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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**

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**RESPONSE OF AT&T AND XO TO QWEST'S EXCEPTIONS**  
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Arizona Corporation Commission

**DOCKETED**

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## I. INTRODUCTION

Qwest's Exceptions to the Recommended Opinion and Order ("RO&O") in this docket are laden with italics and hyperbole, but little substance. Qwest attacks the RO&O as "ridden with errors," "lawless," and "oscillating." In fact, the RO&O balances the positions of the parties in this proceeding, resulting in rates that significantly **exceed** a reasonable TELRIC range. In contrast to problems raised by AT&T and XO in their own exceptions, almost every aspect of the RO&O challenged by Qwest here has been specifically endorsed as TELRIC-based by the FCC or other commissions in Qwest's region. None of Qwest's Exceptions have merit and all should be rejected out of hand.

## II. DISCUSSION

Qwest's Exceptions in this proceeding, while rambling and repetitive, essentially make three arguments. First, Qwest claims that the RO&O adopts a "hodgepodge of TELRIC violations," resulting in rates below Qwest's actual costs for providing network elements. In a separate argument in support of this contention, Qwest argues that the rates adopted by the RO&O must be below TELRIC because higher rates exist in other states. Finally, Qwest concludes that the RO&O is not based upon a TELRIC analysis, but rather upon considerations of the ability of new entrants to compete in Arizona telecommunications markets.

Qwest's contentions range from false to irrelevant. None of the specific issues Qwest identifies in its Exceptions is a violation of TELRIC principles; most, in fact, specifically follow methodology adopted by the FCC in performing its own analysis of forward-looking costs. Moreover, the rates generated by the RO&O are in line with those adopted by many of the more recent commission orders in other states on pricing, recognizing decreases in the costs incurred by incumbent carriers due to higher density, lower equipment costs, merger savings, and other factors. Finally, Qwest's ultimate conclusion that the RO&O ignores costs in favor of assisting

competitors fails on all points. Qwest cannot identify any specific violation of TELRIC standards resulting in rates below a reasonable TELRIC range.<sup>1</sup> Moreover, to the extent that the administrative law judges may have considered the effect of the adopted rates upon competition, such consideration is required by the Telecommunications Act of 1996 (the "Act"). Because the Act is intended to promote competition, the Commission should consider whether unbundled element pricing adopted by the Commission will permit competition to exist. *See Sprint Communication Co. v. Federal Communications Comm'n*, 274 F.3d 549, 555 (D.C. Cir. 2001).

For these reasons, there is no basis for Qwest's Exceptions and they should be rejected by the Commission in its review of the RO&O.

**A. Qwest Has Identified No Specific Failure by the RO&O to Comply With TELRIC Standards.**

Qwest has made few specific exceptions to decisions made by the RO&O. In fact, for most of the rates established by the RO&O, Qwest has made no exceptions at all. Qwest's limited specific exceptions relate to a few of the assumptions adopted by the RO&O in calculating the recurring rate for the unbundled loop element and more generalized objections to the non-recurring charges adopted by the RO&O.

None of Qwest's specific objections have merit. The assumptions adopted by the RO&O in calculating unbundled loop rates challenged by Qwest follow the FCC's own prescriptions for determining TELRIC pricing. Moreover, the non-recurring charges adopted by the RO&O properly adopt forward looking assumptions regarding costs that an efficient carrier would incur in providing elements, rather than Qwest's improper assumptions based upon its embedded network..

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<sup>1</sup> In fact, AT&T and XO have identified certain aspects of the RO&O in their own exceptions which tend to increase rates **above** TELRIC.

**1. The RO&O Properly Adopts the HAI Model to Determine TELRIC Rates for Unbundled Loops.**

The RO&O adopts the HAI Model 5.2a proposed by AT&T, XO, and Worldcom, Inc. (the “Joint Intervenors”) for the purposes of calculating pricing for unbundled analog loops. Qwest does not challenge this decision, which is not surprising since even Qwest’s own expert contended during the hearing that a run of the HAI Model produced “the most objective measure of loops costs in Arizona for Qwest’s service territory.” Tr., pp. 1072-73 (Fitzsimmons).

Qwest does challenge certain assumptions adopted by the RO&O in running the HAI model to calculate loop costs. Qwest makes overlapping challenges to the distribution design used by the Model as well as the use of a “minimum spanning tree” (“MST”) algorithm in calculating the amount of cable required to serve customers in Qwest’s territory. In addition, Qwest challenges the line counts and placement costs assumed by the Model, as well as the RO&O’s findings regarding how frequently placement costs would be shared with other entities under TELRIC assumptions. Finally, Qwest has challenged the RO&O’s assumption that Qwest’s costs for general support assets such as computers and office equipment should be adjusted to take into account retail costs that should not be borne by Qwest’s wholesale customers.<sup>2</sup>

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<sup>2</sup> Qwest has included with its exceptions an analysis purporting to calculate the monetary impact of each of its proposed changes. For the most part, Qwest does not explain how these calculations were done and AT&T and XO cannot, therefore, provide any reasoned analysis of Qwest’s contentions regarding the impact of its proposed changes. Although none of the proposals have merit and none should be accepted by the Commission, to the extent that the Commission does determine to accept any of Qwest’s arguments, the Commission should allow further analysis and argument concerning the impact of the proposed revisions to the RO&O.

