.56	$219.37		
DS0 Analog Trunk Port						
First Port	$16.98	$122.58	$15.78	$123.11	$0.90	$1.68
Each Additional	$16.98	$28.45	$15.78	$28.57		
Digital Trunk Ports						
DS1 Local Message Trunk Port	$59.28		$56.98		$41.50	$17.81
DS1 Local Message Trunk Port - Disconnect						$13.12
Message Trunk Group, First Trunk		$208.23		$209.14		
Message Trunk Group, Each Additional		$50.62		$50.84		
DS1 PRI ISDN Trunk Port	$238.22	$645.72	$228.78	$648.55		
DS1 DID Trunk Port	$3.52	$211.81	$3.38	$212.74		
Local Switching - Market Based Rates						
Analog Line Side Port, First Port					$0.00	$0.00
Each Additional Port (ordered concurrently with					$0.00	$0.00
Vertical Features					$0.00	$0.00
Call Hold					$0.00	$0.00
Call Transfer					$0.00	$0.00
Three Way Calling					$0.00	$0.00
Call Pickup					$0.00	$0.00
Call Waiting/Cancel Call Waiting					$0.00	$0.00
Distinctive Ringing					$0.00	$0.00
Speed Call Long - Customer Change					$0.00	$0.00
Station Dial Conferencing (6-way)					$0.00	$0.00
Call Forwarding Busy Line					$0.00	$0.00
Call Forwarding Don't Answer					$0.00	$0.00
Call Forwarding Variable					$0.00	$0.00
Call Forwarding Variable Remote					$0.00	$0.00

AT&T/WORLDCOM/XO JOINT PRICING PROPOSAL

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	Recurring	NRC	Recurring	NRC	Recurring	NRC
Common Channel Signaling/SS7						
Entrance Facility DS1, Electrical						
Subsequent						
Entrance Facility DS3, Electrical						
Direct Link Transport						
DS1 - over 0 to 8						
DS1 - over 8 to 25						
DS1 - over 25 to 50						
DS1 - over 50						
DS3 - over 0 to 8						
DS3 - over 8 to 25						
DS3 - over 25 to 50						
DS3 - over 50						
Multiplexing						
DS1 to DS0						
DS3 to DS1						
CCSAC STP Port	$260.09	$438.36	$249.69	$440.28		
CCSAC Options Activation Charge						
Basic Translations						
First Activation, per order		$114.83		$115.34		
Each Additional Activation, per		$9.53		$9.58		
CCSAC Options Database Translations						
First Activation per order		$133.90		$134.49		
Each additional Activation per order		$57.20		$57.45		
Signal Formulation, ISUP, Per Call Set-Up Request	$0.0020817		$0.0020272			
Signal Transport, ISUP, Per Call Set-Up Request	$0.0013398		$0.0013148			
Signal Transport, TCAP, per Data Request	$0.0002974		$0.0002914			
Signal Switching, ISUP, Per Call Set-Up Request	$0.0009411		$0.0009192			
Signal Switching, TCAP, Per Data Request	$0.0005910		$0.0005754			

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	Recurring	NRC	Recurring	NRC	Recurring	NRC
STP per message					$0.00005	
SCP per message					$0.00020	
CCS Link - First Link						
CCS Link - Each Additional Link						
Signaling Link						
First Link, DS0					$27.45	$22.21
Additional Link, DS0						
SS7 Links (DS0) Disconnect						$6.33
SS7 Links (DS1) Install						$20.94
SS7 Links (DS1) Disconnect						$5.73
SS7 STP global title translations 'A Link' only Install						$27.69
SS7 STP global title translations 'A Link' only Disconnect						$27.69
SS7 STP message transfer part 'A Link' only (port) Install						$19.63
SS7 STP message transfer part 'A Link' only (port) Disconnect						$18.82
Advanced Intelligent Network (AIN)						
AIN Customized Services (ACS)		ICB		ICB		
AIN Platform Access (APA)	ICB	ICB	ICB	ICB		
AIN Query Processing, per Query	ICB		ICB			
Line Information Database (LIDB)						
LIDB Storage		No Charge		No Charge		
Line Validation Administration System Access (LVAS)		ICB		ICB		
LIDB Line Record Initial Load						
Up to 20,000 Line Records		$2,601.00		$2,601.00		
Over 20,000 Line Records		ICB		ICB		
Mechanized Service Account Update, per Addition or Update Processed		ICB		ICB		
Individual Line Record Audit		ICB		ICB		
Account Group Audit		ICB		ICB		
Expedited Request Charge for Manual Updates		ICB		ICB		
LIDB Query Service, per Query	$0.0009621	See 9.13.2.2	$0.0009435	See 9.13.2.2		
Fraud Alert Notification, per Alert	No Charge		No Charge			

AT&T/WORLDCOM/XO JOINT PRICING PROPOSAL

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	Recurring	NRC	Recurring	NRC	Recurring	NRC
8XX Database Query Service						
Basic Query, per Query	$0.02000723	See 9.13.2.2	$0.02007675	See 9.13.2.2		
POTS Translation	$0.00000057		$0.00000165			
Call Handling & Destination Feature	$0.00000172		$0.00000055			
ICNAM, Per Query	$0.000849	See 9.13.2.2	$0.000836	See 9.13.2.2		
Construction Charges		ICB		ICB	$0.00	$0.00
Miscellaneous Elements						
Additional Engineering – Basic		$31.70		$31.84	$0.00	$0.00
Additional Engineering – Overtime		$39.21		$39.38	$0.00	$0.00
Additional Labor Installation – Overtime		$9.01		$9.05	$0.00	$0.00
Additional Labor Installation – Premium		$18.02		$18.10	$0.00	$0.00
Additional Labor Other – Basic		$27.63		$27.75	$0.00	$0.00
Additional Labor Other – Overtime		$36.90		$37.06	$0.00	$0.00
Additional Labor Other – Premium		$46.19		$46.39	$0.00	$0.00
Testing and Maintenance – Basic		$29.35		$29.48	$0.00	$0.00
Testing and Maintenance – Overtime		$39.21		$39.38	$0.00	$0.00
Testing and Maintenance – Premium		$49.06		$49.28	$0.00	$0.00
Maintenance of Service – Basic		$27.63		$27.75	$0.00	$0.00
Maintenance of Service – Overtime		$36.90		$37.06	$0.00	$0.00
Maintenance of Service – Premium		$46.19		$46.39	$0.00	$0.00
Additional COOP Acceptance Testing – Basic		$29.35		$29.49	$0.00	$0.00
Additional COOP Acceptance Testing – Overtime		$39.21		$39.38	$0.00	$0.00
Additional COOP Acceptance Testing – Premium		$49.06		$49.28	$0.00	$0.00
NonScheduled COOP Testing - Basic		$29.35		$29.48	$0.00	$0.00
NonScheduled COOP Testing – Overtime		$39.21		$39.38	$0.00	$0.00
NonScheduled COOP Testing – Premium		$49.06		$49.28	$0.00	$0.00
NonScheduled Manual Testing – Basic		$29.35		$29.48	$0.00	$0.00
NonScheduled Manual Testing – Overtime		$39.21		$39.38	$0.00	$0.00

AT&T/WORLDCOM/XO JOINT PRICING PROPOSAL

	(2) T-00000A-00-0194 Testimony of Maureen Arnold				(4) Revised Joint AT&T/ Worldcom/XO	
	Exhibit MA-1A 4/16/01		Exhibit MA-1R2 7/17/01		Joint Proposal	
	Recurring	NRC	Recurring	NRC	Recurring	NRC
NonScheduled Manual Testing – Premium		$49.06		$49.28	$0.00	$0.00
Cooperative Scheduled Testing – Loss		$0.08		$0.08	$0.00	$0.00
Cooperative Scheduled Testing – C-Message Noise		$0.08		$0.08	$0.00	$0.00
Cooperative Scheduled Testing – Balance		$0.33		$0.33	$0.00	$0.00
Cooperative Scheduled Testing – Gain Slope		$0.08		$0.08	$0.00	$0.00
Cooperative Scheduled Testing – C-Notched Noise		$0.08		$0.08	$0.00	$0.00
Manual Scheduled Testing – Loss		$0.17		$0.17	$0.00	$0.00
Manual Scheduled Testing – C-Message Noise		$0.17		$0.17	$0.00	$0.00
Manual Scheduled Testing – Balance		$0.66		$0.67	$0.00	$0.00
Manual Scheduled Testing – Gain Slope		$0.17		$0.17	$0.00	$0.00
Manual Scheduled Testing – C-Notched Noise		$0.17		$0.17	$0.00	$0.00
Additional Dispatch		$84.23		$84.60	$0.00	$0.00
Date Change		$10.36		$10.40	$0.00	$0.00
Design Change		$73.78		$74.10	$0.00	$0.00
Expedite Charge		ICB		ICB	$0.00	$0.00
Cancellation Charge		ICB		ICB	$0.00	$0.00
Channel Regeneration						
DS1 Regeneration	$9.45	$480.05	$1.97	$480.53	$0.00	$0.00
DS3 Regeneration	$34.16	$1,807.55	$6.09	$1,817.89	$0.00	$0.00
UNE Platform						
UNE-P Platform Pots New/Existing						
New						
Mechanized, First						
Mechanized, Each Additional						
Manual, First						
Manual, Each Additional						
Existing						
Mechanized, First						
Mechanized, Each Additional						
Manual, First						
Manual, Each Additional						
UNE-P New Connection						
UNE-P POTS Mechanized, First		$55.31		$55.56		
UNE-P POTS Mechanized, Each Additional		$15.87		$15.94		
UNE-P POTS Manual, First		$82.11		$82.49		
UNE-P POTS Manual, Each Additional		$18.44		$18.52		

AT&T/WORLDCOM/XO JOINT PRICING PROPOSAL

	(2) T-00000A-00-0194 Testimony of Maureen Arnold				(4) Revised Joint AT&T/ Worldcom/XO	
	Exhibit MA-1A 4/16/01		Exhibit MA-1R2 7/17/01		Joint Proposal	
	Recurring	NRC	Recurring	NRC	Recurring	NRC
UNE-P Conversion						
UNE-P POTS,CENTREX, PAL, PBX						
Mechanized, First		$0.68		$0.68		$0.28
Mechanized, Each Additional		$0.14		$0.14		
Migration						$0.28
Disconnect						$0.28
UNE-P POTS,CENTREX, PAL, PBX						
Manual,First		$16.21		$16.28		
Manual, Each Additional		$2.70		$2.71		
UNE-P PBX DID						
First		$20.61		$20.70		
Each Additional		$3.12		$3.13		
UNE-P ISDN BRI						
First		$15.09		$15.15		$0.28
Each Additional		$3.12		$3.13		
Migration						$0.28
Disconnect						$0.28
UNE-P ISDN PRI, DSS per DS1 Facility		$51.00		$51.22		
UNE-P ISDN PRI, DSS Trunk						
First		$18.77		$18.85		
Each Additional		$3.12		$3.13		
UNE-Combination Private Line						
DS0/DS1/DS3/OCN/Integrated T-1 Existing Service		$40.87		$41.05		
Enhanced Extended Loop (EEL)						
EEL Link						
DS0 2-Wire		$249.10		$250.19		
DS0, Each Additional		$217.86		$218.81		

AT&T/WORLDCOM/XO JOINT PRICING PROPOSAL

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			Exhibit MA-1A 4/16/01		Exhibit MA-1R2 7/17/01		Joint Proposal	
			Recurring	NRC	Recurring	NRC	Recurring	NRC
		Zone 1			$16.89		$7.34	
		Zone 2			$22.57		$11.23	
		Zone 3			$34.34		$32.06	
	DS0 4-Wire							
		Each Additional						
		Zone 1					$9.54	
		Zone 2					$14.60	
		Zone 3					$41.68	
	DS1			$306.85		$308.19	$43.35	
		Zone 1			$84.48		$42.37	
		Zone 2			$84.57		$42.62	
		Zone 3			$91.39		$47.07	
		Each Additional		$261.17		$262.31		
	DS3			$331.21		$332.66	$516.73	
		Zone 1			$897.72		$479.23	
		Zone 2			$899.73		$490.19	
		Zone 3			$1,053.66		$648.11	
		Each Additional		$285.53		$286.78		
	EEL C							
EEL Transport								
	DS0 EEL Transport			$306.61		$307.95		$6.50
		DS0 Over 0 to 8 Miles - Fixed	$20.93		$19.27		$12.40	
		DS0 Over 0 to 8 Miles - per mile	$0.14		$0.13		$0.06	
		DS0 Over 8 to 25 Miles - Fixed	$20.95		$19.29		$12.41	
		DS0 Over 8 to 25 Miles - per mile	$0.12		$0.12		$0.06	
		DS0 Over 25 to 50 Miles - Fixed	$20.99		$19.33		$12.43	
		DS0 Over 25 to 50 Miles - per mile	$0.13		$0.12		$0.05	
		DS0 Over 50 Miles - Fixed	$20.94		$19.28		$12.41	
		DS0 Over 50 Miles - per mile	$0.06		$0.06		$0.03	
		Migration						$18.88
		Disconnect						$5.98

AT&T/WORLDCOM/XO JOINT PRICING PROPOSAL

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	Recurring	NRC	Recurring	NRC	Recurring	NRC
DS1 EEL Transport		$351.39		$352.92		$6.79
DS1 Transport Mux				$258.16		
DS1 Over 0 to 8 Miles - Fixed	$33.05		$31.14		$21.22	
DS1 Over 0 to 8 Miles - per mile	$1.56		$1.45		$0.86	
DS1 Over 8 to 25 Miles - Fixed	$33.33		$31.40		$21.38	
DS1 Over 8 to 25 Miles - per mile	$1.26		$1.18		$0.70	
DS1 Over 25 to 50 Miles - Fixed	$33.81		$31.87		$21.66	
DS1 Over 25 to 50 Miles - per mile	$2.28		$2.14		$1.27	
DS1 Over 50 Miles - Fixed	$33.78		$31.83		$21.64	
DS1 Over 50 Miles - per mile	$1.19		$1.12		$0.67	
Migration						$19.12
Disconnect						$6.56
DS3 EEL Transport		$351.39		$352.92		
DS3 Transport Mux				$258.16		
DS3 Over 0 to 8 Miles - Fixed	$210.28		$197.32		$142.72	
DS3 Over 0 to 8 Miles - per mile	$65.55		$61.17		$42.03	
DS3 Over 8 to 25 Miles - Fixed	$213.45		$200.35		$142.69	
DS3 Over 8 to 25 Miles - per mile	$20.30		$18.78		$13.70	
DS3 Over 25 to 50 Miles - Fixed	$196.74		$184.41		$133.59	
DS3 Over 25 to 50 Miles - per mile	$25.43		$23.73		$16.22	
DS3 Over 50 Miles - Fixed	$207.61		$194.79		$140.93	
DS3 Over 50 Miles - per mile	$17.49		$16.34		$11.00	
Multiplexing						
Multiplexing DS1 to DS0	$229.32	$267.45	$232.15	$268.62	$160.52	$187.22
Multiplexing DS3 to DS1	$246.64	$267.45	$210.68	$268.62	$172.65	$187.22
DS1 Transport Mux		$257.04				
DS3 Transport Mux		$257.04				
DS0 Channel Performance						
DS0 Low Side Channelization	$13.90		$11.52			
DS1/DS0 MUX, Low Side Channelization	$8.87	$238.79	$7.35	$239.83		
Concentration Capability	ICB		ICB			

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	Recurring	NRC	Recurring	NRC	Recurring	NRC
Unbundled Packet Switching						
Customer Channel	$24.39					
Customer Channel and Shared Distribution Loop		$59.87		$60.14		
Customer Channel and Unbundled Distribution Loop		$126.62		$127.14		
Customer Channel and CLEC ProvidedLoop		$59.87				
DSLAM			$20.29	$60.14	$7.17	
Virtual Transport			$3.16	$60.14		
Unbundled Packet Switch Loop Capability						
Unbundled Packet Switch Interface Port						
DS3 Interface	$216.14	$226.51	$208.02	$227.50		
DS1 Interface	$140.24	$226.51	$135.05	$227.50		
Unbundled Pack Switch DSLAM Functionality	$21.09					
Atm/Edge Switch Port (per line/per month)					$0.06	
Element Manager (per line/ per month)					$0.87	
ANCILLARY SERVICES						
Interim Number Portability	New York Method					
Number Ported						
Service Establishment per route, per switch						
Service Establishment, Per Ported Number						
Service Establishment , additional number ported or changes to existing number, per number ported						
Coordinated Out of Hours Cut – Non-Sunday/Holiday						
Coordinated Out of Hours Cut – Sunday/Holiday						
Local Number Portability						
LNP Queries	See FCC Tariff #1 20.3.1 & 20.3.3.		See FCC Tariff #1 20.3.1 & 20.3.3.			
LNP Managed Cuts						
Standard Managed Cuts per person per 1/2 hour		$27.31		$27.31		
Overtime Managed Cuts per person per 1/2 hour		$35.43		$35.43		
Premium Managed Cust per person per 1/2 hour		$43.49		$43.49		

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	Recurring	NRC	Recurring	NRC	Recurring	NRC
911/E911	No Charge		No Charge			
White Pages Directory Listings, Facility Based Providers						
Primary Listing	No Charge		No Charge			
Premium/Privacy Listings	Exc Tar rates, less wholesale disc		Exc Tar rates, less wholesale disc			
Directory Assistance, Facility Based Providers						
Local Directory Assistance, per Call	$0.34		$0.34			
National Directory Assistance, per Call	$0.385		$0.385			
Call Branding, Set- Up and Recording		$10,500.00		$10,500.00		
Loading Brand /Per Switch		$175.00		$175.00		
Call Completion Link, per call	$0.085		$0.085			
Directory Assistance List Information						
Initial Database Load per Listing	$0.025		$0.025			
Reload of Database, per Listing	$0.020		$0.020			
Daily Updates, per Listing	$0.025		$0.025			
One-time Set-Up Fee, per Hour		$82.22		$82.22		
Media Charges for File Delivery						
Electronic Transmission	$0.0010		$0.0010			
Tapes (charges only apply if this is selected as the nc	$30.00		$30.00			
Shipping Charges (for tape delivery)	ICB			ICB		
Toll and Assistance Operator Services, Facility Based Providers						
Option A - per message						
Operator Handled Calling Card	$0.36		$1.45			
Machine Handled Calling Card	$0.46		$0.60			
Station Call	$0.18		$1.50			
Person Call	$0.84		$3.50			
Connect to Directory Assistance	$2.05		$0.75			
Busy Line Verify, per call	$0.55		$0.72			
Busy Line Interrupt	$0.72		$0.87			
Operator Assistance, per call	$0.87		$0.87			
Option B - per operator work section and computer handled calls						
Operator Handled, per Operator Work Second	$0.0181		$0.0181			
Machine Handled, per call	$0.13		$0.25			
Call Branding, Set-Up & Recording		$10,500		$10,500		
Loading Brand/Per Switch		$175		$175		

AT&T/WORLDCOM/XO JOINT PRICING PROPOSAL

	(2) T-00000A-00-0194 Testimony of Maureen Arnold				(4) Revised Joint AT&T/ Worldcom/XO Joint Proposal	
	Exhibit MA-1A 4/16/01		Exhibit MA-1R2 7/17/01			
	Recurring	NRC	Recurring	NRC	Recurring	NRC
Access to Poles, Ducts, Conduits and Rights of Way						
Pole Inquiry Fee, per Mile		$321.59		$322.99		
Innerduct Inquiry Fee, per Mile		$386.56		$388.25		
ROW Inquiry Fee		$142.86		$143.49		
ROW Document Preparation		$142.86		$143.49		
Field Verification Fee, pr Pole		$35.72		$35.87		$0.00
Field Verification Fee, per Manhole		$464.31		$466.34		$0.00
Planner Verification, per Manhole		$15.93		$16.00		$0.00
Manhole Verification Inspector, per Manhole		$285.73		$286.98		$0.00
Manhole Make Ready Inspector, per Manhole		$428.59		$430.47		
Make-Ready Work, per Foot Innerduct						
Pole Attachment Fee, per Foot, per Year	$4.34		$4.28			
Innerduct Occupancy Fee, per Foot, per Year	$0.37		$0.36			
Access Agreement Consideration				$10.00		
Operational Support Systems						
Development & Enhancements, per Order						
Ongoing Maintenance, per Order						
Daily Usage Record File, per Record	$0.0007616		$0.0007460			
Trouble Isolation Charge	Section 13 Qwest's AZ Exchange & Network Services Catalog			Section 13 Qwest's AZ Exchange & Network Services Catalog		
Bona Fide Request Process						
Processing Fee		$2,400.07		$2,410.58	$0.00	$0.00

NOTE - Rates developed using the current Qwest wire centers. Qwest is in the process of selling 38 wire centers. Once the sale is complete rates will need to be adjusted.

AT&T

Donald R. Finch
Docket Manager
(303) 298-6115

1875 Lawrence St.
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June 26, 2001

RECEIVED
JUN 27 2001
ARIZONA CORPORATION COMMISSION
HEARING DIVISION

VIA OVERNIGHT DELIVERY

Arizona Corporation Commission
Docket Control - Utilities Division
1200 West Washington Street
Phoenix, AZ 85007

Re: Docket No. T-00000A-00-0194

Dear Sir or Madam:

Enclosed are the original and ten copies of the Public Version of Michael Hydock's Rebuttal Testimony on behalf of AT&T Communications of the Mountain States, Inc., WorldCom, Inc., and XO Arizona, Inc. Proprietary Qwest information has been redacted from footnote 12 on page 7. The page containing the proprietary Qwest information and printed on pink paper is being filed under seal.

Yours truly,

Donald R. Finch

Donald R. Finch

Enclosures

EXHIBIT
PENGAD-Bayonne, N. J.
AT/WorldCom
admitted 1 6

Recycled Paper

BEFORE THE ARIZONA CORPORATION COMMISSION

WILLIAM A. MUNDELL
Chairman
JAMES M. IRVIN
Commissioner
MARC SPITZER
Commissioner

IN THE MATTER OF	)	
INVESTIGATION INTO QWEST	)	
CORPORATION'S COMPLIANCE	)	
WITH CERTAIN WHOLESALE	)	DOCKET NO. T-00000A-00-0194
PRICING REQUIREMENTS FOR	)	
UNBUNDLED NETWORK ELEMENTS	)	
AND RESALE DISCOUNTS	)	

REBUTTAL TESTIMONY OF

MICHAEL HYDOCK

ON BEHALF OF THE JOINT CASE OF

AT&T COMMUNICATIONS OF THE MOUNTAIN STATES, INC.,

WORLDCOM, INC. AND

XO ARIZONA, INC.

[PUBLIC VERSION]

JUNE 27, 2001

I. BACKGROUND AND PURPOSE OF TESTIMONY

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Michael Hydock. My business address is 1875 Lawrence Street, Denver, Colorado 80202.

Q. HAVE YOU PREVIOUSLY FILED TESTIMONY IN THIS PROCEEDING?

A. Yes. I filed direct testimony on behalf of AT&T Communications of the Mountain States, Inc., WorldCom, Inc. and XO Arizona, ("Joint Intervenors") on May 18, 2001.

Q. WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY?

A. The purpose of my rebuttal testimony is to respond to the testimony of Randy G. Farrar on behalf of Sprint Communications Company L.P. and the testimony of William Dunkel on behalf of the Staff of the Arizona Corporation Commission ("ACC") as it relates to line conditioning and bridge tap removal charges.

Q. WHAT IS SPRINT'S POSITION ON LINE CONDITIONING CHARGES?

A. Sprint's position is that load coils should be removed in bulk from all loops that are shorter than 18,000 feet in length, at a minimum of 25 pairs at a time and not removed on loops longer than 18,000 feet in length.[1] Additionally, Sprint recommends the rate for bridge tap removals be based on the type of work being done, the number of locations requiring conditioning, and the outside plant environment (aerial, buried or underground).[2]

---

[1] Direct testimony of Randy G. Farrar at 20.
[2] Direct testimony of Randy G. Farrar at 22.

