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BEFORE THE ARIZONA CORPORATION COMMISSION

Arizona Corporation Commission

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

DOCKETED

JAN 24 2001

DOCKETED BY [Signature]

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ARIZONA CORPORATION COMMISSION
CLERK CONTROL

IN THE MATTER OF THE INVESTIGATION
INTO U S WEST COMMUNICATIONS, INC.'S
COMPLIANCE WITH § 271(C) OF THE
TELECOMMUNICATIONS ACT OF 1996

DOCKET NO. T-00000B-97-0238

**QWEST'S NOTICE OF FILING
EMERGING SERVICES MATERIALS**

Qwest Corporation ("Qwest") herewith files materials relevant to the emerging services follow-up workshop to take place January 29 – February 2, 2001 that the parties should find to be helpful in the proceedings.

SGAT Lites

Attached hereto as Attachment A is the most recent version of Qwest's SGAT sections regarding subloop (section 9.3), line sharing (section 9.4), dark fiber (section 9.7) and packet switching (section 9.20). This SGAT Lite contains changes from workshops held in Colorado and the Multistate 271 proceeding since Arizona's initial emerging services workshop. Attachment A should be used as the baseline SGAT language for discussion at the follow-up workshop.

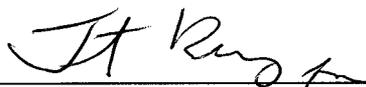
Also attached as Attachment B is an alternative SGAT Lite only for line sharing (section 9.4). Attachment B is the current state of the line sharing provisions in the Multistate. It differs from the line sharing provisions in Arizona and Colorado in that it tracks Qwest's recent Permanent Line Sharing Agreement, which did not exist at the time of Arizona's initial emerging services workshop. Although Qwest herewith submits this alternate version, it suggests that Attachment A be the basis of discussion in Arizona, rather than Attachment B, because the provisions of Attachment A fully implement the legal requirements of line sharing, and utilizing

Attachment B as the basis for discussion in Arizona would serve only to add needless complication and delay to the proceeding.

Colorado Pleadings

Also attached hereto are pleadings from Colorado that will aid the discussions in the follow-up workshop. First, Attachment C is Qwest's Line Sharing Supplement filed November 17, 2000 in Colorado, which documents efforts made by Qwest to improve its provisioning of line sharing (this information was also produced to CLECs as part of an FCC-driven informal collaborative on line sharing among ILECs and CLECs). Second, Attachment D is Qwest's December 5, 2000 Supplemental Affidavit of Karen A. Stewart describing some SGAT changes and addressing some CLEC issues regarding dark fiber and line sharing. Finally, Attachment E is Qwest's January 9, 2001 Second Supplemental Affidavit of Karen A. Stewart that describes some more recent SGAT changes and addresses some additional CLEC issues regarding dark fiber.

Respectfully submitted,

By:  _____

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9.3 Sub-Loop Unbundling

9.3.1 Description

9.3.1.1 A Sub-loop is defined as any portion of the loop that it is technically feasible to access in Qwest's accessible terminals in outside plant, i.e. an accessible terminal, pole, pedestal, Feeder Distribution Interface (FDI) or Minimum Point Of Entry (MPOE) including inside wire owned by Qwest. An accessible terminal is any point on the Loop where technicians can access the wire or fiber within the cable without removing a splice case and/or digging up or trenching underground to reach the wire, e.g., a pole, pedestal, Feeder Distribution Interface (FDI), Serving Area Interface (SAI) or Minimum Point Of Entry (MPOE).

9.3.1.2 Standard Sub-Loops available.

- (a) Two-Wire/Four Wire Unbundled Distribution Loop
- (b) DS1 Capable Unbundled Feeder Loop
- (c) Two-Wire/Four Wire Non-loaded Distribution Loop
- (d) Intrabuilding cable

9.3.1.3 Sub-Loop Unbundling is only available after a CLEC-requested Field Connection Point (FCP) has been installed at within or adjacent to the technically feasible Qwest accessible technically feasible accessible terminal. The FCP provides a demarcation point for the termination of the U S WEST provided Qwest provided Sub-Loop, and the necessary cross-connections to CLEC-provided facilities. The FCP shall be located in direct proximity to the U S WEST Sub-Loop facility accessed by CLEC. The FCP shall be ordered pursuant to Section 9.3.7 herein.

9.3.2 Two-Wire Unbundled Distribution Loops

9.3.2.1 The Two-Wire/Four-Wire Unbundled Distribution Loop is a Qwest provided facility from the U S WEST FCP at the FDI Qwest FCP to the demarcation point or Network Interface Device (NID) at the end-user location. The Two-Wire Unbundled Distribution Loop includes, but is not limited to, distribution facilities that serve Multiple Dwelling Units (MDUs). The Two-Wire Two-Wire/Four-Wire Unbundled Distribution Loop is suitable for local exchange-type services within the analog voice frequency range of 300 to 3000 Hz. CLEC obtains can obtain access to this unbundled element at the FDI through an established FCP arrangement, and at the end-user location any accessible terminal.

9.3.2.2 The Two-Wire/Four-Wire non-loaded Distribution Loop is a Qwest provided facility without load coils and excess bridge taps. When CLEC requests a non-loaded Unbundled through the NID. DS1 Capable Unbundled Feeder Loop Distribution Loop and there are none available, Qwest will contact CLEC to

determine if CLEC wishes to have Qwest unload a Loop. If the response is affirmative, Qwest will dispatch a technician to "condition" the Sub-Loop by removing load coils and excess bridge taps (i.e., "unload" the Loop) in order to provide CLEC with a Non-Loaded Distribution Loop. CLEC will be charged the cable unloading and bridge tap removal non-recurring charge in addition to the Unbundled Loop installation nonrecurring charge. If a Qwest technician is dispatched and no load coils or bridge taps are removed, the non-recurring conditioning charge will not apply. CLEC can obtain access to this unbundled element at the technically feasible accessible terminal.

9.3.2.3 Intrabuilding cable is a Qwest provided facility from the building terminal inside a multiple dwelling unit (MDU) to the demarcation point at the end user customer premises inside the building. This subloop only applies when Qwest owns the intrabuilding cable.

9.3.3 Feeder Loops

9.3.3.1 DS1 Capable Unbundled Feeder Loop is a digital transmission path that is provisioned from a Qwest Central Office Network Interface, which consists of a DSX-1 panel or equivalent, to the Fiber Distribution Interface (FDI) located at the FCP-accessible terminal housing the FCP.

9.3.3.2 The DS1 Capable Unbundled Feeder Loop transports bi-directional DS1 signals with a nominal transmission rate of 1.544 Mbit/s.

9.3.4 Terms and Conditions

~~9.3.4.1 Access to unbundled sub-loop loop elements may be made, to the extent technically feasible, through the use of the Field Connection Point Process at any technically feasible Feeder Distribution Interface (FDI) and accessible terminal premises or utility room in a multi-dwelling unit.~~

9.3.4.1 Access to unbundled sub-loop loop elements at an accessible terminal, e.g., a utility room in a multi-dwelling unit must may be made, to the extent technically feasible, through the use of the Field Connection Point (FCP) Process or other form of Remote Collocation at any technically feasible Feeder Distribution Interface (FDI) and utility room in a multi-dwelling unit.

9.3.4.1.1 Standard access to a Sub-Loop at an accessible terminal is at any technically feasible FDI or SAI and is through the establishment of a Field Connection Point (FCP).

9.3.4.1.2 Non-standard access, e.g., at poles, pedestals, MPOEs or other accessible terminals that are not FDIs or SAIs or through forms of Remote Collocation other than FCP, must be submitted via the ICB process in this Agreement.

9.3.4.2 CLEC ~~obtains~~may obtain access to the DS1 Capable Unbundled Feeder Loop at the Qwest Wire Center through established Collocation arrangements, and at the FDI-accessible terminal through the FCP. To the extent

that the accessible terminal does not have adequate capacity to house the FCP, CLEC may opt to use Adjacent Remote Collocation to house the FCP; CLEC must provide an adjacent structure with the necessary space and meet all premise requirements noted in the technical publication DS1 Capable Sub-Loop.

9.3.4.3 ~~Standard access to a Sub-Loop will be at the Feeder Distribution Interface (FDI)~~any technically feasible FDI or SAI through the establishment of a Field Connection Point (FCP). Non-standard access, to poles, pedestals, MPOEs including inside wire or other accessible terminals, will be submitted via the BFR process in this Agreement.

9.3.5 Rate Elements

9.3.5.1 Sub-Loop Non-Recurring Charge - CLEC will be charged a non-recurring basic installation charge pursuant to Exhibit A for each Sub-Loop ordered by CLEC.

9.3.5.2 Sub-Loop Recurring Charge -CLEC will be charged a monthly recurring charge pursuant to Exhibit A for each Sub-Loop ordered by CLEC.

9.3.5.3 ~~Sub-Loop OSS Charge – The CLEC shall be charged pursuant to Exhibit A to recover the cost of the OSS modifications necessary to provide CLEC access to portions of U S WEST’s feeder and distribution network facilities on an unbundled, sub-loop basis.~~Reserved for Future Use

9.3.5.4 Sub-Loop Trouble Isolation Charge - CLEC will be charged a Trouble Isolation Charge pursuant to the Support Functions – Maintenance and Repair Section 12.3.4 when trouble is reported but not found on the Qwest facility.

9.3.6 Ordering/Provisioning

9.3.6.1 CLEC may only submit orders for Sub-loop elements after the FCP is in place. CLEC will use the termination information provided to them at the completion of the FCP on the LSR for Sub-Loops.

9.3.6.2 CLEC can order sub-loop elements through the Operational Support Systems described in section 12, the Support Functions Section.

9.3.6.3 CLEC shall identify Sub-loop elements by NC/NCI codes.

9.3.6.4 Qwest shall dispatch a technician to run a jumper between its sub-loop elements and CLEC’s sub-loop elements. CLEC shall not at any time disconnect Qwest facilities or attempt to run a jumper between its subloop elements and Qwest’s sub-loop elements without specific written authorization from Qwest.

9.3.7 Field Connection Point Description

9.3.7.1 Field Connection Point is a form of Remote Collocation that allows CLEC to interconnect with Qwest outside of the Central Office location where it is technically feasible. The Field Connection Point interconnects CLEC facilities to

~~binding posts within the accessible terminal that allows a technician to allow a CLEC to access Unbundled Sub-Loops, access and combine Unbundled Sub-Loop elements. The Field Connection Point must be in place before Sub-Loop orders are processed. Access to FCP's at the FDI are generally available. Requests for other Field Connection Point configurations will be considered on an individual case basis. The only use of the FDI Field Connection Point is to provide access to U S WEST Sub Loops.~~

~~9.3.7.2 Feeder Distribution Interface (FDI) Field Connection Point — A FDIA Field Connection Point arrangement requires a CLEC to build and place their equipment adjacent to the U S WEST FDI location. U S WEST will place a cable between the field connection point and U S WEST's Feeder Distribution Interface. U S WEST will perform the splice at the Field Connection Point. Each Provider will only have access to their own facilities. can be established either within a Qwest accessible terminal, or, if space within the accessible terminal is legitimately exhausted, CLEC may place the FCP in an adjacent terminal through Adjacent Remote Collocation cable. CLEC will have access to the equipment placed within the FCP Remote Collocation for maintenance purposes. However, CLEC will not have access to the FCP interconnection point.~~

9.3.8 Terms and Conditions

~~9.3.8.1 With the exception specified in subparagraph (a) below, Qwest is not required to build additional space for the purpose of accessing sub-loop elements. U S WEST shall not preclude CLEC from constructing Qwest shall allow CLEC to construct its own facilities adjacent to U S WEST's facilities. Qwest's facilities via Adjacent Remote Collocation. CLEC shall obtain any necessary authorizations or rights of way required (which may include obtaining access to Qwest rights of way, pursuant to section 10.8 of this Agreement) and shall coordinate its facility placement with Qwest, when placing their facilities adjacent to Qwest's facilities. Obstacles that CLEC may encounter from cities, counties, electric power companies, property owners and similar third Parties, when it seeks to interconnect its equipment at Sub-loop access points, will be the responsibility of CLEC to resolve with the municipality, utility, property owner or other third party.~~

(a) If CLEC seeks access to ~~Two-Wire Unbundled~~ Distribution Loops that serve an MDU, and there is no accessible MPOE or other accessible terminal to which CLEC can access such subloop elements, and Qwest and CLEC are unable to negotiate a reconfigured single point of interconnection to serve the MDU, Qwest will construct a single point of access at or near the property line of the MDU that is fully accessible to and suitable for CLEC. In such instance, CLEC shall pay Qwest a ~~nonrecurring charge according to Exhibit A.~~ charge, which shall be ICB based on the scope of the work required.

9.3.8.2 The optimum point and method to access Sub-Loop elements will be determined during the Field Connection Point process. ~~The Parties agree that they will not have direct access to the other Party's network. The Parties recognize a mutual obligation to interconnect in a manner that maintains network integrity, reliability, and security.~~

9.3.8.3 If the Parties are unable to reach an agreement on the design of the FCP through the Field Connection Point Process, the Parties may utilize the Dispute Resolution process pursuant to ~~Section 5.18 (Dispute Resolution).~~ the Terms and Conditions Dispute Resolution Section. Alternatively, CLEC may seek arbitration under Section 252 of the Act with the Commission, wherein Qwest shall have the burden of demonstrating to the Commission that there is insufficient space in the accessible terminal to accommodate the FCP, or that the requested interconnection is not technically feasible.

9.3.8.4 CLEC must identify the size and type of cable that will be terminated in the Qwest FCP location. Qwest will terminate the cable into the ~~FDI~~Qwest accessible terminal if termination capacity is available. If termination capacity is not available, Qwest will expand the FDI at the request of CLEC, all thereconfiguration costs to be borne by CLEC. In this situation only, Qwest shall seek to obtain any necessary authorizations or rights of way required to expand the terminal. It will be the responsibility of Qwest to seek to resolve obstacles that Qwest may encounter from cities, counties, electric power companies, property owners and similar third parties. The time it takes for Qwest to obtain such authorizations or rights of way shall be excluded from the time Qwest is expected to provision the FCP Remote Collocation. CLEC will be responsible for placing the cable from the Qwest FCP to ~~their~~its equipment. Qwest will perform all of the initial splicing at the FCP.

9.3.8.5 ~~CLEC must arrange for power to its own equipment.~~ Reserved for future use.

9.3.8.6 ~~If U S WEST denies a request for FDI Field Connection Point, U S WEST will provide to the CLEC documentation stating why the request was denied during the feasibility quote process.~~ Reserved for future use.

9.3.8.7 CLEC may cancel a Field Connection Point request prior to the completion of the request by Qwest by submitting a written request by certified mail to the Qwest Account Manager. CLEC shall be responsible for payment of all costs incurred by Qwest.

9.3.9 Rate Elements

~~9.3.9.1 Feeder Distribution Interface Field Connection Point — CLEC will complete a Field Connection Point request form. U S WEST will develop a quote for the work to be performed based on the information provided by the CLEC on the Request Form. U S WEST will recover the Filed Connection Point cost form and submit it to Qwest with its Remote Collocation Application, through individual case basis non-recurring charges.~~

~~9.3.9.2 Feasibility Fee — U S WEST will charge a feasibility fee to recover cost of reviewing the site and engineering work that must be completed to determine if a site is available.~~

~~9.3.9.3 Quote Preparation Fee — U S WEST will charge a fee to recover all cost associated with developing a FDI Field Connection Point quote.~~

~~9.3.9.4 Construction Fee — U S WEST will charge a fee to recover all cost for building the FDI Field Connection point. This fee will cover the cost of augmenting the FDI location so that three CLECs can interconnect at that point. If CLEC is the first provider in the FDI FCP, it will pay the quoted price. If CLEC is the second provider in the FDI FCP, it will pay the initial CLEC 50% of U S WEST's quoted price. If CLEC is the third CLEC in the FDI FCP, it will pay each of the original two CLECs 17% of U S WEST's quoted price.~~

~~9.3.9.2 All applicable Collocation rate elements from Section 8.3.1 shall also apply to FCP-Remote Collocation.~~

~~9.3.9.3 Reserved for Future Use~~

~~9.3.9.4 Reserved for Future Use~~

9.3.10- Repair and Maintenance

Qwest will maintain all of its equipment and CLEC is responsible for maintaining all of its equipment within the FCP Remote Collocation.

9.3.11 Ordering — FDI Field Connection Point Field Connection Point (FCP)

~~9.3.11.1 CLEC shall submit a Field Connection Point Request Form to a U S WEST Account Representative. The Field Connection Point Request Form must be completed in its entirety. Qwest along with its Remote Collocation Application. The FCP Request Form shall be completed in its entirety.~~

~~9.3.11.2 Upon receipt of the Field Connection Point Request Form, U S WEST will initiate a feasibility study and FCP quote. Within thirty (30) calendar days from receipt of correctly completed Field Connection Point Request Form, U S WEST will notify the CLEC if a location is technically feasible and U S WEST will develop and send a quote. The Feasibility Study and quote~~

~~will be valid for thirty (30) calendar days from feasibility and quote notification. Reserved for Future Use.~~

~~9.3.11.3 U.S.WEST will construct the FCP within 120 calendar days of receipt of payment from CLEC. Reserved for Future Use.~~

~~9.3.11.4 After construction is complete, the After construction of the FCP Remote Collocation is complete, CLEC will be notified of its termination location which will be used for ordering Sub-Loops.subloops.~~

~~9.3.11.5 Unless otherwise specified, all intervals for provisioning Remote Collocation shall apply to the provision of FCP Remote Collocation.~~

9.4 Line Sharing

9.4.1 Description

~~Line Sharing provides CLEC with the opportunity to offer advanced data services simultaneously with an existing end user's analog voice-grade (POTS) service on the same copper loop (the Shared Loop). CLEC will access the unused high frequency portion of the Shared Loop while the voice portion of the Shared Loop will a single copper loop referred to herein as the "Shared Loop" or "Line Sharing", by using the frequency range above the voice band on the copper loop. This be used for analog voice-grade POTS service. A frequency range will be referred to herein as the High Frequency Spectrum Network Element ("HUNE"). A POTS splitter separates the voice and data traffic and allows the copper loop to be used for simultaneous data transmission and POTS service. The voice-grade POTS service must be provided to the end user by U.S.WEST.Qwest. This Section does not address Line Splitting which is addressed in Section [under development].~~

9.4.2 Terms and Conditions

9.4.2.1 General

~~9.4.2.1.1 To order the HUNE, CLEC must have a POTS splitter installed in the Qwest Wire Center that serves the end user as provided for in this Section, and the end user must have dial tone originating from a U.S.WEST End Office Switch in the Wire Center where the Shared Loop is being requested.Qwest switch in that Wire Center. CLEC must provide the end user with, and is responsible 9.4.2.1.2 CLEC gains access to the Shared Loop at the U.S.WEST Wire Center through established Collocation arrangements.for, the installation of a splitter, filter(s) and/or other equipment necessary for the end user to receive separate voice and data service across a single copper loop.~~

~~9.4.2.1.3 The splitter must be provided by the CLEC. The splitter must satisfy at least one of the following criteria: (a) the splitter meets the requirements for central office~~

~~9.4.2.1.2 CLEC either may purchase POTS splitters or have Qwest purchase POTS splitters on its behalf subject to full reimbursement. The POTS splitter must meet the requirements for Central Office equipment collocation set by the FCC in its March 31, 1999 order in CC Docket No. 98-147. CLEC may either: (a) purchase POTS splitters and have Qwest install them using Common Area Splitter Collocation, subject to an installation charge; or (b) have Qwest purchase POTS splitters on its behalf (subject to full reimbursement of the purchase price) and have Qwest install them using Common Area Splitter Collocation, subject to an installation charge. The POTS splitter must meet the requirements for Central Office equipment Collocation set by the FCC in its March 31, 1999 Order in CC Docket No. 98-147. Reserved for Future Use~~

~~9.4.2.1.4 The voice and data signals carried by Shared Loops are "split" by the splitter located in a U S WEST Wire Center.~~

~~9.4.2.1.5 The technology used by CLEC will be within the Power Spectrum Density (PSD) mask parameters set forth in ANSI T1E1.413 or other applicable industry standards. Such technologies are currently limited to ADSL and RADSL. In the future, additional technologies may be used by CLECs, to the extent those technologies meet the PSD mask parameters set forth in the above ANSI or other applicable industry standards. Spectrum management is the subject of a pending NPRM (First Report and Order Notice of Proposed Rulemaking, Deployment of Wirelines, Services Offering Advanced Telecommunications Capability—CC Docket Number 98-147). U S WEST will comply with Spectrum Management rules issued by the FCC and standards defined by the ANSI Standards Subcommittee. T1E1.4.~~

~~9.4.2.2 Splitter in CLEC Collocation area~~

~~9.4.2.2.1 The CLEC provided splitter shall be provided, installed and maintained by CLEC in CLEC's Collocation space.~~

~~9.4.2.2.2 U S WEST will either re-designate existing or install new TIE Cables in order to accommodate the capacity requests of CLEC.~~

~~9.4.2.1.3 CLEC may use the HUNE to provide any xDSL services that will not interfere with analog voiceband transmissions in accordance with FCC rules. Such services currently are limited to ADSL, RADSL Multiple Virtual Lines (MVL) and G.lite. In the future, additional services may be used by CLEC to the extent those services are deemed acceptable for Line Sharing deployment under applicable FCC rules.~~

~~9.4.2.1.4 CLEC may not order the HUNE on a given copper loop if Qwest, or another telecommunications carrier, is already using the high frequency spectrum, unless the end user disconnects the original telecommunications carrier's high-frequency service.~~

~~9.4.2.1.5 CLEC may request, and Qwest will provide, conditioning of Shared Loops to remove load coils, excess bridged taps, or electronics~~

subject to the charges for loop conditioning in Exhibit A. Qwest will perform requested conditioning, including de-loading and removal of excess bridged taps, unless Qwest demonstrates in advance that conditioning a Shared Loop will significantly degrade the end user's analog voice-grade POTS service. Based on the pre-order make-up of a given copper loop, CLEC can make a preliminary determination if the loop can meet the technical parameters applicable to the data service it intends to provide over the loop. After a Shared Loop is ordered and the design layout record is reviewed by CLEC, it is CLEC's responsibility to determine if the Shared Loop meets the technical parameters applicable to the data service it intends to provide over the Shared Loop.

9.4.2.1.6 Qwest will provide CLEC with access to the HUNE through POTS splitters installed in Qwest Wire Centers. POTS splitters may be installed in Qwest Wire Centers in either of the following ways at the discretion of CLEC: (a) via the standard Collocation arrangements set forth in the Collocation Section; or (b) via Common Area Splitter Collocation as set forth in this Section. Under either option, POTS splitters will be appropriately hard-wired or pre-wired so that Qwest is not required to inventory more than two (2) points of termination.

9.4.2.1.7 CLEC will provide Qwest with non-binding, good faith, rolling quarterly forecasts for Shared Loop volumes on a Wire Center by Wire Center basis. Qwest will keep forecasts confidential and will not share forecasts with any person involved in Qwest retail operations, product planning or marketing.

9.4.2.2 CLEC Collocation Area Splitter

9.4.2.2.1 ~~If CLEC elects to have POTS splitters installed in Qwest Wire Centers via the standard Collocation arrangements set forth in the Collocation Section, CLEC will be responsible for purchasing the POTS splitters. CLEC also will be responsible for installing and maintaining POTS splitters in its Collocation areas within Qwest Wire Centers. If CLEC elects to have POTS splitters installed in Qwest Wire Centers via the standard Collocation arrangements set forth in the Collocation Section, CLEC will either purchase the POTS splitters or have Qwest purchase the POTS splitters subject to full reimbursement of the cost of the POTS splitters plus any pass through actual vendor invoice costs, including but not limited to taxes, shipping and handling, and any similar charges assessed on Qwest by vendors in connection with the purchase of POTS splitters. The POTS splitters must meet the requirements for Central Office equipment collocation set by the FCC. CLEC will be responsible for installing and maintaining the POTS splitters in its Collocation areas within Qwest Wire Centers.~~

9.4.2.2.2 CLEC may designate some or all of its existing TIE Cables for use in connection with Line Sharing. Qwest will perform any necessary TIE Cable reclassifications, frame re-stenciling, and related work for which it is responsible and that is required to provision Line

Sharing. Charges will apply pursuant to this Section-Exhibit A of the Agreement.