Qwest made each of these arguments to the ALJs. The ALJs, after due consideration of a record that includes tens of thousands of pages, rejected Qwest's arguments. The assumptions made by the ALJs in rejecting Qwest's arguments are modeled upon the FCC's own application of its TELRIC methodology, which relies upon similar customer location information to that used in the HAI Model as filed in this proceeding. There is no basis, therefore, for the Commission to revisit those determinations made by the RO&O.

**2. The HAI Model Conservatively Calculates the Amount of Outside Plant Required to Serve Existing Customer Demand.**

**b. The HAI's Method of using Actual Customer Locations Is Preferable to Qwest's Approach of Using Average Investment Per Line for Distribution.**

Qwest contends, and AT&T and XO agree, that "one of the key steps in determining total loop investment . . . is a calculation of the amount of 'distribution plant' needed to reach individual customers." Qwest Exceptions at 19. In fact, it is in this "key factor" that Qwest's own loop cost model most clearly shows its deficiencies. The Qwest model makes no effort to consider the actual demographic and geological conditions that exist in Arizona in designing outside loop plant. Instead, the model uses standardized distribution group designs, common to every state in Qwest's 14-state region. Tr., p. 89.

The Qwest model designs distribution plant by determining the number of customers and the size of each existing Qwest distribution area as of October 1998. *Id.*, p. 86. Each distribution area is then assigned to one of five standard distribution group designs. Each of the five standard designs, in turn, has a standard design profile indicating the total cable footages and equipment that the model assumes will be required to serve the design. Ex. AT&T/XO 1 at 1.8. For this reason, there is no information used within the Qwest Model regarding actual customer locations or the cost of serving actual locations. Tr., p. 81. The model simply assumes that

applying average cable and equipment investments for each distribution group to develop a per line average will somehow result in a reasonable approximation of the actual amount of plant that would be required to serve customers.

In contrast, the HAI Model is designed to place distribution plant where customers are actually located. Where the actual location of customers is known, the model uses this information. *See* Ex. AT&T/WorldCom 3 (Denney Direct) at 20. Where the actual customer location is not known, the Model uses the next most precise source of information available: the U.S. Census Bureau's location of residential households by census block. *Id.* Surrogate customer locations obtained from the census block information are distributed uniformly along the roads located within the boundaries of the census block. *Id.* This uniform distribution of customer locations likely overestimates the actual dispersion of customers, because households and businesses are typically clustered to some degree. *Id.* The Model chooses to use this even dispersion, however, to ensure that the model will produce a conservative estimate of the amount of distribution plant necessary to serve customers. *Id.*

Qwest contends that the HAI's method of placing distribution plant is not conservative, but actually understates the amount of distribution plant needed to serve current customers. Qwest's contentions ignore the record before the ALJs in this proceeding. The evidence is that the HAI Model distribution assumptions have been tested by comparison to models produced by other incumbent carriers. In comparison to ILEC models that use actual customer location information, the HAI Model conservatively assumes **more** distribution plant than assumed by the ILEC model. *See* Tr., p. 1395. In fact, in this proceeding, the evidence is that the HAI Model produces an average loop length for customer loops in Arizona of 16,374 feet, almost 5,000 feet longer than the average loop length generated by Qwest's loop model. *Compare* HAI Model

results, Ex. AT&T/WorldCom 3 (Denney direct) at Ex. DKD-1 to Ex. 18 (Million rebuttal) at Ex. TKM02R (loop mod, investment summary). This evidence alone is sufficient reason to reject Qwest's contention that the HAI Model understates the necessary distribution plant.

Qwest ignores this evidence and presents, instead, contrived and misleading arguments designed to imply that the HAI Model does not include enough distribution plant. Qwest has raised two overlapping concerns about the way in which the HAI Model designs the outside plant. First, Qwest argues that the Model must underestimate the required outside loop plant because it uses customer location information from 1997 in designing distribution areas. Qwest fails to advise the Commission that its own model uses 1996 and 1998 information and that the FCC has endorsed the use of customer location information similar to that used by the HAI Model in this proceeding. Qwest's second argument is that the HAI Model underestimates the required distribution plant by using the MST algorithm in linking customer locations to design the required plant. The evidence Qwest relies upon in making this allegation, however, fundamentally mischaracterizes the way that the MST is used within the HAI Model. Qwest has provided no evidence that would justify this Commission in ignoring the reasoned determinations of the ALJs to adopt the HAI Model assumptions over the flawed alternative distribution assumptions put forward by Qwest in this proceeding.

**c. The FCC Has Endorsed the Use of Customer Location Information Similar to That Used By the HAI Model.**

The HAI Model does use 1997 customer location information. AT&T and XO presented evidence through the course of the hearing of the difficulties associated with obtaining more current data regarding customer locations and the steps taken to update the available data for this proceeding. Tr., p. 1390. Qwest itself is relying upon 1996 and 1998 customer location data in its own model, demonstrating that more current data is not readily available. *Id.*, pp. 82-86.

Qwest's position in this proceeding is that updating its own 1996 and 1998 information would have only a slight effect on costs. Tr., p. 237. Qwest has provided no evidence in the record that there would be any substantial difference in pricing if more current customer location information were available in the HAI Model analysis.