1 **Q. WHAT IS STAFF'S POSITION ON LINE CONDITIONING CHARGES?**

2 A. Mr. Dunkel, on behalf of Staff, supports Sprint's position presented by Mr. Farrar and
3 recommends a rate of $40.00 per loop to remove load coils or bridge taps for loops of
4 18,000 feet or less and assumes that the Company will be removing several bridge taps or
5 load coils at the same time.[3] Mr. Dunkel also proposes a rate of $70 per location for
6 aerial and buried loops greater than 18,000 feet, $400 per location for underground loops
7 greater than 18,000 feet and $2.00 for each additional coil or tap removed at the same
8 time, location and cable for loops greater than 18,000 feet.[4]

9 **Q. WHAT IS THE MAIN CONCERN WITH BOTH SPRINT'S AND STAFF'S**
10 **POSITION?**

11 A. The most critical question is whether there should be a charge for line conditioning and
12 bridge tap removal at all. Incumbent Local Exchange Carriers ("LECs"), such as Qwest,
13 apparently rely on the FCC's statement in its Line Sharing Order "not prohibiting"
14 incumbent LECs from recovering the cost of line conditioning from requesting carriers.
15 This statement, however, does not either require or allow an incumbent LEC to charge
16 exorbitant fees which clearly violate the FCC's Total Element Long Run Incremental
17 Cost ("TELRIC") principles. The FCC has decided only that the incumbent LEC may
18 recover its cost of line conditioning "where permitted" — presumably meaning that such
19 costs may be recovered where permitted by state commission order.[5]

---

[3] Direct testimony of William Dunkel at 52.
[4] Direct testimony of William Dunkel at 9 of WD-8.
[5] *In the Matter of Deployment of Wireline Services Offering Advanced Telecommunications Capability, et. al.*, CC Docket 98-147, et. al., Third Report and Order in CC Docket No. 98-147 Fourth Report and Order in CC Docket No. 96-98, (Rel. Dec. 9, 1999), at ¶ 148 ("*Line Sharing Order*").

State commissions like this one, therefore, are the decision makers about whether or not such charges are warranted in the first instance. This Commission should not approve such charges for all the reasons stated in my Direct Testimony. The extinction of xDSL competition is assured if incumbent local exchange carriers are allowed to continue to impose massive nonrecurring charges for line conditioning.

Additionally, allowing Qwest to charge for line conditioning raises the potential for double recovery. As addressed in my Direct Testimony, the Oregon Commission found Qwest to be double recovering the cost of line conditioning -- once in a nonrecurring charge ("NRC") and again in the recurring loop cost. The Commission should clarify that costs are recoverable *only* to the extent that they are not already accounted for in the incumbent's maintenance and common cost factors.

Critically, it appears that Qwest in this proceeding has used its *historical* accounting records to determine its *historical* expenditures for maintaining loops and other network equipment as well as *historical* common costs associated with that equipment in calculating its proposed recurring rate for the UNE loop. These historical accounting records typically include the costs that an incumbent LEC incurred to install, maintain, repair *and remove* load coils, bridge taps, repeaters and any other line disturbers. Thus, the maintenance and common cost factors used by incumbent LECs to set their existing UNE rates for the recovery of maintenance and common costs *already include* most, if not all, line conditioning costs. Incumbent LECs already remove load coils from their network as a matter of course, and presumably seek to recover this maintenance expense through their recurring UNE loop charges.

In the Oregon proceeding Qwest conceded, "the labor costs associated with unloading loops are currently included in the maintenance factor used to develop recurring costs."[6] As a result, the Oregon Commission disallowed Qwest's proposed NRC for loop conditioning, and in doing so, reduced it from $597.61 to $0.00.[7] In such circumstances, allowing incumbent LECs to recover line conditioning costs again through separate (nonrecurring or recurring) charges constitutes blatant double recovery. The Commission should, therefore, clarify that the burden of proof is on incumbents to show that their line conditioning costs are appropriate in a forward-looking TELRIC network and are *not* already recovered by their recurring maintenance and common cost factors. Furthermore, the Commission should clarify that whenever the costs of line conditioning are already recovered through maintenance and common cost factors, incumbents may *not* recover those costs again through separate charges of any kind.

Q. DO BASIC TELRIC PRINCIPLES ALLOW THE RECOVERY OF EXCESSIVE LINE CONDITIONING CHARGES?

A. Clearly, no. The FCC's TELRIC rules must be applied and those rules expressly prohibit the most egregious of the incumbent LECs' line conditioning practices. Proper application of the FCC's TELRIC pricing rules would reduce – or even eliminate – line conditioning charges and thereby remove a significant obstacle to the competitive provision of xDSL services. Under TELRIC, the relevant costs are those of a "reconstructed local network [that] will employ the most efficient technology."[8]

---

[6] Oregon Public Utility Commission Order No. 98-444 in Docket Nos. UT-138 and UT-139, entered November 13, 1998. An electronic copy of this decision is available at http://www.puc.state.or.us/orders/1998ords/98-444.htm#_Toc435505293.

[7] *Id.*

[8] *Implementation of the Local Competition Provisions in the Telecommunications Act of 1996*, CC Docket No. 96-98, First Report and Order, FCC 96-325 (Rel. Aug. 8, 1996), ¶ 685. ("*Local Competition Order*").

Therefore, an incumbent LEC may only recover from new entrants the line conditioning costs that it would incur if it had constructed its local network from the ground up using the most efficient design and technology. Such a network would not contain *any* line disturbers (*e.g.,* load coils, bridge taps, repeaters, etc.) for loops shorter than 18,000 feet, so that all such loops should be able to support xDSL-based advanced services. In other words, under TELRIC no separate charge is appropriate for conditioning loops shorter than 18,000 feet. Basic TELRIC principles require that line conditioning charges – to the extent they can be justified at all – must be assessed on a recurring basis at rates amortized over the life of the loop plant and across all loops, rather than as arbitrary line-specific fees that penalize the carriers to which the incumbent assigns unconditioned lines.

Q. IF LINE CONDITIONING CHARGES ARE FOUND TO BE APPROPRIATE, WHAT IS THE PROPER COST RECOVERY MECHANISM?

A. Under the FCC's TELRIC rules, any permissible line conditioning charges should be recovered in the form of recurring monthly charges, rather than the exorbitant nonrecurring fees that the FCC has found to be a barrier to entry. Basic TELRIC principles require that any legitimate and previously unrecovered line conditioning costs must be recovered through recurring charges that amortize those costs over the life of the loops. After a line is conditioned, it can forever be used by any carrier – both incumbents and competitors – to bring consumers the benefits of advanced services competition. Like other costs associated with the onset of local competition, all carriers should bear a portion of line conditioning costs. Moreover, these recurring charges should be spread over *all* loops in a particular serving area to ensure that these costs are recovered in a

1 competitively neutral and nondiscriminatory fashion rather than arbitrarily depending
2 upon where an incumbent LEC happens to assign unconditioned loops.[9] In this way,
3 each carrier will be assessed charges in a nondiscriminatory fashion that appropriately
4 reflect its relative use of the network.

5 **Q. IS IT CLEAR HOW EACH OF THE PROPOSALS, QWEST'S, STAFF'S AND**
6 **SPRINT'S, ARE APPLIED?**

7 A. No. Qwest's testimony does not indicate whether its proposed rate of $649.98 applies on
8 a per pair basis or per twenty-five pair binder group. Qwest's testimony states that "An
9 additional nonrecurring charge may apply to loops when conditioning of those loops is
10 requested by the CLEC. The nonrecurring charge of Conditioning (Cable
11 Unloading/Bridge Tap Removal) would apply in this instance."[10] There is an incredible
12 variance in Qwest's proposed rate depending on whether Qwest's rate proposal is per
13 loop or per binder group. If it is assumed that the rate applies to the entire binder group
14 of 25 pair, the per loop rate is $25.99. The question still remains is a new entrant
15 required to pay Qwest $25.99 for the loop it is purchasing, or $649.98 for the entire
16 binder group. A loop, once conditioned, may be used by any carrier (including the
17 incumbent LEC) for an extended period of time, therefore, all carriers should "bear the
18 same proportionate and reasonable" share of the costs of that line conditioning.[11] If the

---

[9] Line-specific charges create numerous economic inefficiencies. For instance, to the extent that a particular customer is served by more than one line pair, line-specific charges create incentives for incumbents to make only unconditioned line pairs available to new entrants. Moreover, line-specific charges result in different charges for serving customers living in the *same neighborhood* and, to the extent that those charges are passed on to end-users, result in *different rates for end-users in the same neighborhood.*

[10] Direct Testimony of Robert F. Kennedy at 30.

[11] *Local Competition Order* at ¶ 755.

charge to a new entrant is $649.98, a new entrant is in essence subsidizing Qwest's provisioning of its own DSL services.

Sprint's position is that load coils should be removed in bulk from all loops that are shorter than 18,000 feet in length, at a minimum of 25 pairs at a time.

Staff's position for loops under 18,000 feet is based on a per loop charge, but for loops over 18,000 feet Staff's proposed rate is assessed per location.

Q. WHAT IS THE APPROPRIATE METHOD TO DETERMINE THE UNIT COST ASSOCIATED WITH LINE CONDITIONING?

A. Any legitimate costs of line conditioning must be computed using the most efficient methods and technology available for carrying out such line conditioning. Qwest's cost study assumes loops are unloaded one at a time, rather than for an entire binder group.[12] Thus, for a twenty-five pair binder group, incumbent LECs assume that a technician has to be dispatched 25 *separate times* to remove line disturbers from that *single* binder group. That assumption plainly violates TELRIC. The more efficient method of line conditioning would be to assume that the technician makes only one visit, in which he upgrades all line pairs in that binder group. Accordingly, the costs of line conditioning for a pair in a twenty-five pair binder should include only 1/25th of the cost of a technician's visit to upgrade an entire binder group.

[12] Qwest Cost Study – Nonrecurring Elements, Cable Unloading/Bridge Tap Removal. The cost study includes ***[Proprietary] [XXX]*** minutes of engineering time, and ***[Proprietary] [XXX]*** minutes of technician time which is based on an average of 3 splice locations visited.

1 **Q. WHAT IS YOUR RECOMMENDATION FOR CABLE UNLOADING AND**

2 **BRIDGE TAP REMOVAL?**

3 A. There should be no charge for loop conditioning. There is no justification for this rate

4 element or its rate in a forward-looking network. The only practical effect of such a

5 charge, regardless of magnitude, is to inflict new entrants with upgrades to the incumbent

6 LEC network. Moreover, if the charge has been "hidden" in the maintenance factor used

7 to develop recurring loop costs, as appears to be the case, the rate proposed by Qwest in

8 Arizona -- $649.98 -- constitutes blatant double recovery. If any cable unloading or

9 bridge tap removal is found to be legitimate, basic TELRIC principles require that any

10 legitimate and previously unrecovered line conditioning costs must be recovered through

11 recurring charges that amortize those costs over the life of the loops.

12 **Q. DOES THIS CONCLUDE YOUR TESTIMONY?**

13 A. Yes.

CERTIFICATE OF SERVICE

I certify that the original and 10 copies of the Public Version of Michael Hydock's Rebuttal Testimony on behalf of AT&T Communications of the Mountain States, Inc., WorldCom, Inc., and XO Arizona, Inc. in Docket No. T-00000A-00-0194 were sent by overnight delivery on June 26, 2001 to:

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Docket Control - Utilities Division
1200 West Washington Street
Phoenix, AZ 85007

and a true and correct copy was sent by overnight delivery on June 26, 2001 to:

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QWEST

COST DOCKET

NO. T-00000A-00-0194

COX ORIGINAL EXHIBITS

PUBLIC

2. GENERAL REGULATIONS - CONDITIONS OF OFFERING

2.8 CABLE, WIRE AND SERVICE TERMINATION POLICY (M)

The following Policy, effective January 31, 1996, applies to the termination of new cable/wire facilities in buildings under new construction or when there is a complete reinforcement of existing entrance facilities. The policy applies to facilities required to provide services at speeds of 1.544 Mbit/s and below. Due to technical requirements, services provided at speeds above 1.544 Mbit/s will be terminated per technical specifications.

A. Description

Based on options specified in D., following, the Company will place and maintain regulated cable/wire facilities to a point of demarcation that is mutually acceptable to both the Company and the premises owner. The demarcation point location will be within 12" of the protector, or when there is no protector, within 12" (or as close as practicable) of the point at which the cable/wire enters the customer's premises.

Company regulated network facilities includes the portion of an exchange access line circuit that commences at the Minimum Point of Entry (MPOE) and extends up to, and includes the demarcation point, at which point a Standard Network Interface (SNI) is placed. These facilities may include, but are not limited to, wiring enclosures, riser and house cable/wire facilities, protector units and the SNI Unit(s).

B. Terms and Conditions

1. All cable/wire, up to and including the SNI at the demarcation point, are regulated facilities, managed and maintained by the Company.

2. Access to the Company's facilities on the Company's side of the demarcation point is prohibited.

3. The premises owner is responsible for the provision and maintenance of adequate space and supporting structure for all regulated cable/wire facilities placed into, or within private property.

EXHIBIT
Cox-1
Admitted

(M) Material moved to Page 42.1.

2. GENERAL REGULATIONS - CONDITIONS OF OFFERING

2.8 CABLE, WIRE AND SERVICE TERMINATION POLICY (N)

B. Terms and Conditions (Cont'd)

4. When the repair of regulated facilities is required on private property, it is the responsibility of the premises owner to provide suitable working space for repairs by the Company. This would include, but is not limited to, removing any required concrete or asphalt, the repair or replacement of supporting structure or to provide any required digging to access the damaged area.

5. All cable/wire beyond the demarcation point is deregulated. The premises owner/customer has responsibility to provide, and/or maintain and manage the cable/wire beyond the demarcation point.

6. The Company will install and provide maintenance for cable/wiring beyond the demarcation point at the request of the premises owner/customer at deregulated Time and Material Charges.

7. It is the customer's responsibility to know where their facilities begin. The Company will not perform premises audits to determine demarcation point locations, without appropriate charges.

8. If Company provided entrance facilities exceed 300 feet, which will be deemed excessive, Special Construction charges will apply.

9. The termination of regulated network facilities is subject to the terms, conditions and rates set forth in Section 4, Construction Charges.

10. The premises owner shall be responsible for Company costs associated with the disruption of service to the customer if caused by other provider's access to Company equipment that serves as a common Demarcation point for multiple customers. The premises owner is responsible for providing a secured location for the demarcation point, and also to limit access to authorized personnel only.

2. GENERAL REGULATIONS - CONDITIONS OF OFFERING

2.8 CABLE, WIRE AND SERVICE TERMINATION POLICY (CONT'D) (N)

C. New Cable Facilities

1. Single Tenant Building(s)

   If a building is occupied by a single tenant, then the premises owner must choose to have the Company locate the demarcation point as outlined in either Options 1 or 4 in D., following.

2. Multi-Tenant Building(s)

   The premises owner must choose one of the options outlined in D., following, for the premises demarcation location(s).

3. Campus Options

   The premises owner may choose how the campus property and the buildings on the property will be provisioned with Company regulated facilities. The choices of demarcation point location(s) are as follows:

   - One location for the campus property (Option 4), or;
   - Designating demarcation points; in one or more building(s), following the single-tenant or multi-tenant guidelines for each building. (Options 1, 2 or 3 as outlined in D., following.)

2. GENERAL REGULATIONS - CONDITIONS OF OFFERING

2.8 CABLE, WIRE AND SERVICE TERMINATION POLICY (CONT'D) (N)

D. Premises Owner Choices

There are four termination options which a premises owner may choose from. The options vary depending on the occupancy of the building(s).

In a campus environment, the premises owner may choose an option for each building.

- Option 1

  All Company facilities will terminate at one location upon entering the building. This location will be mutually agreed upon by the Company and the premises owner or designee. Normally this location will be at the lowest common serving point. (This option is available for both single and multi-tenant premises.)

- Option 2

  The Company will terminate facilities at common locations throughout the building (terminal rooms, utility closets, etc.). These locations will be mutually agreed upon by the Company and the premises owner or designee. The demarcation points will be accessible to end-users at these locations. (Option 2 is not an option for single tenant buildings).

- Option 3

  The Company will terminate facilities at one mutually agreed upon location within each individual space/unit, within 12" (or a similarly reasonable distance) of cable/wire entry. (Option 3 is not an option for single tenant buildings.)

- Option 4

  The Company will terminate facilities at one location on the property mutually agreed upon by the Company and the premises owner or designee. (This option is available for both single and multi-tenant premises.)

2. GENERAL REGULATIONS - CONDITIONS OF OFFERING

2.8 CABLE, WIRE AND SERVICE TERMINATION POLICY (CONT'D) (N)

E. End User Choices

Where a premises owner has chosen an option other than Option 3, or the premises is served by another provider (e.g. Shared Tenant Provider) the end user may obtain service directly from the Company provided they obtain permission from the premises owner or designee. The premises owner/designee must agree to provide necessary supporting structures. Such service will be provided from the same demarcation point elected by the premises owner. With the premises owner's permission, service will be provided using existing cable pairs. If necessary, new cable/wire will be placed from the demarcation point/SNI to the end user's space at deregulated Time and Material Charges. (N)

2.15 OBSOLETE SERVICES (M)

Services and equipment referred to as obsolete are no longer suitable to meet the current needs of the general public. They will not be furnished as a new entire item of service to any customer or applicant.

A. Monthly Services

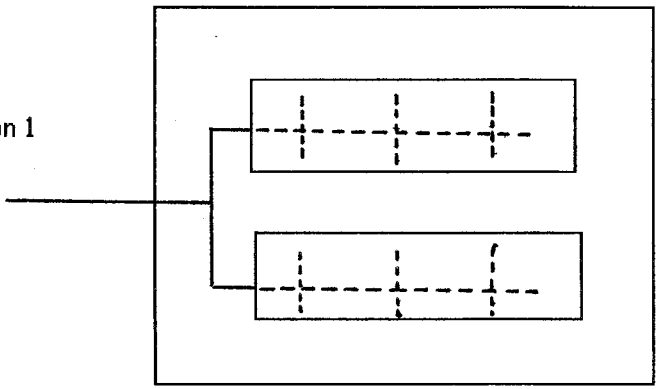
Certain items of service may be furnished where they are required to fully utilize the installed common equipment capacities of existing systems. At the discretion of the Company, such items presently being furnished to existing customers may be continued in service on the same premises for the same customer for a limited period of time subject to the ability of the Company to maintain the items without unreasonable expense and to obtain repair parts from existing or recovered stock. (M)

(M) Material moved from Page 43.

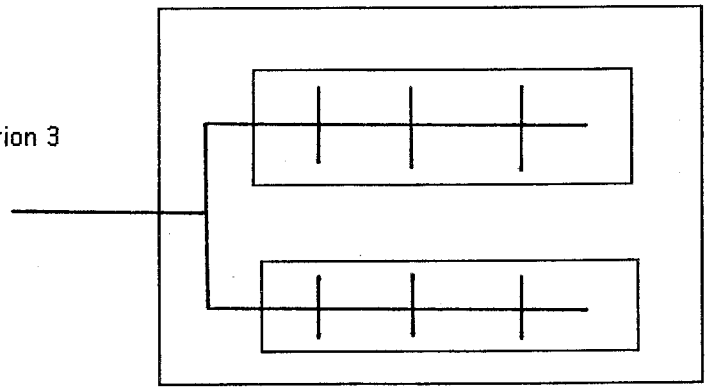
Qwest Cable, Wire and Service Termination Policy, Section 2.8.D Options

Qwest-owned: ———————— Property Owner-owned: - - - - - - - - - - -

Option 1



Option 3



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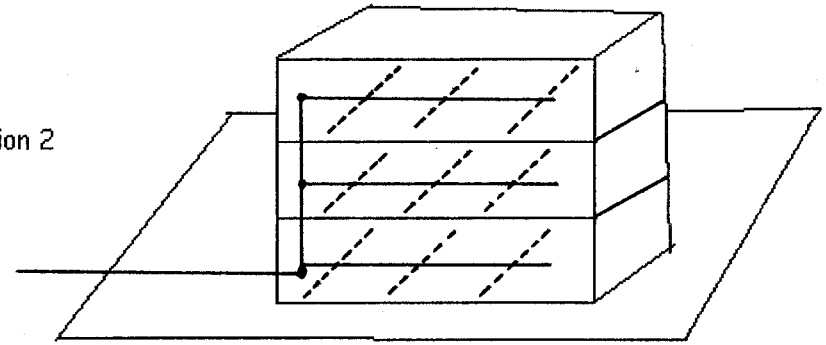

Option 4

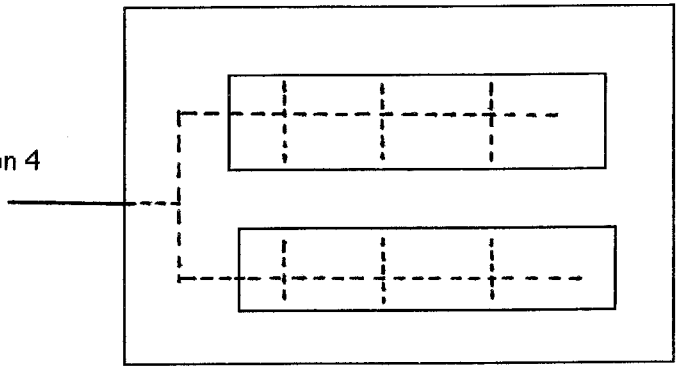

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EXHIBIT
Cox 2
admitted

SUMMARY OF TESTIMONY AND SURREBUTTAL OF FRANK COLLINS

SUMMARY

Initially, Cox is withdrawing the portion of my direct testimony that addressed specific input factors to the Qwest cost model and conducted a "recalculation" of loop rates using Qwest's own investment model. That portion of the testimony focused on the initial position Qwest set forth in its March 15, 2001 filings in this docket and contrasted Cox's analysis with that position. Since that time, Qwest has made numerous modifications to its loop price analyses, including to such things as its pricing zones. Although Cox does not agree with Qwest's modifications, Cox does not intend to prepare a new analytical comparison with Qwest's new position. Cox is withdrawing the direct testimony at page 18, line 1 through page 25, line 7, as well as Exhibits FRC-E-1 through FRC-I.

My remaining testimony points out that the Qwest's proposals in this docket physically, economically, and technologically isolate tenants in business and residence multi-dwelling units (MDUs) to such a significant extent that those tenants will not be able to benefit from the competition in the provision of local exchange services intended by Congress with its passage of the Telecommunications Act of 1996 (the "1996 Act"). Qwest's existing MTE/MDU configurations – which often require CLECs to obtain access to Qwest-owned campus wire or inside wire – create a blockade to the benefits of competition for MDUs, particularly given Qwest's proposed subloop pricing.

I recommend that the Commission adopt the MDU gateway depicted in *Exhibit FRC-D* where both the Minimum Point of Entry and the point of Demarcation meet FCC requirements, are located at the property line of campus properties and located inside single building units at the closest possible point to an accessible outside wall as is feasible. I further urge the Commission to allow property owners to purchase the

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telecommunication facilities on their property at net book value, just as the California Public Utilities Commission has done.

Qwest's pricing proposals also will put in motion a longer range strategy that could allow Qwest to maintain market dominance forever. This longer term strategy uses pricing artifacts – the "fill or utilization factor", the "sizing factor", and the "gradation of allowable cable sizes" – to recover total investment costs on essential technological elements necessary for competition while Qwest remains the super-dominant service provider. Specifically, this strategy provides Qwest with a zero dollar investment cost basis for outside plant facilities going forward by loading all of the investment cost on a small part of the total installed capacity that has caused that cost. Qwest then can enjoy the balance of the capacity ("goods on the shelf") free of investment cost.

The notion of allowing Qwest to use its market dominance to recapture all of its outside plant investment over a significantly smaller number of units of capacity than have been installed (and which caused the investment costs), establishes barriers to market entry and threatens to force out new market entrants currently in business. I, therefore, urge the Commission to require Qwest to capture their investment costs over all but ten percent (10%) of the capacity installed that has caused that cost. The ten percent (10%) difference will provide a buffer for administrative and other costs of Qwest.

SURREBUTTAL

Q. ARE YOU THE SAME DR. COLLINS WHO FILED DIRECT TESTIMONY IN THIS DOCKET?

A. Yes.

Q. HAS YOUR EMPLOYMENT OR QUALIFICATIONS CHANGED SINCE THAT FILING?

A. No, not in any substantial way.

1 **Q. DR. COLLINS, ON WHOSE BEHALF HAVE YOU FILED YOUR**
2 **SURREBUTTAL TESTIMONY?**
3 A. My surrebuttal testimony is presented on behalf of Cox Arizona Telcom, L.L.C.
4 ("Cox"), which continues to be a facilities-based provider of local
5 telecommunications services in Arizona.

6 **Q. DR. COLLINS, WHAT IS THE PURPOSE OF YOUR SURREBUTTAL**
7 **TESTIMONY?**
8 A. The purpose of my surrebuttal testimony is to demonstrate that the Qwest rebuttal
9 of my direct testimony fails to provide a compelling basis for the Commission to
10 reject the recommendations in my direct testimony with respect to MDU/MTE
11 issues and issues related to the development of per unit loop cost. In fact, most of
12 the rebuttal testimony merely describes the problem, as I have set it out in my
13 direct testimony, and does not address a viable solution. I have presented a viable
14 solution in my direct testimony.