9.4.2.2.3 Two ITPs and two TIE Cables will be needed to connect POTS splitters to the Qwest network. One ITP will carry both voice and data traffic from the COSMIC/MDF loop termination, to an appropriate ICDF. From this frame, one TIE Cable will carry both voice and data traffic to the POTS splitter located in CLEC's Collocation area. The voice and data traffic will be separated at the POTS splitter. The data traffic will be routed to CLEC's network within its Collocation area. The voice traffic will be routed to the COSMIC/MDF switch termination, via the ICDF, using a second TIE Cable and a second ITP.

9.4.2.2.43 Interconnection Tie Pairs and TIE Cables. There are two types of ITP arrangements for connecting the U-S WESTQwest network to the CLEC provided splitter, depending on whether the CLEC elects to use an ICDF or direct connections.

9.4.2.2.43.1 CLEC may elect to use an ICDF. In this instance, one ITP carries the combined voice/data signal from the COSMIC/MDF loop termination to the ICDF and a second ITP carries the voice only signal from the ICDF to the COSMIC/MDF switch termination. For each Shared Loop, two pairs of the TIE cable must be used: one pair of the TIE Cable will carry the voice/data from the ICDF to the CLEC provided splitter, and the second pair will carry the voice-only signal from the CLEC provided splitter to the ICDF-ICDF.

9.4.2.2.43.2 CLEC may elect to use direct connections between the CLEC-provided Splittersplitter and the COSMIC/MDF. In this instance, U-S WESTQwest will provide one TIE Cable between each module of the COSMIC/MDF and the CLEC-provided splitter. One pair in the TIE Cable will carry the combined voice/data signal from the COSMIC/MDF loop termination to the CLEC-provided splitter in the CLEC's Collocation Space. A second pair in the TIE Cable will carry the voice-only signal from the CLEC-provided splitter to the switch termination on the COSMIC/MDF. These TIE Cables will be dedicated to the CLEC's use, and, as a result, the full cost of the necessary Mechanized Engineering and Layout for Distributing Frame (MELD) run, cable placement, and cable termination, and associated COSMIC/MDF hardware to terminate a TIE Cable on each outside plant and switch equipment module of the COSMIC/MDF will be assessed to CLEC in accordance with Section 8 (Collocation). U-S WESTQwest will provide, for each Shared Loop, the TIE Cable pair assignments.

9.4.2.2.54 The demarcation points between Qwest's network and CLEC's network will be the place where the combined voice and data loop is connected to the ICDF, or where CLEC chooses a direct

connection to the COSMIC/MDF, where the combined voice and data loop originates from CLECs Collocation.

9.4.2.3 Splitter in Common Area of Central Office

~~9.4.2.3.1 U S WEST will install and maintain CLEC provided splitter in the common area of the Central Office as close to the ICDF as possible.~~

~~9.4.2.3.2 U S WEST will provide cabling on behalf of CLEC or CLEC may provide all cables between their collocation and the ICDF, between their Collocation and the splitter data ports, and between the splitter and the ICDF. CLEC may choose to utilize existing cables from their Collocation to the ICDF.~~

~~9.4.2.3.3 POTS splitter plug in card augmentation will be the responsibility of CLEC to provide and install.~~

~~9.4.2.3.4 U S WEST may co-mingle multiple CLEC owned splitter shelves per bay.~~

-Common Area Splitter Collocation

~~9.4.2.3.1 If CLEC elects to have POTS splitters installed in Qwest Wire Centers via Common Area Splitter Collocation, the POTS splitters will be installed in those Wire Centers in one of the following locations: (a) in a relay rack as close to CLEC's DSO termination points as possible; (b) on an ICDF to the extent such a frame is available; or (c) where options (a) and (b) are not available, or in Wire Centers with network access line counts of less than 10,000 on the Cosmic/MDF or in some other appropriate location such as an existing Qwest relay rack or bay. CLEC either may purchase POTS splitters or have Qwest purchase POTS splitters on its behalf subject to full reimbursement. Qwest will be responsible for the installation and maintenance of the POTS splitters, but CLEC will lease the POTS splitters to Qwest at no cost. Qwest may co-mingle the POTS splitters shelves of different CLECs in a single relay rack or bay. Qwest will not be responsible for shortages of POTS splitters, or Qwest's inability to obtain POTS splitters from vendors, if acting as purchasing agent on behalf of CLEC. If CLEC elects to have POTS splitters installed in Qwest Wire Centers via Common Area Splitter Collocation, the POTS splitters will be installed in those Wire centers in one of the following locations: (a) in a relay rack as close to CLEC's DSO termination points as possible; (b) on an ICDF to the extent such a frame is available; or (c) where options (a) and (b) are not available, or in Wire Centers with network access line counts of less than 10,000, on the Cosmic/MDF or in some other appropriate location such as an existing Qwest relay rack or bay. CLEC either may purchase POTS splitters or have Qwest purchase the POTS splitters subject to full reimbursement of the cost of the POTS splitters plus any pass through actual vendor invoice costs, including but not limited to, taxes, shipping and handling, and any similar charges assessed on Qwest by vendors in connection with the purchase of POTS splitters. The POTS splitters must meet the requirements for Central Office equipment collocation set by the FCC.~~

Qwest will be responsible for installing and maintaining the POTS splitters, but CLEC will lease the POTS splitters to Qwest at no cost. Qwest may co-mingle the POTS splitters shelves of different CLECs in a single relay rack or bay. Qwest will not be responsible for shortages of POTS splitters or Qwest's inability to obtain POTS splitters from vendors, if acting as purchasing agent on behalf of CLEC.

9.4.2.3.2 Two ITPs and four TIE Cables will be needed to connect the POTS splitters to the Qwest network. One ITP will carry both voice and data traffic from the COSMIC/MDF loop termination, to an appropriate ICDF. From this frame, one TIE Cable will carry both voice and data traffic to the POTS splitter. The voice and data traffic will be separated at the POTS splitter, and the separated voice and data traffic will be routed to the ICDF via separate TIE Cables (i.e., the second and third TIE Cables). At the ICDF, the data traffic will be routed to CLEC's Collocation area via a fourth TIE Cable, and the voice traffic will be routed to the COSMIC/MDF switch termination, via a second ITP. CLEC can also elect a direct connect option pursuant to Section 8.3.1.11.2.

9.4.2.3.3 Qwest will provide the cabling used for TIE Cables between the POTS splitter and the ICDF. The POTS Splitter Tie Cable Connection Charge will apply.

9.4.2.3.5 The demarcation point will be at the splitter end of the TIE-cable connecting the CLEC collocation and the splitter.
9.4.2.3.4 The demarcation point between Qwest's network and CLEC's network will be at the place where the data loop leaves the POTS splitter on its way to CLEC's Collocated equipment.

9.4.3 Rate Elements

9.4.3.1 Recurring Rates for Shared Loop

9.4.3.1.1 Shared Loop Charge - A monthly recurring charge for the use of the Shared Loop will apply.

9.4.3.1.2 OSS Costs Charge - A monthly recurring charge to recover upgrades to U-S-WEST Qwest Operational Support Systems required to accommodate Line Sharing will apply.

9.4.3.1.3 Interconnection Tie Pair (ITP) - Charges for the quantity of ITPs used by the CLEC's specific application apply.

9.4.3.1.4 Collocation Terminations - Charges for Collocation Terminations apply pursuant to Section 8 (Collocation).

9.4.3.2 Non-Recurring Rates for the Shared Loop

9.4.3.2.1 Basic Installation Charge for Shared Loop - A non-recurring charge for each Shared Loop installed by U-S-WEST. Qwest will

apply. If CLEC requests conditioning of a Shared Loop, a non-recurring conditioning charge specified in Exhibit A will apply for removal of load coils and excess bridged taps.

~~9.4.3.2.2 Conditioning Charges – Based on the pre-order loop make-up, the CLEC can make a preliminary determination if the loop can meet the technical parameters applicable to the data service it intends to provide over the Loop. After the Shared Loop is ordered and the design layout record is reviewed by CLEC, it is CLEC's responsibility to determine if the Shared Loop meets the technical parameters set forth by the specific data service. If CLEC requests loop conditioning, conditioning charges specified in Exhibit A shall apply for unloading cable pairs in the event that non-loaded Loops are not available.~~

~~9.4.3.3 Non-Recurring for Collocation Augment~~ 9.4.3.3 Non-Recurring Rates for Tie Cable Reclassification

~~9.4.3.3.1 Engineering – A rate~~ 9.4.3.3.1 Reclassification Charge -- A non-recurring charge will apply, based on time and materials to augment existing Collocation with re-designation of existing cables between the for reclassification of existing TIE cable capacity, by among other things, reclassification of existing TIE cables for Line Sharing, frame restenciling, and any other work performed between CLEC's collocation and the intermediate frame. ICDF required to provision Line Sharing.

~~9.4.3.4 Maintenance~~ 9.4.3.4 Non-Recurring Rates for Maintenance and Repair

~~9.4.3.4.1 Trouble Isolation Charge – A non-recurring charge for Trouble isolation charges are~~ will be applied in accordance with Section 12.3.4.

~~9.4.3.4.2 Other Labor – Any labor incurred by U S WEST on behalf of CLEC for any specific customer request other than Trouble Isolation or repair of U S WEST facilities will be charged to CLEC using the Other Labor charge.~~

~~9.4.3.5 Rates for Splitter in Common Area~~ Additional Testing – CLEC may request Qwest to perform additional testing, and Qwest may decide to perform the requested testing on a case-by-case basis. A non-recurring charge will apply in accordance with Exhibit A.

~~9.4.3.5~~ Rates for Common Area Splitter Collocation

~~9.4.3.5.1~~ Splitter Shelf Charge – This charge recovers installation and ongoing maintenance associated with splitter installation, bay installation, lighting costs, aerial support structures, grounding charge and engineering labor. These are both recurring and non-recurring charges.

~~9.4.3.5.2~~ POTS Splitter Charge – A non-recurring charge will apply for the cost of each POTS splitter purchased by Qwest on behalf of

CLEC. This charge will cover the cost of the POTS splitter, plus any associated costs incurred by Qwest to order the POTS splitter.

9.4.3.6 POTS Splitter TIE Cable Connections — The Charge — A non-recurring charge will apply for the cost of each TIE cable connection to the splitter. This includes Cable connected to the POTS splitters. This charge will cover both the TIE cables and associated blocks per 100 pair between the POTS splitter and the ICDF.

9.4.3.7 The rates for each of the aforementioned Line Sharing rate elements are set forth in Exhibit A. All of these rates are interim and will be subject to true up based on either mutually agreed to permanent rates or permanent rates established in a Line Sharing cost proceeding conducted by the Commission. In the event interim rates are established by the Commission before permanent rates are set, the interim rates set forth in Exhibit A will be changed to reflect the interim rates set by the Commission; however, no true up will be performed until mutually agreed to permanent rates are established or permanent rates are intermediate frame-set established by the Commission.

9.4.4 Ordering Process

9.4.4.1 Shared Loop

9.4.4.1.1 As a part of the pre-order process, CLEC can access loop characteristic information through the Loop Information Tool described in Section 12.2.1.4 the Support Functions Section. CLEC will determine, in its sole discretion and at its risk, whether to order the HUNE across any specific copper loop. Qwest and CLEC will work together to modify the Loop Information Tool to better support Line Sharing.

9.4.4.1.2 Prior to placing an order LSR for Shared Loop, CLEC must obtain a Proof of Authorization from the end user customer in accordance with Section 5.3 (Proof of Authorization) the Proof of Authorization Section.

9.4.4.1.3 Splitter Meet Points for Shared Loop will be provided on a separate to CLEC on the Line Sharing Actual Point of Termination (APOT) form specifically for Shared Loop requests. CLEC will provide both TIE Cable Splitter Meet Points at the ICDF. U S WEST on the LSR, the appropriate frame terminations which are dedicated to POTS splitters. Qwest will administer all cross connects/jumpers on the COSMIC/MDF and ICDF.

9.4.4.1.4 Basic Installation “lift and lay” procedure will be used for all Shared Loop orders. Under this approach, the U S WEST a Qwest technician “lifts” the Loop from its current termination in a Qwest Wire Center and “lays” it on a new termination connecting to CLEC’s equipment. Collocated equipment in the same Wire Center.

~~9.4.4.1.5 Orders will carry a standard 5-day interval. Qwest will provision the Shared Loop within the standard unbundled loop provisioning interval, as defined in Exhibit C.~~

~~9.4.4.1.6 CLEC shall not place orders for Shared Loops until TIE Cables have been completed to the CLEC provided splitter; all work necessary to provision Line Sharing in a given Qwest Wire Center, including, but not limited to, POTS splitter installation and TIE Cable reclassification or augmentation has been completed. . .~~

~~Splitter~~ 9.4.4.2 Common Area Splitter Collocation

~~9.4.4.2.1 This section only applies to situations where CLEC orders placement of the splitter in a common area.~~

~~9.4.4.2.2 New Splitter bay~~ 9.4.4.2.2 New POTS splitter shelves may be ordered at the same time as a new Collocation — This may be ordered via on a single Collocation application form and ordering processing charge. CLEC must submit a new Collocation application form and the applicable fee to U S WEST requesting the Shared Loop. Standard form. A single ordering processing charge applies. Standard intervals as contained in Exhibit C will apply.
~~intervals will apply.~~

~~9.4.4.2.3 New splitter bay or shelf requested with an existing Collocation — CLEC must submit a new Collocation application form and the applicable fee to U S WEST requesting the Shared Loop.~~

~~9.4.4.3 TIE Cable Re-designation~~

~~9.4.4.2.3~~ 9.4.4.2.3 New POTS splitter shelves may be ordered with an existing Collocation. CLEC must submit a new Collocation application form and the applicable fee to Qwest. Standard intervals as contained in Exhibit C will apply.

~~9.4.4.3 TIE Cable Reclassification~~

~~9.4.4.3.1 Re-designation of existing TIE Cable to accommodate Shared Loop — To the extent CLEC has existing TIE Cables extending from an ICDF to the CLEC's Collocation space, CLEC may request these pre-existing that these existing TIE Cables be redesignated reclassified for use with Line Sharing. CLEC shall request such redesignation reclassification through the same process used to order new TIE Cables. terminations.~~

9.4.5 Repair and Maintenance

~~9.4.5.1 U S WEST will be responsible for repairing voice services and the physical line between the network interface device at the customer premise and the point of demarcation in the central office. CLEC will be responsible for repairing data services. Each entity will be responsible for maintaining its own~~

~~equipment. The CLEC will be responsible for splitter maintenance and repair when the splitter is in the Collocation space. U S WEST will be responsible for maintenance and repair of splitter in the common area~~

~~9.4.5.2 When U S WEST provides inside wire maintenance services to an end user, U S WEST will only be responsible for testing and repairing the inside wire for voice grade services. U S WEST will not test, repair, or upgrade inside wire to clear trouble calls associated with CLEC's data service. U S WEST will not repair any CPE equipment provided by CLEC. U S WEST will not dispatch a technician to clear inside wire trouble tickets associated with CLEC's data service.~~

~~9.4.5.3 CLEC will validate that the end user has a data only problem before issuing a trouble ticket to U S WEST.~~

~~9.4.5.4 In the case of trouble reported by an end user on their voice grade POTS service, if U S WEST determines the cause of the reported trouble is the CLEC's data equipment, U S WEST will:~~

- ~~a) Notify CLEC and request CLEC immediately test the trouble on the CLEC's data service.~~
- ~~b) If the end user's voice grade POTS service is so degraded that the customer cannot originate or receive voice grade calls, and CLEC has not immediately cleared its trouble, U S WEST may take unilateral steps to temporarily restore the end user's voice grade POTS service.~~
- ~~c) Upon completion of steps (a) and (b) above, U S WEST may temporarily remove the CLEC provided splitter from the end user's loop and switch port.~~
- ~~d) Upon notification from CLEC that the malfunction in the CLEC's data service has been cleared, U S WEST will restore the CLEC's data service by restoring the splitter on the customer's line.~~
- ~~e) Upon completion of the above steps, the CLEC will be charged a Trouble Isolation Charge (TIC) to recover U S WEST's cost for isolating and temporarily removing the malfunctioning data service from the customer's line.~~
- ~~f) U S WEST shall not be liable for damages of any kind for temporary disruptions to CLEC's data service that are the result of the above steps taken to restore the end user's voice grade POTS service.~~

~~9.4.5.5 Before initiating any activity on the Shared Loop that may effect the end user customer voice grade service, CLEC shall attempt to notify the end user customer.~~

~~9.4.5.6 U S WEST and CLEC will work together to address customer initiated repair requests and to prevent adverse impacts to the customer. Qwest will~~

allow CLEC to access Shared Loops at the point where the combined voice and data loop is cross-connected to the POTS splitter.

9.4.5.2 Qwest will be responsible for repairing voice services provided over Shared Loops and the physical line between network interface devices at end user Premises and the point of demarcation in Qwest Wire Centers. Qwest will also be responsible for inside wiring at end user premises in accordance with the terms and conditions of inside wire maintenance agreements, if any, between Qwest and its end users. CLEC will be responsible for repairing data services provided on Shared Loops. Qwest and CLEC each will be responsible for maintaining its equipment. The entity that controls the POTS splitters will be responsible for their maintenance.

9.4.5.3 Qwest and CLEC will continue to develop repair and maintenance procedures for Line Sharing and agree to document final agreed to procedures in a methods and procedures document that will be made available on Qwest's website: <http://www.uswest.com/carrier/guides/interconnect/>. In the interim, Qwest and CLEC agree that the following general principles will guide the repair and maintenance process for Line Sharing.

9.4.5.3.1 If an end user complains of a voice service problem that may be related to the use of a Shared Loop for data services, Qwest and CLEC will work together with the end user to solve the problem to the satisfaction of the end user. Qwest will not disconnect the data service provided to an end user over a Shared Loop without the written permission of CLEC unless the end user's voice service is so degraded that the end user cannot originate or receive voice grade calls.

9.4.5.3.2 Qwest and CLEC are responsible for their respective end user base. Qwest and CLEC will have the responsibility for resolution of any service trouble report(s) initiated by their respective end users.

9.4.5.3.3 Qwest will test for electrical faults (e.g. opens, and/or foreign voltage) on Shared Loops in response to trouble tickets initiated by CLEC. When trouble tickets are initiated by CLEC, and such trouble is not an electrical fault (e.g. opens, shorts, and/or foreign voltage) in Qwest's network, Qwest will assess CLEC the TIC Charge.

9.4.5.3.4 When trouble reported by CLEC is not isolated or identified by tests for electrical faults (e.g. opens, shorts, and/or foreign voltage), Qwest may perform additional testing at the request of CLEC on a case-by-case basis. If this additional testing uncovers electrical fault trouble (e.g. opens, shorts, and/or foreign voltage) in the portion of the network for which Qwest is responsible, CLEC will not be charged by Qwest for the testing. If this additional testing uncovers a problem in the portion of the network for which CLEC is responsible, Qwest will assess the appropriate miscellaneous charge.

9.4.5.4 When POTS splitters are installed in Qwest Wire Centers via Common Area Splitter Collocation, CLEC will order and install additional splitter cards as necessary to increase the capacity of the POTS splitters. CLEC will

leave one empty splitter card in every shelf to be used for repair and maintenance until such time as the card must be used to fill the shelf to capacity.

9.4.5.5 When POTS splitters are installed in Qwest Wire Centers via standard Collocation arrangements, CLEC may install test access equipment in its Collocation areas in those Wire Centers for the purpose of testing Shared Loops. This equipment must meet the requirements for Central Office equipment set by the FCC in its March 31, 1999 order in CC Docket No. 98-147.

9.4.5.6 Qwest and CLEC will work together to address end user initiated repair requests and to prevent adverse impacts to the end user.

9.4.6 Other

9.4.6.1 Qwest and CLEC agree to work together to address and, where necessary and possible, find solutions for the following Line Sharing implementation issues: (i) the development of an effective phased process for handling CLEC orders for the HUNE; (ii) Qwest's ability to handle the existing and forecasted volume of CLEC orders for the HUNE; (iii) Qwest's ability to make loop assignments for the existing and forecasted volume of CLEC orders for the HUNE; (iv) the ability of Qwest and CLEC to coordinate repairs; (v) the experience and education of the Shared Loop end user; (vi) CLEC's forecasts of HUNE orders; and (vii) the process for conditioning Shared Loops by removing load coils and excess bridged taps.

9.7 Unbundled Dark Fiber

9.7.1 -Description

9.7.1 Unbundled Dark Fiber (UDF) is a deployed, unlit pair of fiber optic cable or strands that connects two points within Qwest's network. UDF is a single transmission path between two Qwest Wire Centers, or between a Qwest Wire Centers, between a Qwest Wire Center and a CLEC Wire Center, or between a Qwest Wire Center and an end user customer premisePremises in the same LATA and state. UDF exists in ~~two~~three (3) distinct forms: (a) UDF Interoffice Facility (UDF-IOF), which constitutes an ~~existing~~deployed route between two Qwest Wire Centers; and (b) UDF-Loop, which constitutes an ~~existing~~deployed loop between a Qwest Wire Center and either a fiber distribution panel located at an appropriate outside plant structure or an end-user customer ~~premises~~. Premises; and (c) Extended UDF (E-UDF) which constitutes a deployed route between a Qwest Wire Center and a CLEC Wire Center.

~~9.7.1 Unbundled Dark Fiber (UDF) is a deployed, unlit pair of fiber optic cable or strands that connects two points within Qwest's network. UDF is a single transmission path between two Wire Centers or between a Qwest Wire Centers, between a Qwest Wire Center and a CLEC Wire Center, or between a Qwest Wire Center and an end user customer premisePremises in the same LATA and state. UDF exists in ~~two~~three (3) distinct forms: (a) UDF Interoffice Facility (UDF-IOF), which constitutes an ~~existing~~deployed route between two Qwest Wire~~

~~Centers; and (b) UDF-Loop, which constitutes an existing deployed loop between a Qwest Wire Center and either a fiber distribution panel located at an appropriate outside plant structure or an end-user customer premises. Premises; and (c) Extended UDF (E-UDF) which constitutes a deployed route between an Qwest Wire Center and CLEC Wire Center.~~

9.7.2 Terms and Conditions

9.7.2.1 Qwest will provide CLEC with non-discriminatory access to UDF in accordance with section 9.1.2. IOF and UDF-Loop. will provide UDF of substantially the same quality as the fiber facilities that uses to provide service to its own end user customers within a reasonable time frame. Qwest will provide UDF of substantially the same quality as the fiber facilities that Qwest uses to provide retail service to its own end user customers.

9.7.2.2 ~~CLEC will provide with non-discriminatory access to UDF IOF and UDF-Loop. CLEC will provide UDF of substantially the same quality as the fiber facilities that CLEC uses to provide service to its own end user customers within a reasonable time frame. Reserved for Future Use.~~

9.7.2.3 Qwest will provide CLEC with access to existing deployed Dark Fiber facilities. CLEC shall be responsible for obtaining and connecting electronic equipment, whether light generating or light terminating equipment, to the Dark Fiber. Qwest will not remove, and CLEC shall be permitted to use, regenerating equipment that already exists in mid-span.

9.7.2.4 Qwest will provide Unbundled Dark Fiber to CLEC in increments of two (2) strands (by the pair). In addition, after May 31, 2001, Qwest will provide UDF to CLEC in increments of one (1) strand. CLEC may obtain up to twenty five percent (25%) of available dark fibers or four (4) dark fiber strands, whichever is greater, in each fiber cable segment over a twelve (12) month period. Before CLEC may order additional UDF on any such fiber cable segment, CLEC must demonstrate efficient use of existing fiber in each cable segment. Efficient use of interoffice cable segments is defined as providing a minimum of OC-12 capacity termination on each fiber pair. Efficient use of loop fiber is defined as providing a minimum of OC-3 capacity termination on each fiber pair. Efficient use of E-UDF is defined as providing a minimum of OC-3 capacity termination on each fiber pair. CLEC may designate 5% of its fibers along a fiber cable segment, or 2 strands, whichever is greater, for maintenance spare, which fibers or strands are not subject to the termination requirements in this paragraph.