Qwest's exceptions argue that there must be a substantial difference based upon an unsupported contention that all of its growth in customer lines since 1997 has been the result of geographic expansion in its customer base. See Qwest Exceptions at 15-16. Qwest proposes, on this basis, that the Commission should assume an increase in "the customer service area proportionate to the increase in the line-count figure" from 1997 to 2000. *Id.* at 15-16. Qwest failed to make any such proposal to the Administrative Law Judges. More importantly, there is no evidence in the record of the extent of geographic expansion in Qwest's customer base since 1997 or the percentage of Qwest's line growth actually attributable to geographic expansion.

The FCC has rejected Qwest's contention that use of more recent customer location information would substantially affect costs. The FCC, in fact, used similar data from 1997 in performing its own analysis of forward looking costs for universal service purposes. In its universal service proceeding, the FCC has consistently rejected the argument that Qwest makes here precisely because of the minimal cost impact that would be associated with using updated information. The FCC has determined repeatedly that there was no need to update the customer location information used in its model. See *In the Matter of Federal-State Joint Board on Universal Service*, CC Docket No. 96-45, DA 00-2629 (released December 8, 2000) at ¶12 ("*First Line Counts Order*"); *In the Matter of Federal-State Joint Board on Universal Service*, CC Docket No. 96-45, DA 01-2928 (released December 18, 2001) at ¶ 10-11 ("*Second Line Counts Order*").

In rejecting the argument that the USF Model should be updated or revised to reflect more current customer information, the FCC has recognized that most of the increases in line counts since 1997 have not come in the form of new geographic service areas, but rather through increased use of second lines at existing customer locations and increased concentration in existing service areas. *Id.* The evidence in this proceeding is that Qwest has, in fact, experienced substantial second line growth since the prior cost proceeding in 1996. *Compare* Ex. AT&T/XO 6 (current additional line take) to Decision No. 60635 at 16 (second line take at time of prior order). The evidence, then, supports the FCC's position that there should be little effect from using updated customer location information.

Qwest attempts to downplay the significance of the FCC's own endorsement of the use of 1997 customer location data by arguing that inputs used by the FCC in its model for calculating costs for universal service purposes may not be appropriate in other contexts. *See* Qwest Exceptions at 20-21. What Qwest ignores in making this argument, however, is that the FCC's purpose in analyzing cost modeling inputs and assumptions in the Universal Service proceeding was to determine the forward looking costs of constructing a wire line local telephone network. *See In the Matter of Federal-State Joint Board on Universal Service*, CC Docket No. 96-45 FCC 99-304, 10th Report and Order (Rel. Nov. 2, 1999) ("*Inputs Order*") at ¶¶ 12-16. That is the precise exercise required of the Commission here. The FCC's own interpretation of TELRIC assumptions, therefore, provide ample basis for the assumptions made by the RO&O.

**d. Qwest's Contention That the MST Function Understates Necessary Distribution Relies Upon a Mischaracterization of the Function as Used Within the HAI Model**

Qwest also argues the HAI Model understates the necessary distribution plant by using an MST algorithm in calculating the distance between customer locations. The MST algorithm estimates the distances required to connect customer locations. Qwest contends that this

algorithm ignores obstacles that may exist in the real world between customer locations, creating “distribution distances in urban areas . . . systematically lower than the distances actually required to connect flesh and blood customers.” Qwest Exceptions at 19.

Qwest’s argument is based upon a fundamental mischaracterization of how the MST operates. The evidence upon which Qwest relies, attached to its Exceptions at Exhibit H, assumes that the MST measures the least cable distance required to join customers. *See Ex. Qwest 29 (Fitzsimmons Rebuttal) at 38-39.* This assumption is false. Because all of Qwest’s arguments and calculations are based on this fundamentally flawed assumption, those arguments provide no basis for reconsidering the RO&O.

Qwest’s “evidence” in support of its MST argument is attached to its Exceptions as Exhibit H. This exhibit is an analysis done by Qwest witness William Fitzsimmons for a proceeding before the Minnesota Commission. *Id.* The purpose of the example created by Dr. Fitzsimmons was an attempt to show that a prior version of the HAI Model, which did not use the MST function, failed to provide sufficient distribution cable in rural areas. *Id.*

To do his analysis, Dr. Fitzsimmons used an MST algorithm that links customer locations using the least distance between two points. Dr. Fitzsimmons then applied this algorithm to link customer locations in Marshall, Minnesota and Montevideo, Minnesota and compared this least distance to the amount of distribution calculated by the prior version of the HAI Model. Using this example, Dr. Fitzsimmons argued that the prior version of the HAI Model did not include enough distribution distance to link the least distance between customers.

There were significant problems with Qwest’s attempt to analyze the prior version of the HAI Model based upon this isolated look at two small towns in Minnesota. For example, a review of the analysis shows that the “actual” cable distances include cable to areas where there

are no customers. The more significant issue here, however, is that the MST algorithm used by Dr. Fitzsimmons is not the MST algorithm used in the HAI Model filed in this proceeding. The HAI Model MST Algorithm does not link customer locations based on the least distance. Instead, the HAI Model as filed uses a right-angle routing assumption similar to that one would expect to find in the network of a local exchange carrier. *See* AT&T/WorldCom 3 (Denney Direct) at 24-28.

Because the Qwest analysis is based upon a different algorithm than that used in the HAI Model, the Qwest analysis provides no evidence in this proceeding that the MST function in any way understates the amount of cable required to serve Qwest's customers in Arizona. Dr. Fitzsimmons acknowledges in his testimony that there is this difference between the MST function used in his Minnesota analysis and the MST function used by the HAI Model 5.2a as filed in this proceeding. *See* Ex. Qwest 29 (Fitzsimmons Rebuttal) at 38, fn. 39. Nevertheless, Qwest overlooked this problem in its Exceptions.