15 **Q. DR. COLLINS, WOULD YOU ADDRESS THE REBUTTAL TESTIMONY**
16 **FILED BY QWEST WITNESS MR. OVERTON?**
17 A. Mr. Overton suggested that tenants access to competitive service providers could
18 be provided by any one of four wiring architectural options made available by
19 Qwest under Qwest's Cable Wire Service Termination Policy (CWSTP). The
20 essence of Mr. Overton's rebuttal is a description of these four options and a claim
21 that any of them provide access to competition. I note that all of the options are
22 basically the same as those presented and discussed in my direct testimony and
23 depicted in *Exhibits FRC-C-1* to *FRC-C-4*.
24 The first option presented by Mr. Overton is depicted in my direct
25 testimony *Exhibit FRC-C-1* with an added competitive disadvantage in that the
26 MPOE has been moved away from the property line and located and combined

with the SNI (the combination identified by Mr. Overton as an MTE NID.) All of the competitive physical, technical, and economic disadvantages presented in my direct testimony apply to this option. Additionally, there is the added competitive disadvantage of Qwest's competitors having to place cable across private property to reach the MTE NID location if they choose, for economic reasons, not to obtain access to Qwest's facilities at the SAI.

The second option presented separates the NID (now called "demarcation point") from the MPOE and locates it on each floor of a multi-story building. Qwest maintains ownership of the cable (named riser cable) between the MPOE and the NID/demarcation point on each floor. This option is presented and discussed in my direct testimony and further depicted in *Exhibit FRC-C-3*. Once again this option presents the additional competitive disadvantage of Qwest moving the MPOE from the property line to the building so that other providers must place outside plant facilities across the private property to reach the MPOE. The anti-competitive aspects of this configuration presented in my direct testimony apply directly to CWSTP option 2. The added physical, technical, and economic competitive disadvantage of Qwest's moving the MPOE from the property line to the building also exists.

The third CWSTP option presented by Mr. Overton creates an even more severe competitive disadvantage for CLECs. In this option, Qwest has required its facility-based competitors to overlay the outside plant on private property, to overlay the riser cable in the building, and to overlay the horizontal cable on each floor which connects to the individual business or residence units. Qwest has accomplished this by locating the NID/demarcation point within each unit. This "option" has been presented and its anti-competitive nature discussed in my direct testimony and its architecture is depicted in *Exhibit FRC-C-4*. Again, this option

has the additional competitive disadvantage of Qwest moving the MPOE from the property line to the building.

Mr. Overton's discussion of CWSTP option 4 indicates that the MPOE is located at the property line making physical access easier. However, Qwest now requires a Field Connection Point (FCP) which raises the physical and economic barrier. Additionally, the cable between the MPOE and the tenant may need to be leased from Qwest.

Q. DO ANY OF THE OPTIONS PROVIDED BY QWEST LEVEL THE COMPETITIVE PLAYING FIELD AND PROVIDE FACILE ACCESS TO THE BENEFITS OF COMPETITION TO TENANTS?

A. No, none of them clearly provide the architecture depicted in *Exhibit FRC-D* of my direct testimony. That configuration guarantees competitive neutrality and facile access to competition by tenants.

Q. DR. COLLINS, WOULD YOU DISCUSS THE REBUTTAL TESTIMONY OF QWEST WITNESS MR. BUCKLEY?

A. Mr. Buckley apparently misunderstood my direct testimony regarding the sizing of cable used to provide telephone service. His description of the lack of congruence between "sizing factors" and "pair assignment factors" is accurate and recounts my discussion of that issue but misses the essential point made in my direct testimony and clouds the real issue to an even greater extent. That real issue is how the investment in cable is recovered!

Cox believes that the investment should be recovered over all of the plant units, in this case subscriber loops, that cause the cost. Qwest, based on its manner of computing cost per unit, believes that the cost should be recovered over only a fraction of those installed units – those in service or soon expected to be in service. What is the significance of that difference?

In the Cox position, each subscriber loop carries its own cost and that cost is recovered only when it is placed in service. Unused loops, "goods on the shelf" have unrecovered cost consequences that must be considered in doing plant design. This is what Cox and the other Qwest competitors face.

In the Qwest position all of the investment is recovered by active customers, those making up the "fill". I note that such investment, if made when Qwest has market control, assures Qwest of full cost recovery based on only part of the implemented plant. The remainder of the capacity – the difference between the "fill" (only a portion of the capacity of the plant) and the total capacity -- sits on the shelf absent investment cost. Qwest could literally give those loops away and still have full cost recovery.

The difference between the two positions is clear. The Qwest position allows them to obtain full investment recovery while they have market dominance and then "investment free" goods on the shelf to be used when (and if) competition increases. These investment cost free loops can be used to perpetuate Qwest's market dominance as, for example, in underpricing the market.

Q. DR. COLLINS, QWEST WITNESS MR. FLEMING, IN HIS REBUTTAL TESTIMONY ON PAGES 101 TO 104, DISCUSSED THE PRICING TREATMENT OF WIRE ON PRIVATE PROPERTY. WHAT IS YOUR OPINION OF THAT TESTIMONY?

A. Mr. Fleming opined on several points. The first is that Campus Wire should be priced at the same level as distribution cable. This opinion is merely a restatement of Qwest's current attempt to drag cable on private property into its network. Premise cable, including campus wire, has historically been treated differently than distribution cable because its nature is entirely different. A telling point in support of that position is that Qwest has historically required the property owner to pay for the premise wire infrastructure (conduit placement and the like) in

which the cable is placed. There are no second party payments for infrastructure to support the placement of distribution cable. The cable on private property is intended only to serve customers at that property. Distribution cable is designed to be used and reused as the customer location pattern within the distribution area changes.

Mr. Fleming also cited the fact that no cost models presented in the Docket included the design of a campus arrangement that was different than the distribution configuration in support of his position. In fact, the models were designed to represent distribution plant and not cable on private property. The models were forced fit into a representation of campus wire (or building wire) by simply and erroneously extending them onto the private property. They did not model for campus wire because they were not intended to be used for campus wire.

Mr. Fleming opined that competition would "be impaired in non-MTE distribution areas if MTE's are removed from the calculation of the average subloop distribution costs and priced separately. "He continues with the claim that "There is no doubt that the cost of serving MTEs whether they consist of a single large building or numerous smaller building[s] on a single contiguous piece of property is relatively low when compared to the costs of serving many other types of distribution areas." Cox agrees that the costs are lower and especially so when the property owner is charged for the bulk of the installation as is necessarily so when the property owner pays for the infrastructure. However, the claimed sub-loop price for the "last 300 feet," such as the campus wire, conflicts with the lower cost notion.

As indicated in my direct testimony Cox does not agree that competition will be impaired, and demonstrates how the opposite is true. Mr. Fleming offered no explanation of how competition would be impaired.

Finally, Mr. Fleming summarily suggested (p. 103, lines 18-22) that removing the lower cost of serving MTEs from the average loop cost computation would require a revision of costs for other distribution areas. However, he gave no indication of the relative impact nor did he indicate whether this result was good or bad. The fact is that Cox's recommendations to the Commission would fully compensates Qwest for the remainder of its investment in those facilities (such as campus wire) and consequently makes Qwest financially whole with respect to them. There is no point in claiming that removal of fully compensated plant from an unrelated computation has an effect on that computation. If averages are meaningful, than the distribution cable costs should be averaged and the cable on private property costs should be separately averaged. They should not be lumped together in an apples and oranges mixture.

Mr. Flemings rebuttal testimony provides only unfounded opinion, not evidence, regarding Cox's position in this docket and the Commission should not give his rebuttal testimony any weight in its decision.

Q. IN VIEW OF THE FACT THAT YOU HAVE WITHDRAWN THAT PART OF YOUR DIRECT TESTIMONY THAT DEALS WITH COSTS, DO YOU HAVE ANY COMMENTS ABOUT THOSE ISSUES THAT WILL BE HELPFUL TO THE COMMISSION?

A. Yes, I have a few comments that I believe will be helpful and they involve process and policy issues as they effect the market in Arizona for telecommunication services.

With respect to process, the changes in position filed by Qwest and Staff have resulted in a moving target. It is not unusual for the Parties to attempt to negotiate a settlement of issues that may result in cost numbers different from those calculated by various models. But those compromises are usually done off line. While the negotiations are underway, the Docket proceeds based upon the

information that was filed and which represents the thoughtful position of the Parties. This gives the Docket a structure that the Commission can look to.

In this instance, major changes in cost structure and zone configuration have materialized, each new version contradicting and denying the legitimacy of the earlier one, and being filed as the new formal position of the Parties, not a negotiation position. Cox found the process unusual and believes that it does not result in a record upon which the Commission can base a rational decision. This is the major reason Cox withdrew its cost testimony.

Cox is a facility-based provider that has significant investments in telecommunications infrastructure in Arizona. These investments were made against a business model that depended on a fair and equitable development of the competitive market for services. At this juncture, Cox has some policy concerns.

If UNE rates, particularly loops, are divorced from cost and set too low, it changes the market from one which encourages facilities investment to one which encourages arbitrage. History has shown that competition which arises only because of an artificial gap between retail cost and wholesale rates -- thus allowing an arbitrage business to develop -- is not long lasting. In the meantime, the arbitrageurs destroy the market for companies that have invested in infrastructure, such as Cox. The inevitable result is a failure of competition.

On the other hand, if UNE rates are set too high -- that is significantly above cost -- it raises the barrier to market entry for companies that may eventually become facilities based and invest in Arizona's infrastructure.

Rates should be set at a level that does not invite arbitrage as a way of doing business and at the same time shows that increased margins between UNE cost and retail prices can be obtained by infrastructure investment. To obtain this increased margins, companies should move from the use of UNEs to facilities investment. These undefined "optimum" rates are what the Commission should

attempt to establish. Because of the reasons cited above, Cox does not know how the current record provides a basis upon which to determine what those rates should be.

Q. IN LIGHT OF THIS REBUTTAL TESTIMONY, WHAT IS YOUR RECOMMENDATION TO THE COMMISSION?

A I believe that the Commission will best serve the telephone service consumers in Arizona by following the recommendations made in my direct testimony as to MDU/MTE access and computing subscriber loop investment assignments.

QWEST

COST DOCKET

NO. T-00000A-00-0194

QWEST ORIGINAL EXHIBITS

PUBLIC

EXHIBIT
Qwest-2
Admitted

BEFORE THE ARIZONA CORPORATION COMMISSION

WILLIAM A. MUNDELL
CHAIRMAN
JAMES M. IRVIN
COMMISSIONER
MARC SPITZER
COMMISSIONER

IN THE MATTER OF INVESTIGATION INTO QWEST CORPORATION'S COMPLIANCE WITH CERTAIN WHOLESALE PRICING REQUIREMENTS FOR UNBUNDLED NETWORK ELEMENTS AND RESALE DISCOUNTS	DOCKET NO. T-00000A-00-0194 PHASE II

REBUTTAL TESTIMONY OF

DICK BUCKLEY

ON BEHALF OF

QWEST CORPORATION

JUNE 27, 2001

BEFORE THE ARIZONA CORPORATION COMMISSION

WILLIAM A. MUNDELL
CHAIRMAN
JAMES M. IRVIN
COMMISSIONER
MARC SPITZER
COMMISSIONER

IN THE MATTER OF INVESTIGATION INTO QWEST CORPORATION'S COMPLIANCE WITH CERTAIN WHOLESALE PRICING REQUIREMENTS FOR UNBUNDLED NETWORK ELEMENTS AND RESALE DISCOUNTS	)	DOCKET NO. T-00000A-00-0194 PHASE II

REBUTTAL TESTIMONY OF

DICK BUCKLEY

ON BEHALF OF

QWEST CORPORATION

JUNE 27, 2001

TESTIMONY OF DICK BUCKLEY
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I. INTRODUCTION

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Dick Buckley. I am employed by Qwest Corporation as a Manager-Loop Cost Analysis. My business address is 1801 California St. #2040, Denver Colorado.

Q. HAVE YOU FILED TESTIMONY PREVIOUSLY IN THIS DOCKET?

A. Yes. I filed direct testimony on March 15th.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. The purpose of my testimony is to provide rebuttal to the testimony provided by Thomas H. Weiss, Michael Hydock and Douglas Denney on behalf of AT&T Communications of the Mountain States, Inc., WORLDCOM Corporation, XO Arizona, Inc. I also respond to the testimony provided by William Dunkel on behalf on the Arizona Corporation Commission Staff and Dr. Frances Collins on behalf of Cox Arizona Telecom, L.L.C. In particular, I address Mr. Weiss' criticisms of the default inputs to Qwest's LoopMod module of the ICM and respond to the assertions made by Mr. Hydock concerning alleged embedded inputs. I also provide rebuttal to the testimony of Mr. Denney with regard to structure sharing opportunities. In addition, I address certain changes that were made to the inputs to LoopMod based on concerns raised by Staff and intervenor testimony.

II. REVISIONS TO QWEST COST STUDIES

A. Placement Activities

Q. ARE YOU PROPOSING ANY CHANGES TO THE LOOPMOD DEFAULT VALUES?

A. Yes. Various intervenor and Staff witnesses have recommended certain changes to the placement activity mix. In particular, witnesses criticized LoopMod for using boring and cut and restore type activities in the low density areas. Qwest has considered this testimony and, in response, has adjusted the activity mix for Density Group 5 and Rural Feeder to reflect more extensive use of plowing for placing facilities. The chart below shows the percentages of different placement activities that were originally used in LoopMod and the replacement percentages that are now being used in LoopMod, as reflected in the new ICM run filed by Ms. Million.

(DG 5 Distribution and Rural Feeder	Default %	Adjusted %
Trench & Backfill	0%	3%
Rocky Trench	0%	0%
Plow	60%	91%
Rocky Plow	5%	4%
Cut & Restore Concrete	5%	0%
Hand Dig Trench	5%	0%
2 Inch Bore Cable	3%	0%
4 Inch Bore Cable	2%	0%
Cut & Restore Asphalt	5%	2%
Hydro Mulch	15%	0%
Total	100%	100%

B. Grooming

Q. WHAT CHANGES ARE BEING MADE WITH REGARD TO THE GROOMING OR UNBUNDLING COSTS FOR IDLC LOOPS IN LOOPMOD?

A. The costs for the grooming equipment required to unbundle integrated digital loop carrier ("IDLC") loops have not been changed. Qwest still believes that these are appropriate costs for the provisioning of unbundled loops when dealing with Integrated Digital Loop Carrier systems. What Qwest has changed in the new ICM summary is the presentation of the grooming costs. The prior summary included those costs as part of the loop. In this summary, the grooming costs are held out as a separate item. This will assist in the calculation of the UNE-P rate, where the grooming charge will not apply. The stand-alone cost for 2-wire unbundled loop grooming is $1.59 per loop.

III. FEEDER AND DISTRIBUTION FILLS

Q. MR. WEISS CLAIMS THAT LOOPMOD V2.0 ADJUSTS THE STANDARD DISTRIBUTION DESIGNS TO INCLUDE ALLOWANCES FOR SPARE, DEFECTIVE AND DEDICATED CAPACITIES. IS THIS INTERPRETATION OF THE LOOPMOD CALCULATIONS CORRECT?

A. No. Mr. Weiss appears to be confusing the idle dedicated and additional line adjustments that are made to the distribution divisors with an adjustment to the distribution engineering designs. The LoopMod Engineering Standard designs use a pairs per site approach. Those designs are adjusted only if the user overrides them and uses new

designs with an adjusted number of pairs available at each location based on a "fill" input. The term fill is used here, and in other models such as HM5.2, when what is truly meant is cable-sizing factor. In LoopMod, the user can estimate a two pairs per site design by selecting 50% as the "fill" input. The program will then divide the number of locations at each pedestal or splice location by the "fill" percentage to determine the required number of pairs.

On page 10 of his May 18, 2001 direct testimony, Mr. Weiss discusses the idle dedicated and additional line percentages. These numbers are used to adjust the design locations quantity to develop a working pairs divisor to be used in conjunction with the distribution area total investment. For example, if a distribution area contains 100 homes, the divisor would be calculated by multiplying 100 by the net of the idle dedicated percentage (homes unoccupied with the primary left assigned) and the additional line percentage (homes taking more than one line). With idle dedicated at 4% and additional line at 14%, the net would be 10%. The resulting distribution divisor would be 110 (100 times (14% - 4%)). This has nothing to do with the number of pairs in the designs, as Mr. Weiss incorrectly implies. Instead, the calculation recognizes that additional line demand will spread the distribution investment over more working pairs.

Q. DR. COLLINS DESCRIBES THE USE OF CABLE SIZING FACTORS IN CONJUNCTION WITH THE LOOPMOD PAIRS PER SITE DISTRIBUTION DESIGNS. IS HIS DESCRIPTION ACCURATE?

A. No. The use of cable sizing factors for distribution design is different from LoopMod's approach of using pairs per site for distribution design. The two approaches are mutually exclusive. Designing distribution based on a cable sizing factor involves determining the demand at various points along a route and dividing that demand by a factor. For instance if 4 homes are served at a pedestal and the sizing factor was 80%, the calculation would yield a requirement of 5 pairs at that location. This along with the other locations on the route would determine the cable size. By contrast, designing distribution through a pairs per site approach involves dedicating a pre-designated number of pairs to each customer location. In the previous example, each of the 4 homes would be assigned 3 pairs and the requirement at the pedestal would be 12 pairs. Qwest advocates the use of a pairs per site approach because that approach most realistically reflects the way in which network architectures for distribution are typically designed. LoopMod includes a utility that allows the user to modify the designs to provide pairs to each pedestal on a cable sizing basis. For instance, a 50% sizing factor applied against a location (pedestal) serving 3 homes would result in a 6 pair requirement. This process is continued throughout the distribution area, accumulating pair requirements, to size the cabling in each leg of distribution plant. This approach is separate and different from the default engineering standard designs, which assume 2 pairs or 3 pairs for each home when calculating the cable sizes. Dr. Collins combines these two exclusive approaches and then claims that the model overstates the amount of required plant. Dr. Collins simply does not understand how the model works.

Q. DR. COLLINS ALSO SUGGESTS THAT THE QWEST STUDIES SHOULD USE A 90% UTILIZATION RATE. IS AN ASSUMPTION OF UTILIZATION AT THAT RATE APPROPRIATE?

A. No. The unreasonableness of his proposed utilization rate is demonstrated in the first instance by the fact that no other party in this proceeding advocates a utilization rate that is that high. If Dr. Collins' proposed fills were used in cost studies, Qwest would never recover the investment that must be made to provide service in a timely fashion. If Qwest actually built plant in such a way as to achieve that level of utilization in distribution plant, held-orders (and customer complaints) would rise dramatically. Dr. Collins fails to understand the dedicated nature of twisted pair distribution plant and the costs that will be incurred due to numerous rearrangements and reinforcements. Feeder plant is designed to be reinforced over time, distribution plant is not, because it is far less fungible. There is less accessibility to distribution and it becomes more and more dedicated to a particular geographic area, as it gets closer to the end-user. Attempting to achieve a high fill in distribution will result in technician visits to rearrange pairs when demand shifts from one home to another. If the demand pattern is such that a particular leg of cable in a distribution area (DA) runs out of pairs, the fact that there are spare pairs elsewhere in the DA will not solve the shortage. That particular section will require reinforcement at an added cost. Also, that reinforcement will not benefit other areas within the DA. If a similar situation occurs a few blocks away from the first reinforcement, the Company would have to make additional investments to provide relief at that location. It is more

economical to build plant properly at the onset, then it is to rearrange and reinforce plant at a later date.

Q. ARE THE DISTRIBUTION FILLS RECOMMENDED BY MR. WEISS REASONABLE?

A. No. First, if an engineer followed the design guidelines that AT&T advocated in 1982[1], at least two pairs per living unit would be the standard. However, demand characteristics have changed since then, and Qwest network architectures now recommend three pairs per site in single-family subdivisions. To achieve 0.6667 fill on distribution plant using the actual frequency of additional line take in Arizona would require a design that provides less than two pairs per site. This design approach would violate the engineering practice that AT&T followed as far back as 1982, without even taking into account the changes in demand that have occurred since then. Mr. Weiss claims that his adjustment to 0.6667 fill would still allow access to three pairs per site. With a three pair per site design and a 0.6667 fill, Mr. Weiss is assuming a second line take of over 100%. (For example, 100 homes with 300 pairs. 66.67% fill requires 200 working pairs. That would assume all primary lines are working and that 100 additional lines are working. Any idle dedicated primary lines would increase the additional requirement. As of October 1998, Qwest had a 17.12% second line take in Arizona. Mr. Weiss assumes that second line take will be seven times greater than it actually is.

[1] Outside Plant Engineering Handbook August 1982, page 3-3

Q. WON'T THE DEMAND FOR TEEN LINES, FAX LINES AND INTERNET CONNECTIONS DRIVE UP THE DEMAND FOR ADDITIONAL LINES.

A. Yes, and it did during the late 1990's. But that demand will also be met by new technologies that were not available at that time. DSL, Voice over DSL, Cable Modems, Broadband Wireless, and Direct Broadcast Satellite can all serve as substitutes for additional lines. While dial-up modem access will still be a major player in the near future, assuming a seven-fold increase in additional line take is unsupportable. Mr. Weiss's distribution fill recommendations make no sense in light of the current market.

Q. DO YOU HAVE ANY COMMENTS ABOUT MR. WEISS'S TESTIMONY ON FEEDER FILLS?

A. Yes. Mr. Weiss once again confuses fill with cable-sizing factors. A cable-sizing factor is used to determine what cable to select once the demand for a section has been established. For instance, if demand for a section of cable is 175 pairs and the cable-sizing factor is 80%, the result (219 pairs) is used by the LoopMod program to select the cable size required. The next available cable would be a 300-pair cable. Using an 85% "fill" would yield a 206-pair requirement, and the program would still select a 300-pair cable.

Q. DO YOU AGREE WITH MR. HYDOCK'S CLAIMS THAT LOOP COSTS ARE VERY SENSITIVE TO FILL FACTORS AND THAT QWEST FAILS TO USE FORWARD-LOOKING FACTORS?

A. No. I do not agree with Mr. Hydock. Mr. Weiss criticizes LoopMod because, in his opinion, it is not sensitive enough to changes in fill factors. Apparently, Mr. Hydock did not read Mr. Weiss' analysis of the impact of fill factors on distribution plant costs. In the Sensitivity Tests section below, I explain how Mr. Weiss has misinterpreted the application and impact of fills or cable sizing factors. Mr. Hydock is incorrect in his statement that Qwest failed to use appropriately forward-looking factors. In fact, LoopMod incorporates distribution designs that follow the current Qwest Network architectures. The utilization rates in the distribution network are caused by the design and the demand that is assumed. These are not input factors. The HAI approach allows fewer than 2 pairs per home, the AT&T standard in 1982. This can hardly be construed as a forward-looking factor. It is simply a cost-reducing factor.

IV. DROP LENGTHS

Q. MR. WEISS CLAIMED THAT QWEST HAS NOT OFFERED ANY EVIDENCE CONCERNING THE DROP LENGTHS IN ARIZONA AND THE DEFAULT VALUES IN LOOPMOD. IS THIS TRUE?

A. No. Qwest provided summaries of drop length studies conducted in several Qwest states, including states that are appropriate for comparison with Arizona. The results of these

studies are reasonably consistent, and they show that the default LoopMod drop length inputs are conservative. Mr. Weiss has offered no evidence to support his proposed drop lengths or to show that they are appropriate for Arizona. In fact, the proposed lengths are nothing more than the HAI defaults that have been used by the sponsors of HAI on a national basis since the introduction of the model. They are, in theory, based on a study that developed a 73-foot national average drop length. When Mr. Weiss's recommended inputs are used in LoopMod, the program produces an average drop length of 59 feet for Arizona. Mr. Weiss apparently believes that drop lengths in Arizona would be 20 percent shorter than the national average, which would include New York, Rhode Island, Connecticut and other high-density areas. It should be expected that a state like Arizona that has a significant amount of rural, low-density areas will have average drop lengths that are greater than the average lengths in states that are high-density. Qwest's multi-state drop studies confirm this reality, as they show average drop lengths of 153 feet for New Mexico, 201 feet for North Dakota, and 143 feet for Wyoming. Mr. Weiss's proposed changes are insupportable and should be disregarded.