9.7.2.5 Qwest shall not have an obligation to unbundle Dark Fiber in the following circumstances:

(a) Qwest will not unbundle Dark Fiber that Qwest utilizes for maintenance or reserves for maintenance spare for Qwest's own use. Qwest shall not reserve more than 5% five percent (5%) of the fibers in a sheath, or two (2) strands, whichever is greater, for maintenance or maintenance spare for Qwest's own use.

~~(b) — U S WEST Qwest will not unbundle Dark Fiber that, as of the day CLEC submits its order for Unbundled Dark Fiber, U S WEST Qwest has already designated for use in an approved, or pending job on behalf of U S WEST Qwest or another CLEC.~~

~~(be) Qwest will not be required to unbundle Dark Fiber if Qwest demonstrates to the Commission by a preponderance of the evidence that such unbundling would create a likely and foreseeable threat to its ability to provide its services as required by law meet its carrier of last resort obligations as established by any regulatory authority. Qwest shall initiate such proceeding within seven (7) calendar days of denying CLEC's request (by written notice) to unbundle dark fiber where such fiber is available. In this proceeding, Qwest shall not object to using the most expeditious procedure available under state law, rule or regulation. In such circumstances, Qwest shall be relieved of its unbundling obligations, related to the specific Dark Fiber at issue, during the pendency of the proceeding before the Commission. If Qwest fails to initiate such proceeding within such seven (7) day period, CLEC's request to unbundle Dark Fiber shall be reinstated and the ordering and provisioning processes of Section 9.7.3 shall continue.~~

9.7.2.6 Qwest will provide CLEC with access to the existing deployed Dark Fiber in its network in either single-mode or multi-mode. During the inquiry process, Qwest will inform CLEC of the availability of single-mode and multi-mode fiber.

9.7.2.7 Specifications, interfaces and parameters for Dark Fiber are described in Qwest's Technical Publication 77383.

9.7.2.8 CLEC is responsible for trouble isolation before reporting trouble to Qwest.

9.7.2.9 CLEC shall not use UDF as a substitute for special or switched access services, except to the extent CLEC provides "a significant amount of local exchange traffic" to its end users over the UDF as set forth by the FCC. (See 9.23.3.7.2).

9.7.2.10 ~~Upon reasonable twelve (12) month thirty calendar days notification to the CLEC, or as defined by Commission, Qwest may initiate a proceeding to reclaim Dark Fiber strands from CLEC that were not serving end user customers at the time of Qwest's notice to CLEC. In such proceeding, Qwest shall have the burden to prove that Qwest needs reserves the right to reclaim in part or in whole, but such fiber strands only to the extent necessary for Qwest in order to meet its carrier of last resort obligations to serve under as established by any regulatory authority. In this such proceeding, CLEC shall not object to using the most expeditious procedure available under state law, rule or regulation. CLEC shall be entitled to retain such strands of UDF for any purpose permitted under this Agreement during the pendency of the proceeding before the Commission; provided, however, that such use shall be at CLEC's sole risk of any reclamation approved by the Commission, including the risk of termination of service to end user customers., UDF previously obtained by the CLEC. This~~

~~condition would arise in those cases where U S WEST is in jeopardy of meeting or maintaining Qwest has demonstrated to the Commission that a likely and foreseeable threat exists to Qwest's ability to meet or maintain control of its obligation to provide services as required by law under regulatory authority. CLEC may designate five percent (5%) of its fibers along a fiber cable segment, or 2 strands, whichever is greater, for maintenance spare, which fibers or strands are not subject to the reclamation requirements in this paragraph.~~

~~9.7.2.11 U S WEST will not combine a Dark Fiber element with another Unbundled Network Element or U S WEST services, or CLEC facilities. CLEC is responsible for connecting Dark Fiber with CLEC fiber optic terminal or other equipment. Reserved for Future Use.~~

~~9.7.2.12 CLEC must have established Collocation or other technically feasible means of network demarcation pursuant to section 9.1.4 of this Agreement at both ends terminating points of the UDF-IOF or at the Serving Wire Center of either the UDF-Loop, UDF-Loop or the E-UDF unless loop and transport combinations are ordered. Qwest will provide fiber cross connects at the serving Wire Center to connect UDF-Loop or E-UDF with the UDF-IOF if such elements are ordered in combination. No collocation is required in intermediate central offices within a UDF or at central offices where CLEC's UDFs are cross connected. CLEC has no access to UDF at those intermediate central offices.~~

~~9.7.2.12.1 CLEC-to-CLEC connections with UDF for the mutual exchange of traffic is permissible pursuant to the limitations in Section 9.7.2.9.~~

~~9.7.2.13 For UDF-Loop, CLEC is responsible for all work activities at the end-user premise/premises. All negotiations with the premise/Premises end-user and or premise/Premises owner are solely the responsibility of the CLEC.~~

~~9.7.2.14 For a UDF-Loop terminating at an existing end-user premises FDP, Qwest will provide to the CLEC an optical "jumper", not to exceed 30 feet in length, connected to the Qwest UDF-Loop FDP.~~

~~9.7.2.15 CLEC is responsible for all permits, licenses, bonds, or other necessary legal authority and permission, at the CLEC's sole expense, in order to perform its obligations. The remote collocation provisions and § 9.3.8.1. of this Agreement apply where CLEC needs to gain access to UDF at an outside plant structure. The As may be required by Section 10.8 of this Agreement, CLEC shall contact all owners of public and private Rights-of-Way to obtain their permission required to perform the necessary work to access UDF. CLEC facilities shall be placed and maintained in accordance with the requirements and specifications of applicable Fiber Communications Standards, the National Electrical code, the National Electrical Safety Code, the rules and regulations of the Occupational Safety and Health Act, and any governing authority having jurisdiction. Access to Right-of-Way shall be in accordance with Section 10.8 (Access the Access to Poles, Ducts, Conduit, and Right-of-Way). Conduits and Rights of Way Section.~~

9.7.2.16 The CLEC will incur all costs associated with returning the UDF to its original condition when they disconnect UDF, disconnecting the UDF from its side of the network demarcation point.

9.7.2.17 Qwest and CLEC will jointly participate in continuity testing within the provisioning interval established in Exhibit C. Qwest and CLEC must coordinate on the date and time for this continuity testing. As part of their respective duties regarding this continuity test, Qwest shall furnish a light detector at one termination point of the UDF, and CLEC shall furnish light generating equipment at the other termination point of the UDF as described below:

9.7.2.17.1 UDF-IOF: Qwest and CLEC shall mutually agree on the Wire Center at which Qwest must provide a light detector and the Wire Center at which CLEC must provide light generating equipment.

9.7.2.17.2 UDF-Loop: Qwest will provide the light detector at the serving Wire Center, and CLEC will provide the light generating equipment at the appropriate outside plant structure or end-user customer Premises.

9.7.2.17.3 E-UDF: Qwest will provide the light detector at the serving Wire Center, and CLEC will provide the light generating equipment at the CLEC Wire Center.

9.7.2.18. If, within ten (10) days of the date Qwest provisioned an order for UDF, CLEC demonstrates that the UDF pair(s) provisioned over requested route do not meet the minimum parameters set forth in Technical Publication 77383, and if the trouble is in the Qwest UDF facility, not due to fault on the part of CLEC, then Qwest will at no additional cost, attempt to repair the UDF as it relates to Qwest cross-connects and jumpers. If Qwest cannot repair the UDF to the minimum parameters set forth in Technical Publication 77383, Qwest will replace the UDF if suitable UDF pair(s) are available, at no additional non-recurring charge. If Qwest cannot replace the UDF upon receipt of a CLEC disconnect order, then Qwest will refund the non-recurring charges associated with the provisioning excluding IRI, FVQP and Field Verification and will discontinue all recurring charges.

9.7.3 Ordering Processes

Ordering processes and installation intervals are as follows:

9.7.3.1 Prior to placing an order for UDF, CLEC must first establish a Collocation arrangement in each of the necessary U S WEST Qwest Wire Centers. The CLEC must establish proper ICDF network demarcation points as part of their collocation build in order to accommodate the UDF optical terminations.
9.7.3.2 The first step of the UDF ordering process is the inquiry process. The CLEC must submit a UDF inquiry through their its account team. The UDF inquiry is used to determine the availability of UDF between the any two requested locations: between 2 Qwest wire centers, between a Qwest wire center and an end user premises, between a Qwest wire center and an appropriate outside plant structure, or between a Qwest wire

~~center and a CLEC wire center. UDF-IOF or UDF-Loop. The UDF-IOF, UDF-Loop or E-UDF. CLEC must specify the two U S WEST(2) Qwest offices or End-user Premise/end-user Premises location and the number of fibers requested. U S WESTQwest will inform CLEC of the availability of dark fiber that will meetthe CLEC's request, if any, within 10ten (10) business days for an Initial Records Inquiry (IRI) and 30 business days for a Mid-Point Structure Inquiry (MPSI).~~

9.7.3.1.1 CLEC must submit a UDF inquiry through its account team. CLEC must specify the two locations and the number of fibers requested.

9.7.3.1.2 Qwest will inform CLEC if there is UDF available via the UDF Inquiry Response within the interval set forth in Exhibit C of this Agreement.Qwest will notify CLEC, within the interval set forth in Exhibit C of this Agreement, that: (i) UDF is available to satisfy CLEC's request, (ii) UDF is not available to satisfy CLEC's request; or (iii) Qwest, in writing, denies CLEC's request pursuant to Section 9.7.2.5 (b), Qwest shall provide written notice of denials pursuant to (iii) above.

9.7.3.1.3 The UDF Inquiry Response will contain up to five available UDF routes between the CLEC-specified end locations. If additional routes are available, Qwest will notify CLEC that such additional routes exist and negotiate how that additional information will be made available.

9.7.3.2 Prior to placing an order for UDF to be provisioned, CLEC must first establish a collocation arrangement in each Qwest wire center where the UDF terminates. As part of its collocation build, CLEC will establish network demarcation points to accommodate UDF optical terminations. After collocation arrangements are complete, CLEC may place an order for UDF or place an order to provision previously leased UDF.

9.7.3.3 Based on the CLEC request (UDF-Loop or UDF-IOF),(UDF-Loop, UDF-IOF or E -UDF), there are two (2) possible termination scenarios.

9.7.3.3.1 **Termination at an Mid-PointOutside Plant Structure:** If spare fiber is available, andthe CLEC chooses to proceed, and the requests is for UDF-Loop going to an mid-pointoutside plant structure such as a Controlled Environmental Vault (CEV), or Remote Terminal (RT), the remote collocation provisions of this Agreement will apply. the CLEC will submit the Field Verification Quote Preparation (FVQP) form. U S WESTQwest will prepare and submit tothe CLEC a quote along with the original Field Verification Quote Preparation form (FVQP) within the interval set forth in Exhibit C. 20twenty (20) business days of the submission of the FVQP form bythe CLEC. Quotes are on an Individual Case Basis (ICB) and will include costs and an interval in accordance with Exhibit C.number of days required to provision the service.

9.7.3.3.2 U S WESTQwest will begin the provisioning process upon notification fromthe CLEC to proceed and the receipt of 50%fifty percent (50%) of the quoted amount. The notification to proceed is accomplished

~~by completing, signing and returning the original FVQP to the account manager. The account manager will notify the CLEC when provisioning is complete and the remaining quoted amount, the non-recurring charges, and recurring charges will be billed.~~Reserved for Future Use

~~**Termination at U S WEST Wire Center or End-user Premise**~~**Qwest Wire Center, End-user Premises or CLEC Wire Center**

9.7.3.3 Termination at Qwest Wire Center, End-user Premises or CLEC Wire Center: ~~If spare fiber is available, and the CLEC chooses to proceed, and the request is for a UDF-IOF or a UDF-IOF, UDF-Loop going to an end-user premise, U S WEST Premises, or E-UDF going to a CLEC Wire Center, Qwest will begin the provisioning process upon notification from the CLEC to proceed and the receipt of 50% of the non-recurring charges. The notification to proceed is accomplished by completing, signing and returning the original inquiry request to the account manager. Provisioning of intervals for this type of request will take 20 twenty (20) business days are set forth in Exhibit C. The CLEC will be notified that provisioning is complete and the remaining non-recurring charges and associated recurring charges will be billed.~~

9.7.3.4 An order may be canceled any time up to and including the service date. Cancellation charges will apply.

9.7.3.5 CLEC may reserve dark fiber for CLEC during collocation builds. Prior to reserving space, CLEC must place an inquiry pursuant to section 9.7.3.1 of this Agreement and receive a UDF Inquiry Response that reflects that the route to be reserved is available. CLEC is also strongly encouraged to request a Field Verification that the route to be reserved is available. If CLEC does not obtain Field Verification, CLEC assumes the risk that records upon which the UDF Inquiry Response is based may be in error. CLEC may reserve UDF for 30, 60, or 90 days. CLEC may extend or renew reservations if there is delay in completion of the collocation build. All applicable UDF recurring charges specified in sections 9.7.5.2 will be assessed at the commencement of the reservation. Non-recurring charges for provisioning and cross connects will be assessed at the time of installation.

9.7.4 Maintenance and Repair

9.7.4.1 The Parties will perform cooperative testing and trouble isolation to identify where trouble points exist. CLEC cross connections will be repaired by CLEC and Qwest cross connections will be repaired by Qwest. ~~Maintenance and Repair processes are contained in Section 12 (Operational Support the Support Functions Section of this Systems (OSS)) Agreement~~

9.7.4.2. If it is determined that the UDF does not meet the minimum parameters of Technical Publication 77383 without fault of CLEC, and if the trouble is in the Qwest UDF facility, then Qwest will attempt to repair the UDF as it relates to Qwest cross-connects and jumper at no additional cost. If Qwest

cannot repair the UDF to the minimum parameters set forth in Technical Publication 77383, then Qwest will replace the UDF at no additional cost if suitable UDF pair(s) are available. If Qwest cannot replace the UDF with available pairs, then it, upon receipt of a CLEC disconnect order, will discontinue the recurring charges effective as of the date of the commencement of the trouble.

9.7.5 Rate Elements

9.7.5.1 Dark Fiber rates are contained in Exhibit A of this Agreement and include the following elements:

(a) Initial Records Inquiry (IRI). This rate element is a pre-order work effort that investigates the availability of UDF. This is a one-time charge for each route check requested by the CLEC. A simple IRI determines if UDF is available between two Qwest wire centers or between a Qwest wire center and Qwest -will bill the CLEC the IRI immediately upon receipt of the inquiry.

~~b) Mid-Point Structure Inquiry (MPSI) (Loop only). This rate element is a pre-order records research effort that (1) includes IRI to determine the availability of UDF and (2) records research to locate the closest customer Premises. A complex IRI determines if UDF is available between a Qwest wire center and an outside structure (CEV, Hut, etc.) along the Loop fiber route. -will locate the closest point in Qwest will bill CLEC the IRI immediately upon receipt of the inquiry. The IRI is a record search and does not guarantee the availability of UDF.~~

~~which access is available (via an existing structure and FDP).~~

e)(b) Field Verification and Quote Preparation (FVQP). This rate element is a pre-order work effort to estimate the cost of providing UDF access to the CLEC at locations other than Qwest Wire Centers or an end-user premises. Qwest will prepare a quote which will explain what work activities, timeframes, and costs are associated with providing access to this FDP location. This quote will be good for 90 calendar days. This charge is not applied when the demarcation points are in a Wire Centers or an end-user premises thirty (30) calendar days. The FVQP is not necessary when the request is between Qwest wire centers or between a Qwest wire center and customer Premises (i.e., IRI). If FVQP is applicable pursuant to this section and CLEC orders UDF that has been reserved after a Field Verification has been performed, then the charge for FVQP will be reduced by the amount of the Field Verification charge assessed in the context of the reservation.

(c) Field Verification. This rate element is a work effort performed at CLEC's option before placing a request to reserve UDF to verify the availability of UDF that CLEC desires to reserve.

9.7.5.2 The following rate elements are used once the availability of UDF has been established and the CLEC chooses to access UDF.

9.7.5.2.1 Unbundled Dark Fiber - IOF Rate Elements

(a) UDF-IOF Termination (Fixed) Rate Element. This rate element has both a recurring and non-recurring component and provides a termination at the interoffice FDP within the Qwest Wire Center. Two UDF-IOF terminations apply per pair. Termination charges apply for each intermediate office terminating at an FDP or like cross-connect point.

(b) UDF-IOF Fiber Transport, (Per Mile/Pair) Rate Element. This rate element has both a recurring and a non-recurring component and applies per pair. This rate element provides a transmission path between Qwest Wire Centers. The recurring component of this rate element is a mileage sensitive element based on the route miles of the UDF rounded up to the next mile.

(c) UDF-IOF Fiber Cross-Connect Rate Element. This rate element has both a recurring and non-recurring component and is used to extend the optical connection from the IOF FDP to the CLEC's optical demarcation point (ICDF). A minimum of two UDF-IOF fiber cross-connects apply per pair. Cross-connect charges apply for each intermediate office terminating at an FDP or like cross-connect point. The non-recurring rate will not be charged for cross-connects already in place prior to CLEC's order for UDF-IOF.

9.7.5.2.2 Unbundled Dark Fiber - Loop Rate Elements

(a) UDF-Loop Termination (Fixed) Rate Element. This rate element is a recurring rate element and provides a termination at the interoffice FDP within the Qwest Wire Center and at either the customer Premises or an appropriate outside plant structure. Two UDF-Loop terminations apply per pair.

(b) UDF-Loop Fiber (Per Pair) Rate Element. This rate element has both a recurring and a non-recurring component, and it applies per pair. This rate element provides a transmission path between the Qwest Serving Wire Center and either the customer Premises or an appropriate outside plant structure.

(c) UDF-Loop Fiber Cross-Connect Rate Element. This rate element has both a recurring and non-recurring component, is applied per pair, and is used to extend the optical connection from FDP to FDP. The non-recurring rate will not be charged for cross-connects already in place prior to CLEC's order for UDF-Loop.

(a) UDF-Loop Fiber Non-Recurring Charge: This rate element includes the termination and cross-connects at both ends.

~~(b) UDF-Loop Fiber Recurring Charge: This rate element include transport per pair calculated as the average mileage between the originating U S WESTQwest Wire Center and the End-user Premises and the terminations and cross-connects at both ends.~~

~~These rate elements are flat-rated charges to recover the cost of (1) UDF between the Qwest wire center and end user premises and (2) terminations and cross-connects at each location.~~

9.7.5.2.3 Extended Unbundled Dark Fiber Rate Elements

(a) E-UDF Termination (Fixed) Rate Element. This rate element is a recurring rate element and provides a termination at the interoffice FDP within the Qwest Wire Center and at the CLEC Wire Center. Two E-UDF terminations apply per pair.

(b) E-UDF Fiber (Per Pair) Rate Element. This rate element has both a recurring and a non-recurring component, and it applies per pair. This rate element provides a transmission path between the Qwest Serving Wire Center and the CLEC Wire Center.

(c) E-UDF Fiber Cross-Connect Rate Element. This rate element has both a recurring and non-recurring component, is applied per pair, and is used to extend the optical connection from FDP to FDP. The non-recurring rate will not be charged for cross-connects already in place prior to CLEC's order for E-UDF.

{Under development}

9.20 Reserved for Future Use Unbundled Packet Switching

Qwest shall provide CLEC with unbundled Packet Switching in a non-discriminatory manner according to the following terms and conditions.

9.20.1 Description

9.20.1.1 Unbundled Packet Switching provides the functionality of delivering and routing packet data units via a virtual channel to a CLEC demarcation point. Unbundled Packet Switching includes use of a distribution loop and virtual transport facilities as well as the DSLAM ~~and ATM electronics~~ functionality with the routing and addressing functions of the packet switch necessary to generate the virtual channel.

9.20.2 Terms and Conditions

9.20.2.1 CLEC may obtain unbundled packet switching only when all four of the following conditions are satisfied in a specific geographic area:

9.20.2.1.1 Qwest has deployed digital loop carrier systems, including but not limited to, integrated digital loop carrier or universal digital loop carrier systems or has deployed any other system in which fiber optic facilities replace copper facilities in the distribution section.

9.20.2.1.2 There are no spare copper loops available capable of supporting the xDSL services the requesting carrier seeks to offer.

9.20.2.1.3 Qwest has placed a DSLAM for its own use in a remote Qwest Premises but has not permitted CLEC to collocate its own DSLAM at the same remote Qwest Premises or collocating a CLEC's DSLAM at the same Qwest Premises will not be capable of supporting xDSL services at parity with the services that can be offered through Qwest's Unbundled Packet Switching.

9.20.2.1.4 Qwest has deployed packet switching capability for its own use.

9.20.2.2 ~~The~~ A demarcation point must be established to ~~in the central office housing the Qwest packet ATM~~ switch serving the DSLAM of the end user customer to which the CLEC is providing data services.

9.20.2.3 Qwest will provide CLEC with virtual channels at a physical network demarcation point such as a DSX-1 or DSX-3 in the central office in which the ~~ATM~~packet switch is located.

9.20.2.4 The ATM virtual channels provided to CLEC shall conform with ATM User-to-Network Interface (UNI) specifications as described in ITU-T 1.371/ATM Forum.

9.20.2.5 CLEC must specify the number of virtual channels, the bit rate for each virtual channel, and the quality of service for each virtual channel. Qwest will commit to satisfy the request to the extent feasible. Qwest will provide CLEC with Unspecified Bit-Rate (UBR) for each channel, and a minimum bit rate.

9.20.2.6 Qwest will provision CLEC specified options as available for each virtual channel in its OSS.

9.20.2.7 ~~CLEC shall not have access to Qwest's Packet Network Management Systems.~~ Qwest shall provide CLEC with Packet Network Management capacity through its service order activities. CLEC shall have access to Qwest's Packet Network Management Systems if, and only if, such Packet Network Management System capacity can be partitioned and made available to CLEC.

9.20.2.8 CLEC shall provide the customer premises modem. Customer premises equipment including modem and filters must be compatible with specific DSLAM equipment deployed by Qwest.

9.20.3 Rate Elements

9.20.3.1 Unbundled Packet Switch Customer Channel – This rate element includes the consists of two (2) rate sub elements: DSLAM functionality and virtual loop transport.

9.20.3.1.1 from the DSLAM - to the Qwest Wire Center and virtual interoffice transport from the wire center serving the end-user customer to the wire center containing the ATMpacket switch. Both a non-recurring rate and a recurring rate shall apply. Rates will vary depending on the following factors: (a) Uncommitted Bit Rate or, (b) Committed Bit Rate at 256 Kbps, 512 Kbps, 768 Kbps, 1 Mbps, or 7 Mbps.

9.20.3.1.2 Virtual Transport – This includes virtual loop transport from the DSLAM to the Qwest Wire Center and virtual interoffice transport from the Wire Center serving the end-user customer to the Wire Center containing the packet switch. Both a non-recurring rate and a recurring rate shall apply. If CLEC provisions its own transport, then this rate element shall not apply.

9.20.3.2 Unbundled Packet Switch Loop Capability — This element includes loop facilities between the Remote DSLAM and the end user customer premises and will vary depending on the type of loop elements, which may be either a Dedicated Loop or Shared Loop. If CLEC provisions its own transport from the end user customer to the DSLAM, this rate element shall not apply.

9.20.3.3 Unbundled Packet Switch Interface Port - CLEC obtains the Unbundled Packet Switch Interface Port currently contained within Qwest's network. This port may be a DS1 or DS3 port on an ATMpacket Sswitch allowing virtual channels to be connected and transmitted to the CLEC network.