There is no basis for Qwest's contentions that the HAI Model in any way understates the distribution cable needed to serve Qwest's customers in Arizona. All evidence is that the model provides a conservative measure of the cable required. On this basis, Qwest's contention that this Commission should assume even more plant will be required to serve customers has no basis.

### **3. Qwest's Proposed Change to the Line Counts Ignores the FCC's Treatment of Access Lines.**

Qwest contends that the RO&O is "illogical" in its treatment of high capacity loops for line-count purposes. Qwest contends that these loops should be counted on a physical pair basis rather than on a channel equivalent basis in determining loop costs. The ALJs considered and

rejected Qwest's proposal in the RO&O. This is not surprising given that the FCC has itself endorsed the use of per-channel line counts in TELRIC cost modeling.

The FCC rejected Qwest's argument for the same reason that the RO&O rejected it here. Calculating line counts on a physical pair basis would require reliance upon confidential information that can only be obtained from Qwest. Use of the per-channel line counts, in contrast, permits the Commission to use publicly available information to calculate cost. The FCC determined that this need to rely upon public information outweighed any alleged advantage that might be gained in using line counts calculated on a physical-pair basis. *See Line Counts Order* at ¶ 16, *Inputs Order* at ¶ 393. The ALJs were justified in coming to the same conclusion.

There is an additional reason in this proceeding to use the publicly available information regarding the lines being served by Qwest. The confidential information regarding its line counts that Qwest provided in this proceeding is not reliable. The line counts recorded by Qwest contain significant anomalies that Qwest was unable to explain during the hearing. *Tr.*, pp. 1038-41. Qwest bears the ultimate burden of proof to show that its costs are TELRIC-based. *See* 47 C.F.R. § 51.505(c). Qwest's failure to demonstrate with any accuracy how line counts could be determined on the physical-pair basis make it even more important in this proceeding to rely upon publicly available information.

**4. The Cable Placement Costs Adopted by the RO&O Comply With TELRIC Assumptions.**

In addition to attacking assumptions regarding the amount of cable placed by the HAI Model, Qwest also attacks the placement costs assumed by the model. Qwest contends that the HAI Model placement costs assume that "cable is placed in existing underground conduits" lessening reliance upon expensive placement techniques like directional boring. Qwest

Exceptions at 29. Like Qwest's MST argument, this argument relies upon a mischaracterization of the HAI Model. The HAI Model placement costs do not assume that cable will be placed in existing conduits. Moreover, the placement costs assumptions used within the HAI Model, in contrast to those proposed by Qwest, rely upon the FCC's methodology for determining placement activities. Qwest's arguments have no basis in the record and should be rejected.

There is nothing within the record indicating that the placement costs used within the HAI Model are based upon an assumption the cable would be placed in existing conduits. This is not surprising, because Qwest's contention is untrue. The HAI Model documentation describes the basis for the HAI Model's placement cost assumptions. This documentation shows that the model includes costs for constructing conduit where appropriate.<sup>3</sup> The model also allows for placement under and around existing obstacles where necessary. See Ex. AT&T/WorldCom 3 (Denney Direct), Ex. B (Hatfield Inputs Portfolio) at 141-46.

The statement from the RO&O that Qwest quotes in contending that the ALJs made this assumption regarding conduit does not come from any information presented in this proceeding about the HAI Model. Rather, the RO&O uses this statement only to summarize an argument made by **Staff** regarding why Qwest's own placement assumptions were overstated. See RO&O at 12. Qwest's twisting of this statement into an argument regarding the HAI Model placement costs assumption has no basis in the record.

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<sup>3</sup> In fact, the HAI Model conservatively assumes a higher cost for placing conduit than assumed in Qwest's model. Ex. AT&T/WorldCom 3 (Denney Direct), Ex. B at § 6.4.

The RO&O relies upon substantial evidence that requires the Commission to reject Qwest's placement costs assumptions in favor of those adopted by the HAI Model. As with the customer location and line count information used within the HAI Model, the Model's cable placement cost assumptions also rely upon the FCC's interpretation of TELRIC principles. In contrast, the placements costs used in Qwest's model which Qwest proposes as an alternative are based upon assumptions rejected by the FCC. This Commission should reject them as well.

There is a fundamental difference in the way the HAI Model develops placement costs compared to the assumptions used by Qwest. The HAI Model assumes that buried cable would be placed the way an efficient provider would place it, by burying cable whenever possible before structures such as roads and landscaping are already in place. The Qwest model, in contrast, designs outside plant by first assuming that all physical structures are currently in places they are today and then choosing placement activities that would be required to place the cable in and around obstacles. Tr., p. 232.

The Qwest witnesses who testified in this proceeding universally agree that Qwest does not place cable under and around obstructions in the real world. Instead, Qwest makes every effort to place cable before obstructions are built. See Tr., pp. 127-128, 889, 914. As Qwest's own witness admits, "nine times out of ten, Qwest goes right in with the road crew" and places cable before streets and other structures are in place. Tr., p. 889.

In order to capture an incumbent's efficiencies of scale, a TELRIC model must assume efficient placement techniques that are actually used by an incumbent, not costs that would exist in some fantasy world where the incumbent digs up streets and gardens to place a new network. The FCC agrees with this approach. In its universal service proceeding, the FCC determined that the cost today of building an entirely new network using "current technology" was best modeled

by using costs derived from large scale “growth projects” – that is projects where new loops are placed in undeveloped areas – rather than by assuming that all obstructions are already in place. *See Inputs Order*, ¶ 118.