V. PLACEMENT COSTS

Q. MR. WEISS STATES IN HIS TESTIMONY THAT HE PRESUMES THAT THE QWEST CONSTRUCTION CONTRACTS THAT ARE RELIED UPON FOR PLACEMENT COSTS USED IN LOOPMOD ARE BASED ON SMALL PROJECTS. IS THIS A VALID ASSUMPTION?

A. No. Mr. Weiss bases this assumption on his experience with GTE and a small independent telephone company in Vermont several years ago. His experience with construction contracts involving these companies apparently is not comparable to the practices that Qwest follows today for network construction. The extent to which Qwest contracts with outside vendors for the placement of outside plant has increased in recent years. Today, the vast majority of the placement of buried cable in Arizona is done by contracted construction firms. Qwest has spent over $1.4 billion in Arizona in 1999 and 2000 to upgrade and add to its network. As these amounts reflect, these upgrades have involved substantial projects, not the small projects that Mr. Weiss assumes. Mr. Weiss's claims about the size of Qwest's construction projects are based on pure conjecture. Qwest is actually building outside plant. The prices Qwest pays for construction activities in Arizona are the best estimate of the forward-looking cost to build a replacement network. Mr. Weiss offers no evidence that any other CLEC or ILEC is paying lower prices for the same type of work.

Q. IS MR. WEISS CORRECT THAT IN A TELRIC ANALYSIS THE ENTIRE PLANT WILL BE REPLACED?

A. Yes. And that is exactly what Qwest has assumed in its loop cost modeling. The studies reflect the economies that Qwest could achieve in building a network to serve the universe of current demand and the costs that Qwest currently incurs to place outside plant in Arizona. They do not include the hypothetical placement costs recommended by Mr. Weiss. His placement costs are based on the opinions of HAI subject matter experts

who have no apparent experience building a network in Arizona and are premised upon national averages. By contrast, the placement costs in the Qwest studies are based on what Qwest pays contractors in Arizona to build actual network facilities.

Q. DO YOU AGREE WITH MR. WEISS'S CONTENTION THAT DIRECTIONAL BORING IS A LAST RESORT FOR TELEPHONY OUTSIDE PLANT CONSTRUCTION?

A. Not at all. Depending on the construction site, it may be the first choice. As I stated in my direct testimony of March 15, the rebuild of the distribution plant in Omaha, Nebraska, quickly shifted from standard trenching methods to directional boring when it became obvious that boring would reduce customer complaints and restoration costs. Mr. Weiss is correct that crews must use care when operating boring equipment. I have attached an exhibit (RJB1) that contains photographs of AT&T Broadband crews in Colorado using boring equipment to upgrade and replace cable television plant. As this photograph shows, AT&T Broadband supports the use of boring techniques when it comes to actually building plant. When boring is employed by trained crews, using modern equipment, this method of placement can be both extremely accurate from an engineering perspective and very efficient from a cost perspective.

Q. IS MR. WEISS CORRECT WHEN HE CLAIMS THAT QWEST'S SUPPORT FOR THE MIX OF PLACING METHODS "IS LITTLE MORE THAN SPECULATION"?

A. No, he is absolutely incorrect. There is nothing speculative about the data that was derived from those distribution plant replacement projects. Rather than relying strictly on opinions, as is done with the HAI inputs, the LoopMod inputs reflect the experience that was gained from these projects. As I discuss in my direct testimony, the reality is that in replacing plant, Qwest and the cable company in North Dakota found that it made a great deal of engineering and cost sense to use directional boring extensively. Qwest used it for approximately 65% of the route distance in the Omaha rebuild, and the cable company used it for approximately 50% of the route distance in the Bismarck rebuild. These real-life percentages are in sharp contrast to the 3% and 4% HAI inputs for comparable density zones. The opinions that the HAI model relies upon are simply out of step with actual network experience.

Q. IS THE CURRENT MIX OF PLACEMENT METHODS USED IN GROWING THE ARIZONA NETWORK PERTINENT TO A FORWARD-LOOKING REPLACEMENT STUDY, AS MR. WEISS CLAIMED?

A. No, it is not. As Mr. Weiss stated on page 20 of his May 18th direct testimony, the TELRIC studies assume the replacement of the entire network. This allows the use of currently available technology and the economies of scale associated with sizing plant for the total demand (i.e. one large cable in a route as opposed to three smaller cables placed over the years as the network grew). But the TELRIC assumptions also require placing this plant so as to serve all customers, not just those in new developments. This means dealing with mature neighborhoods with fences, landscaping, streets and sidewalks. The

percentages of activities used in Arizona today reflect the requirements involved in growing the existing network. This primarily entails placing plant in new sub-divisions and office complexes and, occasionally, replacing sections of plant for maintenance reasons. The activities used to grow the network will differ dramatically from those used in the total plant replacement projects mentioned earlier, and they do not represent a TELRIC construct.

Q. IS QWEST "SIMPLY WRONG", AS MR. WEISS CLAIMS, IN ASSUMING REALISTIC PLANT PLACING METHODS IN THE SCORCHED NODE APPROACH?

A. No. Mr. Weiss is being inconsistent. He argues that plant should be placed as if the landscape looked as it did decades ago, but he wants to use the technology and demand that exists today. The TELRIC modeling reflects the cost savings associated with the latest technologies and the economies of sizing cabling for total demand. WorldCom, AT&T and XO are supporting a 50% forward-looking network operations factor based on all new network facilities. That assumption conflicts directly with Mr. Weiss' assumption that the plant was placed before the development of twenty-year old homes. Placing that cable requires recognition of the infrastructure that exists in the real world. I doubt that the budgeting for the AT&T Broadband upgrades assumed primarily plowing and simple trenching. If it did, those projects certainly came in well over budget. Mr. Weiss wants to use a forward-looking approach where it lowers costs, but reverts to the embedded world when that benefits him. This is inconsistent and incorrect modeling and will yield

meaningless data. No rational businessperson would develop a business case based on assuming away a major portion of the costs of a project. In visiting AT&T cable placement sites, I observed extensive use of boring and hand-dig placement methods. Both of these activities are virtually ignored in the HAI default inputs.

Q. THE TESTIMONY FROM STAFF WITNESS MR. DUNKEL CLAIMS THAT THE QWEST MODEL USES BORING AND CUT & RESTORE METHODS FOR 60% OF THE DISTRIBUTION CABLE LENGTH. IS THIS TRUE?

A. No. In LoopMod, distribution plant uses boring, cut & restore concrete, cut & restore asphalt, and cut & restore sod for 41% of the cable length. It is not unrealistic, as Mr. Dunkel claims, to expect cable replacement projects to use either boring or some sort of cut & restore method to place cable in mature neighborhoods. Because of the significant costs and disruption that result from digging up and repairing yards, sidewalks, and streets in mature neighborhoods, boring is a very efficient practical placement method for these areas. The data and real-life experience from Omaha and Bismarck confirm that boring is a practical solution for placing plant in existing areas.

Q. IS IT CORRECT TO ASSUME THE MODELED MIX OF PLACEMENT METHODS SHOULD MIRROR THE MIX USED IN NEW SUB-DIVISIONS?

A. No. The models all assume that the universe of customers is being served by the latest technologies and can benefit from the economies of scale that can be achieved in a total plant replacement. It would be inconsistent to model a network replacement using

forward-looking designs and technologies and then assume the same accessibility for trenching as was available when the area was first developed. Mr. Dunkel is correct that the industry practice is to place plant prior to the construction of streets and homes in new sub-divisions. Unfortunately, the number of lines involved in new sub-divisions is a small fraction of the total lines included in the TELRIC models. The vast majority of those lines are located in areas that are already built. Putting new technologies in these locations will require building around and through the landscaping and streets that currently exist. Mr. Dunkel's use of placement methods that are appropriate for new sub-divisions is inconsistent with the other inputs to the models and will produce a number that is neither forward-looking nor embedded. The costs produced by Mr. Dunkel's adjusted inputs will not provide any meaningful data for use in setting TELRIC-based rates.

Q. MR. WEISS CRITICIZES THE LOOPMOD INPUTS AS BEING BASED ON OPINIONS OF SUBJECT MATTER EXPERTS (SMES). HOW DOES LOOPMOD'S RELIANCE ON SME OPINIONS COMPARE TO THE HAI MODEL'S RELIANCE ON SME OPINIONS?

A. The inputs to HAI appear to rely heavily on SME opinions. As a matter of fact, the support for various inputs in the Hatfield Inputs Portfolio cites SME opinion or judgment over 40 times. Mr. Weiss is being a bit disingenuous in discounting the opinions of Qwest experts, who actually are involved in the development and maintenance of networks in the Qwest region, while wholeheartedly endorsing the inputs supported by

HAI opinions. These opinions often assume the best case, such as in sharing and placement methods, which will have a major impact on the estimated costs of the loop. The Qwest assumptions regarding structure sharing are based on Qwest experience with pole ownership and joint trench and SME opinions on joint builds of conduit systems. The HAI "judgment" is that in most density zones, every single foot of trench for buried cable will involve sharing by three different providers. This is completely out of line with the data that Qwest has gathered on sharing in distribution plant replacement projects.

Q. MR. WEISS ALSO CLAIMS THAT QWEST FAILED TO PROVIDE SUPPORT FOR THE MATERIAL PRICES USED IN LOOPMOD. IS THIS A VALID CRITICISM?

A. No. In its data requests, AT&T asked for proprietary vendor contracts. Qwest was not able to provide this information without first securing permission from each vendor involved. Qwest has now substantially completed that process and is in the process of providing responsive information. In addition, AT&T asked for data from the Qwest Continuing Property Records (CPR). LoopMod does not use information from CPR. One reason for this is the very problem cited by Mr. Weiss. CPR summarizes information at a level that is unsuitable for modeling purposes.

VI. GROOMING

Q. MR. WEISS COMMENTS ON THE COSTS FOR EQUIPMENT USED TO GROOM OUT UNBUNDLED LOOPS. PLEASE EXPLAIN WHAT GROOMING IS.

A. Grooming refers to the process by which a lower bit rate circuit, such as a DS-0, is removed from a higher bit rate circuit prior to connecting to the local switch. Digital Loop Carrier (DLC) systems use high bit rate circuits (DS-1s or OC-3s) to transport multiple DS-0s from the remote electronics to the central office. If the system is a universal DLC, the equipment in the central office will demultiplex the signal to a DS-0 level and hand it off at the MDF or COSMIC frame. If the DLC is integrated, the DS-1s from the remote will use a DSX to cross-connect to the switch. In a large, integrated DLC, a multiplexer at the central office will be used to separate out the DS-1s in the OC-3 circuit and the DS-1s can then be routed through the DSX and connected to the switch. The grooming equipment allows the DS-1s to be reduced further to a DS-0 level. This is done so that unbundled loops can be terminated on an IDF and cross-connected to a CLEC's equipment. This only occurs for those loops that are derived from an Integrated Digital Loop Carrier (IDLC) system. The equipment is not necessary for copper loops or loops derived from universal DLC systems. For that reason, the grooming costs are reduced to reflect that although they apply to all unbundled loops, they only occur on the loops modeled as IDLC derived loops. In Arizona, the model assumes that 44% of the loops are on IDLC. The grooming investments are multiplied times 44%, and the

reduced amount is used to develop the cost for grooming. This charge is then applied to all unbundled loops. Resale loops and UNE-P elements do not incur this charge because those circuits utilize the Qwest switch and would not need to be cross-connected to CLEC collocation equipment.

Q. MR. WEISS STATES THAT CLECS WILL BE PURCHASING LOOPS IN FULLY INTEGRATED DLC SYSTEMS AND THAT QWEST WILL NOT NEED TO GROOM OUT THOSE LOOPS. IS THAT TRUE?

A. No. The situations where a CLEC wishes to access loops (DS0s) that are derived from an IDLC are exactly the situations that cause the necessity for grooming. If not for the interconnection requirement, the IDLC DS-1 would connect directly to a DS-1 level line card on the switch. When the CLEC requests a DS-0 circuit that resides within the IDLC DS-1, some sort of equipment is necessary to demultiplex the DS-1 to DS-0s, hand off the appropriate DS-0 to a frame, and route the remaining DS-0s (in the DS-1 circuit) to the switch. This equipment is a capital cost item. It is not included in the maintenance expense, as claimed by Mr. Weiss. It also costs less to groom than to take a circuit through a switch.

VII. SENSITIVITY TESTS

Q. PLEASE EXPLAIN THE SENSITIVITY TESTS THAT MR. WEISS CONDUCTED ON THE TECHNOLOGY CROSS-OVER POINT OR MAXIMUM COPPER FEEDER DISTANCE DEFAULT.

A. The default maximum distance for copper feeder in LoopMod is 12 kilo-feet. This means that all loops that connect to an FDI at less than 12,000 feet from the central office will be served on physical copper and all loops longer than that will be served using digital loop carrier systems. These systems are connected to the central office by fiber optic facilities. The model allows the user to vary this break point between copper and DLC. Mr. Weiss ran the program with the maximum copper distance set at 9,000 feet. In addition, he ran the program with the distance set at 8, 10, and 11 kilo-feet. He states that the changes in the cost results were less than his experience led him to expect.

Q. WHAT EXPECTATIONS WOULD YOU HAVE IN RUNNING THESE TESTS?

A. I would expect minimal cost impact when moving the maximum copper distance a few kilo-feet one direction or the other. The reason for this is that costs change only for those loops that were served on copper and are now served on DLC. And because they are at or near the point where the costs are the same for either solution, the cost difference will be very small. When you take a small cost difference for a small percentage of the total lines, the logical assumption is that there will be very little difference in the average cost of the loop. The same sort of test Mr. Weiss conducted with LoopMod can be conducted

with HAI. If one changes the maximum copper feeder distance from 9 kilo-feet to 12 kilo-feet (a 33% increase), the cost changes from $10.10 to $10.00, a 1% decrease. This shows that the percentage change in maximum copper feeder distance is meaningless. What is important is the change in the cost of the affected circuits and the percentage of affected circuits. When changing from 12 kilo-feet to 9 kilo-feet, both of these are fairly small values. Thus, the impact on average loop cost will be minimal.

Q. WHAT OTHER SENSITIVITY TESTS DID MR. WEISS CONDUCT?

A. Mr. Weiss also made adjustments to the cable sizing factors for feeder and distribution. Once again, he stated that he would have expected the results to have changed more than they did. In fact, changing the cable sizing factors should have very little impact on the average. First, it only affects cable material and does not impact the structure (trench) cost. Second, it only affects those cables that are on the cusp of one cable size versus another. For example, a demand of 70 lines divided by an 80% sizing factor yields 87.50 for the cable selection calculation. The LoopMod program will select a 100 pair cable. If the sizing factor is changed to 85%, the result will be 82.35 and the program will still select a 100 pair cable. In this situation, there is no cost impact due to the factor change. As long as the demand is less than 80% of the next larger cable (i.e. 79 line demand is less than 80% of the 100 pair cable), a shift from an 80% sizing factor to an 85% sizing factor is unlikely to impact costs at all. Mr. Weiss' conclusion appears to be based on a misunderstanding of how both HAI and LoopMod function.

Q. DID YOU PERFORM SIMILAR TESTS USING THE HM 5.2A PROGRAM?

A. Yes, I did. For copper feeder cable sizing factors, I adjusted the input to Zone 1 (lowest density) from 65% to 70%. For Zone 2, I adjusted the input from 75% to 80%. All other zones were changed from 80% to 85%. The cost decreased less than 1/10th of 1%. This compares to the 4/10^{ths} of 1% that Mr. Weiss generated when making his adjustments to the LoopMod feeder cable sizing factors. Mr. Weiss' expectations are out of line with the results of both LoopMod and HAI52a. For the distribution cable sizing factors, I adjusted the HAI default inputs from 75% to 95% in all zones. Here, a 27% increase in the value of the input resulted in a 2.5% to 4% decrease (depending on the staring point) in the loop monthly cost.

Q. GIVEN THE RESULTS FROM THESE SENSITIVITY RUNS, HOW DO YOU RESPOND TO MR. WEISS' CRITIQUE OF HIS LOOPMOD RUNS?

A. HAI and LoopMod both show that changes to the cable sizing factors, whether feeder or distribution, produce relatively minor changes to the average cost. This is due to the fact that changes only affect a small percentage of the cables and that those cable changes only affect the total investment by the incremental increase or decrease in material cost. Mr. Weiss accuses Qwest of some sort of sinister programming effort. But he bases this accusation on LoopMod results that are very consistent with HAI results. This sort of unfounded accusation gives me general skepticism about other criticisms that Mr. Weiss presents.

VIII. MODEL STRUCTURE

Q. MR. WEISS AND MR. HYDOCK CLAIM THAT LOOPMOD WAS CONSTRUCTED SO AS TO MAKE ANALYSIS "QUITE DIFFICULT" AND WOULD REQUIRE "AN INORDINATE AMOUNT OF TIME TO ANALYZE". PLEASE COMMENT.

A. This is a fundamentally inaccurate assertion. The programming associated with upgrades to LoopMod was aimed at adding features or functionality. There was no effort to make the model "quite difficult" to analyze. Neither Mr. Weiss nor Mr. Hydock offered their opinions on the ease of analyzing HAI5.2a. HAI contains hundreds of formulas like the one pictured below for Drop Investment per Cluster.

```
=IF(calculations!BH2=1,0,(VLOOKUP(density,density_inputs,17)*(slbus_lines)
+VLOOKUP(density,density_inputs,17)*IF(hh_tot>1,(hh_det+hh_att*drop_material
+drop_struct*CEILING(hh_att/(2*occ_SFA),1)+hh_2*drop_material+drop_struct*
CEILING(hh_2/(2*occ_2),1)+hh_4*drop_material+drop_struct*
CEILING(hh_4/(2*occ_4),1)+hh_mob+hh_other),1)+
VLOOKUP(density,density_inputs,15)*((bus_lines-slbus_lines+SA_loops)
*drop_material+(firms-slbus_lines)*drop_struct+pub_lines)+
VLOOKUP(density,density_inputs,15)*IF(hh_tot>1,
IF(hh_tot=0,0,(hh_59*drop_material+
drop_struct*CEILING(hh_59/(7*occ_59),1)+hh_1019*drop_material+drop_struct*
CEILING(hh_1019/(14.5*occ_1019),1)+hh_2049*drop_material+
drop_struct*CEILING(hh_2049/(34.5*occ_2049),1)
+hh_50*drop_material+drop_struct*
CEILING(hh_50/(50*occ_50),1))/hh_tot*res_lines),0)))
```

The models are complex enough as they are without attempting to confuse analysis. Understanding exactly how the loop models develop investments for all the various

components of the network is a difficult task and requires a fair amount of effort. Mr. Weiss' and Mr. Hydock's complaints should be disregarded.

Q. IN HIS DISCUSSION OF DISTRIBUTION DESIGN, MR. WEISS CRITICIZES THE LOOPMOD DENSITY GROUP DESIGNS. IS HIS ANALYSIS FLAWED?

A. Yes, it is. First, he ignores the fact that LoopMod uses actual network DA data on density characteristics to adjust the distribution designs, not to replicate the embedded network. He claims that the unique characteristics of DAs need to be accounted for in any modeling effort and that LoopMod cannot do this. The main cost driver in distribution plant design is density -- in other words, how much cable is required to pass all the customers. Larger lots require more cable. Smaller lots require less cable. LoopMod starts with standard designs that allow the model to recognize the impact of common areas, cul-de-sacs, and other real world aspects of distribution plant construction. These real-world considerations are missed in a purely mathematical approach to branch and backbone cable distance. LoopMod then applies a multiplier based on the individual DA densities to adjust the cable lengths in the standard design. Mr. Weiss claims that the actual DAs are not the least-cost design, but he offers no evidence to support that statement. He says that, on a forward-looking basis, some would be larger and some would be smaller, but regardless of the direction of the changes, it would lower cost. This is pure speculation by Mr. Weiss. The Qwest loop model uses the network DA data to incorporate the unique densities of the actual distribution areas. The designs are based

on the current architectures utilized by Qwest. The model does not attempt to recreate the existing network, as Mr. Weiss erroneously claims.

IX. SHARING

Q. MR. DENNEY PROVIDES TWO EXAMPLES OF QWEST DATA THAT HE CLAIMS SUPPORT THE HAI5.2A SHARING ASSUMPTIONS. ARE THESE EXAMPLES PERTINENT TO THE TELRIC MODELING?

A. No, they are not. His first example cites the Qwest tariff concerning agreements between homebuilders and Qwest on the provisioning of distribution plant. This would be pertinent if the models were addressing only new growth in the existing network. If this were the case, the models would look at only the demand in those growth locations. Instead, the models look at total demand, which allows them to reflect the economies of sizing plant to serve the universe of customers. It also allows the models to reflect the shorter loop lengths associated with existing customer locations that are close to the serving wire center. Assuming the sharing (or developer provided trenching) for new areas and the universe of existing locations is inconsistent and will produce questionable results. His second example is of the Qwest long distance, inter-city fiber construction project. This is a far cry from the replacement of distribution plant. It is possible that companies that are building a major section of plant between two large population centers may be able to time their builds so as to share structure. It is unlikely that the ILEC or a company such as AT&T Broadband, will find other companies who wish to place

distribution plant at the same time, in the same area as the upgrading company. The examples of distribution plant upgrades offered as evidence in this hearing show little if any structure sharing in the distribution environment. The cable company mentioned earlier stated that they were able to share approximately five miles of trench out of the 220 miles of cable placed in the Bismarck upgrades. This would yield a sharing percentage of 98.86% assigned to the incumbent. WorldCom, AT&T and XO assume that, to achieve a factor of 33% assigned to the incumbent, three companies will share the cost of the trench 100% of the time. There is no data to support this dramatic adjustment to the placing costs.

Q. MR. HYDOCK FAULTS QWEST FOR NOT USING THE FCC USF SHARING PERCENTAGES. WERE THESE INPUTS USED IN THE HAI MODEL FILED IN ARIZONA?

A. No. The HAI5.2a default inputs anticipate far more sharing of structure costs than either the ACC or the FCC inputs would indicate. HAI assigns as little as 25% of the aerial structure costs and 33% of the buried structure costs to the ILEC. These inputs are completely out of line with the FCC inputs he appears to advocate.

Q. IN YOUR DIRECT TESTIMONY, YOU COMPARED THE RESULTS FROM LOOPMOD WITH THE RESULTS FROM AN ADJUSTED RUN OF HAI5.0A. WOULD THE COMPARISON BE DRAMATICALLY DIFFERENT USING HAI5.2A?

A. HAI5.2a will produce investments similar to HAI5.0a when run with the same inputs and the strand distance (DRD) adjustment turned off. While there have been changes to HAI5.2a, such as line counts, occupancy factors and the strand distance calculation, the vast majority of the inputs and algorithms are identical to those in HAI5.0a. Dr. Fitzsimmons provides data in his rebuttal testimony demonstrating that HAI5.2a, with reasonable adjustments to a limited group of inputs, will develop an average loop investment of $741(after removal of wire centers that have been proposed for sale).

X. EMBEDDED INPUTS

Q. MR. HYDOCK STATES IN HIS TESTIMONY THAT LOOPMOD CONTAINS "NON-FORWARD-LOOKING NETWORK COMPONENTS". IS THIS TRUE?

A. No. I'm not sure what components Mr. Hydock is referring to. And, based on his testimony, it appears he doesn't know how or if the inputs are used. But for some unexplained reason, without identifying which components he is addressing, he concludes that this proves that LoopMod is not a forward-looking model. LoopMod uses forward-looking designs to serve the current demand. The components in those designs are network components currently being installed by Qwest. The prices to purchase and place those components are the current prices Qwest pays to actually build plant in Arizona. Mr. Hydock offers no evidence that there is anything of an embedded nature in the LoopMod investments.

Q. MR. HYDOCK REFERS TO DA INFORMATION USED BY LOOPMOD AS IN APPROPRIATE EMBEDDED DESIGNS. PLEASE COMMENT.

A. The DA information is used in the same fashion as density data in HAI. It allows the model to determine levels of density and differentiate between buildings and houses. This provides data needed to best match the DAs density characteristics to the forward-looking distribution designs. The model does not use existing terminal configurations in the distribution designs as Mr. Hydock erroneously claims. LoopMod is a forward-looking model and does not attempt to replicate the existing network or develop embedded investments.