9.20.4 Ordering Process

9.20.4.1 Prior to placing an order for unbundled packet switching, CLEC must have provided issued Qwest a collocation application, collocation space availability report pursuant to Section 8.2.1.9, or a collocation forecast to place a DSLAM in a remote Qwest Remote Premises containing a Qwest DSLAM and has been denied such access. –

9.20.4.1.1. Upon CLEC request Qwest will disclose the location of all DSLAMs Qwest has deployed in remote premises throughout the State.

9.20.4.2 Prior to placing an order for Unbundled Packet Switch Customer Channel, CLEC must have established or be in the process of establishing continuity between CLEC network and an Unbundled Packet Switch Interface Port.

9.20.4.3 The process for ordering Unbundled Packet Switching is manual and will be provisioned on an individual case basis (ICB) To order unbundled packet switching, CLEC will place two (2) orders via an LSR, which orders will be provisioned according to the intervals set forth in Exhibit C once the continuity as set forth in the preceding section is established.:

9.20.4.3.1 Network Interface Order to establish connectivity between CLEC network and Qwest Unbundled Packet Switch Interface Port:- CLEC must specify bandwidth requirement of DS1 or DS3. Qwest will combine transport UNE to Unbundled Packet Switch Interface Port.

9.20.4.3.2 Customer channel order to establish linkage between end-user customer equipment and Qwest's packet network. CLEC must specify remote DSLAM address, end-user customer address, quality of service requested, and bit-rate requested.

9.20.5 Maintenance and Repair

Maintenance and Repair of unbundled Packet Switching are the sole responsibility of Qwest. Maintenance and Repair processes are contained in Section 12.

9.4 Line Sharing

9.4.1 Description

Line Sharing provides CLEC with the opportunity to offer advanced data services simultaneously with an existing end user's analog voice-grade (POTS) service on the same copper loop (the Shared Loop). CLEC will access the unused high frequency portion of the Shared Loop while the voice portion of the Shared Loop will a single copper loop referred to herein as the "Shared Loop" or "Line Sharing", by using the frequency range above the voice band on the copper loop. This be used for analog voice-grade POTS service. Afrequency range will be referred to herein as the High Frequency Spectrum Network Element ("HUNE"). A POTS splitter separates the voice and data traffic and allows the copper loop to be used for simultaneous data transmission and POTS service. Thevoice-grade POTS service must be provided to the end user by Qwest. This section does not address line splitting, which is addressed in Section [under development].

9.4.2 Terms and Conditions

9.4.2.1 General

9.4.2.1.1 To order the HUNE, CLEC must have a POTS splitter installed in the Qwest Wire Center that serves the end user as provided for in this Section, and the end user must have dial tone originating from a U S WEST End Office Switch in the Wire Center where the Shared Loop is being requested.Qwest switch in that Wire Center. CLEC must provide the end user with, and is responsible 9.4.2.1.2 CLEC gains access to the Shared Loop at the U S WEST Wire Center through established Collocation arrangements for, the installation of a splitter, filter(s) and/or other equipment necessary for the end user to receive separate voice and data service across a single copper loop.

9.4.2.1.3 The splitter must be provided by the CLEC. The splitter must satisfy at least one of the following criteria: (a) the splitter meets the requirements for central office

9.4.2.1.2 CLEC either may purchase POTS splitters or have Qwest purchase POTS splitters on its behalf subject to full reimbursement. The POTS splitter must meet the requirements for Central Office equipment collocation set by the FCC in its March 31, 1999 order in CC Docket No. 98-147.CLEC may either: (a) purchase POTS splitters and have Qwest install them using Common Area Splitter Collocation, subject to an installation charge; or (b) have Qwest purchase POTS splitters on its behalf (subject to full reimbursement of the purchase price) and have Qwest install them using Common Area Splitter Collocation, subject to an installation charge. The POTS splitter must meet the requirements for Central Office equipment Collocation set by the FCC in its March 31, 1999 Order in CC Docket No. 98-147.Reserved for Future Use

9.4.2.1.4 The voice and data signals carried by Shared Loops are "split" by the splitter located in a U S WEST Wire Center.

~~9.4.2.1.5 The technology used by CLEC will be within the Power Spectrum Density (PSD) mask parameters set forth in ANSI T1E1.413 or other applicable industry standards. Such technologies are currently limited to ADSL and RADSL. In the future, additional technologies may be used by CLECs, to the extent those technologies meet the PSD mask parameters set forth in the above ANSI or other applicable industry standards. Spectrum management is the subject of a pending NPRM (First Report and Order Notice of Proposed Rulemaking, Deployment of Wirelines, Services Offering Advanced Telecommunications Capability—CC Docket Number 98-147). U S WEST will comply with Spectrum Management rules issued by the FCC and standards defined by the ANSI Standards Subcommittee. T1E1.4.~~

~~9.4.2.2 Splitter in CLEC Collocation area~~

~~9.4.2.2.1 The CLEC provided splitter shall be provided, installed and maintained by CLEC in CLEC's Collocation space.~~

~~9.4.2.2.2 U S WEST will either re-designate existing or install new TIE Cables in order to accommodate the capacity requests of CLEC.~~

9.4.2.1.3 CLEC may use the HUNE to provide any xDSL services that will not interfere with analog voiceband transmissions in accordance with FCC rules. Such services currently are limited to ADSL, RADSL Multiple Virtual Lines (MVL) and G lite. In the future, additional services may be used by CLEC to the extent those services are deemed acceptable for Line Sharing deployment under applicable FCC rules.

9.4.2.1.4 CLEC may not order the HUNE on a given copper loop if Qwest, or another telecommunications carrier, is already using the high frequency spectrum, unless the end user disconnects the original telecommunications carrier's high-frequency service.

9.4.2.1.5 CLEC may request, and Qwest will provide, conditioning of Shared Loops to remove load coils, excess bridged taps, or electronics subject to the charges for loop conditioning in Exhibit A. Qwest will perform requested conditioning, including de-loading and removal of excess bridged taps, unless Qwest demonstrates in advance that conditioning a Shared Loop will significantly degrade the end user's analog voice-grade POTS service. Based on the pre-order make-up of a given copper loop, CLEC can make a preliminary determination if the loop can meet the technical parameters applicable to the data service it intends to provide over the loop. After a Shared Loop is ordered and the design layout record is reviewed by CLEC, it is CLEC's responsibility to determine if the Shared Loop meets the technical parameters applicable to the data service it intends to provide over the Shared Loop.

9.4.2.1.6 Qwest will provide CLEC with access to the HUNE through POTS splitters installed in Qwest Wire Centers. POTS splitters may be installed in Qwest Wire Centers in either of the following ways at the

discretion of CLEC: (a) via the standard Collocation arrangements set forth in the Collocation Section; or (b) via Common Area Splitter Collocation as set forth in this Section. Under either option, POTS splitters will be appropriately hard-wired or pre-wired so that Qwest is not required to inventory more than two (2) points of termination.

9.4.2.1.7 CLEC will provide Qwest with non-binding, good faith, rolling quarterly forecasts for Shared Loop volumes on a Wire Center by Wire Center basis. Qwest will keep forecasts confidential and will not share forecasts with any person involved in Qwest retail operations, product planning or marketing.

9.4.2.2 CLEC Collocation Area Splitter

9.4.2.2.1 ~~If CLEC elects to have POTS splitters installed in Qwest Wire Centers via the standard Collocation arrangements set forth in the Collocation Section, CLEC will be responsible for purchasing the POTS splitters. CLEC also will be responsible for installing and maintaining POTS splitters in its Collocation areas within Qwest Wire Centers. If CLEC elects to have POTS splitters installed in Qwest Wire Centers via the standard Collocation arrangements set forth in the Collocation Section, CLEC will either purchase the POTS splitters or have Qwest purchase the POTS splitters subject to full reimbursement of the cost of the POTS splitters plus any pass through actual vendor invoice costs, including but not limited to taxes, shipping and handling, and any similar charges assessed on Qwest by vendors in connection with the purchase of POTS splitters. The POTS splitters must meet the requirements for Central Office equipment collocation set by the FCC. CLEC will be responsible for installing and maintaining the POTS splitters in its Collocation areas within Qwest Wire Centers.~~

9.4.2.2.2 CLEC may designate some or all of its existing TIE Cables for use in connection with Line Sharing. Qwest will perform any necessary TIE Cable reclassifications, frame re-stenciling, and related work for which it is responsible and that is required to provision Line Sharing. Charges will apply pursuant to ~~this Section~~ Exhibit A of the Agreement.

9.4.2.2.3 Two ITPs and two TIE Cables will be needed to connect POTS splitters to the Qwest network. One ITP will carry both voice and data traffic from the COSMIC/MDF loop termination, to an appropriate ICDF. From this frame, one TIE Cable will carry both voice and data traffic to the POTS splitter located in CLEC's Collocation area. The voice and data traffic will be separated at the POTS splitter. The data traffic will be routed to CLEC's network within its Collocation area. The voice traffic will be routed to the COSMIC/MDF switch termination, via the ICDF, using a second TIE Cable and a second ITP.

9.4.2.2.3 ~~Interconnection Tie Pairs and TIE Cables. There are two~~

~~types of ITP arrangements for connecting the Qwest network to the CLEC provided splitter, depending on whether the CLEC elects to use an ICDF or direct connections.~~

9.4.2.2.3.1 CLEC may elect to use an ICDF. In this instance, one ITP carries the combined voice/data signal from the COSMIC/MDF loop termination to the ICDF and a second ITP carries the voice only signal from the ICDF to the COSMIC/MDF switch termination. For each Shared Loop, two pairs of the TIE cable must be used: one pair of the TIE Cable will carry the voice/data from the ICDF to the CLEC provided splitter, and the second pair will carry the voice-only signal from the CLEC provided splitter to the ICDF.

9.4.2.2.3.2 CLEC may elect to use direct connections between the CLEC-provided ~~Splitter~~ splitter and the COSMIC/MDF. In this instance, Qwest will provide one TIE Cable between each module of the COSMIC/MDF and the CLEC-provided splitter. One pair in the TIE Cable will carry the combined voice/data signal from the COSMIC/MDF loop termination to the CLEC-provided splitter in the CLEC's Collocation Space. A second pair in the TIE Cable will carry the voice-only signal from the CLEC-provided splitter to the switch termination on the COSMIC/MDF. These TIE Cables will be dedicated to the CLEC's use, and, as a result, the full cost of the necessary Mechanized Engineering and Layout for Distributing Frame (MELD) run, cable placement, and cable termination, and associated COSMIC/MDF hardware to terminate a TIE Cable on each outside plant and switch equipment module of the COSMIC/MDF will be assessed to CLEC in accordance with Section 8 (Collocation). Qwest will provide, for each Shared Loop, the TIE Cable pair assignments.

9.4.2.2.4 The demarcation points between Qwest's network and CLEC's network will be the place where the combined voice and data loop is connected to the ICDF, or where CLEC chooses a direct connection to the COSMIC/MDF, where the combined voice and data loop originates from CLECs Collocation.

9.4.2.3 Collocation

~~Splitter in Common Area of Central Office~~ Common Area Splitter

~~9.4.2.3.1 If CLEC elects to have POTS splitters installed in Qwest Wire Centers via Common Area Splitter Collocation, the POTS splitters will be installed in those Wire Centers in one of the following locations: (a) in a relay rack as close to CLEC's DSO termination points as possible; (b) on an ICDF to the extent such a frame is available; or (c) where options (a) and (b) are not available, or in Wire Centers with network access line counts of less than 10,000 on the Cosmic/MDF or in some other appropriate location such as an existing Qwest relay rack or bay. CLEC~~

either may purchase POTS splitters or have Qwest purchase POTS splitters on its behalf subject to full reimbursement. Qwest will be responsible for the installation and maintenance of the POTS splitters, but CLEC will lease the POTS splitters to Qwest at no cost. Qwest may co-mingle the POTS splitters shelves of different CLECs in a single relay rack or bay. Qwest will not be responsible for shortages of POTS splitters, or Qwest's inability to obtain POTS splitters from vendors, if acting as purchasing agent on behalf of CLEC. If CLEC elects to have POTS splitters installed in Qwest Wire Centers via Common Area Splitter Collocation, the POTS splitters will be installed in those Wire centers in one of the following locations: (a) in a relay rack as close to CLEC's DS0 termination points as possible; (b) on an ICDF to the extent such a frame is available; or (c) where options (a) and (b) are not available, or in Wire Centers with network access line counts of less than 10,000, on the Cosmic/MDF or in some other appropriate location such as an existing Qwest relay rack or bay. CLEC either may purchase POTS splitters or have Qwest purchase the POTS splitters subject to full reimbursement of the cost of the POTS splitters plus any pass through actual vendor invoice costs, including but not limited to, taxes, shipping and handling. The POTS splitters must meet the requirements for Central Office equipment collocation set by the FCC. Qwest will be responsible for installing and maintaining the POTS splitters, but CLEC will lease the POTS splitters to Qwest at no cost. Qwest may co-mingle the POTS splitters shelves of different CLECs in a single relay rack or bay. Qwest will not be responsible for shortages of POTS splitters or Qwest's inability to obtain POTS splitters from vendors, if acting as purchasing agent on behalf of CLEC.

9.4.2.3.2 Two ITPs and four TIE Cables will be needed to connect the POTS splitters to the Qwest network. One ITP will carry both voice and data traffic from the COSMIC/MDF loop termination, to an appropriate ICDF. From this frame, one TIE Cable will carry both voice and data traffic to the POTS splitter. The voice and data traffic will be separated at the POTS splitter, and the separated voice and data traffic will be routed to the ICDF via separate TIE Cables (i.e., the second and third TIE Cables). At the ICDF, the data traffic will be routed to CLEC's Collocation area via a fourth TIE Cable, and the voice traffic will be routed to the COSMIC/MDF switch termination, via a second ITP. CLEC can also elect a direct connect option pursuant to section 8.3.1.11.2.

9.4.2.3.3 Qwest will provide the cabling used for TIE Cables between the POTS splitter and the ICDF. The POTS Splitter Tie Cable Connection Charge will apply.

9.4.2.3.5 The demarcation point will be at the splitter end of the TIE-cable connecting the CLEC collocation and the splitter.

9.4.2.3.4 The demarcation point between Qwest's network and CLEC's network will be at the place where the data loop leaves the POTS splitter on its way to CLEC's Collocated equipment.

9.4.3 Line Sharing Deployment

9.4.3.1 New applications for installation of POTS splitters will be processed in the manner outlined in the Collocation Section for Cageless or Common Collocation.

9.4.3.2 CLEC may submit applications for additional DSO TIE Cable terminations and/or reclassifications to support Line Sharing. Qwest will process any such applications for augmentation and/or reclassification of DSO TIE Cable terminations under intervals as outlined below in this Section.

9.4.3.3 Augmentation intervals will be thirty (30) days, subject to the following terms and conditions identified below:

9.4.3.3.1 CLEC will provide a quarterly forecast to Qwest in advance of placing applications. Upon receipt of the initial forecast, the interval for augments forecasted in the first month will be sixty (60) days. The interval for each subsequent month will be thirty (30) days.

9.4.3.3.2 The forecast must include, at a minimum, the following:

- (a.) The Month in which each application will be sent;
- (b.) The Wire Center by common name for each application;
- (c.) Type of terminations required for each level of connection;
and
- (d.) Whether the termination types are the same as existing or, if different, what numbering is requested on the block.

9.4.3.3.3 The interval for reclassification will be fifteen (15) days, subject to the following terms and conditions. If requested reclassification engineering results in additional requirements for DSO TIE Cable termination or TIE Cable support, the interval will default to thirty (30) days.

9.4.3.3.4 If an application for augmentation and/or reclassification is not included in the above forecast, the application will default to the augmentation interval found in the Collocation Section.

9.4.3.3.5 In the event CLEC, or Qwest acting as purchasing agent for CLEC, is unable to procure any equipment needed to complete all work required by applications submitted to Qwest by CLEC, including but not limited to, POTS splitters or cabling, Qwest will install the subject equipment when it becomes available. If Qwest is acting as purchasing agent for CLEC and is unable to procure equipment to complete all work in a timely manner, CLEC may provide Qwest with the subject equipment. CLEC will be notified by Qwest of the required material on-site date for the affected Wire Center(s) and CLEC will have two (2) business days to determine if it will be able to provide the subject equipment in advance of the material on-site date. If CLEC does not notify Qwest in writing of its intent to provide the subject equipment within this two (2) business day

period, or if the subject equipment in a timely manner. Qwest will install the subject equipment when available.

9.4.4 Rate Elements

9.4.4.1 Recurring Rates for Shared Loop

9.4.4.1.1 Shared Loop Charge - A monthly recurring charge for the use of the Shared Loop will apply.

9.4.4.1.2 OSS Charge - A monthly recurring charge to recover upgrades to Qwest Operational Support Systems required to accommodate Line Sharing will apply.

9.4.4.2 Non-Recurring Rates for the Shared Loop

9.4.4.2.1 Basic Installation Charge for Shared Loop – A non-recurring charge for each Shared Loop installed will apply.

9.4.4.2.2 If CLEC requests conditioning of a Shared Loop, a non-recurring conditioning charge specified in Exhibit A will apply for removal of load coils and excess bridged taps. If the conditioning significantly degrades the voice services on the loop to the point it is unacceptable to the end user, CLEC shall pay the conditioning charge in Exhibit A to recondition the loop.

9.4.4.3 Non-Recurring Rates for Tie Cable Reclassification

9.4.4.3.1 Reclassification Charge – A non-recurring charge will apply, based on time and materials for reclassification of existing TIE cable capacity, by among other things, reclassification of existing TIE cables for Line Sharing, frame restenciling, and any other work performed between CLEC's collocation and the intermediate distribution frame required to provision Line Sharing.

9.4.4.4 Non-Recurring Rates for Maintenance and Repair

9.4.4.4.1 Trouble Isolation Charge – A non-recurring charge for Trouble isolation will be applied in accordance with the Support Functions – Maintenance and Repair Section.

9.4.4.4.2 Additional Testing – CLEC may request Qwest to perform additional testing, and Qwest may decide to perform the requested testing on a case-by-case basis. A non-recurring charge will apply in accordance with Exhibit A.

9.4.4.5 Rates for Common Area Splitter Collocation

9.4.4.5.1 Splitter Shelf Charge – This charge recovers installation and ongoing maintenance associated with splitter installation, bay installation, lighting costs, aerial support structures and grounding charge for splitters

either in a bay, on the IDF, or on the MDF/COSMIC. These are both recurring and non-recurring charges.

9.4.4.5.2 POTS Splitter Charge – A non-recurring charge will apply for the cost of each POTS splitter purchased by Qwest on behalf of CLEC. This charge will cover the cost of the POTS splitter, plus any associated costs incurred by Qwest to order the POTS splitter.

9.4.4.5.3 Engineering – A non-recurring charge will apply for the planning and engineering associated with placing POTS splitters in the Central Office, either in a bay, on the IDF, or on the MDF/COSMIC.

9.4.4.6 POTS Splitter TIE Cable Connections Charge – A non-recurring charge will apply for the cost of each TIE Cable connected to the POTS splitters. This charge will cover both the TIE cables and associated blocks per 100 pair between the POTS splitter and the intermediate distribution frame or splitter bay.

9.4.4.7 The rates for each of the aforementioned Line Sharing rate elements are set forth in Exhibit A. All of these rates are interim and will be subject to true up based on either mutually agreed to permanent rates or permanent rates established in a Line Sharing cost proceeding conducted by the Commission. In the event interim rates are established by the Commission before permanent rates are set, the interim rates set forth in Exhibit A will be changed to reflect the interim rates set by the Commission; however, no true up will be performed until mutually agreed to permanent rates are established or permanent rates are set established by the Commission.

9.4.5 Ordering Process

9.4.5.1 Shared Loop

9.4.5.1.1 As a part of the pre-order process, CLEC can access loop characteristic information through the Loop Information Tool described in the Support Functions Section. CLEC will determine, in its sole discretion and at its risk, whether to order the HUNE across any specific copper loop. Qwest and CLEC will work together to modify the Loop Information Tool to better support Line Sharing.

9.4.5.1.2 The appropriate Splitter Meet Points dedicated to the POTS splitters will be provided on the Line Sharing Actual Point of Termination (APOT) from one day prior to the ready for service date or at an interval ordered by the Commission or further agreed to by Qwest and CLEC in writing. CLEC will provide on the LSR, the appropriate frame terminations which are dedicated to POTS splitters. Qwest will administer all cross connects/jumpers on the COSMIC/MDF and ICDF.

9.4.5.1.3 Basic Installation “lift and lay” procedure will be used for all Shared Loop orders. Under this approach, a Qwest technician “lifts” the Loop from its current termination in a Qwest Wire Center and “lays” it on a new termination connecting to CLEC’s Collocated equipment in the same Wire Center.

9.4.5.1.4 Qwest will provision the Shared Loop within the standard unbundled loop provisioning interval at least 90% of the time, as defined in Exhibit C.

9.4.5.1.5 CLEC shall not place orders for Shared Loops until all work necessary to provision Line Sharing in a given Qwest Wire Center, including, but not limited to, POTS splitter installation and TIE Cable reclassification or augmentation has been completed.

9.4.5.2 Common Area Splitter Collocation

9.4.5.2.1 This Section only applies to situations where CLEC orders placement of the splitter in a common area.

9.4.5.2.2 New POTS splitter shelves may be ordered via a single Collocation application form and quote preparation fee. Standard intervals as contained in Exhibit C will apply.

9.4.5.2.3 New POTS splitter shelves may be ordered with an existing Collocation. CLEC must submit a new Collocation application form and the applicable fee to Qwest. Standard Cageless and/or Common Collocation intervals as contained in Exhibit C will apply.

9.4.5.3 TIE Cable Reclassification

9.4.5.3.1 To the extent CLEC has existing DSO TIE Cable terminations extending from an intermediate distribution frame to its Collocation space, CLEC may request that these existing DSO TIE Cable terminations be reclassified for use with Line Sharing. CLEC shall request such reclassification through the same process used to order new terminations.

9.4.6 Repair and Maintenance

9.4.6.1 Qwest will allow CLEC to access Shared Loops at the point where the combined voice and data loop is cross-connected to the POTS splitter.

9.4.6.2 Qwest will be responsible for repairing voice services provided over Shared Loops and the physical line between network interface devices at end user premises and the point of demarcation in Qwest Wire Centers. Qwest will also be responsible for inside wiring at end user Premises in accordance with the terms and conditions of inside wire maintenance agreements, if any, between Qwest and its end users. CLEC will be responsible for repairing data services provided on Shared Loops. Qwest and CLEC each will be responsible for maintaining its equipment. The entity that controls the POTS splitters will be responsible for their maintenance.

9.4.6.3 Qwest and CLEC will continue to develop repair and maintenance procedures for Line Sharing and agree to document final agreed to procedures in a methods and procedures document that will be made available on Qwest's

website: <http://www.uswest.com/wholesale/productsServices/irrg/TABL1-0.html>. In the interim, Qwest and CLEC agree that the following general principles will guide the repair and maintenance process for Line Sharing.

9.4.6.3.1 If an end user complains of a voice service problem that may be related to the use of a Shared Loop for data services, Qwest and CLEC will work together with the end user to solve the problem to the satisfaction of the end user. Qwest will not disconnect the data service provided to an end user over a Shared Loop without the written permission of CLEC unless the end user's voice service is so degraded that the end user cannot originate or receive voice grade calls and/or the end user authorizes Qwest to disconnect the data service. Qwest will notify CLEC whenever this occurs upon voice trouble ticket closure.

9.4.6.3.2 Qwest and CLEC are responsible for their respective end user base. Qwest and CLEC will have the responsibility for resolution of any service trouble report(s) initiated by their respective end users.

9.4.6.3.3 Qwest will test for electrical faults (e.g. opens, and/or foreign voltage) on Shared Loops in response to trouble tickets initiated by CLEC. When trouble tickets are initiated by CLEC, and such trouble is not an electrical fault (e.g. opens, shorts, and/or foreign voltage) in Qwest's network, Qwest will assess CLEC the TIC Charge.