Qwest admits that it did not seek to model placement costs that would be achieved by placing cable in growth projects as required by the FCC. *Tr.*, pp. 129-130. Instead, Qwest has presumed that, for example, sixty-five percent of all buried cable in residential subdivisions would be placed using directional boring or cut-and-restore methods necessary to prevent or restore disruptions to existing structures or landscaping. This is not the way Qwest places plant today, and it is not the way an efficient company would place cable in the future. *Tr.*, pp. 127-28.

The HAI Model used in this proceeding calculates placement costs based upon reasonable assumptions regarding placement activities that would be required to place cable efficiently. The Model relies upon detailed geologic information regarding conditions that actually exist within the State that could have an impact on the difficulty and cost of placement. *See Exhibit AT&T/Worldcom 3 (Denney Direct)* at Ex. DKD-3. Placement costs developed by the Model are reasonable and specific to Arizona. Qwest’s proposal that this Commission should ignore the findings of the RO&O in favor of Qwest’s own placement costs assumptions should be rejected.

**5. The Sharing Assumptions Adopted by the RO&O Are Conservative.**

The RO&O rejected the sharing assumptions made by the HAI Model that an incumbent carrier, on average, would pay about 40% of the cost of placing cable in a forward looking network. Instead, the RO&O adopts a 50% sharing assumption. This is the identical sharing assumption that this Commission found was TELRIC-based in its prior cost decision. *See*

Decision No. 60635 at 20. The district court also endorsed this sharing assumption in *U.S. West Communications v. Jennings*, 46 F. Supp. 2d 104, 111 (D. Ariz. 1999).

AT&T and other intervenors provided substantial evidence that the sharing assumptions should be greater than those adopted by the RO&O. Numerous potential sharing opportunities exist. As Qwest itself admits, developers provide the trench for Qwest to use in residential areas. Tr., p. 186. As Qwest also admits, in a high-growth market like Arizona, there may be “a dramatic amount of development-provided shared trench.” *Id.*

In its Exceptions, Qwest argues that the sharing assumption adopted by the RO&O cannot be sustained because “certain placement techniques – such as simple plowing, the most frequently used method of laying cable – are not even amenable to the simultaneous placement of multiple cables.” Qwest Exceptions at 25, citing Ex. Qwest-23 (Overton Direct) at 11. This statement, however, is false. Qwest witness Mr. Overton, who testified both here and in Colorado, admitted in the Colorado cost proceeding that multiple cables can in fact be placed during a plowing operation, clearly making it possible for plowed facilities of different carriers to be placed at the same time. *See Colorado Tr., Vol. V, at p.12.* Based on this evidence, the Colorado Commission appears to have adopted the same 50% sharing assumption used by the RO&O. *See Qwest’s Notice of Filing Colorado Decision (Dec. 28, 2001) at 48.*

Given the substantial evidence in the record, as well as the Commission’s prior determination reviewed and accepted on appeal that a 50% sharing assumption is acceptable in a

TELRIC analysis, there is no basis for Qwest's contention in its Exceptions that the Commission should assume less sharing in this proceeding.<sup>4</sup>

**6. The General Support Reduction Is Supported by the Record.**

Qwest's final attack on the RO&O's HAI Model assumptions is a claim that the Recommended Order should have rejected Qwest's contention that it, as a wholesale carrier, would incur the same general support costs that it incurs today as a provider of both retail and wholesale services. Qwest's argument ignores the intent of TELRIC to capture wholesale-related costs. The FCC's rules state specifically that TELRIC may not include retail costs or revenues to subsidize other services. *See* 47 C.F.R. § 51.505(d). Qwest's reported costs for general support assets clearly include costs associated with retail operations. General support assets include, for example, all office equipment, furniture, computers, vehicles and space used by Qwest employees who are engaged in retail operations like sales and marketing. *See* 47 C.F.R. §§ 32.2112 to 32.2124. These expenses must be removed from Qwest's total expenses to determine the expenses properly attributable to wholesale operations. In fact, even Qwest adjusts its booked general support expenses in calculating its own expense factors for use in its cost models. *See* Qwest Ex. 18 (Million Rebuttal), Ex. TKM-02R (Expense Factors Module Users Manual) at 31-32. The Commission must reject Qwest's argument in reviewing the RO&O.

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<sup>4</sup> Paradoxically, in making its argument, Qwest attempts to rely upon the same FCC decision it urges the Commission to reject with respect to other assumptions. In fact, that FCC *Inputs Order* directly supports the determination of the RO&O that it is appropriate to consider a ILEC's ability to share the cost of building plant at the time the plant was first built in assessing the possibility for sharing. *See Inputs Order* at ¶¶ 241, 244, n.867.

**7. The Non-Recurring Charges Adopted by the RO&O Follow TELRIC Principles.**

In addition to attacking assumptions made by the RO&O in calculating the recurring rate for unbundled analog loops, Qwest also contends that the RO&O errs in calculating non-recurring charges. The RO&O rejects the non-recurring charges proposed by Qwest on the basis that those charges “fail to recognize efficiencies that would likely be achieved with a fully mechanized OSS system.” *See* RO&O at 32. The RO&O finds that the Qwest “studies are based upon its current OSS system and therefore do not reflect efficiencies that will occur in a forward-looking environment.” In contrast, the RO&O finds that the non-recurring cost model proposed by AT&T, XO and WorldCom (together the “Joint Intervenors”), “assumes that manual processing should be kept to a minimum in a forward-looking environment.” *Id.* This is the reason that the RO&O adopts the non-recurring charges proposed by the Joint Intervenors.