XI. SUB-LOOP

Q. WHAT IS DISTRIBUTION SUB-LOOP?

A. The Unbundled Distribution Loop is a QWEST provided facility from the QWEST Serving Area Interface (SAI) to the Network Interface Device or other point of demarcation at the customer location. The point of demarcation is where the Qwest owned facilities end and the customer owned facilities begin. This element consists of:

1. A connection point at the serving area interface (SAI) or feeder distribution interface (FDI);
2. The wires between the FDI and the customer NID or building terminal;
3. The simple or complex NID or building terminal at the customer residence; and

4. Any Qwest owned intra-building cable that may exist in the customers building.

The company proposes deaveraging this element consistent with the method the Commission used to de-average the unbundled loop.

Q. IS DR. COLLINS' INTERPRETATION OF THE QWEST DISTRIBUTION SUB-LOOP CORRECT?

A. No. Dr. Collins claims that based on my direct testimony that the distribution plant excludes cable on private property because the description does not expressly mention that situation. The excerpt from the testimony, which is a general description, discusses the various network components used in building distribution plant. It does not address where the cable is placed. It describes the distribution as being the facilities that extend from the Serving Area Interface (SAI) to some sort of network interface at the customer's location. Dr. Collins provides no evidence that "campus wire" has been left out of the Distribution Sub-Loop costs. The reality is that the LoopMod Density Group 2 (DG2) design contains underground cabling placed in building owner provided duct. This cabling provides the connectivity between the SAI and the building terminals at each building in a multi-building/multi-tenant environment.

Q. DR. COLLINS ADVOCATES PRICING THE CAMPUS CABLING AS A UNIQUE SUB-LOOP ARRANGEMENT. WHAT WOULD BE THE IMPACT OF THIS CHANGE?

A. Qwest believes that the campus cabling investment is an appropriate part of the average distribution investment. Any additional de-averaging of the distribution would have to create new elements that are both higher and lower than the current average. Because the campus or DG2 arrangement is a lower cost distribution design, removal of that design will result in a higher cost for the remaining average sub-loop distribution.

XII. CONCLUSION

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes it does.

BEFORE THE ARIZONA CORPORATION COMMISSION

WILLIAM A. MUNDELL
CHAIRMAN
JIM IRVIN
COMMISSIONER
MARC SPITZER
COMMISSION

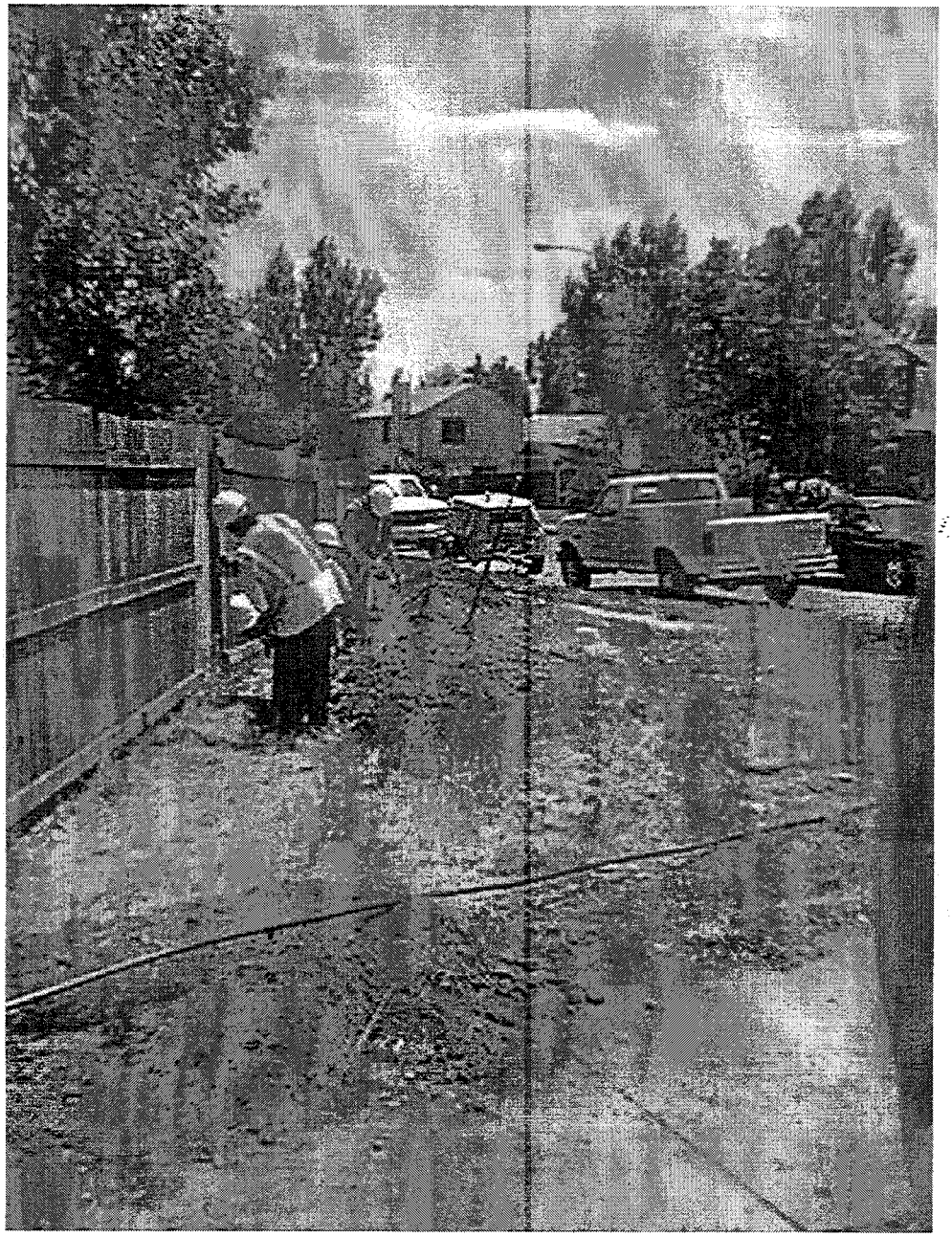
IN THE MATTER OF INVESTIGATION INTO	)	
QWEST CORPORATION'S COMPLIANCE	)	DOCKET NO. T-00000A-00-0194
WITH CERTAIN WHOLESALE PRICING	)	PHASE II
REQUIREMENTS FOR UNBUNDLED	)	
NETWORK ELEMENTS AND RESALE	)	
DISCOUNTS	)	

EXHIBIT OF

DICK BUCKLEY

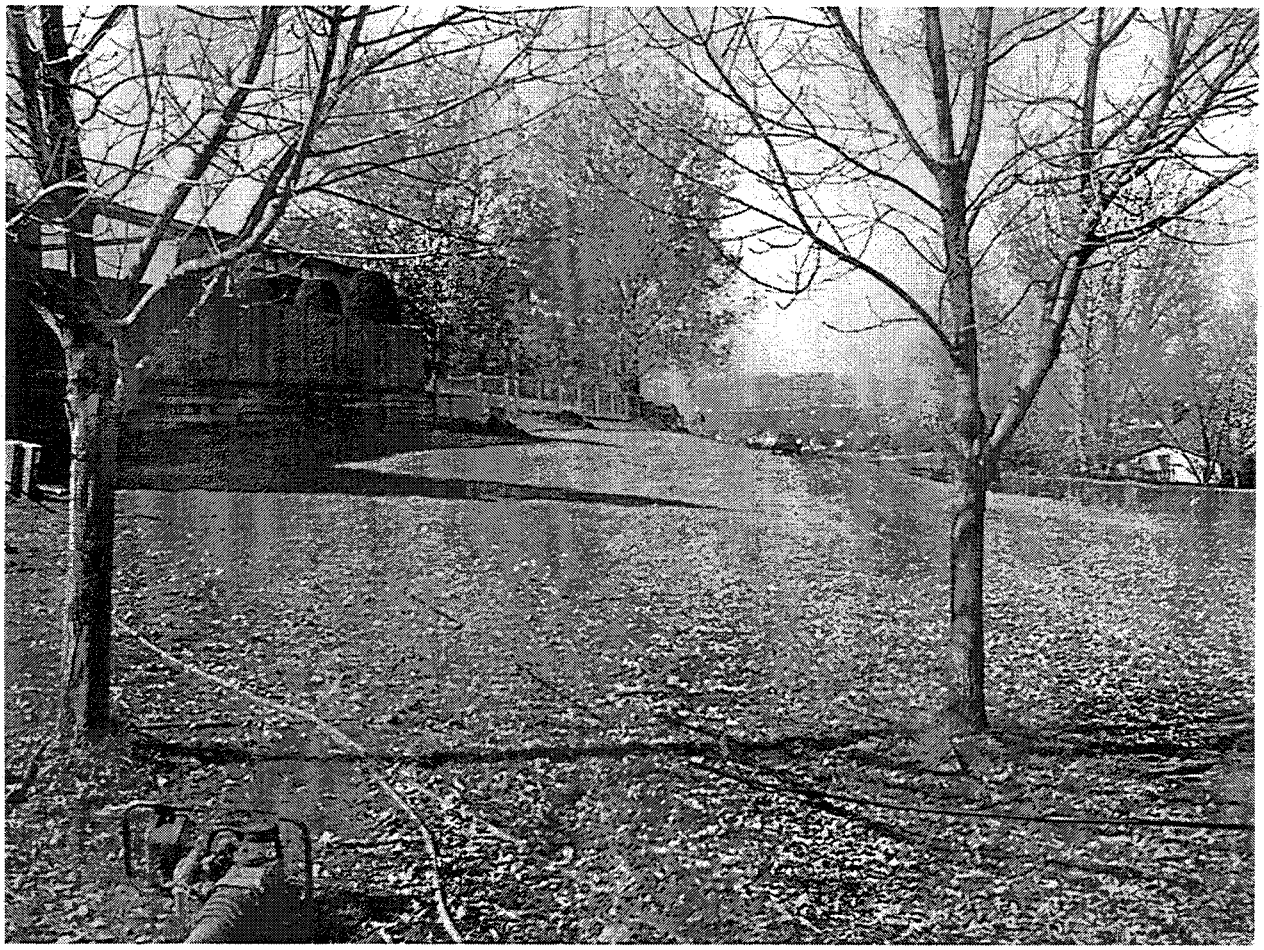
JUNE 27, 2001

CATV hand-dig and missile, no sharing

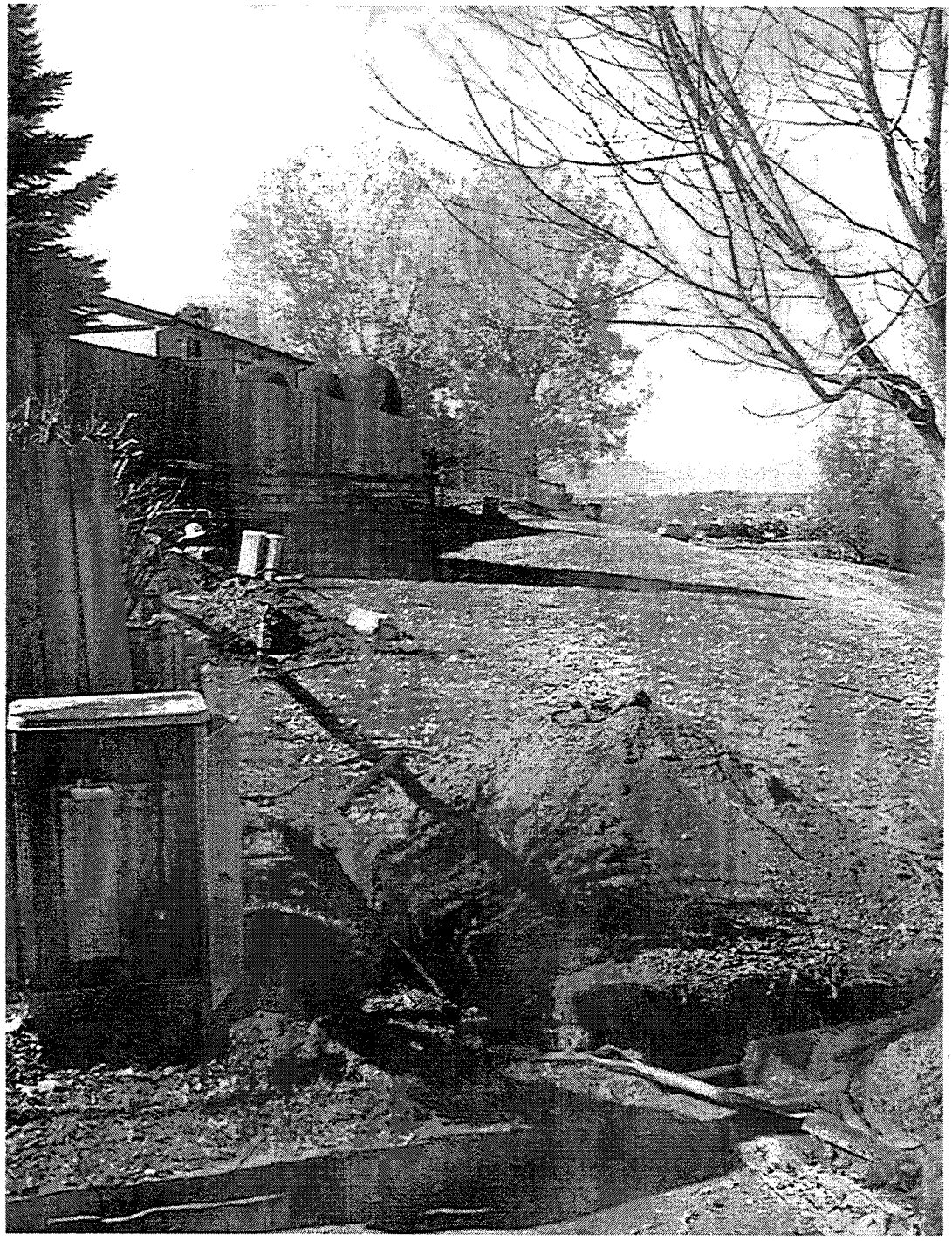


CATV directional boring backyards, no sharing

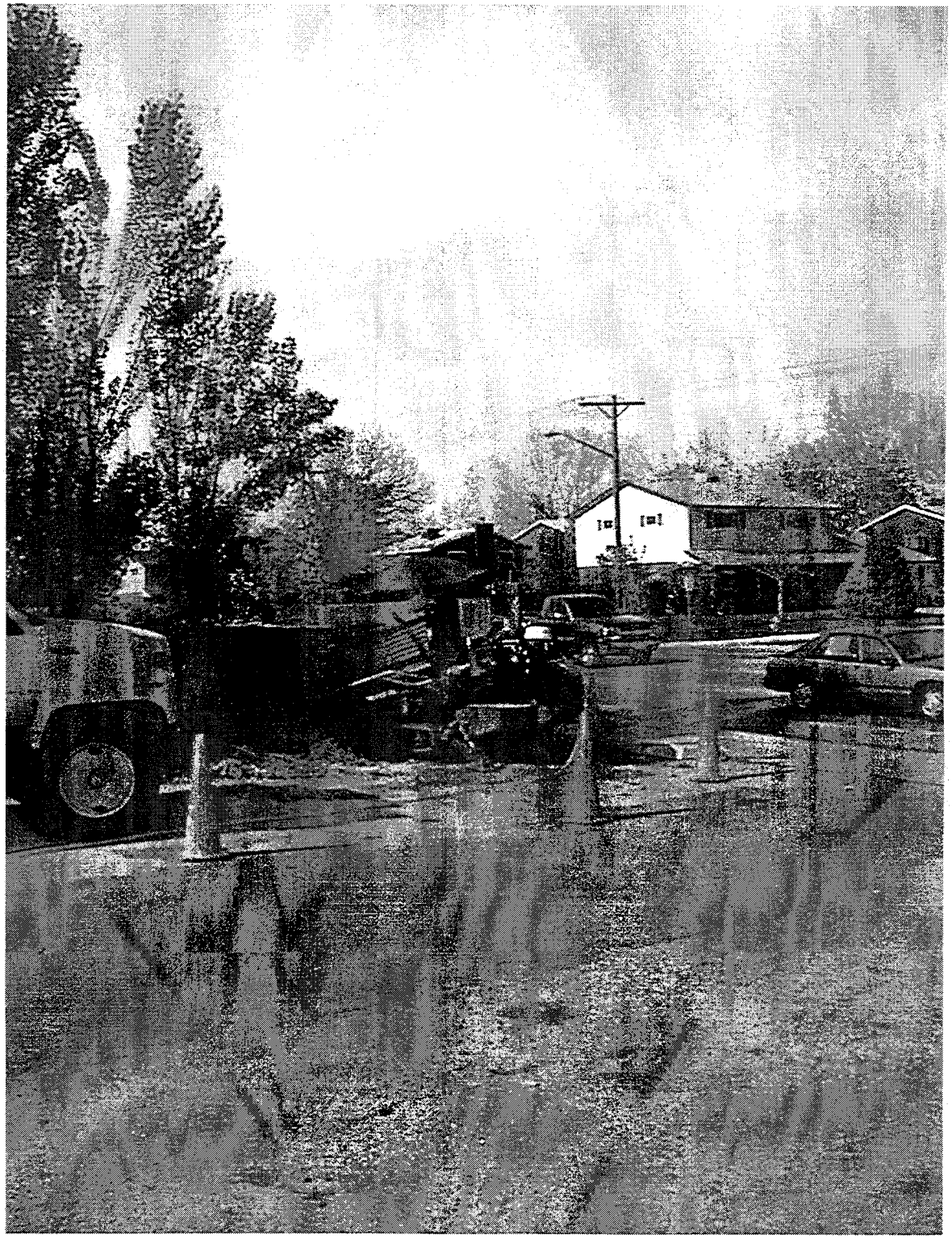
CATV hand-dig and missile, no sharing.



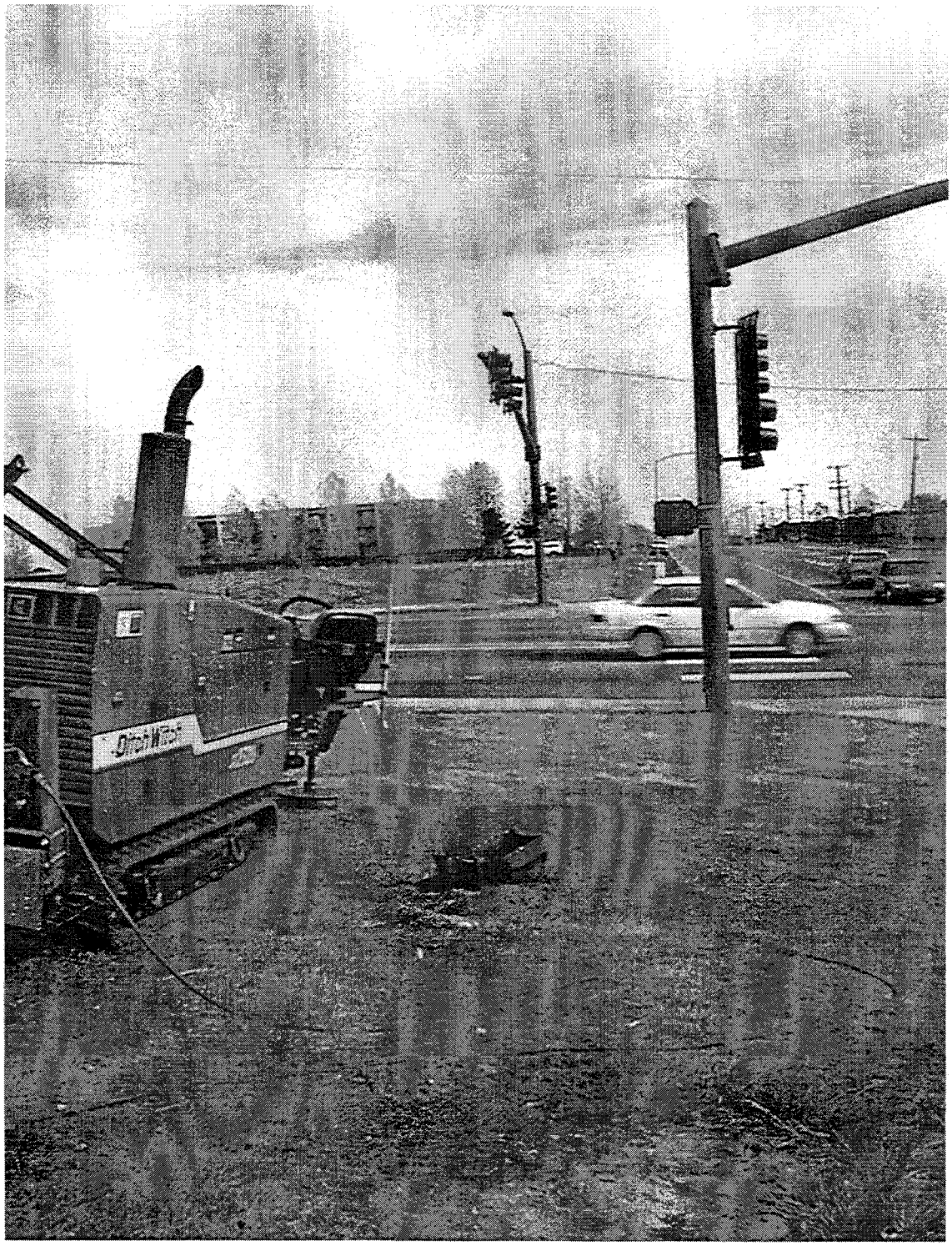
CATV hand-dig and missile, no sharing.



CATV directional boring backyards



CATV directional boring street crossing and full block of easement.
(Receiving pit is near white pick-up by bikepath.)



CATV directional boring adjacent to main roadway.

Directional boring on main downtown street.

BEFORE THE ARIZONA CORPORATION COMMISSION

WILLIAM A. MUNDELL
CHAIRMAN
JIM IRVIN
COMMISSIONER
MARC SPITZER
COMMISSIONER

IN THE MATTER OF INVESTIGATION INTO QWEST CORPORATION'S COMPLIANCE WITH CERTAIN WHOLESALE PRICING REQUIREMENTS FOR UNBUNDLED NETWORK ELEMENTS AND RESALE DISCOUNTS	)	**DOCKET NO. T-00000A-00-0194** **Phase II** **AFFIDAVIT OF RICHARD J. BUCKLEY JR.**
STATE OF COLORADO	)	
COUNTY OF DENVER	)	

Richard J. Buckley Jr., of lawful age being first duly sworn, deposes and states:

1. My name is Richard J. Buckley Jr. I am a Manager – Loop Cost analysis for Qwest Corporation in Denver, Colorado. I have caused to be filed written rebuttal testimony and exhibits in support of Qwest Corporation in Docket No. T-00000A-00-0194, Phase II.

2. I hereby swear and affirm that my answers contained in the attached testimony to the questions therein propounded are true and correct to the best of my knowledge and belief.

Further affiant sayeth not.

Richard J. Buckley Jr.
Richard J. Buckley Jr.

SUBSCRIBED AND SWORN to before me this 27 day of June, 2001.

Jennifer Rogers
Notary Public residing at
Denver, CO

My Commission Expires: May 17, 2003

EXHIBIT
Qwest-4
admitted

BEFORE THE ARIZONA CORPORATION COMMISSION

WILLIAM A. MUNDELL
CHAIRMAN
JIM IRVIN
COMMISSIONER
MARC SPITZER
COMMISSIONER

IN THE MATTER OF INVESTIGATION INTO QWEST CORPORATION'S COMPLIANCE WITH CERTAIN WHOLESALE PRICING REQUIREMENTS FOR UNBUNDLED NETWORK ELEMENTS AND RESALE DISCOUNTS	)	**DOCKET NO. T-00000A-00-0194**

REBUTTAL TESTIMONY OF

RENÉE ALBERSHEIM

QWEST CORPORATION

JUNE 27, 2001

I. IDENTIFICATION OF WITNESS

Q. PLEASE STATE YOUR NAME, OCCUPATION, AND BUSINESS ADDRESS.

A. My name is Renée Albersheim. I am employed by Qwest Corporation (Qwest) as a Staff Advocate for Policy and Law in the Information Technologies Wholesale Organization. My business address is 1999 Broadway, 10th Floor, Denver, Colorado 80202.

Q. HAVE YOU FILED TESTIMONY IN THIS DOCKET BEFORE?

A. Yes. I filed direct testimony in this docket on March 15, 2001.

II. PURPOSE OF TESTIMONY

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. The purpose of my testimony is to respond to statements made by Mr. Roy Lathrop in his direct testimony.[1] I am also responding to the testimony of Mr. William Dunkel,[2] and Mr. Thomas H. Weiss.[3]

III. DATABASE CLEANUP

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[1] *See Direct Testimony of Roy Lathrop on Behalf of WorldCom, Inc., AT&T of the Mountain States, Inc., and XO Arizona, Inc., In The Matter of Investigation Into Qwest Corporation's Compliance with Certain Wholesale Pricing Requirements For Unbundled Network Elements and Resale Discounts, Docket No. T-00000A-00-0194*, Filed May 16, 2001, "Lathrop Direct."