9.4.6.3.4 When trouble reported by CLEC is not isolated or identified by tests for electrical faults (e.g. opens, shorts, and/or foreign voltage), Qwest may perform additional testing at the request of CLEC on a case-by-case basis. CLEC may request that Qwest perform additional testing and Qwest may decide not to perform requested testing where it believes, in good faith, that additional testing is unnecessary because the test requested has already been performed or otherwise duplicates the results of a previously performed test. In this case, Qwest will provide CLEC with the relevant test results on a case-by-case basis. If this additional testing uncovers electrical fault trouble (e.g. opens, shorts, and/or foreign voltage) in the portion of the network for which Qwest is responsible, CLEC will not be charged by Qwest for the testing. If this additional testing uncovers a problem in the portion of the network for which CLEC is responsible, Qwest will assess the appropriate miscellaneous charge.

9.4.6.4 When POTS splitters are installed in Qwest Wire Centers via Common Area Splitter Collocation, CLEC will order and install additional splitter cards as necessary to increase the capacity of the POTS splitters. CLEC will leave one unused, spare splitter card in every shelf to be used for repair and maintenance until such time as the card must be used to fill the shelf to capacity.

9.4.6.5 When POTS splitters are installed in Qwest Wire Centers via standard Collocation arrangements, CLEC may install test access equipment in its Collocation areas in those Wire Centers for the purpose of testing Shared Loops. This equipment must meet the requirements for Central Office equipment set by the FCC.

9.4.6.6 Qwest and CLEC will work together to address end user initiated repair requests and to prevent adverse impacts to the end user.

9.4.7 Other

9.4.7.1 Qwest and CLEC agree to work together to address and, where necessary and possible, find solutions for the following Line Sharing implementation issues: (i) the development of an effective phased process for handling CLEC orders for the HUNE; which reflect different end user action scenarios including but not limited to; end user changes or disconnects data service provider and/or end user orders new voice and data service simultaneously; (ii) Qwest's ability to handle the existing and forecasted volume of CLEC orders for the HUNE; (iii) Qwest's ability to make loop assignments for the existing and forecasted volume of CLEC orders for the HUNE; (iv) the ability of Qwest and CLEC to coordinate repairs; (v) the experience and education of the Shared Loop end user; (vi) CLEC's forecasts of HUNE orders; and (vii) the process for conditioning Shared Loops by removing load coils and excess bridged taps; and the ability of CLEC to order a HUNE to serve end users over fiber-fed loops, including loops comprised of digital loop carrier facilities.



DATE

July 18, 2000

PRODUCT NAME

Raw Loop Data (RLD) Tool

PRODUCT DEFINITION

The RLD tool provides data in bulk format to the Co-Providers about loop make-up characteristics at the wire center level. The data includes CLLI code, load coil, bridged tap, wire gauge, cable and pair make-up, and similar information on a loop-by-loop basis.

There is a web-site maintained by Qwest where Co-Providers may access the RLD tool. To gain access to the web-site, Co-Providers must obtain a digital certificate from Qwest. The RLD tool is presented in an ASCII text file and can be downloaded to an Excel format or database built by the Co-Provider. The web-site address is <http://ecom.uswest.com>.

The data available via the RLD tool will be loaded/refreshed every month on a wire center basis. There will be approximately 60 wire centers loaded/refreshed each business day with a 20 business day cycle to load/refresh the data for all of Qwest's wire centers.

All information referenced will be provided as is, with any errors and omissions that exist in Qwest's records.

Co-Providers may access the RLD tool 7 days a week, 24 hours a day.

The RLD is available immediately to Co-Providers as they become eligible with a digital certificate.

Data Fields

Qwest will provide the following data via the RLD tool:

- 1. Telephone Number**
- 2. Wire Center CLLI Code**
- 3. Cable Name**
- 4. Pair Name**
- 5. Terminal Address**
- 6. Segment (e.g. F1, F2, etc.)**
- 7. Sub Segment (e.g. segment 1 of F1)**
- 8. Segment Length**
- 9. Gauge**
- 10. Bridge-Tap Length**
- 11. Length Units**
- 12. Bridge-Tap Offset Distance**
- 13. Load Coil Type**
- 14. Pair Gain**
- 15. Composition of loop**
- 16. MLT Distance**
- 17. House Number**
- 18. Street**
- 19. Unit**
- 20. Floor**
- 21. Building**
- 22. Community (e.g., City)**
- 23. State Code**

Raw Data Example:

The RLD tool contains the following data entries. If a specific data item is not available or does not pertain to a particular loop, then the field entry will be blank. For instance, if the loop only consists of F1 and F2, then the entry fields that correspond to F3 through F9 would be empty. Commas separate field entries and an empty field is designated by:

FILE_CREATION_DATE,WIRE_CENTER_CLLI,TELEPHONE_NUMBER,F1_CABLE_NAME,F2_CABLE_NAME,F3_CABLE_NAME,F4_CABLE_NAME,F5_CABLE_NAME,F6_CABLE_NAME,F7_CABLE_NAME,F8_CABLE_NAME,F9_CABLE_NAME,F1_PAIR_NUMBER,F2_PAIR_NUMBER,F3_PAIR_NUMBER,F4_PAIR_NUMBER,F5_PAIR_NUMBER,F6_PAIR_NUMBER,F7_PAIR_NUMBER,F8_PAIR_NUMBER,F9_PAIR_NUMBER,F1_TERMINAL_ID,F2_TERMINAL_ID,F3_TERMINAL_ID,F4_TERMINAL_ID,F5_TERMINAL_ID,F6_TERMINAL_ID,F7_TERMINAL_ID,F8_TERMINAL_ID,F9_TERMINAL_ID,F1_MAKE_UP_DESC,F2_MAKE_UP_DESC,F3_MAKE_UP_DESC,F4_MAKE_UP_DESC,F5_MAKE_UP_DESC,F6_MAKE_UP_DESC,F7_MAKE_UP_DESC,F8_MAKE_UP_DESC,F9_MAKE_UP_DESC,F1_BRIDGE_TAP_OFFSET_DESC,F2_BRIDGE_TAP_OFFSET_DESC,F3_BRIDGE_TAP_OFFSET_DESC,F4_BRIDGE_TAP_OFFSET_DESC,F5_BRIDGE_TAP_OFFSET_DESC,F6_BRIDGE_TAP_OFFSET_DESC,F7_BRIDGE_TAP_OFFSET_DESC,F8_BRIDGE_TAP_OFFSET_DESC,F9_BRIDGE_TAP_OFFSET_DESC,F1_LOAD_COIL_TYPE,F2_LOAD_COIL_TYPE,F3_LOAD_COIL_TYPE,F4_LOAD_COIL_TYPE,F5_LOAD_COIL_TYPE,F6_LOAD_COIL_TYPE,F7_LOAD_COIL_TYPE,F8_LOAD_COIL_TYPE,F9_LOAD_COIL_TYPE,F1_PAIR_GAIN_TYPE,F2_PAIR_GAIN_TYPE,F3_PAIR_GAIN_TYPE,F4_PAIR_GAIN_TYPE,F5_PAIR_GAIN_TYPE,F6_PAIR_GAIN_TYPE,F7_PAIR_GAIN_TYPE,F8_PAIR_GAIN_TYPE,F9_PAIR_GAIN_TYPE,MLT_DISTANCE,HOUSE_NUMBER,STREET_NAME,UNIT,FLOOR,BUILDING,COMMUNITY,STATE_CODE

The loop make-up txt file would appear as follows, the commas separate the fields:

```
06-19-2000,CHNDAZMA,,25,1330P,,,,,,,,,1086,773,,,,,,,,,X 1330 W PALO VERDE DR,F
1843 W ALAMO DR,,,,,,,,,24NL 23.810kf ,24NL
7.016kf,,,,,,,,,,,,,H88,,,,,,,,,NO_PG,NO_PG,,,,,,,,,34800,1846,W ALAMO
DR,,,,,
06-19-2000,CHNDAZMA,,25,1330P,,,,,,,,,1086,773,,,,,,,,,X 1330 W PALO VERDE DR,F
1843 W ALAMO DR,,,,,,,,,24NL
7.016kf,,,,,,,,,,,,,H88,,,,,,,,,NO_PG,NO_PG,,,,,,,,,34800,1846,W ALAMO
DR,,,,,
06-19-2000,CHNDAZMA,,IPG1,1960D,,,,,,,,,1825,355,,,,,,,,,X 1960 N DOBSON
RD,2019 W LEMON TREE PL 1174,,,,,,,,,26NL 0.760kf 19NL 0.020kf ,26NL
0.165kf 24NL 0.802kf,,,,,,,,,,,,,ISLC96,NO_PG,,,,,,,,,2019,W
LEMON TREE
```

PL, 1174, , , ,

Data from the RLD tool can be downloaded into an Excel spreadsheet or a database provided by the Co-Provider. The format of the text files will remain constant.

Accessing the RLD tool for loop make-up information

The following is the process Co-Providers must follow to gain access to the web-site where the RLD tool resides

- 1. To access the bulk wire center loop make-up data, the Co-Provider must have a digital certificate. A digital certificate is required for each Co-Provider employee that will be requesting the loop make-up data. If a Co-Provider employee does not currently have a digital certificate, they can obtain one by requesting an id from their Account Manager.**
- 2. The Co-Provider must provide their Account Manager with the names and telephone numbers of their employees who will be accessing the loop make-up files. The employees' e-mail address is optional.**
- 3. The account manager must establish the necessary permissions for the Co-Provider to access the loop make-up files.**
- 4. Once the permissions are established, the Co-Provider employees can access the loop make-up data by accessing <http://ecom.uswest.com> and then clicking on the "Get a Certificate" link. (NOTE: When the Co-Provider employee does subsequent log ins, they will choose the "I Have a Certificate" link.) This will display all of the sites available to that Co-Provider employee including the Raw Loop Data, "rld", site.**
- 5. Click on the Raw Loop Data site and a list of all the Qwest wire centers in alphabetical order by CLLI will be returned.**
- 6. Click on the desired CLLI and the raw data file for that wire center will be returned.**
- 7. The file is an ASCII text file that can be downloaded by "cut" and "paste" commands. The Co-Providers can download and save the files according to their preferences.**

LINE SHARING PROVISIONING (NON-DESIGN PROCESS FLOW)

This unbundled element service is installed using a basic "lift and lay" procedure on an existing POTS customer. On or before the service order Due Date, U S West Central Office Personnel "lift" the loop from its current termination and "lays" it on a new termination (POTS Splitter) connecting to the Co-Provider's equipment based on data contained on the FOMS output report.

IN ADDITION:

- 1) Central Office Personnel will perform a load coil detection test utilizing a 77S or equivalent test set.
- 2) If a load coil is detected the Central Office Personnel will notify LPC and request a ticket number. Central Office Personnel will not place cross connects until the load coil jeopardy is resolved by the LPC.
- 3) If load coil detection test is negative Central Office Personnel will "cut in" the POTS Splitter per POTS service order using "lift and lay" procedure.
- 4) Central Office Personnel will verify that dial tone is leaving at the protector and "SCM" the order in Switch/FOMS.
- 5) Jeop Codes are: A6-Qwest wiring/inventory issue A7-Splitter not stenciled correctly A8-Splitter not connected on CLEC side A9-Load coils

POTS SPLITTER MISCELLANEOUS EQUIPMENT CODE BREAK-DOWN

OUTSIDE CLEC SPACE		INSIDE CLEC SPACE	
Definition of ME (miscellaneous equipment) for splitter assignment in Switch/FOMS splitter is: me Z99.0100192.05.02-002		Definition of ME (miscellaneous equipment) for splitter assignment in Switch/FOMS splitter is: me Z99.alt01.1	
Z99	CLEC id	Z99	CLEC id
0100192	Floor and relay rack	alt01	cable name
05	Bay	1	cable count
02	Shelf		
002	Port		
Delimiters of periods will separate elements with the exception of shelf and port id, a dash will separate these last two elements. Z99.0100192.05.02-002		Delimiters of periods will separate elements. Z99.alt01.1	
The frame and frame coordinates will be noted as a permanent remark such as: F03 1G 1H		The frame and frame coordinates will be noted as a permanent remark such as: FO3 B10 C11	
F03 designates the frame, 1G is the vertical and horizontal frame location of the VOICE connection and 1H is the vertical and horizontal frame location of the VOICE/DATA connection.		F03 designates the frame, B10 is the vertical and horizontal frame location of the voice connection and C11 is the vertical and horizontal location of the voice/data connection. The frame blocks will be labeled VOICE AND VOICE/DATA.	

NOTE 1: It is extremely important that the Office Equipment (OE) is connected to the Voice side of the Splitter and that the facility (cable pair) is connected to the Voice/Data side of the Splitter. If the cross connect terminations are reversed, dial tone will still be detected at the protector but data will not be passed.

NOTE 2: When splitter is located outside the CLEC space, USW provisions and maintains the splitter as in virtual collocation.

LINE SHARING MAINTENANCE (NON-DESIGN PROCESS WILL BE USED TO RESOLVE THE VOICE TROUBLE.)

VOICE SERVICE TROUBLE REPORTED BY END USER AND IS ISOLATED TO USW CENTRAL OFFICE NETWORK.

Use normal trouble processes associated trouble isolation and repair of normal POTS service. Repair trouble and contact customer and close ticket.

The possible voice trouble scenarios are as follows:

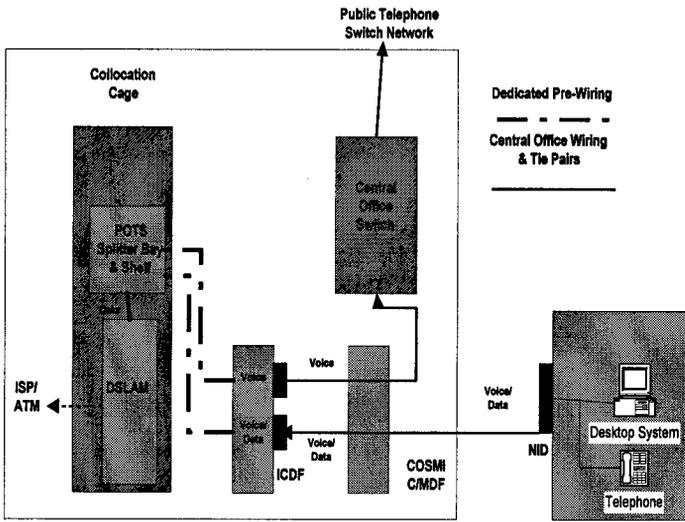
- Frame Wiring
 - Line Translation
 - Complex software
 - CLEC POTS Splitter affecting trouble
- When the POTS splitter is placed in the central office via Common Area Splitter Collocation, CLEC will order and install additional splitter cards as necessary to increase POTS splitter capacity from the initial installation. CLEC will leave one empty card in every shelf to be used for repair and maintenance until such time as the card must be used to fill the shelf to capacity.
 - U S WEST will not disconnect the data service provided to an end user over a Shared Loop unless the end user's voice service is so degraded that the end user cannot originate or receive voice grade calls and/or the end user authorizes U S WEST to disconnect the data service. US WEST will notify CLEC whenever this occurs upon voice trouble ticket closure.

DATA SERVICE TROUBLE REPORTED BY CLEC AND IS ISOLATED TO A USW CENTRAL OFFICE NETWORK

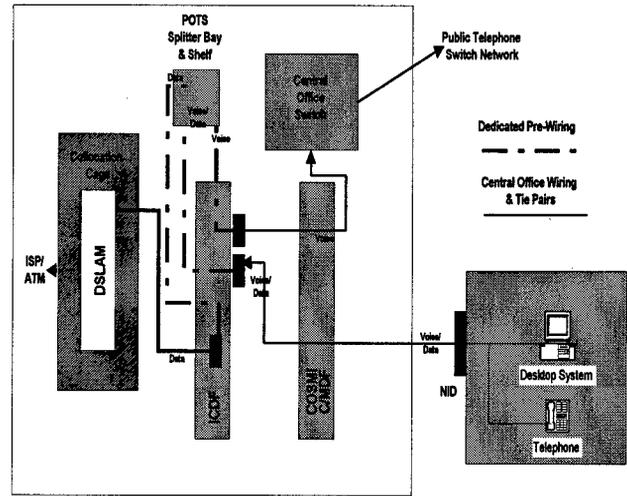
The possible data trouble scenarios are as follows:

- Frame Wiring
 - Existence of Load Coil
 - CLEC POTS Splitter affecting trouble
- When the POTS splitter is placed in the central office via Common Area Splitter Collocation, CLEC will order and install additional splitter cards as necessary to increase POTS splitter capacity from the initial installation. CLEC will leave one empty card in every shelf to be used for repair and maintenance until such time as the card must be used to fill the shelf to capacity.
 - May be called upon to do cooperative testing with a USW field Technician if they are unable to resolve facility issues.

Shared Loop (POTS Splitter resides inside Cage)



Shared Loop (CLEC-Owned POTS Splitter resides outside Cage)



Line Sharing Example¹

```

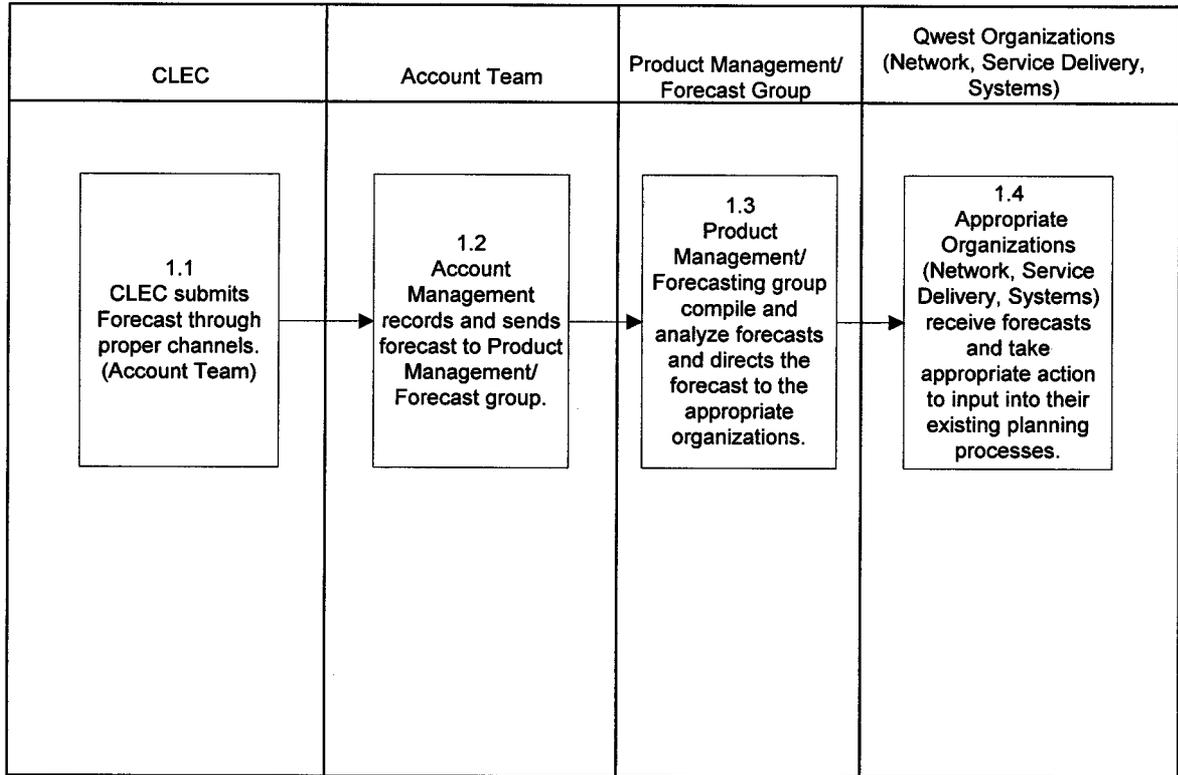
FOMS SERVICE ORDER FRAME OUTPUT - EASTERN C99999999
0
6 r          06-19-00 ch  c99999999          646-7474 06-19-00
-
1 line eqp reu    2006-01351-021
9
  line eqp   1fr   r   rnnl   f12-11-07116-3-03
c
9 tie pair in    alx01-0566          ← Tie Assignment to ICDF Frame
9
9 tie pair      f03-001              f12-12-02101-3-16
9
9 misc eqp in   me   z99.0100192.05.02-002(or z99.alt01.1) ← POTS Splitter I D
9
9 misc eqp     f03-001
9
perm rmk f03 k15 j15          ← Frame Termination Voice/Data
          ▲ ← Frame Termination Voice
tie pair in    alx01-0600          ← Tie Assignments to ICDF Frame

tie pair      f03-001              f12-12-02101-4-25

cable pr reu   16-0971              f12-12-04103-3-21          032-1-71

scid   in     3.acfu.651.646.7474 ← Circuit I D
6
4 tel/ckt reu   646-7474
6
-
7 oe-----tp-----tpdf-----mdf-----tp-----cp-----ins-----tst-----scm-----
4
7 date: 06-15-00 14:36          06-15 12:51 page 1 last
4
**fwm completed 06-15-00 14:36
1
Note: Handled in Non-Design flow ** NO ASSOCIATED WORD DOCUMENT**
    
```

Qwest's Forecasting Flow



UNBUNDLED ADSL LOOP QUALIFICATION TOOL:

For both POTS and non-POTS, a Co-Provider representative uses the facility check interface in Interconnect Mediated Access - Graphical User Interface (IMA-GUI) and Interconnect Mediated Access - Electronic Data Interchange (IMA-EDI) to obtain a real-time indication regarding the availability of the requested facilities at the customer's service address.

IMA-GUI is a real-time, human-to-computer electronic interface that allows Co-Providers access to each of the OSS functions necessary to support their customers' requests. IMA-EDI is a real-time, computer-to-computer electronic interface that allows Co-Providers access to each of the OSS functions necessary to support their customers' requests.

In IMA-GUI, the Co-Provider determines whether or not a particular unbundled loop is qualified to provide ADSL service. The Co-Provider has access to this information through the pre-order "facility availability" query. Co-Providers use a customer's address or working telephone number to identify the loop for which they would like to perform the query. It receives a "Yes" or "No" response indicating whether or not the unbundled loop is ADSL qualified along with the following ADSL associated unbundled loop information: length, existence of load coils, the number and length of bridge taps, whether service is on a Digital Loop Carrier (DLC) systems or DAMLs, and insertion loss.

The qualifying statements are as follows:

RESULTS	RESPONSE
No copper facilities available	No facilities are available, or loop is pair gain, UDC, etc.
No non-loaded facilities available	Total loop length, type of load, total length of bridge tap, and insertion loss
Non-qualified non-loaded loop	Total loop length, total length of bridge tap, and insertion loss
Qualified loop available	Total loop length, total length of bridge tap, and insertion loss

If the circuit is not qualified, Facility Check will search for another available circuit and provide information regarding that circuit.

The IMA-GUI screen shots below are examples of the screens that Co-Providers see when performing Unbundled ADSL Loop Qualification queries:

Unbundled ADSL Loop Qualification - Address Request Window

The screenshot shows a web browser window titled "Unbundled ADSL Loop Qualification Facility Availability Request Wizard". The main content area is titled "Unbundled ADSL Loop Qualification". At the top, there are two fields: "Number of DSL Lines Requested:" with a value of "1" and "Qualify working telephone numbers:" with an unchecked checkbox. Below this are two tabs: "Address Request" (selected) and "TN Request". Under the "Address Request" tab, there is a "Validated Addresses:" section with a dropdown menu showing "No Validated Address". Below this are several input fields: "SANO", "SASF", "SASN", "ROOM", "FLOOR", "BLDG", "AHN", "ROUTE", and "BOX". There are also fields for "SALOC:", "SAST:", and "SAZC:". At the bottom of the form area is a "CALASAGA:" dropdown menu and a "Select Supplemental" button. At the bottom of the window, there is a navigation bar with buttons for "Print Preview", "E-mail", "Start Over", "Next >>", "Clear", and "Finish". A warning message "Warning: Applet Window" is visible at the very bottom.