All of these findings of the RO&O are based upon the FCC’s TELRIC requirements and are supported by the record. A TELRIC analysis must be based upon “the use of the most efficient telecommunications technology currently available and the lowest-cost network configuration . . . .” C.F.R. § 51.505(b)(1). More specifically, those costs must not be modeled based upon a company’s “existing network design and technology that are currently in operation.” *Local Competition Order* at ¶ 684. Prices based on existing network design and technology would enshrine the inefficiencies of existing networks. *Id.* The FCC has explicitly rejected this pricing methodology as contrary to TELRIC.

There is ample evidence in the record that Qwest’s non-recurring cost studies are based not upon efficient, forward-looking technology, but rather upon the dated and inefficient systems that presently exist in Qwest’s network. All of the information used in the studies comes from Qwest’s “subject matter experts,” none of whom testified at trial. These mysterious “experts”

admittedly used assumptions based upon Qwest's current systems. Tr., p. 653. Qwest made no adjustments to its cost studies to recognize efficiencies that would be achieved by forward-looking systems, except to the extent that Qwest anticipated productivity increases for its existing systems at the time its initial study assumptions were made. *Id.* Many of the assumptions used by Qwest in its non-recurring cost studies were not even current as of the time of the hearing in this matter. In fact, many of those assumptions are based upon information gathered as early as 1988. *See* Ex. AT&T/XO 34.

In contrast, the Joint Intervenors presented extensive evidence of the basis for the forward-looking assumptions made by the Model, the currently available systems that would allow an efficient carrier to achieve those assumptions, and the costs that would be incurred by an efficient carrier to provide unbundled elements. *See* Ex. AT&T/WorldCom 6 (Weiss Direct) at Ex. 13. The model documentation provided to the ALJs for review included a detailed step-by-step description of how an efficient carrier would process different types of orders from other carriers and the costs that would be involved in efficient processing of those orders. *Id.* The model documentation specifically identified available systems that an efficient carrier would use to achieve the efficiencies of electronic processing assumed by the model. *Id.*

On this basis, the record before the ALJs required rejection of Qwest's cost model in favor of that presented by the Joint Intervenors. The Joint Intervenors' model was the only model presented in this proceeding that complies with the requirements of TELRIC. Recent court decisions confirm RO&O's analysis. For example, in *Bell Atlantic-Delaware, Inc. v. McMahon*, 80 F. Supp.2d 218 (D. Del. 2000), the Delaware Public Service Commission approved non-recurring charges based upon the ILEC's "**current** manual service order processing system" *Id.* at 250 (emphasis in original). The court in that case determined that the

commission should *not* have adopted charges based upon the ILEC's current processes.

According to the court, the ILEC's current processes were "irrelevant to the legal standard for determining network at costs." *Id.* at 251. Rather, appropriate non-recurring charges must be developed "in light of 'the most efficient telecommunications technology currently available and the lowest cost network configuration.'" *Id.* (quoting 47 C.F.R. § 51.505(b)(1)). Qwest's cost studies, which are admittedly based upon Qwest's current systems, are not TELRIC based and were appropriately rejected by the RO&O.

Qwest admits that "TELRIC requires consideration for what it would cost an **efficient carrier today** to replace the existing network and perform efficient network functions." Qwest Exceptions at 33 (emphasis in bold added). Based upon mischaracterizations of statements made during the hearing by an intervenor witness, Qwest contends that the Joint Intervenors' non-recurring cost study is not based upon efficient technologies that are currently available, but rather on technologies that may be available in the future. *See* Qwest Exceptions at 34. There is no evidence in the record supporting Qwest's argument. Rather, Qwest has created the illusion of record support by using purported quotations from the record that either do not exist or are taken completely out of context.

Citing page 1511 of the transcript, Qwest contends that Joint Intervenors witness Mr. Weiss "conceded in this proceeding [that] the nearly flawless automation assumed by the ALJs' non-recurring cost model is nowhere 'currently available.'" Qwest Exceptions at 34. The language that Qwest purports to quote from Mr. Weiss's cross-examination does not appear in the record. In fact, Mr. Weiss never stated during the hearing that the systems assumed by the Joint Intervenors' model were unavailable. To the contrary, Mr. Weiss stated that every carrier

in the nation is or should be moving toward the available systems identified by the model documentation. Tr., pp. 1506-07, 1510-11.

Qwest takes other statements of Mr. Weiss out of context as well. For example, Qwest contends that Mr. Weiss must have meant that the technologies assumed by the Joint Intervenors' non-recurring cost model are not presently available because he later testified that "right now it is not a forward-looking time." Qwest Exceptions at 36. In fact, the context of that statement shows Mr. Weiss's statement had nothing to do with the Joint Intervenors' cost model. In fact, Mr. Weiss made that statement in response to questioning about Qwest's current systems, pointing out that Qwest's current systems presently are not forward-looking. *See* Tr., p. 1566.