[2] *See Direct Testimony of William Dunkel on Behalf of the Staff of the Arizona Corporation Commission, In The Matter of Investigation Into Qwest Corporation's Compliance with Certain Wholesale Pricing Requirements For Unbundled Network Elements and Resale Discounts, Docket No. T-00000A-00-0194,* Filed June 13, 2001, "Dunkel Direct."

[3] *See Direct Testimony of Thomas H. Weiss on Behalf of the Joint Case of AT&T of the Mountain States, Inc., WorldCom, Inc., and XO Arizona, Inc., In The Matter of Investigation Into Qwest Corporation's Compliance with Certain Wholesale Pricing Requirements For Unbundled Network Elements and Resale Discounts, Docket No. T-00000A-00-0194*, Filed May 16, 2001, "Weiss Direct."

Q. MR. LATHROP STATES THAT CLECS SHOULD NOT BE REQUIRED TO PAY FOR THE CLEANUP OF ILEC DATABASES.[4] IS HE CORRECT?

A. Yes. If Qwest "cleans up" a database, both Qwest and the CLECs that use the same database benefit from more accurate data.

Q. HAS QWEST ENDEAVORED TO IMPROVE THE ACCURACY OF ITS DATABASES?

A. Yes. Qwest continuously works to improve the accuracy and completeness of the data in its databases.

Q. DOES QWEST ASK CLECS TO PAY THE COSTS OF IMPROVING THE ACCURACY OF ITS DATABASES?

A. No. Qwest is well aware that it would be inappropriate to ask CLECs to pay the costs of OSS enhancements that are of benefit to Qwest in addition to the CLECs. Qwest has not and does not intend to seek recovery of such costs from CLECs.

Q. HAS QWEST INCLUDED THE COST OF "DATABASE CLEANUP" IN THE OSS COSTS FOR LINE SHARING THAT WERE FILED IN THIS DOCKET?

A. No. By discussing "database cleanup" Mr. Lathrop implies that such costs were included in the OSS cost filings in this docket. They were not. The only costs Qwest included were those necessary to provide pre-ordering, ordering, provisioning, billing and maintenance OSS functions for line sharing. As I stated in my direct testimony, but for the requirement to provide line sharing,

---

[4] *See* Lathrop Direct at Page 11, Lines 7 through 21.

Qwest would not have incurred these costs. While Qwest has made improvements to its databases, for the benefit of CLECs as well as for its own business, Qwest has not included database cleanup costs in this docket.

IV. COST OF LINE SHARING

Q. MR. DUNKEL SUGGESTS THAT THERE IS NO BASIS FOR QWEST'S CLAIM THAT 85% OF THE COST OF THE TELCORDIA LINE SHARING SOFTWARE IS EXCLUSIVELY FOR LINE SHARING.[5] IS THIS ACCURATE?

A. No. In response to a formal request from Qwest, Telcordia Technologies, Inc. (Telcordia) provided written confirmation that 85% of the software cost applies exclusively to line sharing. Qwest provided, as a confidential attachment to an AT&T data request, a redacted copy of the letter received from Telcordia.[6] Qwest believes it is appropriate to reduce the cost associated with the Telcordia line sharing solution by the 15% identified by Telcordia.

Q. MR. DUNKEL OBSERVES THAT THE PERMANENT LINE SHARING SOLUTION DOESN'T ENABLE ANY ADDITIONAL LINE SHARING SERVICES.[7] IS HE CORRECT?

A. Yes.

Q. DID QWEST PURCHASE THE PERMANENT LINE SHARING SOLUTION IN ORDER TO ADD LINE SHARING SERVICES?

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[5] *See* Dunkel Direct at Page 32, footnote 43.

[6] *See Response to AT&T Data Request* 002-060.

A. No. The permanent solution does not make any changes to the product 'per se', as Mr. Dunkel suggested in his discovery request to Qwest.[8] But that was never the intent of the permanent solution.[9] Qwest put the interim line sharing solution in place very quickly, in order to make it possible for CLECs to order line sharing. The interim solution required manual intervention, and was always intended as a temporary process.

All line sharing orders submitted through the interim process were forced to "fall out" of the system for manual handling. Those line sharing orders did not flow through Qwest's OSS. The permanent solution was necessary to improve flow through for line sharing orders.

It should also be noted that the permanent line sharing solution makes it possible for Qwest to implement OSS changes required for other shared products such as shared distribution loops.

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[7] See Dunkel Direct at page 34.

[8] *See* Dunkel Direct at page 34 and *Staff Data Request WD 4-94(e).*

[9] Qwest made this point clear when responding to Mr. Dunkel's data request. Mr. Dunkel asked:

> Please explain what line sharing service cannot be provided as part of the "interim" solution, but would be provided as part of the "long term" solution.

The **full** response to the data request stated:

> See Exhibit RA-2 Gap Analysis for a comparison of the Interim Solution to the long-term solution. The primary purpose of the long-term solution was to establish automated processes for ordering, billing, provisioning, and repair of line sharing. There is no difference in 'what line sharing service' could or could not be provided. The difference between the interim and long-term solutions is a difference in the automation of line sharing processes via Qwest OSS.

Q. MR. DUNKEL CRITICIZES THE CUSTOMIZED NATURE OF THE LINE SHARING SOLUTION THAT QWEST PURCHASED FROM TELCORDIA.[10] IS THIS CRITICISM FAIR?

A. No. While it is true that all ILECs were ordered by the FCC to provide line sharing, Qwest was in a unique situation. When Qwest was ordered by the Minnesota Public Utilities Commission to implement line sharing,[11] Qwest became the first ILEC to have this obligation. This obligation made it necessary for Qwest to respond quickly in order to implement line sharing prior to the other ILECs. As I stated in my direct testimony, many of the systems that had to be changed to accommodate line sharing are owned by Telcordia. Qwest does not own the source code to these systems and therefore does not have the right to modify the code. Legally, Qwest could not modify these systems itself or hire other companies besides Telcordia to modify them. Only Telcordia could access the source code to carry out the modifications needed to support line sharing for those systems.

Q. MR. DUNKEL SUGGESTS THAT QWEST SHOULD HAVE NEGOTIATED WITH OTHER ILECS TO SHARE THE COSTS FOR TELCORDIA SOFTWARE.[12] WAS THAT FEASIBLE OR EVEN POSSIBLE?

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[10] *See* Dunkel Direct at page 35.

[11] *See In the Matter of a Commission Initiated Investigation into the Practices of Incumbent Local Exchange Companies Regarding Shared Line Access, Minnesota Public Utilities Commission, Docket No. P-999/CI-99-678, at 6* (Issued October 8, 1999).

[12] *See* Dunkel Direct at Page 35 and 36.

A. Not really. First, while a joint negotiation might have been possible in theory, recall that Qwest was required to implement line sharing in Minnesota prior to other ILECs being required to implement in any of the states in their regions. A lengthy negotiation process with the other ILECs would have slowed the process dramatically and, seeing as how at the time, the other ILECs were not yet required to implement line sharing, it is doubtful any of the other ILECs would have agreed to collaborate with Qwest.

All contracts such as this line sharing package are negotiated with Telcordia, and Qwest negotiated for the best deal it could get at the time.

Second, Telcordia is in the business of selling telecommunications software and services. Each ILEC is a separate customer of Telcordia, and Telcordia deals with each company individually. In the past, the ILECs shared ownership in Telcordia's predecessor company, Bellcore. But the ILECs divested their ownership in Bellcore a long time ago, and today Telcordia is a completely independent entity. Therefore, each ILEC has an independent business relationship with Telcordia.

Third, even if collaboration with the other ILECs was possible or feasible, Qwest did not know if the other ILECs' software was sufficiently similar to Qwest's to allow for quick development of a common solution. Though it is true that the ILECs all use certain core software applications that they have leased from Telcordia, the software is not necessarily identical. Each ILEC requires changes to the software they lease from Telcordia in order to

integrate that software into their unique OSS. Such changes can involve work on ILEC owned software, but it can also require changes to the Telcordia software as well. For example, Qwest has three licenses for Telcordia's LFACS software. Each license serves a different region. These regions are known internally to Qwest as Eastern (formerly Northwestern Bell), Central (formerly Mountain Bell), and Western (formerly Pacific Northwest Bell). Some of the OSS in each region are still uniquely different. If Qwest's own internal systems have differences, then certainly there will be differences between Qwest's OSS and the OSS of other ILECs.

Finally, I will reiterate that when Qwest was ordered to provide line sharing, Telcordia had not yet created releases of its software to allow for line sharing. In effect, Telcordia and Qwest learned the technical software requirements of line sharing at the same time.

V. CLEC TECHNICAL ASSUMPTIONS

Q. PLEASE COMMENT ON EXHIBIT THW-13 SUBMITTED WITH THE DIRECT TESTIMONY OF MR. THOMAS H. WEISS.

A. The exhibit is titled NRCM Technical Assumptions Binder. As Mr. Weiss states in his testimony, this exhibit contains purported support for the AT&T/WorldCom Non-Recurring Cost Model.[13] Mr. Weiss states that he is responsible for explaining this exhibit,[14] but no explanation is provided in his

[13] *See* Weiss Direct at Page 89.
[14] *Id.*

testimony. It is appropriate that the title contains the word "assumptions." The document contains a high-level data flow diagram purported to show an efficient telecommunications OSS. There is no support explaining why this set of applications and this particular data flow is the correct, or ideal, or standard data flow for a telecommunications OSS.

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes, it does.

BEFORE THE ARIZONA CORPORATION COMMISSION

WILLIAM A. MUNDELL
CHAIRMAN
JIM IRVIN
COMMISSIONER
MARC SPITZER
COMMISSIONER

IN THE MATTER OF INVESTIGATION INTO QWEST CORPORATION'S COMPLIANCE WITH CERTAIN WHOLESALE PRICING REQUIREMENTS FOR UNBUNDLED NETWORK ELEMENTS AND RESALE DISCOUNTS	)	**DOCKET NO. T-00000A-00-0194 Phase II**
STATE OF COLORADO	)	**AFFIDAVIT OF RENÉE ALBERSHEIM**
COUNTY OF DENVER	)	

Renée Albersheim, of lawful age being first duly sworn, deposes and states:

1. My name is Renée Albersheim. I am Staff Advocate for Policy and Law in the Information Technologies Wholesale Organization in Denver, Colorado. I have caused to be filed written rebuttal testimony and exhibits in support of Qwest Corporation in Docket No. T-00000A-00-0194, Phase II.

2. I hereby swear and affirm that my answers contained in the attached testimony to the questions therein propounded are true and correct to the best of my knowledge and belief.

Further affiant sayeth not.

Renée Albersheim

SUBSCRIBED AND SWORN to before me this 29TH day of June, 2001.

NOTARY PUBLIC STATE OF COLORADO

PAMELA L. LANING
Notary Public
State of Colorado
My Commission Expires
06-29-2002

Pamela L. Laning
Notary Public residing at
Denver, Colorado

My Commission Expires: 06-29-02

BEFORE THE ARIZONA CORPORATION COMMISSION

WILLIAM MUNDELL
CHAIRMAN
JIM IRVIN
COMMISSIONER
MARC SPITZER
COMMISSIONER

IN THE MATTER OF INVESTIGATION INTO Qwest CORPORATION'S COMPLIANCE WITH CERTAIN WHOLESALE PRICING REQUIREMENTS FOR UNBUNDLED NETWORK ELEMENTS AND RESALE DISCOUNTS	)	**DOCKET NO. T-00000A-00-0194 Phase II**

DIRECT TESTIMONY OF

ROBERT F. KENNEDY

QWEST CORPORATION

March 15, 2001

EXHIBIT
Qwest-5
Admitted

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I. EXECUTIVE SUMMARY

This Direct Testimony proposes recurring and nonrecurring charges and describes certain products and services included within the categories of Local Interconnection Service, Collocation, CLEC-to-CLEC Connections, Unbundled Network Elements and Other Services. The recurring and nonrecurring charges discussed herein are included in the Direct Testimony of Qwest witness Maureen Arnold. Qwest recommends that the Arizona Corporation Commission (Commission) approves Qwest's proposed recurring and nonrecurring charges for the products included in this proceeding.

II. IDENTIFICATION OF WITNESS

Q. PLEASE STATE YOUR NAME, BUSINESS ADDRESS AND POSITION WITH QWEST CORPORATION.

A. My name is Robert F. Kennedy. My business address is 1314 Douglas-on-the-Mall, 6th Floor, Omaha, Nebraska 68102. My principal business responsibility is to testify in regulatory and legal proceedings concerning Qwest's wholesale services and products.

Q. PLEASE BRIEFLY REVIEW YOUR EDUCATIONAL BACKROUND.

A. I hold a Bachelor of Science degree in education from the University of Nebraska at Omaha. I have completed numerous technical courses concerning the installation and maintenance of telecommunications equipment and facilities.

Q. BRIEFLY OUTLINE YOUR EMPLOYMENT BACKGROUND.

A. I began my career in the telecommunications industry in 1972 with the former Northwestern Bell in Omaha, Nebraska. From 1972 to 1978, I held the positions of lineman and cable splicer. In 1978, I moved into a management position where I was an instructor and course developer for outside plant courses. In 1985, I joined the former U S WEST's Custom Pricing Organization where I developed the cost models used in pricing DS1, DS3, SHARP and SHNS products, among others. From April 1996 until April, 2000 I was U S WEST's lead negotiator for interconnection agreements with competitive local exchange providers (CLECs).

III. PURPOSE OF DIRECT TESTIMONY

Q. WHAT IS THE PURPOSE OF YOUR DIRECT TESTIMONY?

A. This Direct Testimony describes certain of Qwest's products and services, and the applicable recurring and nonrecurring charges for these products and services, which Qwest seeks to introduce in this proceeding. Specifically, I describe the following products and services and their associated charges:

Local Interconnection Service (LIS)

1 Collocation
2 CLEC to CLEC Connections
3 Certain UNEs including:
4 Unbundled Loops
5 Sub-Loop
6 Unbundled Dedicated Interoffice Transport (UDIT) and
7 Extended UDIT (EUDIT)
8 Unbundled Dark Fiber (UDF)
9 Interconnection Tie Pairs (ITP)
10 Field Connection Point (FCP)
11 Other Services including:
12 Enhanced Extended Loop (EEL)
13 Access to Poles, Ducts and Rights of Way (ROW)
14 Bona Fide Requests (BFR)

15 **IV. LOCAL INTERCONNECTION SERVICE (LIS)**

16 **Q. PLEASE DESCRIBE QWEST'S LOCAL INTERCONNECTION SERVICE (LIS).**
17 A. LIS is a terminating, trunk-side service provided between the point of
18 interconnection (POI) of a CLEC's network and the Qwest network. LIS trunks are
19 used to complete local calls between a CLEC's end user customers and Qwest's
20 end user customers. Local calls begin and end within a local calling area that has
21 been defined by the Commission. RFK Exhibit 1 provides an illustrative example
22 of the LIS products.

A. ENTRANCE FACILITIES

Q. PLEASE DESCRIBE HOW AN ENTRANCE FACILITY IS USED TO INTERCONNECT QWEST'S NETWORK WITH A CLEC'S NETWORK.

A. Interconnection may be accomplished by leasing facilities from Qwest. These leased facilities are provisioned on DS1 or DS3 entrance facilities. An entrance facility extends from the Qwest serving wire center to the CLEC's switch location or point of interconnection (POI). The recurring and nonrecurring rate elements that apply include DS1 Entrance Facilities and DS3 Entrance Facilities.

Q. WHAT ARE THE LIMITATIONS ON THE USE OF ENTRANCE FACILITIES?

A. Entrance facilities may not extend beyond the area served by the Qwest serving wire center. Furthermore, entrance facilities may not be used for interconnection with unbundled network elements.

B. LOCAL INTERCONNECTION SERVICE EXPANDED INTERCONNECT CHANNEL TERMINATION (LIS EICT)

Q. WHAT IS LIS EICT?

A. LIS EICT provides an intraoffice connection between a CLEC's collocated equipment and Qwest's network. When collocation is used to facilitate interconnection, the EICT recurring and nonrecurring rate elements will apply for each DS1 and DS3.

Q. IS QWEST INTRODUCING OTHER LIS EICT-RELATED PRODUCTS AT THIS TIME?

A. Yes. Qwest is introducing Interconnection Tie Pairs (ITP) and Channel Regeneration. These are optional replacement products that are addressed in Section VII. A. and B. of this testimony.

C. DIRECT TRUNKED TRANSPORT (DTT)

Q. WHAT IS DIRECT TRUNKED TRANSPORT (DTT)?

A. DTT are facilities between serving wire centers and tandem or end office switches. DTT facilities are provided as dedicated DS1 and DS3 facilities.

Q. HOW DOES QWEST PROPOSE TO CHARGE FOR DTT?

A. Recurring fixed and recurring per mile charges will be applied to DTT facilities ordered by a CLEC. The mileage for DTT facilities is measured based upon the distance (air miles) between Qwest's serving wire center and the local/access tandem or end office using the following increments:

DS1/DS3 over 0 to 8 miles

DS1/DS3 over 8 to 25 miles

DS1/DS3 over 25 to 50 miles

DS1/DS3 over 50 miles

D. MULTIPLEXING

Q. PLEASE DESCRIBE MULTIPLEXING.

A. Multiplexing is the process of combining two or more communications channels into a single higher bandwidth circuit. Multiplexing is an optional service that a CLEC may order from Qwest when it does not perform its own multiplexing.

Q. HOW WILL QWEST CHARGE FOR MULTIPLEXING?

A. Recurring and nonrecurring rate elements will be applied for each DS3 to DS1 multiplexed arrangement.

E. TRUNK NONRECURRING CHARGES

Q. WHEN DOES QWEST PROPOSE THAT TRUNK NONRECURRING CHARGES SHOULD APPLY?

A. Nonrecurring installation charges may be assessed for the first and each additional trunk ordered by a CLEC on an Access Service Request (ASR). The charges will vary depending on whether the trunks will interface with DS1 or DS3 LIS facility. In addition to nonrecurring installation charges, nonrecurring rearrangement charges will apply when a CLEC requests the rearrangement of DS1 and DS3 facilities.

F. LOCAL TRAFFIC

Q. WHAT RATES ARE INCLUDED IN THE LOCAL TRAFFIC CATEGORY?

A. The following fixed and distance sensitive recurring charges apply to Local Traffic:

- End office call termination, per minute of use
- Tandem Switched Transport

  Tandem Switching, per minute of use

  Tandem Transmission, per minute of use

  0-8 miles

  8-25 miles

  25-50 miles

  over 50 miles

Q. WHAT IS THE END OFFICE CALL TERMINATION RATE ELEMENT?

A. The end office call termination rate element is a per minute of use charge for the use of the terminating end office switch to complete a local call.

Q. WHAT IS THE TANDEM SWITCHING RATE ELEMENT?

A. The tandem switching rate element is a per minute of use charge for the use of a tandem switch in the event a call is routed through a local tandem switch for call completion.

Q. WHAT IS THE TANDEM TRANSMISSION RATE ELEMENT?

A. The tandem transmission rates include a fixed per minute of use charge and a recurring per mile charge for the transmission of traffic from the tandem switch to the terminating end office switch for call completion.

G. MISCELLANEOUS CHARGES

Q. WHAT MISCELLANEOUS CHARGES DOES QWEST SEEK TO INTRODUCE?

A. Qwest seeks to introduce the following Miscellaneous Charges:

- Expedite Charge (LIS Trunks) - Arizona specific terms and conditions, which are found in the applicable Access Service tariff, are applied to LIS nonrecurring charges to calculate expedite charges.

- Cancellation Charge (LIS Trunks) - Arizona specific terms and conditions, which are found in the applicable Access Service tariff, are applied to LIS nonrecurring to calculate cancellation charges.

- Construction Charges - An ICB charge applies for the construction of network capacity, facilities or space for

access to or use of unbundled loops, ancillary services or finished services.

H. INTRALATA TOLL TRAFFIC

Q. WHEN DOES QWEST PROPOSE THAT CHARGES SHOULD APPLY FOR INTRALATA TOLL TRAFFIC?

A. The applicable Switched Access tariff charge should apply when a CLEC's IntraLATA Toll Traffic i.e. exchange access traffic, is routed to an access tandem or directly to an end office.

I. TRANSIT TRAFFIC

Q. WHAT IS TRANSIT TRAFFIC?

A. Transit Traffic consists of Local Transit traffic, IntraLATA Toll traffic, Jointly Provided Switched Access traffic, and Category 11 Mechanized Record traffic. Transit traffic, when used in association with LIS, is local traffic that neither originates nor terminates on Qwest's network. This includes traffic transmitted between one CLEC and another CLEC, or traffic that is transmitted between a CLEC and an ILEC, IXC or wireless carrier other than QWEST.

Q. CAN LIS BE USED TO PROVIDE TRANSIT TRAFFIC?

A. Yes. LIS enables the completion of local calls through the local tandem that originate and terminate on non-QWEST switches.

Q. WHAT CHARGES DOES QWEST PROPOSE FOR TRANSIT TRAFFIC?

A. The following charges should apply to Transit Traffic:

- Local Transit -The same charges apply to Transit Traffic as those that apply to Tandem Switching and Tandem Transmission addressed above.
- Tandem transmission is calculated using an assumed 9 miles. This result is added to the Tandem Switching rate.
- IntraLATA Toll - A charge consisting of the applicable Qwest Switched Access tandem switching and tandem transmission tariff rates.
- Jointly Provided Switched Access - A charge consisting of the applicable Switched Access rates based on the Multiple Exchange Carrier Access Billing (MECAB) guidelines and the respective FCC and state access tariffs.
- Category 11 Mechanized Record Charge, per record - A charge to recover the cost for providing a CLEC with the information necessary for the CLEC to bill the originating

carrier for transit when technically feasible. The charge applies to each record created and transmitted to the CLEC. Qwest makes the Category 11 Mechanized Record available as an optional offering because the information contained on the record can also be provided by the carrier who originates the call.

V. COLLOCATION

A. GENERAL

Q. PLEASE DESCRIBE COLLOCATION.

A. Collocation allows for the placement of telecommunications equipment within Qwest's premises for the purpose of accessing UNEs and/or terminating local traffic. The equipment can either be owned by the CLEC or, in the case of a virtual collocation, the equipment may be leased back to Qwest.

Q. WHICH RATE ELEMENTS APPLY TO QWEST'S COLLOCATION SERVICES?

A. Both recurring and nonrecurring rate elements apply to Qwest's collocation services. The rate elements are determined based upon the scope of the work to be performed as determined through an evaluation of the information provided by the CLEC on Qwest's collocation application form.

The rate elements for collocation are categorized as follows:

1) All Collocation;

(2) Cageless Physical Collocation;

(3) Caged Physical Collocation; and

(4) Virtual Collocation.

B. ALL COLLOCATION

Q. PLEASE DESCRIBE THE RATE ELEMENTS INCLUDED IN THE ALL COLLOCATION CATEGORY.

A. Rate elements included in the All Collocation category are generic in nature and may apply to one or more types of collocation. The rate elements include: (1) Collocation Terminations, (2) Collocation Entrance Facility, (3) Cable Splicing, (4) –48 Volt DC Power Usage, (5) AC Power Feed (6) Inspector Labor, (7) Security and (8) Central Office Clock Synchronization:

(1) **Collocation Terminations:** A collocation termination is located between the CLEC's collocation space and the interconnection distribution frame (ICDF). Recurring and nonrecurring charges apply for cable placement, cable block placement, and blocks required by the CLEC.

Listed below are the Collocation Termination rate elements presented:

DSO terminations:

DS0 Cable Placement, per 100 pair block or per termination

DSO Cable, per 100 pair block or per termination

DSO Block Placement, per 100 pair block or per termination

DSO Block, per 100 pair termination or per termination

DS1 terminations:

DS1 Cable Placement, per 28 DS1 or per termination

DS1 Cable, Per 28 DS1 or per termination

DS1 Panel Placement, per 28 DS1 or per termination

DS1Panel, per 28 DS1 or per termination

DS3 terminations:

DS3 Cable Placement, per termination

DS3 Cable, per termination

DS3 Panel/Connector Placement, per termination

DS3Panel/Connector, per termination

(2) **Collocation Entrance Facility Charge:** Qwest offers three Fiber Collocation Entrance Facility options. The first option is a Standard Fiber Entrance Facility, the second option is a Cross- Connect Fiber Entrance Facility and the third option is Express Fiber Entrance Facility. These options apply to

Caged Physical Collocation, Cageless Physical Collocation and Virtual Collocation.