Unbundled ADSL Loop Qualification - TN Request window

The screenshot shows the same web browser window as above, but with the "TN Request" tab selected. The "Validated Addresses:" dropdown still shows "No Validated Address". The form fields are now: "Telephone No.:" with a value of "- -", "Zip Code:", and "CALASAGA:". The navigation bar at the bottom remains the same, with buttons for "Print Preview", "E-mail", "Start Over", "Next >>", "Clear", and "Finish". The "Warning: Applet Window" message is also present at the bottom.

Unbundled ADSL Loop Qualification - Response window - "N"

Unbundled ADSL Loop Qualification

Request Response

Number of Lines Requested: Quality working telephone numbers

No. of Lines	Result	Description
1	N	Circuit ID, 303-470-3553; Loop Length, 2.281; BT Length, 0; Insert Loss, 6.54; Metal, INTEGRATED PAIR GAIN; # Wires, TWO; Load Type, NONE;
1	N	Circuit ID, 303-470-3443; Loop Length, 2.281; BT Length, 0; Insert Loss, 6.54; Metal, INTEGRATED PAIR GAIN; # Wires, TWO; Load Type, NONE;

Print Preview E-mail Submit Request Clear Close

Warning: Applet Window

Unbundled ADSL Loop Qualification - Response window - "Y"

Unbundled ADSL Loop Qualification Facility Availability Request Wizard

Unbundled ADSL Loop Qualification Response

Number of Lines Requested: Quality working telephone numbers

No. of Lines	Result	Description
1	Y	Circuit ID, 69.LXda.66200...; Loop Length, 7.632; BT Length, 0; Insert Loss, 28.93; Metal, COPPER; # Wires, TWO; Load Type, NONE;

Print Preview E-mail Start Over << Previous

Warning: Applet Window

IMA RAW LOOP DATA TOOL:

Qwest is scheduled to add new functionality to Interconnect Mediated Access - Graphical User Interface (IMA-GUI) and Interconnect Mediated Access - Electronic Data Interchange (IMA-EDI) by the end of December 2000. This new functionality will enable Co-Providers to perform raw loop data queries to access raw loop data by loop segment and sub-segment. Co-Providers will use telephone numbers or address information to identify the loops for which they would like raw data information. With this new functionality, Co-providers will be able to the following:

- For each TN, receive data pertaining to the entire loop displayed with a repeating section of data pertaining to loop segments. Each segment will contain a repeating section with data for sub-segments of the loop segment.
- Receive data for performing calculations and determining whether the loop qualifies to carry DSL service.
- Query on more than one TN at a time.

The IMA-GUI screen shots below are examples of the screens that Co-Providers see when performing Unbundled Raw Loop Data queries:

Raw Loop Data Query By Address

Raw Loop Data Query By Address

Query by Address

Validated Addresses:
No Validated Address

SANO: SASF: SASN:

ROOM: FLOOR: BLDG: AHN: ROUTE: BOX:

SALOC: SAST: SAZC:

CALA/SAGA

Print Preview E-mail Start Over Next >> Clear Finish

Warning: Applet Window

Raw Loop Data Query By TNs

Raw Loop Data Query By TNs

Query by TNs

WTN:

WTN Query List:

Warning: Applet Window

Steps required for reviewing installation quality for Line Sharing Splitter Collocation sites:

- 1) Customer Application information must be checked vs. the Designed Work Package to ensure that what was engineered matches the customer desires.
 - a) Collocation Engineering group, Engineering Point of Contacts (EPOCs), and Project Management (CPMC – Collocation Project Management Center) contact.
 - b) Verification of all non-cancelled jobs will be completed by 11/30/00. This verification will involve checking the CLECs applications, changes, DWPs, and APOT data for validity. Discrepancies will be tracked and fixed in the field, working with the CLEC if needed.
- 2) Bay mounted Splitter Installations must be quality-checked via Corning (formerly Siecor) Splitter Card testing
 - a) Corning Streaker card part number is - cosk0pt20000
 - b) A spreadsheet has been generated that includes all of the Line Sharing jobs where Corning Splitters were installed. It is organized by state, then central office, then CLECs that ordered bay-mounted splitters in each central office.
 - i) This spreadsheet resides in the QTI Group Folder.
 - ii) Prior to the Corning Streakers being provided in late July and into September of 2000, manual tests were used to check the circuitry.
 - iii) Corning Streakers test continuity through the Splitter circuitry (NOT each card) by checking grounding vs. expected zero resistance – displays green LEDs if ok (card has own power source)
 - c) Timetable for completing all offices – December 31, 2000.
 - d) Initial Estimate of offices:
 - e) SICM, State Interconnection Manager, to be contacted upon streaker testing completion.

State	Total Offices	Offices Per Week over 6 weeks (11/19/00 – 12/31/00)
AZ	42	7
CO	36	6
IA	2	1
ID	7	2
MN	52	9
MT	1	1
NE	3	1
NM	15	3
OR	19	3 (4 in last week)
UT	21	4
WA	48	8
Grand Total	194	45 (average)

- 3) There is no physical circuitry check possible for “In-the-Cage” Line Sharing. There is also no special test above and beyond resistance testing for Frame-mounted splitters.
- 4) Future Jobs:
 - a) Corning Splitters will be ordered on CLEC 1st application Line Sharing jobs (per CLEC per office) by Collocation Engineering Team.
 - b) Training document to be created by 11/22/00 using manufacturer literature to provide to all Contract Liaison Managers by ICC (ICC Training Manager)

Qwest Line Sharing Walkthrough and Testing

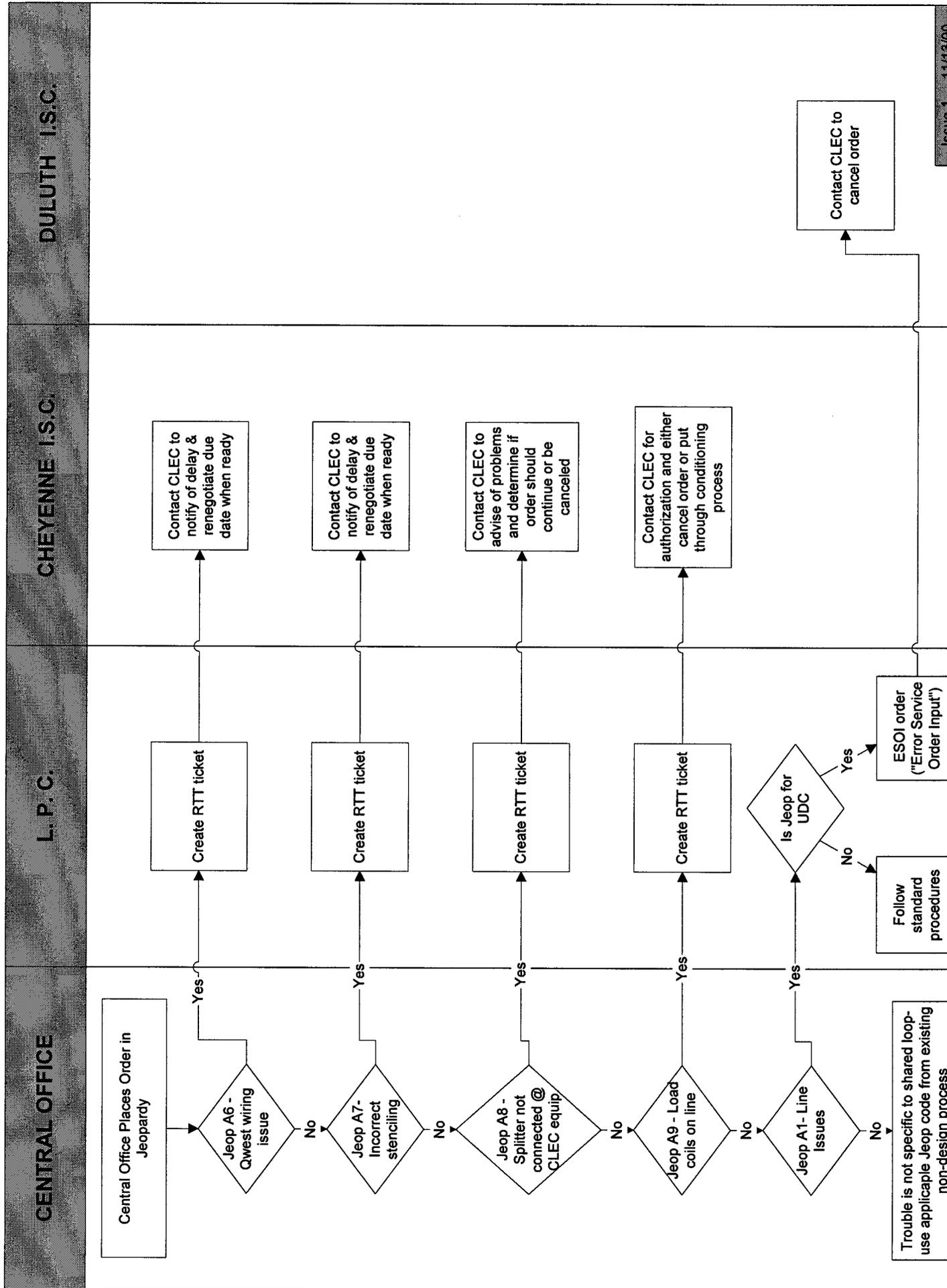
- CLECs will have the opportunity to view Splitter Installations through their current Collocation/Splitter Collocation Walkthrough process with Qwest State Interconnect Manager (SICM). This process may include:
 - Showing the CLEC their voice and voice/data frame terminations.
 - Showing the data terminations hard-wired to the CLEC DSO terminations.
 - Showing the location of the splitter bay.
 - The SICM will include Central Office Representative and a review of the Line Sharing Central Office provisioning and maintenance process will take place. This review is similar to the process that Qwest representative, Jerry Shypulski conducted with Covad during initial order placement in Minnesota. That review included:
 - Cross-Connect Appearances
 - Use of Tie Cables between Frames
 - POTS Splitter Plug-In Cards
 - Work documents for wiring by Central Office personnel
 - Relationship of wiring of voice/data, voice and data.

- For CPE Sync tests, the CLEC has the ability to conduct this test at the Demarcation point at the splitter. CPE Sync tests are the responsibility of the CLEC.

- Any trouble reports on line sharing circuit installations should follow the current process for reporting trouble that exists today. (Refer to AMSC information provided on November 9, 2000)

Shared Loop Jeopardy Process Flow

Sub Process for Overall Shared Loop Provisioning Flow



CENTRAL OFFICE

L. P. C.

CHEYENNE I.S.C.

DULUTH I.S.C.

Trouble is not specific to shared loop-use applicable Jeop code from existing non-design process

9.4 Line Sharing

9.4.1 Description

Line Sharing provides CLEC with the opportunity to offer advanced data services simultaneously with an existing end user's analog voice-grade (POTS) service on the same copper loop (the Shared Loop). CLEC will access the unused high frequency portion of the Shared Loop while the voice portion of the Shared Loop will a single copper loop referred to herein as the "Shared Loop" or "Line Sharing", by using the frequency range above the voice band on the copper loop. This be used for analog voice-grade POTS service. A frequency range will be referred to herein as the High Frequency Spectrum Network Element ("HUNE"). A POTS splitter separates the voice and data traffic and allows the copper loop to be used for simultaneous data transmission and POTS service. The voice-grade POTS service must be provided to the end user by Qwest. This section does not address line splitting, which is addressed in Section [under development].

9.4.2 Terms and Conditions

9.4.2.1 General

9.4.2.1.1 To order the HUNE, CLEC must have a POTS splitter installed in the Qwest Wire Center that serves the end user as provided for in this Section, and the end user must have dial tone originating from a U S WEST End Office Switch in the Wire Center where the Shared Loop is being requested. Qwest switch in that Wire Center. CLEC must provide the end user with, and is responsible 9.4.2.1.2 CLEC gains access to the Shared Loop at the U S WEST Wire Center through established Collocation arrangements for, the installation of a splitter, filter(s) and/or other equipment necessary for the end user to receive separate voice and data service across a single copper loop.

9.4.2.1.3 The splitter must be provided by the CLEC. The splitter must satisfy at least one of the following criteria: (a) the splitter meets the requirements for central office

9.4.2.1.2 CLEC either may purchase POTS splitters or have Qwest purchase POTS splitters on its behalf subject to full reimbursement. The POTS splitter must meet the requirements for Central Office equipment collocation set by the FCC in its March 31, 1999 order in CC Docket No. 98-147. CLEC may either: (a) purchase POTS splitters and have Qwest install them using Common Area Splitter Collocation, subject to an installation charge; or (b) have Qwest purchase POTS splitters on its behalf (subject to full reimbursement of the purchase price) and have Qwest install them using Common Area Splitter Collocation, subject to an installation charge. The POTS splitter must meet the requirements for Central Office equipment Collocation set by the FCC in its March 31, 1999 Order in CC Docket No. 98-147. Reserved for Future Use

9.4.2.1.4 The voice and data signals carried by Shared Loops are "split" by the splitter located in a U S WEST Wire Center.

~~9.4.2.1.5 The technology used by CLEC will be within the Power Spectrum Density (PSD) mask parameters set forth in ANSI T1E1.413 or other applicable industry standards. Such technologies are currently limited to ADSL and RADSL. In the future, additional technologies may be used by CLECs, to the extent those technologies meet the PSD mask parameters set forth in the above ANSI or other applicable industry standards. Spectrum management is the subject of a pending NPRM (First Report and Order Notice of Proposed Rulemaking, Deployment of Wirelines, Services Offering Advanced Telecommunications Capability—CC Docket Number 98-147). U.S. WEST will comply with Spectrum Management rules issued by the FCC and standards defined by the ANSI Standards Subcommittee. T1E1.4.~~

~~9.4.2.2 Splitter in CLEC Collocation area~~

~~9.4.2.2.1 The CLEC provided splitter shall be provided, installed and maintained by CLEC in CLEC's Collocation space.~~

~~9.4.2.2.2 U.S. WEST will either re-designate existing or install new TIE Cables in order to accommodate the capacity requests of CLEC.~~

9.4.2.1.3 CLEC may use the HUNE to provide any xDSL services that will not interfere with analog voiceband transmissions in accordance with FCC rules. Such services currently are limited to ADSL, RADSL Multiple Virtual Lines (MVL) and G lite. In the future, additional services may be used by CLEC to the extent those services are deemed acceptable for Line Sharing deployment under applicable FCC rules.

9.4.2.1.4 CLEC may not order the HUNE on a given copper loop if Qwest, or another telecommunications carrier, is already using the high frequency spectrum, unless the end user disconnects the original telecommunications carrier's high-frequency service.

9.4.2.1.5 CLEC may request, and Qwest will provide, conditioning of Shared Loops to remove load coils, excess bridged taps, or electronics subject to the charges for loop conditioning in Exhibit A. Qwest will perform requested conditioning, including de-loading and removal of excess bridged taps, unless Qwest demonstrates in advance that conditioning a Shared Loop will significantly degrade the end user's analog voice-grade POTS service. Based on the pre-order make-up of a given copper loop, CLEC can make a preliminary determination if the loop can meet the technical parameters applicable to the data service it intends to provide over the loop. After a Shared Loop is ordered and the design layout record is reviewed by CLEC, it is CLEC's responsibility to determine if the Shared Loop meets the technical parameters applicable to the data service it intends to provide over the Shared Loop.

9.4.2.1.6 Qwest will provide CLEC with access to the HUNE through POTS splitters installed in Qwest Wire Centers. POTS splitters may be installed in Qwest Wire Centers in either of the following ways at the

discretion of CLEC: (a) via the standard Collocation arrangements set forth in the Collocation Section; or (b) via Common Area Splitter Collocation as set forth in this Section. Under either option, POTS splitters will be appropriately hard-wired or pre-wired so that Qwest is not required to inventory more than two (2) points of termination.

9.4.2.1.7 CLEC will provide Qwest with non-binding, good faith, rolling quarterly forecasts for Shared Loop volumes on a Wire Center by Wire Center basis. Qwest will keep forecasts confidential and will not share forecasts with any person involved in Qwest retail operations, product planning or marketing.

9.4.2.2 CLEC Collocation Area Splitter

9.4.2.2.1 If CLEC elects to have POTS splitters installed in Qwest Wire Centers via the standard Collocation arrangements set forth in the Collocation Section, CLEC will be responsible for purchasing the POTS splitters. CLEC also will be responsible for installing and maintaining POTS splitters in its Collocation areas within Qwest Wire Centers. If CLEC elects to have POTS splitters installed in Qwest Wire Centers via the standard Collocation arrangements set forth in the Collocation Section, CLEC will either purchase the POTS splitters or have Qwest purchase the POTS splitters subject to full reimbursement of the cost of the POTS splitters plus any pass through actual vendor invoice costs, including but not limited to taxes, shipping and handling, and any similar charges assessed on Qwest by vendors in connection with the purchase of POTS splitters. The POTS splitters must meet the requirements for Central Office equipment collocation set by the FCC. CLEC will be responsible for installing and maintaining the POTS splitters in its Collocation areas within Qwest Wire Centers.

9.4.2.2.2 CLEC may designate some or all of its existing TIE Cables for use in connection with Line Sharing. Qwest will perform any necessary TIE Cable reclassifications, frame re-stenciling, and related work for which it is responsible and that is required to provision Line Sharing. Charges will apply pursuant to this Section- Exhibit A of the Agreement.

9.4.2.2.3 Two ITPs and two TIE Cables will be needed to connect POTS splitters to the Qwest network. One ITP will carry both voice and data traffic from the COSMIC/MDF loop termination, to an appropriate ICDF. From this frame, one TIE Cable will carry both voice and data traffic to the POTS splitter located in CLEC's Collocation area. The voice and data traffic will be separated at the POTS splitter. The data traffic will be routed to CLEC's network within its Collocation area. The voice traffic will be routed to the COSMIC/MDF switch termination, via the ICDF, using a second TIE Cable and a second ITP.

9.4.2.2.3 Interconnection Tie Pairs and TIE Cables. There are two

~~types of ITP arrangements for connecting the Qwest network to the CLEC provided splitter, depending on whether the CLEC elects to use an ICDF or direct connections.~~

9.4.2.2.3.1 CLEC may elect to use an ICDF. In this instance, one ITP carries the combined voice/data signal from the COSMIC/MDF loop termination to the ICDF and a second ITP carries the voice only signal from the ICDF to the COSMIC/MDF switch termination. For each Shared Loop, two pairs of the TIE cable must be used: one pair of the TIE Cable will carry the voice/data from the ICDF to the CLEC provided splitter, and the second pair will carry the voice-only signal from the CLEC provided splitter to the ICDF.

9.4.2.2.3.2 CLEC may elect to use direct connections between the CLEC-provided ~~Splitter~~splitter and the COSMIC/MDF. In this instance, Qwest will provide one TIE Cable between each module of the COSMIC/MDF and the CLEC-provided splitter. One pair in the TIE Cable will carry the combined voice/data signal from the COSMIC/MDF loop termination to the CLEC-provided splitter in the CLEC's Collocation Space. A second pair in the TIE Cable will carry the voice-only signal from the CLEC-provided splitter to the switch termination on the COSMIC/MDF. These TIE Cables will be dedicated to the CLEC's use, and, as a result, the full cost of the necessary Mechanized Engineering and Layout for Distributing Frame (MELD) run, cable placement, and cable termination, and associated COSMIC/MDF hardware to terminate a TIE Cable on each outside plant and switch equipment module of the COSMIC/MDF will be assessed to CLEC in accordance with Section 8 (Collocation). Qwest will provide, for each Shared Loop, the TIE Cable pair assignments.

9.4.2.2.4 The demarcation points between Qwest's network and CLEC's network will be the place where the combined voice and data loop is connected to the ICDF, or where CLEC chooses a direct connection to the COSMIC/MDF, where the combined voice and data loop originates from CLECs Collocation-

9.4.2.3 Collocation

~~Splitter in Common Area of Central Office~~Common Area Splitter

~~9.4.2.3.1 If CLEC elects to have POTS splitters installed in Qwest Wire Centers via Common Area Splitter Collocation, the POTS splitters will be installed in those Wire Centers in one of the following locations: (a) in a relay rack as close to CLEC's DSO termination points as possible; (b) on an ICDF to the extent such a frame is available; or (c) where options (a) and (b) are not available, or in Wire Centers with network access line counts of less than 10,000 on the Cosmic/MDF or in some other appropriate location such as an existing Qwest relay rack or bay. CLEC~~

~~either may purchase POTS splitters or have Qwest purchase POTS splitters on its behalf subject to full reimbursement. Qwest will be responsible for the installation and maintenance of the POTS splitters, but CLEC will lease the POTS splitters to Qwest at no cost. Qwest may co-mingle the POTS splitters shelves of different CLECs in a single relay rack or bay. Qwest will not be responsible for shortages of POTS splitters, or Qwest's inability to obtain POTS splitters from vendors, if acting as purchasing agent on behalf of CLEC. If CLEC elects to have POTS splitters installed in Qwest Wire Centers via Common Area Splitter Collocation, the POTS splitters will be installed in those Wire centers in one of the following locations: (a) in a relay rack as close to CLEC's DS0 termination points as possible; (b) on an ICDF to the extent such a frame is available; or (c) where options (a) and (b) are not available, or in Wire Centers with network access line counts of less than 10,000, on the Cosmic/MDF or in some other appropriate location such as an existing Qwest relay rack or bay. CLEC either may purchase POTS splitters or have Qwest purchase the POTS splitters subject to full reimbursement of the cost of the POTS splitters plus any pass through actual vendor invoice costs, including but not limited to, taxes, shipping and handling. The POTS splitters must meet the requirements for Central Office equipment collocation set by the FCC. Qwest will be responsible for installing and maintaining the POTS splitters, but CLEC will lease the POTS splitters to Qwest at no cost. Qwest may co-mingle the POTS splitters shelves of different CLECs in a single relay rack or bay. Qwest will not be responsible for shortages of POTS splitters or Qwest's inability to obtain POTS splitters from vendors, if acting as purchasing agent on behalf of CLEC.~~

9.4.2.3.2 Two ITPs and four TIE Cables will be needed to connect the POTS splitters to the Qwest network. One ITP will carry both voice and data traffic from the COSMIC/MDF loop termination, to an appropriate ICDF. From this frame, one TIE Cable will carry both voice and data traffic to the POTS splitter. The voice and data traffic will be separated at the POTS splitter, and the separated voice and data traffic will be routed to the ICDF via separate TIE Cables (i.e., the second and third TIE Cables). At the ICDF, the data traffic will be routed to CLEC's Collocation area via a fourth TIE Cable, and the voice traffic will be routed to the COSMIC/MDF switch termination, via a second ITP. CLEC can also elect a direct connect option pursuant to section 8.3.1.11.2.

9.4.2.3.3 Qwest will provide the cabling used for TIE Cables between the POTS splitter and the ICDF. The POTS Splitter Tie Cable Connection Charge will apply.

9.4.2.3.5 The demarcation point will be at the splitter end of the TIE-cable connecting the CLEC collocation and the splitter.

9.4.2.3.4 The demarcation point between Qwest's network and CLEC's network will be at the place where the data loop leaves the POTS splitter on its way to CLEC's Collocated equipment.

9.4.3 Line Sharing Deployment

9.4.3.1 New applications for installation of POTS splitters will be processed in the manner outlined in the Collocation Section for Cageless or Common Collocation.

9.4.3.2 CLEC may submit applications for additional DSO TIE Cable terminations and/or reclassifications to support Line Sharing. Qwest will process any such applications for augmentation and/or reclassification of DSO TIE Cable terminations under intervals as outlined below in this Section.

9.4.3.3 Augmentation intervals will be thirty (30) days, subject to the following terms and conditions identified below:

9.4.3.3.1 CLEC will provide a quarterly forecast to Qwest in advance of placing applications. Upon receipt of the initial forecast, the interval for augments forecasted in the first month will be sixty (60) days. The interval for each subsequent month will be thirty (30) days.

9.4.3.3.2 The forecast must include, at a minimum, the following:

- (a.) The Month in which each application will be sent;
- (b.) The Wire Center by common name for each application;
- (c.) Type of terminations required for each level of connection;
and
- (d.) Whether the termination types are the same as existing or, if different, what numbering is requested on the block.