All evidence in this proceeding is that the non-recurring charges proposed by the Joint Intervenors are the only proposed rates that comply with TELRIC standards. Qwest has provided no basis for reconsideration of the RO&O's findings regarding non-recurring charges.

**B. The Rates Adopted By the RO&O Are Consistent With Recent Rates Adopted In Other States.**

Throughout the course of this proceeding, until filing its exceptions, Qwest has argued consistently that the Commission must only comply with "basic TELRIC principles" in coming to a determination of rates that fall within "the range that a reasonable application of TELRIC principles would produce." *See* Ex. Qwest 8 (Fleming Rebuttal) at 5. As shown above, Qwest has identified no "basic TELRIC principle" that the RO&O fails to follow. In fact, on the issues identified by Qwest, the RO&O follows the FCC's own methodology in determining rates. For this reason, there is no basis for the Commission to reconsider any of the determinations made by the RO&O.

Given that Qwest cannot identify any substantial TELRIC violation in RO&O, its further contention that the rates adopted in other states provide some basis for reconsideration of the

RO&O has no merit. Moreover, even if a rate differential could, in and of itself, provide a basis for another look at the rates as determined by the RO&O, Qwest's proposed analysis is flawed and should be disregarded.

Qwest contends that because recurring loop rates and non-recurring charges in certain Qwest states exceed those adopted by the RO&O, there must be "something wrong with the ALJs' pricing methodology." Qwest Exceptions at 3. In fact, Qwest itself provided another analysis of rates in its testimony in this proceeding clearly demonstrating that the loop rates adopted by the RO&O fall well within or above a reasonable TELRIC range.

In several orders issued by the FCC on applications under Section 271 of the Act, the FCC has performed a comparison of loop rates to rates in other states for which 271 approval has been granted. Attached as Exhibit A to this Memorandum is an analysis performed by Qwest using the FCC methodology. (Filed as Ex. Qwest 8 (Fleming Rebuttal)). This analysis shows that an Arizona statewide average loop rate as low as \$11.39 would fall within the FCC's range of TELRIC reasonableness. Under AT&T's calculation of the loop rate generated using the assumptions of the RO&O, the statewide average loop rate under the RO&O would be \$12.13, well above the minimum reasonable rate.

The same type of analysis holds true for non-recurring costs. For example, Qwest has challenged the \$1.76 non-recurring charge established by the RO&O for basic loop installation. According to Qwest, this rate does not consider substantial manual activities that Qwest needs to perform using its current operational support systems. The intervenors presented evidence that a forward-looking system would not require these manual activities. The FCC has approved Section 271 applications in other states with similar loop installation charges. For example, the

charge for loop installation in Pennsylvania is \$4.07, including \$1.06 service owner charge. In Qwest's region, Minnesota has also adopted a similar rate for loop installation.

The determination of the RO&O that a TELRIC-based rate for unbundled analog loops is lower now than was at the time of the first cost order in this proceeding also finds substantial support in actions taken in other states that have revisited the issue of unbundled element pricing. For example, New Jersey, New York and Ohio have recently issued orders substantially reducing network element rates. *In the Matter of the Review of Ameritech Ohio's Economic Costs for Interconnection, Unbundled Network Elements and Reciprocal Compensation*, Case No. 96-922-TP-UNC, Opinion and Order (October 4, 2001) (Ohio Pub. Util. Comm'n); *Press Release* issued November 20, 2001 by the New Jersey Board of Public Utilities regarding 38% decrease in UNE-P rates (available at [www.bpu.state.nj.us](http://www.bpu.state.nj.us)); *Press Release* issued January 23, 2002 by New York Public Service Commission (available at [www.dps.state.ny.us](http://www.dps.state.ny.us)). The Colorado Commission order upon which Qwest relies so heavily in its own briefing also adopts substantially lower recurring rates for unbundled loops.

These determinations are not surprising. The intervenors provided substantial evidence in this proceeding that changes in materials prices, demand, density and Qwest's own cost structure as a result of its merger should be expected to lead to lower costs. *See, e.g.*, Ex. AT&T/WorldCom 14 (Hydock Direct) at 14-20. Qwest's contention, therefore, that this Commission should reconsider the rates established by the RO&O based upon a comparison with other rates established at the same time as those previously adopted by this Commission would require this Commission to ignore reality. Costs have declined. The RO&O properly recognizes this in its determinations. There is no basis in the record for this Commission to determine otherwise.

**C. The RO&O Properly Considers the Effect of the Adopted Rates on Competition in Arizona.**

Finally, Qwest argues that the rates established by the RO&O are “lawless,” because they rely upon existing retail rates “as a measure of whether the proposed UNE prices fall within a range of reasonableness.” Qwest Exceptions at 7, (quoting RO&O at 62). Qwest ignores statements in the same paragraph of the RO&O indicating the goal of this proceeding is to “set prices for interconnection and network elements at a level that fairly compensates Qwest.” RO&O at 62. Moreover, Qwest’s contention that a review of the effect of its proposed rates on competition is “lawless,” is itself contrary to the law. In fact, the Commission **must** consider how rates will effect competitors. Both federal regulation and the laws of this state require more than simply removing legal barriers and permitting entry by competitors. Rather, Arizona law and the Federal Telecommunications Act are designed to **promote** entry into local telecommunications markets.