(a) **Standard Fiber Entrance Facility:** The standard fiber entrance facility provides fiber connectivity between a CLEC's fiber facilities delivered to the Collocation Point Of Interconnection (C-POI) and the CLEC's collocation space. A fiber interconnection cable is placed between a CLEC's collocation space and the Feeder Distribution Panel (FDP).

(b) **Cross Connect Fiber Entrance Facility:** The cross-connect fiber entrance facility provides fiber connectivity between a CLEC's fiber facilities delivered to a C-POI and multiple locations within the Qwest wire center. The CLEC's fiber cable is spliced into a Qwest provided shared fiber entrance cable. The fiber cable terminates in an FDP. Fiber interconnection cables connect the second FDP and equipment locations in the wire center. This option has the capability to serve multiple locations or pieces of equipment within the office. This option provides maximum flexibility in distributing fibers within the wire center and readily supports

Virtual and Cageless Physical Collocation and multiple CLEC locations in the office.

(c) **Express Fiber Entrance Facility:** Qwest will place a CLEC provided fiber cable from the C-POI directly to the CLEC's collocation space. This option will not be available if there is less than one full sized conduit for emergency restoration and 2 innerducts -one for emergency restoral and one for a shared entrance cable.

(3) **Cable Splicing Charge:** The Cable Splicing charge is intended to recover the labor and equipment necessary to perform a subsequent splice or splices to a CLEC-provided fiber optic cable. The Cable Splicing charge consists of two elements: one for setup and one for each fiber spliced.

(4) **-48 Volt Power Usage:** Recovers the cost of purchasing power from the electric company and the cost of the power plant and maintenance to provide power to the CLEC's equipment. The recurring charge is applied on a per month per amp basis.

(5) **AC Power Feed:** The AC Power feed is optional. The AC Power feed recovers the cost of Qwest providing the engineering and installation of wire, conduit and support, breakers and miscellaneous electrical equipment necessary

requirements when ordering the clock signals. Central office synchronization is required for collocation involving digital services or connections. Synchronization may be required for analog services. Central Office Clock Synchronization is available where Qwest wire centers are equipped with Building Integrated Timing Supply (BITS). A monthly charge is applied on a per port basis.

(9) **Space Availability Report:** Upon request from a CLEC, Qwest will prepare a central office Space Availability Report. The report will include the number of collocations within the central office, the number of equipment bay spaces available for collocation, any measures that Qwest has underway to make additional collocation space available, and finally, any modifications that Qwest may have made in the use of space since the last report was issued. A nonrecurring charge will apply for each central office Space Availability Report ordered by the CLEC.

C. CAGELESS PHYSICAL COLLOCATION

Q. WHAT IS CAGELESS PHYSICAL COLLOCATION?

A. Cageless Physical Collocation permits the CLEC to locate its equipment in single frame bay increments within a non-caged area of Qwest's premises. The CLEC is responsible for the procurement, installation and on-going maintenance of its equipment, as well as those cross-connections required within the CLEC's collocation space.

Q. PLEASE DESCRIBE THE RATE ELEMENTS THAT ARE ASSOCIATED WITH CAGELESS PHYSICAL COLLOCATION.

A. There are three categories of rate elements associated with Cageless Physical Collocation. The first is Quote Preparation Fee, the next is Space Construction and the third is Floor Space Lease. Each of these rate elements is described below:

(1) **Quote Preparation Fee (QPF):** QPF is a non-refundable, nonrecurring charge for the work required to verify space, power, cable terminations, review design requested, and develop a price quote for the total costs to the CLEC for its Cageless Collocation request.

(2) **Space Construction:** These charges recover the cost of engineering the job, site preparation, providing a single DC power feed, overhead structures to support cable racking and CLEC equipment, cable racking, additional lighting, and the supporting environmental requirements i.e. heating, ventilation and air conditioning.

Recurring and nonrecurring charges apply for cageless collocation space construction. The physical cageless collocation space construction charge includes the provisioning of one 40-amp DC power feed. If the CLEC requests a cageless collocation with a power feed of 20, 30, or 60 amperes per bay, an adjustment to space construction charges are applied for the amps requested. If

the CLEC orders an additional power cable, additional charges are applied. Cageless collocation is designed to provide two bays for the CLEC's equipment. If the CLEC requires additional bays, an incremental per bay nonrecurring charge is applied to recover the prorated costs of the supporting structure, cable racking, lighting, and grounding facilities.

(3) **Floor Lease Space:** This charge is intended to recover the cost of the space and its use including: one 110 AC, 15 amp electrical outlet, preventative maintenance and repair of climate controls, filters, fire and life systems and alarms, mechanical systems, and HVAC, bi-weekly housekeeping service and general repair and maintenance. A recurring monthly charge applies on a per square foot basis.

D. CAGED PHYSICAL COLLOCATION

Q. WHAT IS CAGED PHYSICAL COLLOCATION?

A. Caged Physical Collocation permits the CLEC to lease caged floor space within Qwest's premises for the placement of the CLEC's equipment. The CLEC may access Qwest provided UNEs or it may access Qwest's finished services through its equipment.

Q. PLEASE DESCRIBE THE RATE ELEMENTS THAT ARE SPECIFIC TO CAGED PHYSICAL COLLOCATION.

A. There are four rate elements that are specific to Caged Physical Collocation. The first is Quote Preparation Fee, the next is Space Construction, the third is Floor Space Lease and the fourth is Grounding. Each of these rate elements is described below:

(1) **Quote Preparation Fee (QPF):** QPF is a non-refundable, nonrecurring charge for the work required to verify space, power, cable terminations, review design requested, and develop a price quote for the total costs to the CLEC for its caged collocation request.

(2) **Space Construction:** This charge recovers the cost of engineering the job, cage construction, providing a single DC power feed, overhead structures to support cable racking and CLEC equipment, additional lighting, and the supporting environmental requirements i.e. heating, ventilation and air conditioning.

There are both recurring and nonrecurring charges for caged collocation arrangements. The physical caged collocation space construction charge includes the provisioning of one 60-amp DC power feed. If the CLEC requests a caged collocation with a power feed of 20, 30, 40, 100, 200, 300 or 400 amperes, an adjustment to the space construction charge is applied for the amps requested. If the CLEC orders an additional power cable additional charges apply. Consistent with the FCC's First

Interconnection Order, CLECs have the option to subcontract the construction of the caged enclosure to contractors approved by Qwest, in conformance with Qwest's standards.

(3) **Floor Lease Space:** This charge recovers the cost of the space and its use including: one 110 AC, 15 amp electrical outlet, preventative maintenance and repair of climate controls, filters, fire and life systems and alarms, mechanical systems, and HVAC, bi-weekly housekeeping service and general repair and maintenance. A recurring monthly charge applies on a per square foot basis.

(4) **Grounding:** The grounding rate element recovers the cost of extending the building DC ground from the grounding plane of the wire center to the CLEC's caged collocation space. There is a recurring and nonrecurring charge per size, per foot.

E. VIRTUAL COLLOCATION

Q. PLEASE DESCRIBE THE RATE ELEMENTS THAT ARE UNIQUE TO VIRTUAL COLLOCATION.

A. Following are the rate elements that are unique to virtual collocation.

Quote Preparation Fee (QPF): QPF is a non-refundable, nonrecurring charge for the work required to verify space, power, cable terminations, review design

requested, and develop a price quote for the total costs to the CLEC for its Virtual Collocation request.

Engineering Labor: Engineering Labor recovers the cost of planning and engineering the installation, change or removal of the CLEC's equipment and associated supporting equipment such as power, cabling, cable racking, frame terminations, lighting, and entrance facility. Qwest charges CLECs per half-hour of engineering labor performed during regular business hours and a separate rate per half-hour for engineering performed outside of regular business hours.

Installation Labor: Installation Labor recovers the cost of the installation, change or removal of the CLEC's equipment and associated supporting equipment. Installation labor is assessed in half-hour increments for installation labor performed during regular business hours and at a separate rate per half-hour for installations performed outside of regular business hours.

Maintenance Labor: Maintenance labor recovers the cost for the labor necessary to repair of out of service and/or service affecting conditions and preventative maintenance of a CLEC's virtually collocated equipment. The CLEC is responsible for ordering maintenance spares. Qwest will perform maintenance and/or repair work upon receipt of the replacement maintenance spare and/or equipment from a CLEC.

Training Labor: Training Labor recovers the cost of training Qwest employees on the installation and maintenance of non-standard equipment provided by a CLEC under a virtual collocation arrangement. This charge does not apply if a CLEC selects equipment already in use by Qwest in the same metropolitan area. The training element covers the cost of training three Qwest employees, and includes the actual cost of the training course, and the employees' time. In the event a second CLEC selects the same equipment, the second CLEC is assessed a training fee equal to one-half the fee charged to the first CLEC. The first CLEC is refunded one-half the training fee.

Equipment Bay / per shelf: Recovers the cost of the equipment rack in which the CLEC's virtually collocated equipment and fuse panel is mounted. The cost of the equipment bay is recovered through a recurring rate per month, per equipment shelf.

Floor Space Lease: Required for virtual collocation only in the instance where the CLEC provides its own equipment bay. This rate element provides the monthly lease for the space occupied by the CLEC-provided equipment bay, including property taxes and base operating cost without -48 volt DC power. Includes convenience 110 AC, 15 amp electrical outlets provided in accordance with local codes and may not be used to power transmission equipment or -48 volt DC power generating equipment. Also includes maintenance for the leased

space; provides for the preventative maintenance (climate controls, filters, fire and life systems and alarms, mechanical systems, standard HVAC); biweekly housekeeping services (sweeping, spot cleaning, trash removal) of Qwest premises areas surrounding the CLEC-provided equipment bay and general repair and maintenance. The Floor Space Lease includes required aisle space on each side of the CLEC-provided equipment bay.

Q. DO THE RATE ELEMENTS IDENTIFIED IN THE FOUR CATEGORIES OF COLLOCATION DESCRIBED ABOVE NECESSARILY APPLY TO ALL TYPES OF COLLOCATIONS THAT A CLEC MAY ORDER?

A. No. The rate elements may not be appropriate for use in developing pricing for certain types of collocation such as adjacent, remote or ICDF collocation.

Q. PLEASE DESCRIBE ADJACENT COLLOCATION.

A. When space is exhausted in a particular Qwest premises a CLEC may request Adjacent Collocation. When the request is determined to be technically feasible, Qwest will make space available in controlled environmental vaults or similar structures that are adjacent to Qwest's premises. Alternatively, Qwest will permit a CLEC to construct or otherwise procure such an adjacent structure on property owned or controlled by Qwest.

Q. PLEASE DESCRIBE REMOTE COLLOCATION.

A. With Remote Collocation, a CLEC may collocate equipment in, or adjacent to, Qwest's remote premises. Remote premises include controlled environmental

vaults, controlled environmental huts, cabinets, pedestals and other remote terminals.

Q. HOW IS ADJACENT AND REMOTE COLLOCATION PRICED?

A. Due to the numerous variations and circumstances that may be involved, adjacent and remote collocation requests are priced on an Individual Case Basis (ICB).

Q. PLEASE DECRIBE INTERCONNECTION DISTRIBUTION FRAME COLLOCATION?

A. Interconnection Distribution Frame (ICDF) Collocation provides a location for CLECs to combine UNEs and ancillary services when they elect not to collocate equipment in Qwest's wire center.

Q. WHAT CHARGES APPLY TO ICDF COLLOCATION?

A. The charges that apply to ICDF Collocation are the non-recurring and recurring charges associated with the UNEs ordered by the CLEC and the cost of extending the UNEs to the demarcation point. This cost is recovered through the ITP charges addressed in the UNE section of this testimony. Additionally, a security charge applies to ICDF Collocation when ordered by a CLEC.

VI. CLEC-TO-CLEC CONNECTIONS

Q. PLEASE DESCRIBE CLEC-TO-CLEC CONNECTIONS.

A. CLEC-to-CLEC connections provide CLECs with the ability to connect with each other within the same Qwest wire center for the purpose of mutually exchanging traffic. A CLEC may also use the connections to connect multiple forms of its own collocations together within the same wire center.

Q. HOW IS A CLEC-TO-CLEC CONNECTION ACCOMPLISHED?

A. Qwest offers direct connection and cross-connection to CLECs that wish to order a CLEC-to-CLEC Connection.

Q. PLEASE DESCRIBE THE DIRECT CONNECTION.

A. When a direct connection is requested, a cable is placed between the collocations of each CLEC. The connections may be physical to physical, physical to virtual, or virtual to virtual collocations.

Q. PLEASE DESCRIBE THE RATE ELEMENTS THAT APPLY WHEN A CLEC ORDERS A DIRECT CONECTION.

A. A CLEC ordering the CLEC-to-CLEC direct connection will be charged:

(1) **Design Engineering and Installation Charge, No Cables**: This nonrecurring charge covers order processing, development of the price quote, and the hours to engineer and install cable racking.

(2) **Cable Racking (Per Foot)**: This recurring charge is a per foot, per month charge that recovers the cost of the racking used to support the cabling, but not the cabling itself. Prices also vary by the type of cabling supported i.e., DSO, DS1 and DS3);

(3) **Virtual Connections (Connections only; no cables)**: This nonrecurring charge covers the labor cost to connect a cable to a virtual collocation, but does not include the cost of the cable itself. If two virtual collocations are involved, two Virtual Connection charges apply. Prices vary by type i.e.. DSO per100 connections, DS1 per 28 connections, and DS3 per each connection.

(4) **Cable Hole**: This non-recurring charge is incurred per occurrence. It covers the cost of the labor and material that are required to open and close holes or slots between floors or through interior walls designed to be compartmentalized. These holes and slots are closed with approved firestop material that meets OSHA standards and Qwest policy.

Q. PLEASE DESCRIBE THE CHARGE THAT APPLIES WHEN A CLEC USES CLEC-TO-CLEC CROSS-CONNECTIONS TO CONNECT WITH ANOTHER CLEC'S COLLOCATION.

A. A one-time CLEC-to-CLEC Cross-Connection charge is the only rate that applies when a CLECs' uses Connecting Facility Assignments (CFA) residing on an Interconnection Distribution Frame (ICDF). Both CLECs must terminate at the same service rate level (i.e. DS1, DS3). Termination cables must be in place to the ICDFs. The CLEC may obtain the termination cables through the standard collocation ordering process.

VII. UNBUNDLED NETWORK ELEMENTS (UNES)

A. INTERCONNECTION TIE PAIRS (ITP)

Q. WHAT IS AN INTERCONNECTION TIE PAIR (ITP)?

A. An interconnection tie pair (ITP) is a connection between UNEs and a demarcation point at an ICDF.

Q. WHAT RATE ELEMENTS ARE BEING PRESENTED FOR THE ITP?

A. Recurring charges apply for DSO, DS1, and DS3 connections.

B. CHANNEL REGENERATION

Q. WHAT IS CHANNEL REGENERATION?

A. Channel Regeneration is an optional feature available to CLECs with DS1 and DS3 loops. The channel regenerator regenerates the DS1 and DS3 signals to overcome signal losses that are caused by the gauge of the copper cable and the length of the facility within a Qwest wire center.

Q. WHAT CHANNEL REGENERATION RATES ARE BEING PROPOSED?

A. Recurring and nonrecurring rates for both DS1 and DS3 regeneration are being proposed.

C. UNBUNDLED LOCAL LOOPS

Q. PLEASE DESCRIBE QWEST'S UNBUNDLED LOCAL LOOP PRODUCT.

A. Qwest's Unbundled Local Loop product establishes a transmission path between a wire center main distribution frame, or equivalent, up to and including, Qwest's Network Interface Device (NID) and/or demarcation point at the end user location. Unbundled Local Loops are available in three product categories: (i) 2-Wire and 4-Wire Analog, (ii) 2-Wire and 4-Wire Non-Loaded and (iii) Digital Capable.

Q. WHICH RECURRING RATES APPLY TO 2-WIRE AND 4-WIRE VOICE GRADE AND 2-WIRE AND 4-WIRE NON-LOADED ANALOG LOOPS?

A. The recurring rates that apply include those for 2-Wire and 4-Wire Voice Grade and 2-Wire and 4-Wire Non-loaded Analog Loops within Zones 1, 2 and 3.

Q. DOES THIS TESTIMONY ADDRESS OTHER TYPES OF LOOPS AND LOOP CHARGES?

A. Yes. This testimony addresses digital capable loops and their associated recurring and nonrecurring charges.

Q. PLEASE DESCRIBE THE DS0 LEVEL DIGITAL CAPABLE LOOPS.

A. The DSO level loop includes a Basic Rate ISDN Capable Loop, Digital Subscriber Loop (xDSL-I) and an Asymmetric Digital Subscriber Loop (ADSL).

Q. WHAT CHARGES APPLY FOR DSO LEVEL DIGITAL CAPABLE LOOPS ORDERED BY A CLEC?

A. Recurring charges apply for each of the DSO level digital capable loops identified above. Recurring charges apply for 2-wire unbundled loops within zones 1,2 and 3. Likewise, recurring charges apply for 4-wire unbundled loops within zones 1,2 and 3.

Q. WHAT OTHER CHARGES MAY APPLY TO LOOPS ORDERED BY THE CLEC?

A. An additional nonrecurring charge may apply to loops when conditioning of those loops is requested by the CLEC. The nonrecurring charge of Conditioning (Cable Unloading/Bridge Tap Removal) would apply in this instance.

Q. PLEASE DESCRIBE THE DS1 CABLE LOCAL LOOP.

A. The DS1 Capable Loop is a transmission path between a wire center network interface at a DS1 panel or equivalent in a Qwest serving wire center and the network interface at the end user location. The DS1 Capable Loop is capable of transporting bi-directional DS1 signals with a nominal transmission rate of 1.544 Mbit/s.

Q. DOES A RECURRING CHARGE APPLY TO THE DS1 CAPABLE LOOP?

A. Yes. A recurring charge applies to each DS1 Capable Loop ordered within Zone 1, 2 and 3.

Q. PLEASE DESCRIBE THE DS3 CABLE LOCAL LOOP.

A. The DS3 Capable Loop is a transmission path between a Qwest central office network interface and an equivalent demarcation point at an end user location. The DS3 Capable Loop is capable of transporting bi-directional DS3 signals with a nominal transmission rate of 44.736 Mbit/s.

Q. DOES A RECURRING CHARGE APPLY TO THE DS3 CAPABLE LOOP?

A. Yes. A recurring charge applies to each DS3 Capable Loop ordered within Zone 1, 2 and 3.

Q. WHAT NONRECURRING INSTALLATION CHARGES ASSOCIATED WITH UNBUNDLED LOOPS ARE ADDRESSED IN YOUR TESTIMONY?

A. The nonrecurring charges addressed in my testimony include:

- DSO – Basic Installation, Basic Installation with Performance Testing, Coordinated Installation with Cooperative Testing, and Coordinated Installation without Cooperative Testing and Basic Installation with Cooperative Testing.
- DS1 – Basic Installation, Basic Installation with Performance Testing, Coordinated Installation with Cooperative Testing and Coordinated Installation without Cooperative Testing and Basic Installation with Cooperative Testing.
- DS3 – Basic Installation, Basic Installation with Performance Testing, Coordinated Installation with Cooperative Testing and Coordinated Installation without Cooperative Testing and Basic Installation with Cooperative Testing.

Q. PLEASE DESCRIBE BASIC INSTALLATION.

A. Basic Installation may be ordered for existing DSO, DS1 and DS3 service. With Basic Installation, Qwest disconnects the loop from its current termination and delivers it via ITPs to the point of demarcation. A Basic Installation charge applies for each loop installed.

Q. PLEASE DESCRIBE BASIC INSTALLATION WITH PERFORMANCE TESTING.

A. Basic Installation with Performance Testing is the minimum level of installation required for new DSO, DS1 and DS3 service. Qwest will complete the circuit wiring and perform the required performance tests as described in Qwest's Technical Publication 77384 to ensure that the new circuit meets the required parameter limits. A Basic Installation with Performance Testing charge applies to each loop installed.

Q. PLEASE DESCRIBE BASIC INSTALLATION WITH COOPERATIVE TESTING.

A. Basic Installation with Cooperative Testing may be ordered for new service i.e. service that is not currently in place, or existing service. This service may be ordered by the CLEC when an end user changes from Qwest-provided service to CLEC-provided service, or when an end user changes from one CLEC-provided service to another CLEC-provided service. With Basic Installation with Cooperative Testing, the Qwest central office technician lifts the loop from its termination and lays it on the new termination that connects to the CLEC collocation equipment. A Qwest installation technician then completes the required performance tests. Finally, the CLEC performs acceptance testing. A Basic Installation with Cooperative Testing charge applies to each loop so installed.

Q. PLEASE DESCRIBE COORDINATED INSTALLATION WITH COOPERATIVE TESTING.

A. Coordinated Installation with Cooperative Testing may be ordered for new or existing DSO, DS1 and DS3 service. When an existing Qwest end-user, or a CLEC end-user, changes to another CLEC that orders this service, the coordinated installation will include cooperative testing and a technician dispatch. At the appointed time, Qwest will disconnect the loop from its current termination and deliver it to the point of demarcation in coordination with the CLEC. Qwest will complete the required performance tests and perform other testing as requested

by the CLEC. A Coordinated Installation with Cooperative Testing charge applies to each loop so installed.

Q. PLEASE DESCRIBE THE COORDINATED INSTALLATION WITHOUT COOPERATIVE TESTING.

A. When an existing Qwest end-user or a CLEC end-user changes to another CLEC using this option, Qwest will disconnect the loop and deliver it to the requesting CLEC via an ITP to the demarcation point. This option offers the CLEC the ability to coordinate the conversion activity, thus allowing the CLEC's end-user the ability to minimize any service interruption. No testing is performed. At the appointed time, Qwest will disconnect the loop from its current termination and deliver it via an ITP to the point of demarcation. Coordinated Installation Without Cooperative Testing charges apply to each loop so installed.

D. SUB-LOOP UNBUNDLING

Q. WHAT IS A SUB-LOOP?

A. A Sub-loop is defined as any portion of the loop that it is technically feasible to access in Qwest accessible terminals located throughout the outside plant. The Sub-Loop elements addressed in this testimony include a 2-Wire Distribution Loop; a 2-Wire Non-Loaded Distribution Loop; Intrabuilding Cable-per pair; and a DS1 Capable Feeder Loop.

Q. PLEASE IDENTIFY THE CHARGES APPLICABLE TO THE 2-WIRE AND 4-WIRE ANALOG DISTRIBUTION LOOPS AND THE 2-WIRE AND 4-WIRE ANALOG/NON LOADED DISTRIBUTION LOOPS.

A. A recurring charge applies to each 2-Wire and 4-Wire Analog Distribution Loop located within Zones 1, 2 and 3. A recurring charge applies to each 2-Wire and 4-Wire Analog/Non Loaded Distribution Loop located within zones 1, 2 and 3. Basic Installation nonrecurring charges apply for the first and each additional 2-Wire and 4-Wire Analog and 2-Wire and 4-Wire Analog/Nonloaded Loop.

Q. PLEASE DESCRIBE THE INTRABUILDING CABLE LOOP PRODUCT.

A. When the CLEC places outside plant to a building and wishes to access the Qwest owned riser cable or inside wire through a building terminal it must order an Intrabuilding Cable Loop. The CLEC, or building owner, will place a common terminal or cross-connect facility near the existing Qwest terminal. Qwest will connect to the Qwest terminal providing connection to the riser/inside wire.

Q. WHAT CHARGE APPLIES WHEN AN INTRABUILDING CABLE LOOP IS ORDERED BY THE CLEC?

A. A monthly recurring charge applies per Intrabuilding Cable Loop pair ordered.

Q. WHAT CHARGES APPLY TO THE FIRST AND EACH ADDITIONAL DS1 CAPABLE FEEDER LOOP?

A. Recurring charges apply to DS1 Capable Feeder Loops in zones 1, 2 and 3. A separate nonrecurring charge applies to the first and each additional DS1 Feeder Loop installed.

E. FIELD CONNECTION POINT (FCP)

Q. WHAT IS A FIELD CONNECTION POINT (FCP)?

A. The FCP permits a CLEC to interconnect with the Qwest network outside of the central office location where it is technically feasible to do so. For example, the FCP allows the CLEC to access an unbundled Sub-Loop at a Feeder Distribution Interface (FDI). The FCP must be in place prior to Qwest processing the CLEC's request for an unbundled Sub-Loop.