9.4.3.3.3 The interval for reclassification will be fifteen (15) days, subject to the following terms and conditions. If requested reclassification engineering results in additional requirements for DSO TIE Cable termination or TIE Cable support, the interval will default to thirty (30) days.

9.4.3.3.4 If an application for augmentation and/or reclassification is not included in the above forecast, the application will default to the augmentation interval found in the Collocation Section.

9.4.3.3.5 In the event CLEC, or Qwest acting as purchasing agent for CLEC, is unable to procure any equipment needed to complete all work required by applications submitted to Qwest by CLEC, including but not limited to, POTS splitters or cabling, Qwest will install the subject equipment when it becomes available. If Qwest is acting as purchasing agent for CLEC and is unable to procure equipment to complete all work in a timely manner, CLEC may provide Qwest with the subject equipment. CLEC will be notified by Qwest of the required material on-site date for the affected Wire Center(s) and CLEC will have two (2) business days to determine if it will be able to provide the subject equipment in advance of the material on-site date. If CLEC does not notify Qwest in writing of its intent to provide the subject equipment within this two (2) business day

period, or if the subject equipment in a timely manner. Qwest will install the subject equipment when available.

9.4.4 Rate Elements

9.4.4.1 Recurring Rates for Shared Loop

9.4.4.1.1 Shared Loop Charge - A monthly recurring charge for the use of the Shared Loop will apply.

9.4.4.1.2 OSS Charge - A monthly recurring charge to recover upgrades to Qwest Operational Support Systems required to accommodate Line Sharing will apply.

9.4.4.2 Non-Recurring Rates for the Shared Loop

9.4.4.2.1 Basic Installation Charge for Shared Loop – A non-recurring charge for each Shared Loop installed will apply.

9.4.4.2.2 If CLEC requests conditioning of a Shared Loop, a non-recurring conditioning charge specified in Exhibit A will apply for removal of load coils and excess bridged taps. If the conditioning significantly degrades the voice services on the loop to the point it is unacceptable to the end user, CLEC shall pay the conditioning charge in Exhibit A to recondition the loop.

9.4.4.3 Non-Recurring Rates for Tie Cable Reclassification

9.4.4.3.1 Reclassification Charge – A non-recurring charge will apply, based on time and materials for reclassification of existing TIE cable capacity, by among other things, reclassification of existing TIE cables for Line Sharing, frame restenciling, and any other work performed between CLEC's collocation and the intermediate distribution frame required to provision Line Sharing.

9.4.4.4 Non-Recurring Rates for Maintenance and Repair

9.4.4.4.1 Trouble Isolation Charge – A non-recurring charge for Trouble isolation will be applied in accordance with the Support Functions – Maintenance and Repair Section.

9.4.4.4.2 Additional Testing – CLEC may request Qwest to perform additional testing, and Qwest may decide to perform the requested testing on a case-by-case basis. A non-recurring charge will apply in accordance with Exhibit A.

9.4.4.5 Rates for Common Area Splitter Collocation

9.4.4.5.1 Splitter Shelf Charge – This charge recovers installation and ongoing maintenance associated with splitter installation, bay installation, lighting costs, aerial support structures and grounding charge for splitters

either in a bay, on the IDF, or on the MDF/COSMIC. These are both recurring and non-recurring charges.

9.4.4.5.2 POTS Splitter Charge – A non-recurring charge will apply for the cost of each POTS splitter purchased by Qwest on behalf of CLEC. This charge will cover the cost of the POTS splitter, plus any associated costs incurred by Qwest to order the POTS splitter.

9.4.4.5.3 Engineering – A non-recurring charge will apply for the planning and engineering associated with placing POTS splitters in the Central Office, either in a bay, on the IDF, or on the MDF/COSMIC.

9.4.4.6 POTS Splitter TIE Cable Connections Charge – A non-recurring charge will apply for the cost of each TIE Cable connected to the POTS splitters. This charge will cover both the TIE cables and associated blocks per 100 pair between the POTS splitter and the intermediate distribution frame or splitter bay.

9.4.4.7 The rates for each of the aforementioned Line Sharing rate elements are set forth in Exhibit A. All of these rates are interim and will be subject to true up based on either mutually agreed to permanent rates or permanent rates established in a Line Sharing cost proceeding conducted by the Commission. In the event interim rates are established by the Commission before permanent rates are set, the interim rates set forth in Exhibit A will be changed to reflect the interim rates set by the Commission; however, no true up will be performed until mutually agreed to permanent rates are established or permanent rates are set established by the Commission.

9.4.5 Ordering Process

9.4.5.1 Shared Loop

9.4.5.1.1 As a part of the pre-order process, CLEC can access loop characteristic information through the Loop Information Tool described in the Support Functions Section. CLEC will determine, in its sole discretion and at its risk, whether to order the HUNE across any specific copper loop. Qwest and CLEC will work together to modify the Loop Information Tool to better support Line Sharing.

9.4.5.1.2 The appropriate Splitter Meet Points dedicated to the POTS splitters will be provided on the Line Sharing Actual Point of Termination (APOT) from one day prior to the ready for service date or at an interval ordered by the Commission or further agreed to by Qwest and CLEC in writing. CLEC will provide on the LSR, the appropriate frame terminations which are dedicated to POTS splitters. Qwest will administer all cross connects/jumpers on the COSMIC/MDF and ICDF.

9.4.5.1.3 Basic Installation “lift and lay” procedure will be used for all Shared Loop orders. Under this approach, a Qwest technician “lifts” the Loop from its current termination in a Qwest Wire Center and “lays” it on a new termination connecting to CLEC’s Collocated equipment in the same Wire Center.

9.4.5.1.4 Qwest will provision the Shared Loop within the standard unbundled loop provisioning interval at least 90% of the time, as defined in Exhibit C.

9.4.5.1.5 CLEC shall not place orders for Shared Loops until all work necessary to provision Line Sharing in a given Qwest Wire Center, including, but not limited to, POTS splitter installation and TIE Cable reclassification or augmentation has been completed.

9.4.5.2 Common Area Splitter Collocation

9.4.5.2.1 This Section only applies to situations where CLEC orders placement of the splitter in a common area.

9.4.5.2.2 New POTS splitter shelves may be ordered via a single Collocation application form and quote preparation fee. Standard intervals as contained in Exhibit C will apply.

9.4.5.2.3 New POTS splitter shelves may be ordered with an existing Collocation. CLEC must submit a new Collocation application form and the applicable fee to Qwest. Standard Cageless and/or Common Collocation intervals as contained in Exhibit C will apply.

9.4.5.3 TIE Cable Reclassification

9.4.5.3.1 To the extent CLEC has existing DSO TIE Cable terminations extending from an intermediate distribution frame to its Collocation space, CLEC may request that these existing DSO TIE Cable terminations be reclassified for use with Line Sharing. CLEC shall request such reclassification through the same process used to order new terminations.

9.4.6 Repair and Maintenance

9.4.6.1 Qwest will allow CLEC to access Shared Loops at the point where the combined voice and data loop is cross-connected to the POTS splitter.

9.4.6.2 Qwest will be responsible for repairing voice services provided over Shared Loops and the physical line between network interface devices at end user premises and the point of demarcation in Qwest Wire Centers. Qwest will also be responsible for inside wiring at end user Premises in accordance with the terms and conditions of inside wire maintenance agreements, if any, between Qwest and its end users. CLEC will be responsible for repairing data services provided on Shared Loops. Qwest and CLEC each will be responsible for maintaining its equipment. The entity that controls the POTS splitters will be responsible for their maintenance.

9.4.6.3 Qwest and CLEC will continue to develop repair and maintenance procedures for Line Sharing and agree to document final agreed to procedures in a methods and procedures document that will be made available on Qwest's

website: <http://www.uswest.com/wholesale/productsServices/irrg/TABL1-0.html>. In the interim, Qwest and CLEC agree that the following general principles will guide the repair and maintenance process for Line Sharing.

9.4.6.3.1 If an end user complains of a voice service problem that may be related to the use of a Shared Loop for data services, Qwest and CLEC will work together with the end user to solve the problem to the satisfaction of the end user. Qwest will not disconnect the data service provided to an end user over a Shared Loop without the written permission of CLEC unless the end user's voice service is so degraded that the end user cannot originate or receive voice grade calls and/or the end user authorizes Qwest to disconnect the data service. Qwest will notify CLEC whenever this occurs upon voice trouble ticket closure.

9.4.6.3.2 Qwest and CLEC are responsible for their respective end user base. Qwest and CLEC will have the responsibility for resolution of any service trouble report(s) initiated by their respective end users.

9.4.6.3.3 Qwest will test for electrical faults (e.g. opens, and/or foreign voltage) on Shared Loops in response to trouble tickets initiated by CLEC. When trouble tickets are initiated by CLEC, and such trouble is not an electrical fault (e.g. opens, shorts, and/or foreign voltage) in Qwest's network, Qwest will assess CLEC the TIC Charge.

9.4.6.3.4 When trouble reported by CLEC is not isolated or identified by tests for electrical faults (e.g. opens, shorts, and/or foreign voltage), Qwest may perform additional testing at the request of CLEC on a case-by-case basis. CLEC may request that Qwest perform additional testing and Qwest may decide not to perform requested testing where it believes, in good faith, that additional testing is unnecessary because the test requested has already been performed or otherwise duplicates the results of a previously performed test. In this case, Qwest will provide CLEC with the relevant test results on a case-by-case basis. If this additional testing uncovers electrical fault trouble (e.g. opens, shorts, and/or foreign voltage) in the portion of the network for which Qwest is responsible, CLEC will not be charged by Qwest for the testing. If this additional testing uncovers a problem in the portion of the network for which CLEC is responsible, Qwest will assess the appropriate miscellaneous charge.

9.4.6.4 When POTS splitters are installed in Qwest Wire Centers via Common Area Splitter Collocation, CLEC will order and install additional splitter cards as necessary to increase the capacity of the POTS splitters. CLEC will leave one unused, spare splitter card in every shelf to be used for repair and maintenance until such time as the card must be used to fill the shelf to capacity.

9.4.6.5 When POTS splitters are installed in Qwest Wire Centers via standard Collocation arrangements, CLEC may install test access equipment in its Collocation areas in those Wire Centers for the purpose of testing Shared Loops. This equipment must meet the requirements for Central Office equipment set by the FCC.

9.4.6.6 Qwest and CLEC will work together to address end user initiated repair requests and to prevent adverse impacts to the end user.

9.4.7 Other

9.4.7.1 Qwest and CLEC agree to work together to address and, where necessary and possible, find solutions for the following Line Sharing implementation issues: (i) the development of an effective phased process for handling CLEC orders for the HUNE; which reflect different end user action scenarios including but not limited to; end user changes or disconnects data service provider and/or end user orders new voice and data service simultaneously; (ii) Qwest's ability to handle the existing and forecasted volume of CLEC orders for the HUNE; (iii) Qwest's ability to make loop assignments for the existing and forecasted volume of CLEC orders for the HUNE; (iv) the ability of Qwest and CLEC to coordinate repairs; (v) the experience and education of the Shared Loop end user; (vi) CLEC's forecasts of HUNE orders; and (vii) the process for conditioning Shared Loops by removing load coils and excess bridged taps; and the ability of CLEC to order a HUNE to serve end users over fiber-fed loops, including loops comprised of digital loop carrier facilities.

Steps required for reviewing installation quality for Line Sharing Splitter Collocation sites:

- 1) Customer Application information must be checked vs. the Designed Work Package to ensure that what was engineered matches the customer desires.
 - a) Collocation Engineering group, Engineering Point of Contacts (EPOCs), and Project Management (CPMC – Collocation Project Management Center) contact.
 - b) Verification of all non-cancelled jobs will be completed by 11/30/00. This verification will involve checking the CLECs applications, changes, DWPs, and APOT data for validity. Discrepancies will be tracked and fixed in the field, working with the CLEC if needed.
- 2) Bay mounted Splitter Installations must be quality-checked via Corning (formerly Siecor) Splitter Card testing
 - a) Corning Streaker card part number is - cosk0pt20000
 - b) A spreadsheet has been generated that includes all of the Line Sharing jobs where Corning Splitters were installed. It is organized by state, then central office, then CLECs that ordered bay-mounted splitters in each central office.
 - i) This spreadsheet resides in the QTI Group Folder.
 - ii) Prior to the Corning Streakers being provided in late July and into September of 2000, manual tests were used to check the circuitry.
 - iii) Corning Streakers test continuity through the Splitter circuitry (NOT each card) by checking grounding vs. expected zero resistance – displays green LEDs if ok (card has own power source)
 - c) Timetable for completing all offices – December 31, 2000.
 - d) Initial Estimate of offices:
 - e) SICM, State Interconnection Manager, to be contacted upon streaker testing completion.

State	Total Offices	Offices Per Week over 6 weeks (11/19/00 – 12/31/00)
AZ	42	7
CO	36	6
IA	2	1
ID	7	2
MN	52	9
MT	1	1
NE	3	1
NM	15	3
OR	19	3 (4 in last week)
UT	21	4
WA	48	8
Grand Total	194	45 (average)

- 3) There is no physical circuitry check possible for “In-the-Cage” Line Sharing. There is also no special test above and beyond resistance testing for Frame-mounted splitters.
- 4) Future Jobs:
 - a) Corning Splitters will be ordered on CLEC 1st application Line Sharing jobs (per CLEC per office) by Collocation Engineering Team.
 - b) Training document to be created by 11/22/00 using manufacturer literature to provide to all Contract Liason Managers by ICC (ICC Training Manager)

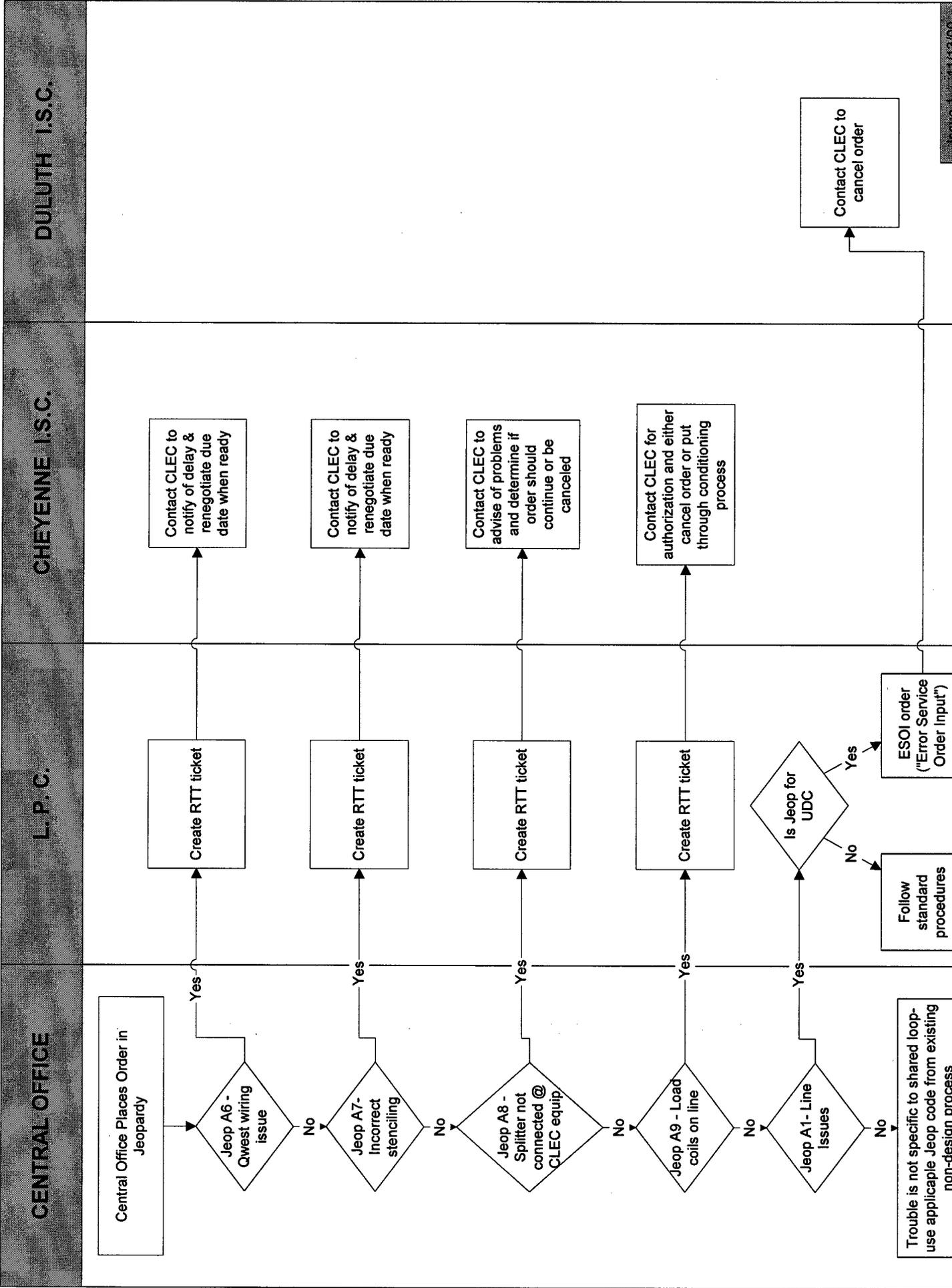
Qwest Line Sharing Walkthrough and Testing

- CLECs will have the opportunity to view Splitter Installations through their current Collocation/Splitter Collocation Walkthrough process with Qwest State Interconnect Manager (SICM). This process may include:
 - Showing the CLEC their voice and voice/data frame terminations.
 - Showing the data terminations hard-wired to the CLEC DSO terminations.
 - Showing the location of the splitter bay.
 - The SICM will include Central Office Representative and a review of the Line Sharing Central Office provisioning and maintenance process will take place. This review is similar to the process that Qwest representative, Jerry Shypulski conducted with Covad during initial order placement in Minnesota. That review included:
 - Cross-Connect Appearances
 - Use of Tie Cables between Frames
 - POTS Splitter Plug-In Cards
 - Work documents for wiring by Central Office personnel
 - Relationship of wiring of voice/data, voice and data.

- For CPE Sync tests, the CLEC has the ability to conduct this test at the Demarcation point at the splitter. CPE Sync tests are the responsibility of the CLEC.

- Any trouble reports on line sharing circuit installations should follow the current process for reporting trouble that exists today. (Refer to AMSC information provided on November 9, 2000)

Shared Loop Jeopardy Process Flow
 Sub Process for Overall Shared Loop Provisioning Flow



CENTRAL OFFICE

L.P.C.

CHEYENNE I.S.C.

DULUTH I.S.C.

Trouble is not specific to shared loop- use applicable Jeop code from existing non-design process

ESOI order
 ("Error Service Order Input")

Follow standard procedures

Contact CLEC to cancel order

Contact CLEC to notify of delay & renegotiate due date when ready

Contact CLEC to notify of delay & renegotiate due date when ready

Contact CLEC to advise of problems and determine if order should continue or be canceled

Contact CLEC for authorization and either cancel order or put through conditioning process

Qwest

Line Sharing Quality Review

Quality Review Process:

1. By 11/17/00, a report will be pulled reflecting all in-service line sharing accounts. This list will be sent to the Process Group and will be provided to Local Networks for distribution to the respective CO supervisors.
2. Between 11/21/00 and 12/4/00, all in-service accounts will be physically checked to insure cross-connections are run correctly.
3. By 12/5/00, all line sharing will have been verified.

Interim Reviews (between now and the turn-up of the EDI-based real time completion report capability): To Be Determined by 12/5/2000

Line Sharing Training Documentation

Function	# People Trained Initial	Date(s) Initial Trng Delivered	# People Trained Review	Date(s) Review Trng Delivered	# People Yet to be Trained	Target Date Training Complete	Is L/S included in standard trng path? Y/N	If not in std path, when?
LRAC	726	1/00 - 7/00	100	9/00	0	NA	Y	.
T & M	9462	1/00 - 7/00	5000	9/00	0	NA	Y	
RCHC	562	6/00-8/00	-	.	NA	.	Y	.
Screening	427	6/00-7/00	389	10/00	258	11/00	Y	.
AMSC -- (repair center)	47	1/00	42	8/00	NA	NA	Y	.
TSC -- (order centers)	4 3 2 1 7 10 62	1/00 4/00 6/00 7/00 8/00 9/00 10/00	NA	NA	0	NA	Y	.
Escalations	22	9/00	NA	NA	15	11-20/00	Y	.
Central Office	1192	3/00 - 7/00	1192	8/29/00 -- 9/13/00	0	NA	N	12/01/00
CO Eqpt. Instln. -- Qwest Empls	623	12/99 - 7/00	-	.	623	12/00	Y	.
CO Eqpt. Instln. -- Contr/Vndr	24 Mgrs (CLMs will train contractors)	11/00	NA	NA	24	11/30/00	NA	NA

BEFORE THE PUBLIC UTILITIES COMMISSION FOR THE STATE OF COLORADO

Docket No. 97I-198T

IN THE MATTER OF THE INVESTIGATION INTO U S WEST COMMUNICATIONS, INC.'S
COMPLIANCE WITH THE § 271(C) OF THE TELECOMMUNICATIONS ACT OF 1996

QWEST'S LINE SHARING SUPPLEMENT

Qwest Corporation, formerly known as U S WEST Communications, Inc., submits this Line Sharing Supplement. During the course of Workshop 3 in this docket, Qwest committed to supplement the record with additional evidence regarding line sharing. That information is attached hereto.

DATED this 17th day of November, 2000.

Respectfully submitted,

QWEST CORPORATION

By:

Kris A. Ciccolo, Reg. No. 17948
Charles W. Steese, No. 026924
1801 California Street, Suite 3800
Denver, CO 80202
(303) 672-2884

CERTIFICATE OF SERVICE

I hereby certify that an original and five copies of the above and foregoing **QWEST'S LINE SHARING SUPPLEMENT** was hand delivered this 17th day of November, 2000, to the following:

Mr. Bruce N. Smith
Colorado Public Utilities Commission
Executive Secretary
1580 Logan St., Office Level 2
Denver, CO 80203

and a copy has been hand delivered on the following:

**Joseph Molloy Colorado Public Utilities 1580 Logan St., OL-2 Denver, CO 80203	Commission	**Mana Jennings-Fader Assistant Attorney General 1525 Sherman St., 5 th Floor Denver, CO 80203
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and a copy was served electronically to each person on the e-mail distribution list for this docket.

TABLE OF ATTACHMENTS

Training:

- Line Sharing Training Documentation
- Line Sharing Provisioning (Non-Design Process Flow) 2 pages
- Line Sharing Walkthrough and Testing

Ordering:

- Manual Completion Reporting
- Qwest's Permanent Solution for Providing Line Sharing Completion Reports to CLECs
- Shared Loop Jeopardy Process Flow

Loop Qualification:

- Unbundled ADSL Loop Qualification Tool (6 pages)
- Qwest Raw Loop Data Tool (4 pages)

Forecasting:

- Forecasting Flow

Central Office:

- Installation Quality Review
- Line Sharing Quality Review
- Process for New Splitter Installation Request
- Qwest Response to Question on Initial Project Splitter Testing

- Point of Contact - Escalation for the Provisioning Center
- Unbundled Shared Loop Provisioning Center Escalation Timeframes
- Point of Contact - Escalation AMSC
- Point of Contact - Escalation for IMA
- Point of Contact - Escalation for Splitter Installation

Qwest's Permanent Solution for Providing Line Sharing Completion Reports to CLECs

Qwest's currently has an application that provides daily completion reports to the Competitive Local Exchange Carriers (CLECs) for resale services, unbundled loops, unbundled switching and interim number portability (INP), and the UNE-P. These reports are derived from daily-completed service order activities. Daily reporting of all product completions is done via files sent to the Interconnect Mediated Access - Electronic Data Interchange (IMA-EDI) and the Interconnect Mediated Access - Graphical User Interface (IMA-GUI) gateway applications.