The Court of Appeals for the District of Columbia has recently recognized precisely this point. In *Sprint Communications Co. v. Federal Communications Comm’n*, 274 F.3d 549 (D.C. Cir. 2001) the court expressed that true TELRIC pricing would:

“normally be expected to generate competition. In principle there is no reason to think that the BOC’s real costs could be lower. In an otherwise undistorted market, firms capable of efficiently supplying the non-BOC elements should be able to compete.”

*Id.* at 553.

This is particularly true in a state like Arizona, where Qwest has recently completed a rate case in which it agreed on retail rates that it presumably believes are compensatory. The ALJs’ review of these retail rates as a “sometime useful” tool in determining whether the proposed UNE rates fell within a reasonable TELRIC range, *see* RO&O at 62, is absolutely appropriate. In fact, it is appropriate for the Commission to choose rates at the low end of any

reasonable TELRIC range in order to promote competition with an incumbent carrier, precisely to allow new entrants to compete with Qwest. *Sprint Communications*, 294 F.3d at 555.

### III. CONCLUSION

Qwest's exceptions provide no basis for any determination that the RO&O results in rates outside a reasonable TELRIC range. In fact, as argued in the Exceptions file by AT&T and XO in this matter, rates resulting from application of the RO&O exceed the rates that would be produced by a TELRIC analysis. For these reasons, the Commission should reject Qwest's exceptions in its review of the RO&O.

Dated this 1 day of February, 2002.

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## CERTIFICATE OF SERVICE

I hereby certify that the original and 10 copies of the Response of AT&T and XO to Qwest's Exceptions, regarding Docket No. T-00000A-00-0194, were hand delivered this 1st day of February, 2002, to:

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***EXHIBIT A***

**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**

**REBUTTAL TESTIMONY OF**

**GARRETT Y. FLEMING**

**QWEST CORPORATION**

**JUNE 27, 2001**

1 A. Following is a table comparing the actual ordered loop rates for Minnesota,  
2 Colorado, Washington and Arizona. The top line identifies the ordered rate  
3 in each state. The second line identifies the total the cost output from the  
4 SM. The next 3 lines provide each states adjusted loop rate using the FCC  
5 TELRIC test with the ratios based on Minnesota, Colorado, and Washington  
6 respectively.

State	MN	CO	WA	AZ
Ordered Loop Rate	\$17.87	\$18.00	\$18.16	\$21.98
SM Total Basic Local Svc Cost	\$22.42	\$22.56	\$20.56	\$20.62
Loop Rate Using MN Ratio	\$17.87	\$17.98	\$16.39	\$16.44
Loop Rate Using CO Ratio	\$17.89	\$18.00	\$16.40	\$16.45
Loop Rate Using WA Ratio	\$19.80	\$19.93	\$18.16	\$18.21

Table 1: Loop Rate Adjusted By SM Total Basic Local Service Cost and Investment

7

8 Applying the FCC TELRIC tests to the ordered loop rates in Colorado,  
9 Minnesota and Washington yields a loop rate of up to \$18.21.

10

11 **Q. WHY DID YOU SELECT COLORADO, WASHINGTON AND MINNESOTA**  
12 **AS THE BASIS FOR THIS COMPARISON?**

13 A. I selected Colorado, Washington and Minnesota as the basis for this  
14 comparison based on the fact that they are similar in size to Arizona and  
15 contain areas with comparable densities.

16

17 **Q. DID YOU PERFORM A SIMILAR ANALYSIS USING THE ORDERED**  
18 **LOOP RATES FOR STATES THAT HAVE PREVIOUSLY BEEN**  
19 **GRANTED 271 RELIEF?**

20 A. Yes. Following is the results of applying the FCC TELRIC test to the  
21 ordered rates in New York, Massachusetts, Kansas and Texas:

1

State	NY	MA	KS	TX	AZ
Ordered Loop Rate	\$14.52	\$15.00	\$13.30	\$14.11	\$21.98
SM Total Basic Local Svc Cost	\$18.71	\$19.23	\$24.08	\$21.13	\$20.62
Loop Rate Using NY Ratio	\$14.52	\$14.92	\$18.69	\$16.40	\$16.00
Loop Rate Using MA Ratio	\$14.59	\$15.00	\$18.78	\$16.48	\$16.08
Loop Rate Using KS Ratio	\$10.33	\$10.62	\$13.30	\$11.67	\$11.39
Loop Rate Using TX Ratio	\$12.49	\$12.84	\$16.08	\$14.11	\$13.77

**Table 2: Loop Rate Adjusted By SM Total Basic Local Service Cost and Investment**

2

3 Using the loop rates in New York, Massachusetts, Kansas and Texas as the  
4 basis for applying the TELRIC test results yields a loop price in Arizona of  
5 up to \$16.08

6

7 **Q. WHY DID YOU SELECT NEW YORK, MASSACHUSETTS, KANSAS, AND**  
8 **TEXAS AS THE BASIS FOR THE COMPARISON?**

9 A. I selected New York, Massachusetts, Kansas and Texas as the basis for  
10 the comparison because their loop rates were established by the state  
11 Commissions using methods that the FCC found adhered to reasonable  
12 TELRIC principles. Using Oklahoma prices as a point of comparison, adds  
13 an element of circularity into the analysis. It is improper logic to use the  
14 rates that were established using the TELRIC test, as the basis for applying  
15 the TELRIC test in another state. For this reason I have limited my analysis  
16 to prices from states whose prices were based on the proper application of  
17 TELRIC principles.

18

19 **Q. COULD YOU SUMMARIZE THE RESULTS OF YOUR ANALYSIS?**