Q. WHAT TYPES OF CHARGES ARE PROPOSED FOR FIELD CONNECTION POINT (FCP)?

A. Two nonrecurring charges are proposed for FCP. The first nonrecurring charge is the Feasibility and Quote Preparation charge. The second charge is an ICB Construction Fee.

F. NETWORK INTERFACED DEVICE (NID)

Q. PLEASE DEFINE THE TERM NETWORK INTERFACE DEVICE (NID).

A. The NID provides an interface between Qwest's loop facility and the end user's inside wire and is considered part of the unbundled loop facility. The NID provides a protective ground connection, provides protection against lightening and other high voltage surges and is capable of terminating cables such as twisted pair cable.

Q. WHAT CHARGES APPLY TO THE NID?

A. A recurring and nonrecurring charge applies to the NID.

G. UNBUNDLED DEDICATED INTEROFFICE TRANSPORT (UDIT) AND EXTENDED UNBUNDLED DEDICATED INTEROFFICE TRANSPORT (EUDIT)

Q. PLEASE DEFINE THE TERM UNBUNDLED DEDICATED INTEROFFICE TRANSPORT (UDIT).

A. UDIT is a network element that provides a CLEC with a single transmission path between two Qwest wire centers in the same LATA. UDITs are available in DS0, DS1, DS3, OC-3, OC-12 bandwidths, where facilities are available.

Q. WHAT RECURRING CHARGES DOES QWEST PROPOSE FOR UDIT?

A. Qwest proposes "fixed" and "distance sensitive" recurring charges for DS0, DS1, DS3 OC-3 and OC-12 UDIT.

Q. DOES QWEST PROPOSE NONRECURRING CHARGES FOR UDIT?

A. Yes. Qwest proposes nonrecurring charges for the installation of DSO, DS1, DS3, OC3 and OC12 UDITs.

Q. WILL QWEST MAKE UDITS AVAILABLE AT BANDWIDTHS HIGHER THAN OC-12?

A. Yes. Qwest will make UDITs available at bandwidths in excess of OC-12 and up to OC-192 as an ICB basis.

H. UDIT-RELATED PRODUCTS AND SERVICES

Q. IS QWEST INTRODUCING OTHER UDIT-RELATED PRODUCTS AND SERVICES IN THIS COST PROCEEDING?

A. Yes. Qwest is introducing EUDIT Interoffice Transport, UDIT Rearrangement, Low Side Channelization, and Multiplexing in this cost proceeding.

Q. PLEASE DEFINE THE TERM EUDIT.

A. EUDIT is a network element that provides a CLEC with a bandwidth specific transmission path between the Qwest Serving Wire Center and the CLEC's Wire Center, or an IXC's point of presence located within the same Qwest Serving Wire Center area. EUDIT is a bandwidth-specific interoffice transmission path. EUDIT is available in DS1, DS3, OC-3, OC-12 bandwidths where facilities are available.

Q. WHAT TYPE OF EQUIPMENT DOES QWEST PROVIDE AT THE CLEC'S WIRE CENTER OR IXC POP?

A. For DS1 EUDIT, Qwest may provide existing copper to the CLEC's Wire Center or an IXC POP. For DS3 or OCn, Qwest provides only an optical interface with no terminating transmission equipment.

Q. WHICH CHARGES ARE APPLICABLE TO THE EUDIT?

A. Qwest proposes both recurring and nonrecurring charges for DS1, DS3, OC3, and OC12 EUDITs.

Q. WILL QWEST MAKE EUDITS AVAILABLE AT BANDWIDTHS HIGHER THAN OC-12?

A. Yes. Qwest will make EUDITs available at bandwidths in excess of OC-12 and up to OC-192 as an ICB basis.

Q. PLEASE DESCRIBE UDIT REARRANGEMENTS.

A. A CLEC may request that UDIT terminations be moved or rearranged at the CLEC demarcation point. A CLEC may also request that UDIT options be changed. Rearrangements may be ordered by the CLEC for working UDITS in place at single and dual office locations.

Q. WHAT CHARGES APPLY TO UDIT REARRANGEMENTS?

A. Nonrecurring charges apply for rearrangements involving DS0 single offices, DS0 dual offices, high capacity single offices, and high capacity dual offices

Q. WHAT IS LOW SIDE CHANNELIZATION?

A. Low Side Channelization modifies the circuit with the basic performance requirements needed for the circuit to function. It may also provide various signaling parameters necessary to enhance the basic performance.

Q. WHAT CHARGES APPLY TO LOW SIDE CHANNELIZATION?

A. Qwest proposes a recurring charge for Low Side Channel Performance. Qwest also proposes a recurring and nonrecurring charge for Low Side Channel Performance with Multiplexing.

Q. WHAT IS A MULTIPLEXER?

A. A multiplexer is electronic equipment that allows two or more communications channels to travel over a single circuit. Multiplexing is the process of combining a number of channels into a single higher bandwidth circuit. As traffic is moved throughout the network on a UDIT, the UDIT is multiplexed as traffic is distributed to various locations.

Q. WHAT CHARGES DOES QWEST PROPOSE FOR MULTIPLEXING?

A. Qwest proposes recurring and nonrecurring charges for DS1 to DS0 and DS3 to DS1 multiplexing and UDIT M1-3 and M1-0 Multiplexing High-Side.

I. UNBUNDLED DARK FIBER (UDF)

Q. PLEASE DESCRIBE UNBUNDLED DARK FIBER (UDF).

A. UDF is a deployed unlit pair of fiber optic cables or strands that connect two points within Qwest's network.

Q. PLEASE SUMMARIZE THE UDF CHARGES THAT QWEST IS INTRODUCING IN THIS COST PROCEEDING.

A. Qwest is introducing charges for Initial Records Inquiry, Field Verification and Quote Preparation, UDF-Interoffice Facilities (IOF) charges, and UDF Loop charges.

Q. WHAT IS INITIAL RECORDS INQUIRY (IRI)?

A. The IRI rate element recovers the cost associated with the pre-order work effort conducted by Qwest to determine the availability of UDF. IRI is a one-time nonrecurring charge that applies for each route check requested by a CLEC. A simple IRI will be conducted to determine if UDF is available between two Qwest wire centers, or between a Qwest wire center and a Qwest customer premises. A complex/midspan splice structure point inquiry IRI will be conducted to determine if UDF is available between a Qwest wire center and an outside structure (CEV, hut, etc.) located along the loop fiber route. A nonrecurring charge for the simple IRI has been developed and is presented in this Direct Testimony. The nonrecurring charge for a complex/midspan splice structure point inquiry IRI will be ICB.

Q. PLEASE DESCRIBE FIELD VERIFICATION AND QUOTE PREPARATION (FVQP).

A. Field Verification and Quote Preparation is used to provide an estimate of the cost to furnish the CLEC with UDF access at locations other than a Qwest wire center or an end-user's premises. Qwest will prepare a quote of the work activities, timeframes, and costs associated with providing access to a FCP location. FVQP is a nonrecurring charge.

Q. PLEASE DESCRIBE THE UDF-INTEROFFICE FACILITY (IOF).

A. UDF-IOF is an unlit pair of fiber optic cable or strands that connect two points within Qwest's network.

Q. WHAT UDF-IOF RECURRING CHARGES DOES QWEST PROPOSE?

A. Qwest Proposes the following UDF-IOF recurring charges:

(1) Termination, fixed, per pair

(2) Fiber Transport, per pair, per mile

(3) Cross-Connect, per pair

Q. WHAT UDF-IOF NONRECURRING CHARGES DOES QWEST PROPOSE?

A. Qwest proposes the following UDF-IOF nonrecurring charges:

(1) Order Charge, per pair, per route, per order

(2) Each Additional, per pair, same route

Q. PLEASE DESCRIBE THE TERM UDF-LOOP.

A. UDF-Loop is an existing loop that extends between a Qwest wire center and a fiber distribution panel located at an appropriate outside plant structure, or an end-user customer's premises.

Q. WHICH UDF-LOOP RECURRING CHARGES DOES QWEST PROPOSE?

A. Qwest proposes the following recurring charges for UDF-Loop:

(1) Termination at Wire Center, per pair

(2) Termination at Premises, per pair

(3) UDF-Loop Fiber, per pair

(4) UDF-Loop Fiber Cross-Connect, per pair

Q. WHAT UDF-LOOP NONRECURRING CHARGES DOES QWEST PROPOSE?

A. Qwest propose the following UDF-Loop nonrecurring charges:

(1) Order Charge, per pair, per route, per order

(2) Each Additional, per pair, same route

(3) Fiber Cross-Connect, per pair

Q. PLEASE DESCRIBE THE TERM E-UDF.

A. E-UDF is an existing loop that extends between a Qwest wire center and a fiber distribution panel located at an appropriate outside plant structure, or an end-user customer's premises.

Q. WHICH E-UDF RECURRING CHARGES DOES QWEST PROPOSE?

A. Qwest proposes the following recurring charges for E-UDF:

(1) Termination at Wire Center, per pair

(2) Termination at Premises, per pair

(3) E-UDF-Loop Fiber, per pair

(4) Fiber Cross-Connect, per pair

Q. WHICH E-UDF NONRECURRING CHARGES DOES QWEST PROPOSE?

A. Qwest propose the following E-UDF nonrecurring charges:

(1) Order Charge, per pair, per route, per order

(2) Each Additional, per pair, same route

(3) Fiber Cross-Connect, per pair

J. MISCELLANEOUS NONRECURRING CHARGES

Q. PLEASE GENERALLY DESCRIBE THE NATURE OF THE ACTIVITIES FOR WHICH MISCELLANEOUS NONRECURRING CHARGES WOULD APPLY.

A. Miscellaneous Nonrecurring Charges are intended to cover additional engineering, labor and testing when incurred by Qwest. Miscellaneous charges may be assessed when at the direction of a CLEC a work activity is requested that is not part of the nonrecurring charges normally associated with a product. A CLEC may

also be charged a miscellaneous non recurring charge when a CLEC reports a trouble condition and through testing Qwest discovers the trouble in the network which the CLEC is responsible for.

Q. PLEASE PROVIDE A LIST OF THE MISCELLANEOUS NONRECURRING CHARGES?

A. Additional Engineering - Basic (Per 1/2 Hour)
Additional Engineering - Overtime (Per 1/2 Hour)
Additional Labor Installation-Overtime (Per 1/2 Hour)
Additional Labor Installation-Premium (Per 1/2 Hour)
Additional Labor Other-Basic (Per 1/2 Hour)
Additional Labor Other-Overtime (Per 1/2 Hour)
Additional Labor Other-Premium (Per 1/2 Hour)
Testing and Maintenance Basic (Per 1/2 Hour)
Testing and Maintenance Overtime (Per 1/2 Hour)
Testing and Maintenance Premium (Per 1/2 Hour)
Maintenance of Service-Basic (Per1/2 Hour)
Maintenance of Service-Overtime (Per1/2 Hour)
Maintenance of Service-Premium (Per1/2 Hour)
Additional Coop Acceptance Test-Basic (Per1/2 Hour)
Additional Coop Acceptance Test-Overtime (Per1/2 Hour)
Additional Coop Acceptance Test-Premium (Per1/2 Hour)
Nonscheduled Coop Test-Basic (Per 1/2 Hour)

Nonscheduled Coop Test-Overtime (Per 1/2 Hour)

Nonscheduled Coop Test-Premium (Per 1/2 Hour)

Nonscheduled Manual Test-Basic (Per 1/2 Hour)

Nonscheduled Manual Test-Overtime (Per 1/2 Hour)

Nonscheduled Manual Test-Premium (Per 1/2 Hour)

Cooperative Scheduled Test-LOSS (Per Month)

Coop Scheduled Test-C-Message Noise (Per Month)

Coop Scheduled Test-Balance (Per Month)

Coop Scheduled Test-Gain Slope (Per Month)

Coop Scheduled Test-C Notched Noise (Per Month)

Manual Scheduled Test – Loss

Manual Scheduled Test-C-Message Noise (Per Month)

Manual Scheduled Test-Balance (Per Month)

Manual Scheduled Test-Gain Slope (Per Month)

Manual Scheduled Test-C Notched Noise (Per Month)

Q. DOES QWEST PROPOSE OTHER MISCELLANEOUS ELEMENTS IN ADDITION TO THOSE ADDRESSED IN THIS PROCEEDING?

A. Yes. Qwest proposes to introduce Additional Dispatch Charge, Date Change and Design Change elements in this cost proceeding.

Q. PLEASE DESCRIBE WHEN A NONRECURRING CHARGE WOULD APPLY FOR ADDITIONAL DISPATCH.

A. A nonrecurring charge would apply when, at the request of the CLEC, a Qwest technician is dispatched an additional time to a CLEC designated location.

Q. PLEASE DESCRIBE WHEN A NONRECURRING CHARGE WOULD APPLY FOR DATE CHANGE.

A. A Date Change nonrecurring charge would apply when the CLEC changes a previously established due date for service. Such a change necessitates the issuance of a new service order.

Q. PLEASE DESCRIBE WHEN AN INDIVIDUAL NONRECURRING CHARGE WOULD APPLY FOR DESIGN CHANGE.

A. A nonrecurring charge would apply when a design change occurs that requires an engineer's review. Such design changes may include a change of end user premises, the addition or deletion of optional features or functions, or a change in the type of transport termination.

Q. HOW DOES QWEST PROPOSE TO CHARGE FOR EXPEDITES AND CANCELLATIONS?

A. Qwest proposes to charge for Expedites and Cancellations on an ICB basis.

VIII. OTHER SERVICES

A. ENHANCED EXTENDED LOOP (EEL)

Q. PLEASE DESCRIBE ENHANCED EXTENDED LOOP (EEL).

A. An Enhanced Extended Loop (EEL) is a means by which a CLEC may access an end user customer not located in the same Qwest wire center in which the CLEC is located. An EEL is a combination of a loop and dedicated interoffice transport facilities. The EEL may also include multiplexing or concentration capabilities.

Q. PLEASE IDENTIFY THE CHARGES THAT QWEST PROPOSES FOR EEL.

A. Qwest proposes charges for the following EEL and EEL-related elements: EEL Link, EEL Transport, Multiplexing, DS0 Channel Performance, and Concentration Capability. A description of each element and its associated rate elements follows:

(1) EEL Link: The EEL Link is the loop connection between the end user customer premises and the serving Wire Center. Nonrecurring rate elements specific to EEL- Link apply for the first and each additional DSO, DS1 and DS3 facility and for DS1 and DS3 Transport Multiplexing

(2) EEL Transport: EEL Transport consists of the dedicated interoffice facilities between Qwest Wire Centers. Qwest proposes to use the UDIT nonrecurring DSO, DS1 and DS3 rates for EEL transport.

(3) EEL Multiplexing: EEL Multiplexing is offered in DS3 to DS1, DS1 to DS0 and DS1 and DS3 Transport Multiplexing configurations. Recurring and nonrecurring charges apply for DS3 to DS1 and DS1 to DS0 configurations. Nonrecurring charges apply to DS1 and DS3 Transport Multiplexing. All other multiplexing arrangements will be ICB. EEL Multiplexing is ordered with EEL Transport.

(4) DSO Channel Performance: DS0 Low Side Channelization and DS1/DS0 MUX Low Side Channelization are the two rate elements being introduced for DSO Channel Performance. Recurring charges apply to both types of channelization. A nonrecurring charge for DS1/DS0 MUX, Low Side Channelization is also proposed.

(5) Concentration Capability: A recurring ICB rate will apply for space preparation and space lease, equipment installation, cabling and associated terminations and structure installation, personnel training, if required, and delivery of required power.

Q. WHAT RECURRING RATE ELEMENTS APPLY TO THE EEL LINK DESCRIBED ABOVE?

A. The EEL Link recurring rate elements will depend upon the configuration requested by the CLEC. The recurring rates will therefore either be those applicable to the unbundled loop or EUDIT offered by Qwest.

Q. HOW DOES QWEST PROVIDE EELS?

A. Qwest provides EELs in two forms: EEL-Conversion (EEL-C) and EEL-Provision (EEL-P). EEL-C is the conversion of an existing private line/special access service to a combination of loop and transport UNEs. EEL-P is a new installation of loop and dedicated interoffice transport used by the CLEC for connecting an end user customer to the CLEC's switch.

Q. WHAT NONRECURRING CHARGES APPLY TO EEL-C

A. A nonrecurring charge applies for converting an existing service to EEL.

B. ACCESS TO POLES, DUCTS, CONDUITS AND RIGHTS OF WAY (ROW)

Q WHICH ELEMENTS WITHIN THE CATEGORY OF POLES, DUCTS, CONDUITS AND RIGHTS OF WAY (ROW) IS QWEST INTRODUCING IN THIS COST DOCKET?

A. Qwest proposes the following nonrecurring charge elements:

(1)Pole Inquiry Fee- per mile
(2) Innerduct Inquiry Fee – per mile
(3)ROW Inquiry Fee
(4)ROW Documentation Fee
(5) Field Verification Fee per pole
(6) Field Verification Fee, per manhole
(7)Planner Verification, per manhole
(8) Manhole Verification Inspector, per manhole
(9) Manhole Make-Ready Inspector, per manhole.

Qwest also proposes the recurring price elements of Pole Attachment Fee and Innerduct Occupancy Fee.

Q. PLEASE DESCRIBE THE ACTIVITIES ASSOCIATED THE POLE AND INNERDUCT INQUIRY FEES.

A. The Pole Inquiry Fee and the Innerduct Inquiry Fee are a non-refundable pre-paid charges used to recover the costs associated with performing an internal record review to determine if a requested route and/or facility is available for lease.

Q. WHAT IS THE ROW INQUIRY FEE?

A. The ROW Inquiry Fee recovers the cost to research and provide a CLEC with copies of publicly recorded easements and a matrix of private easements that the CLEC's route will pass through.

Q. WHAT IS INCLUDED IN THE ROW DOCUMENTATION FEE?

A. The ROW Documentation Fee recovers the cost of research and preparation of documents associated with private easements, including the preparation of quit claim deeds as required.

Q. WHICH ACTIVITIES ARE ASSOCIATED WITH FIELD VERIFICATION?

A. The Field Verification Fees are non-refundable pre-paid charges that recovers the estimated actual costs for a field survey verification required for a route. The estimated pre-paid fees are billed in advance. Separate Field Verification Fees apply for poles and manholes.

Q. WHAT IS INCLUDED IN THE PLANNER VERIFICATION FEE?

A. The Planner Verification Fee is a pre-paid charge that recovers the cost for Qwest's tactical planner to review records and prepare a final field inspection report of availability.

Q. PLEASE DESCRIBE THE MANHOLE VERIFICATION CHARGE.

A. The Manhole Verification, Inspector per manhole charge will apply when a CLEC performs the field verification step of an innerduct request, This charge recovers the cost for a Qwest inspector to ensure that manholes are opened and sealed properly and that work safety standards are followed by the CLEC's workers.

Q. WHAT IS THE PURPOSE OF THEMANHOLE MAKE-READY FEE?

A. The Manhole Make-Ready Inspector, per manhole fee recovers the cost for a Qwest inspector to be present during the placement of innerduct by a CLEC. The inspector will ensure that manholes are opened and sealed properly, that the innerduct materials used by the CLEC's workers meet the appropriate standards and that work safety standards are followed.

Q. WHAT IS COVERED BY THE POLE ATTACHMENT FEE?

A. The Pole Attachment Fee is recovered from the CLEC for the occupancy of pole space. The fee is charged per foot, per year.

Q. WHAT IS THE INNERDUCT OCCUPANCY FEE?

A. The Innerduct Occupancy Fee is a pre-paid fee that is recovered from the CLEC for, occupancy of innerduct space. The fee is charged per foot, per year.

C. BONA FIDE REQUESTS

Q. PLEASE DESCRIBE A BONA FIDE REQUEST (BFR) AND THE ASSOCIATED NONRECURRING CHARGE.

A. A request by a CLEC for interconnection or access to a UNE or ancillary service that Qwest does not make readily available will be treated as a Bona Fide Request (BFR). Qwest will use the BFR process to determine the terms and timetable for providing the requested interconnection or access to UNEs or ancillary services. Qwest is proposing a nonrecurring nonrefundable Processing Fee for the BFR process.

IX. CONCLUSION

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes it does. Thank you.

BEFORE THE ARIZONA CORPORATION COMMISSION

WILLIAM A. MUNDELL
CHAIRMAN
JIM IVIN
COMMISSIONER
MARC SPITZER
COMMISSIONER

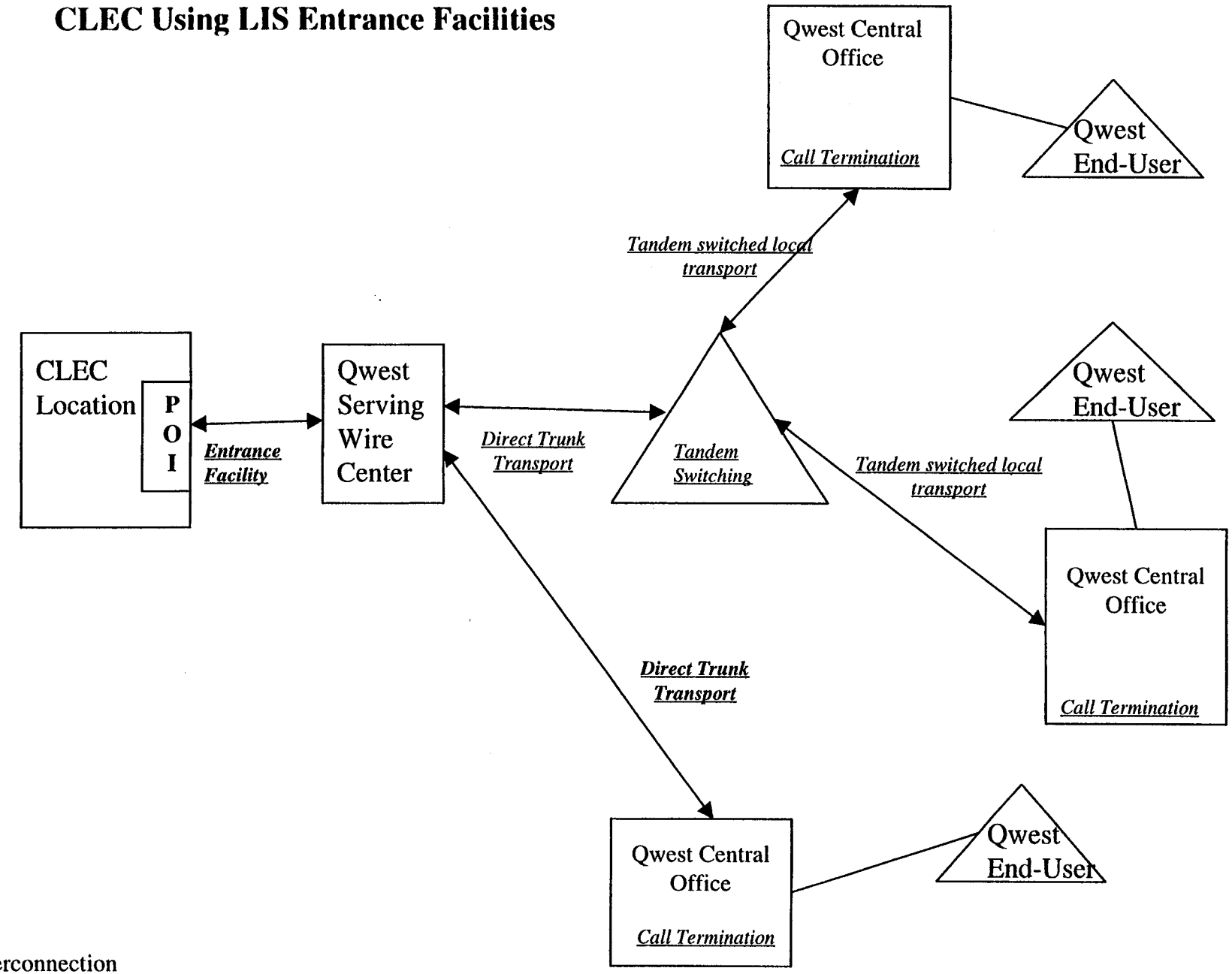
IN THE MATTER OF INVESTIGATION INTO	)	
QWEST CORPORATION'S COMPLIANCE	)	DOCKET NO. T-00000-00-0194
WITH CERTAIN WHOLESALE PRICING	)	PHASE II
REQUIREMENTS FOR UNBUNDLED	)	
NETWORK ELEMENTS AND RESALE	)	
DISCOUNTS	)	

EXHIBIT OF

ROBERT F. KENNEDY

MARCH 15, 2001

CLEC Using LIS Entrance Facilities



POI = Point of Interconnection