Qwest is in the process of developing the functionality necessary to support providing line sharing loss and completion reports to CLECs on a daily basis via IMA-EDI and/or IMA-GUI. This functionality should be available to CLECs by the end of the first quarter, 2001.

With this new functionality in place, line sharing completion reports will be sent by Qwest to CLECs within 24 hours¹ (in addition to the provisioning interval) of Qwest's work completion of the following types of line sharing orders:

- conversion of an existing Qwest retail customer with a 1FR, 1FB, 1MR, 1MB, HFR, HFB or equivalent classes of service (i.e. analog voice line), to an ADSL Line sharing arrangement (a line with any other service, like ISDN, will have to be converted to one of the above listed Classes of Service prior to ordering ADSL Line sharing),
- data service conversion from one CLEC to another CLEC,
- data service conversion from Qwest (ILEC) to a CLEC,
- conversion of a shared line to an unbundled loop, and
- changing the telephone number of shared loop.

¹ Due to service order processor system limitations in Qwest's Central and Eastern regions, orders completed on Sundays in the Central region and orders completed on Saturdays and Sundays in the Eastern region are not available to CLECs until the following Tuesday.

Qwest
Manual Completion Reporting

Following are the current steps Qwest is taking to provide the Manual Completion Reports:

- 1. Generate a report nightly from one of our Central Office systems.**
- 2. Data is put in a file to manually retrieve.**
- 3. The data is then manually taken and negotiated to pull out the completion data.**
- 4. The data is then reformatted to identify each CLEC.**
- 5. We then manually pull up each completed order in another system to find the CLEC Pon # and add it to the spreadsheet.**
- 6. The data is then manually copied to e-mail and sent to the designate for each CLEC.**

Qwest
Process to be used for New Splitter installation
Steps in Overall Collocation Workflow

1. Receive order.
2. Review Collocation order for accuracy.
3. Conduct order review meeting.
4. Identify unique ACTL/CLLI (Common Language Location Identifier) for FS if demarcation is at Collocation site.
5. Provide feasibility.
6. Send feasibility to Account Team and CLEC.
7. CLEC receives feasibility.
8. Provide Quote and ACTL to Account Team and CLEC.
9. Provide ACTL to Service Delivery Center.
10. Complete engineering.
11. Preliminary APOT issued.
12. Forward preliminary APOT to appropriate organizations.
13. Preliminary APOT forwarded to Account Team and CLEC.
14. TIRKS build PA.
15. ACTL loaded.
16. N&C order to establish Billing Account Number (BAN).
17. Wait for Access Service Request (ASR) END.
18. Installation of all pre-provisioned facilities including copper demarcation.
19. Notify that installation of pre-provisioned facilities is complete.
20. Installation completion notice received by appropriate organizations.
21. TIRKS records are input in a pending add status.
22. Appropriate organizations notified of records in TIRKS.
23. TIRKS inventory put in effect status.
24. APOT will be sent to appropriate organizations.
25. APOT sent to State Interconnect Manager and Account Team.
26. CLEC receives final APOT.
27. CLEC notified Ready For Service complete.
28. Account Team provides completion package internally.
29. APOT received by State Interconnect Manager.
30. Customer is notified for final walkthrough.

**Commitment dates for these activities may vary depending on the language in the CLEC agreement.

POINTS OF CONTACT / ESCALATION: IMA

INTERCONNECT MEDIATED ACCESS - SYSTEM AVAILABILITY FOR PRE-ORDER / ORDER FUNCTIONS¹

- hours of operation² 6a.m. - 10p.m. Monday - Friday
6a.m. - 8p.m. Saturday

These hours apply to both Interconnect Mediated Access - Graphical User Interface (IMA-GUI) and Interconnect Mediated Access - Electronic Data Interchange (IMA-EDI)

WHOLESALE SYSTEMS HELP DESK (TECHNICAL / IMA SYSTEM SUPPORT)

CLECs experiencing trouble with the IMA system itself (e.g. trouble accessing IMA; trouble performing certain functions) call the Wholesale Systems Help Desk at 1-888-796-9102. The Wholesale Systems Help Desk hours of operation are as follows:

6a.m. - 8p.m. Monday - Friday
7a.m. - 3p.m. Saturday

- hours of pager support: 8p.m. - 10p.m. Monday - Friday
6a.m. - 7a.m.; 3p.m. - 8p.m. Saturday

- hours of pager support for repair and maintenance: 24/7

When a CLEC representative calls the Wholesale Systems Help Desk when the help desk is closed, the CLEC representative has the option of leaving a voicemail message. If the CLEC representative leaves a voicemail message, the Wholesale Systems Help Desk voicemail system then activates the Wholesale Systems Help Desk duty pager. This pager is always in the possession of one of the Wholesale Systems Help Desk representatives; the Wholesale Systems Help Desk representatives share the duty pager responsibilities. If the duty pager is activated between the following times:

- 1) 8-10p.m. Monday - Friday,
- 2) 6-7a.m. Saturday, or
- 3) 3-8p.m. Saturday,

the Wholesale Systems Help Desk representative that has the pager at the time will respond to the page by calling the CLEC representative back. If the duty pager is activated during the following times:

- 1) 10p.m. - 6a.m. Monday - Friday,
- 2) 12:00a.m. - 6a.m. Saturday, or
- 3) 8p.m. Saturday - 6a.m. Monday,

the Wholesale Systems Help Desk representative that has the pager at the time will not respond to the page unless the message the CLEC representative has left is in relation to repair and/or maintenance. The Wholesale Systems Help Desk duty pager supports CLECs' repair and maintenance needs 24 hours per day, seven days a week.

Regardless of when a CLEC leaves a voicemail message at the Wholesale Systems Help Desk, and regardless of the nature of the CLEC's voicemail message, a representative from the Wholesale Systems Help Desk will always follow-up with the CLEC during regularly scheduled Help Desk hours to make sure the CLEC's needs were met to the best of Qwest's ability.

ISC HELP DESK (NETWORK / INTERCONNECT SUPPORT)

CLECs in need of general interconnection support (e.g. need to check the status of an order) call the Interconnect Service Center (ISC) Help Desk at 1-888-796-9087. The ISC Help Desk hours of operation are as follows:

6a.m. - 8p.m. Monday - Friday³
7a.m. - 5p.m. Saturday⁴

¹ IMA-GUI / EDI Hours of Operation are also listed on the following Qwest Wholesale web site:

<http://www.uswest.com/wholesale/cicmp/ossHours.html>

² all times listed in this document are in Mountain Standard Time (MST)

³ 5a.m. - 7p.m. during daylight savings because of AZ

⁴ 6a.m. - 4p.m. during daylight savings because of AZ

Splitter Installation Point of Contact/Escalation

For splitter installation issues and escalation process:

- ◆ The CLEC would call in to the QWEST account team.
- ◆ For escalation within the account team – see account team hierarchy on <http://www.uswest.com/wholesale/index.html>

**CUSTOMER SERVICE INQUIRY AND EDUCATION GROUP
STATUS, QUERY, & ASSISTANCE PROCESS**

**Center Hours are 6 AM to 8 PM, Monday-Friday, 7AM – 5PM Saturday, Mountain Standard Time
(All calls after the center hours are referred to the AMSC @ 1-800-223-7881)**

<u>TIER</u>	<u>NAME, GROUP/TITLE</u>	<u>PHONE NUMBER</u>	<u>FUNCTION</u>
0	Call Center Representative	888-796-9087	LSR/Order Status, Queries on Completion, Due Dates, FOC's, Assisting with LSR Prep, Re-send FOC's/Rejects
1	Customer Service Inquiry and Education Group Representative	See product sheet for your support team list & T/N's	Missed FOC intervals, Due Date Expedites, Cut Overs, Out of Service, Emergency Cancels or Due Date Changes, Missed Due Dates, Feature Discrepancies
2	Customer Service Inquiry and Education Group Managers		Missed Commitments of Customer Service Inquiry and Education Group Reps, Assist Team with Issues and Escalations
	* <u>Duty Pager</u>	<u>303-201-4939</u>	
	Emily Mangin	303-298-2204	
	Steve Kast	303-299-0870	
	Stephanie Skarbek	303-299-0961	
	Cathy McGinness	303-298-2441	
	Ramona Zamora	303-298-2510	
	Diane Highland	303-298-2511	
	* One of the Customer Service Inquiry and Education Group managers always carries the duty pager. It is rotated to cover hours of operation.		
3	Team Leader Terry Simmons	303-298-2432 Pager 800-946-4646	Missed Commitments of Customer Service Inquiry and Education Group Managers
		PIN # 141-2923	
4	Director Ken Beck	303-896-8805 Pager 800-946-4646 PIN # 141-4032	Missed Commitments by Team Leader
5	Vice President Christie Doherty Mary Beer	303-896-0848 303-965-0984	

Account Maintenance Support Center /Wholesale Repair Escalations

Tier	Communication Repair	Numbers	Type of Service	Info To Provide
1	Initial Trouble Report/ Status/Escalation	1-800-223-7881	Type 2 Trunking HI-CAP (DS1, DS3) DSO	2/6 code or Trunk Group # or Circuit ID
2	Status/Escalation Desk	1-800-223-7881		Trouble Report Ticket Number
3	Center On-Call Coach On-Call duty rotates, please call center to have appropriate coach contacted. Tazaine Welch Carla West Rick Pryor Scott Riley TBA	1-800-223-7881 1-303-985-3717 1-303-298-3109 1-303-896-5507 1-303-299-0773 1-303-965-1179		Trouble Report Ticket Number
4	Please call the AMSC to Page if call back requested after hours Team Leader Joan Masztaler	303-896-8331		Trouble Report Ticket Number
5	Director Ken Beck Vice President Christie Doherty Escalations Mgr for VP Mary Beer Veronica Lopez	303-896-8805 1-303-896-0848 1-303-965-0984 1-303-896-0207		Trouble Report Ticket Number
6	Executive Vice-President Greg Casey	1-303-992-2787		Trouble Report Ticket Number
911 Trunks	Initial Trouble Report/ Status/Escalation	1-800-357-0911		Circuit ID or 2/6 Code

Qwest Response to COVAD Question on Splitter Testing

In June, Mike Zulevic from COVAD contacted Gerald ("Jerry") Shypulski from Qwest regarding Line Sharing splitter installation testing. In particular, Mr. Zulevic asked if streaker cards were used in the testing.

At the time of the contact by Mr. Zulevic, Qwest's installation work, to meet the CLEC-agreed to, initial rollout timeframes for Line Sharing splitter installation was well underway. In fact the work was near completion, with a targeted completion date of July 31.

Qwest was testing the splitters using a continuity test, cable pair by cable pair, to check that there were no "opens" on the cables. At the time, the manual continuity test was used in lieu of streaker card tests due to lack of availability of the streaker cards. Given the timeframes and volumes, Qwest viewed that the continuity tests provided as close to an equivalent level of testing to that of the streaker cards as was possible at the time, given the situation.

Streaker cards were not initially available on a mass basis for this deployment. Manufacturing delays experienced with the vendor were the reason for the delays in the ready availability of the streaker cards to meet the July 31 date.

Mr. Shypulski contacted Mr. Zulevic via email and advised that the streaker cards were used to test the splitters if the particular installation crew was in possession of the card. Not all installations were tested using streaker cards because not all of our installation crews had them. Where the crew did not have streaker cards, the manual continuity testing was done.

UNBUNDLED/SHARED LOOP

Customer Service Inquiry and Education Group

PRIOR TO 48 HOURS BEFORE DUE DATE

Service Affecting Problems - Refer to Retail Repair (800) 954-1211

Any Order Changes (i.e. due date change, order content change) - send supplement

FROM 48 HOURS BEFORE DUE DATE TO 72 HOURS AFTER COMPLETION

Service Affecting Problems (i.e. no dial tone, can't receive calls) - Open Provisioning ticket with call center (888) 796-9087

Non-service affecting problems (i.e. resend FOC, reject, billing, status) - Open ticket with call center (888) 796-9087

Any Order Changes - send supplement and contact call center (888) 796-9087

BEYOND ORDER COMPLETION

Any Service Affecting problems - Call Repair Service (800) 223-7881

SUPPORT TEAM CONTACTS

Manager **Stephanie Skarbek** 303-299-0961

* Duty Pager 303-201-4939

Hours: Mon-Fri. 6AM - 8PM

Sat: 7AM - 5 PM

* Duty pager is rotated to cover hours of operation

Grace Anderson 303-298-2163

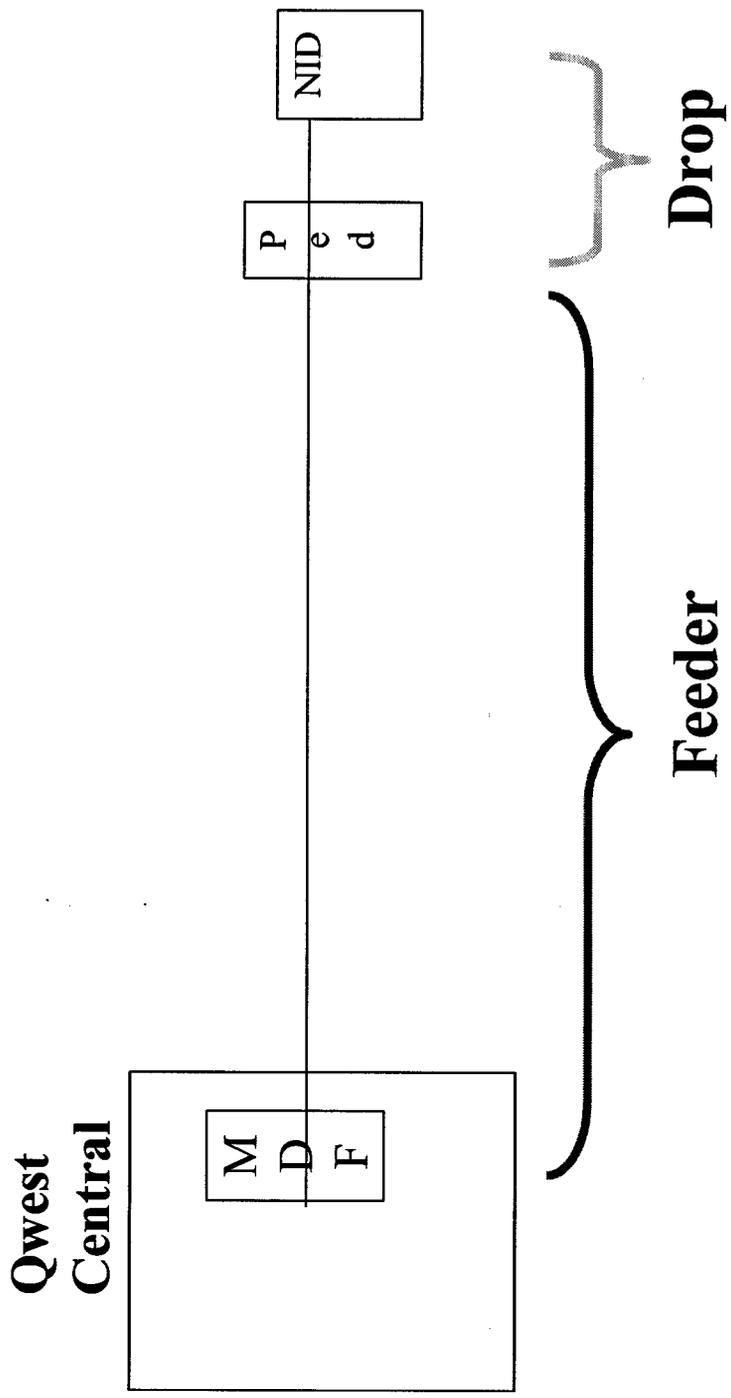
JoAnn Aranda 303-298-2125

James Armento 303-298-2160

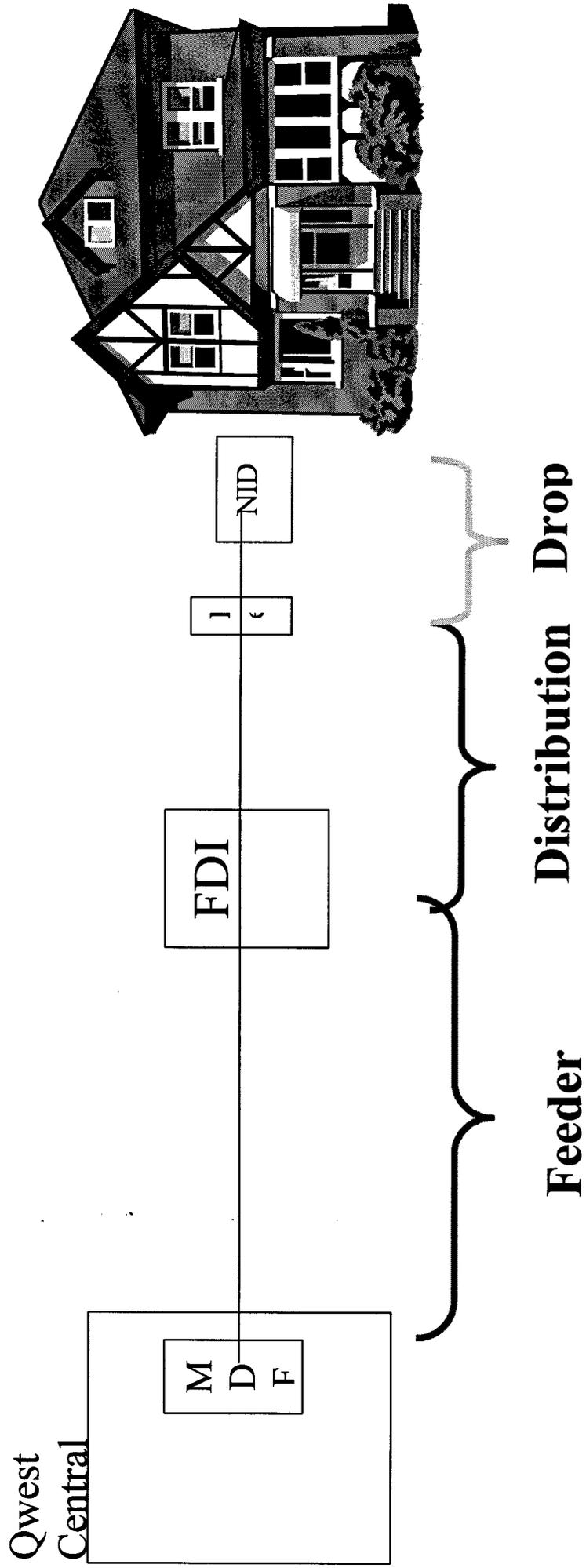
Darlene Calkins	303-298-2918
Sue Carlson	303-298-2674
Vicki Davis	303-298-3320
Vickie Douglas	303-298-3314
Carolyn Draper	303-298-2154
Marie Guerrero	303-298-2104
Lorraine Maestas	303-298-2109
Ellie Salzano	303-298-2108
Richard Stewart	303-298-2158

Common Loop Architectures:

Central Office Feed

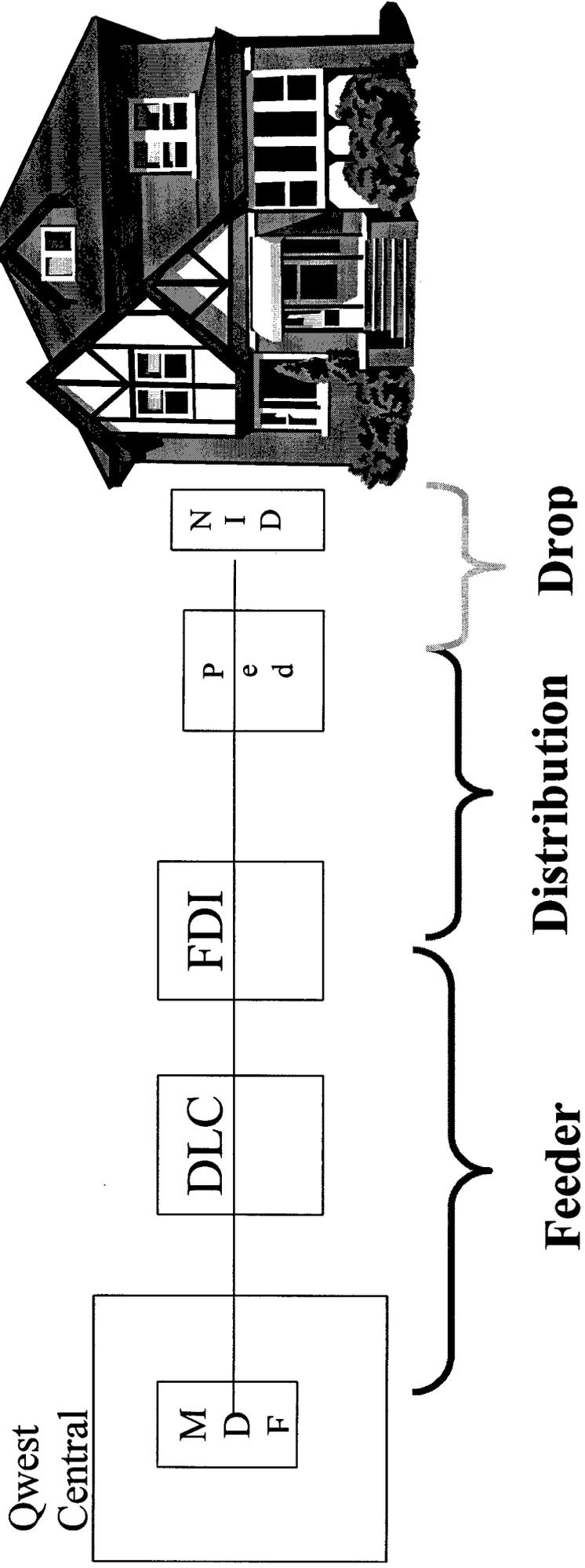


Common Loop Architectures: Loop with Feeder Distribution Interface (FDI)



Common Loop Architectures

Loop with Digital Loop Carrier (DLC)



INDEX OF EXHIBITS

DESCRIPTION

EXHIBIT NUMBER

Unbundled Dark Fiber Process Flows
Pricing and Rating Diagrams
Common Loop Architectures

KAS-1
KAS-2
KAS-3

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF COLORADO
Docket No. 97I-198T

IN THE MATTER OF THE INVESTIGATION INTO U S WEST COMMUNICATIONS,
INC.'S COMPLIANCE WITH § 271(C) OF THE TELECOMMUNICATIONS ACT OF 1996.

**SUPPLEMENTAL AFFIDAVIT OF KAREN A. STEWART
EMERGING SERVICES UPDATES FOR
COLORADO WORKSHOP NO. 4
ON DECEMBER 12-15, 2000**

DECEMBER 5, 2000

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I. IDENTIFICATION OF AFFIANT

My name is Karen A. Stewart. I am a Director in the Qwest Corporation (Qwest), formerly known as U S WEST Communications, Inc. Policy And Law organization.¹ My office is located at 421 SW Oak Street, Portland, Oregon. I am the same Karen A. Stewart that testified in the Emerging Services workshop on October 30-November 3, 2000.

II. PURPOSE OF AFFIDAVIT

The purpose of this affidavit is to respond to several open issues that resulted from the Emerging Services workshop held on October 30-November 3, 2000. For ease of review, I have used the COIL issues list order to provide additional information. In the Line Sharing section, I reference the Qwest line sharing filing that was filed and distributed to the parties in this proceeding on November 17, 2000. In this affidavit, I report all progress Qwest has made on its takebacks on the COIL issues. The issues that do not appear fall into one of the following categories:

1. Impasse,
2. Addressed in Jean Liston's affidavit focusing on xDSL loop issues,
3. There was no Qwest takeback on the issue (all of the General, Packet Switching and Subloop issues fall into this category), or

¹ Qwest Corporation is the successor to U S WEST communications, Inc. Qwest filed an Authority to Transact Business application with the Commission on July 6, 2000. That application is pending. Nevertheless, given that Qwest's principal

1 4. Qwest is still working on the takeback related to the issue.

2
3 **III. DARK FIBER**

4
5 **DF-14&15 - Should dark fiber leased by Qwest be a UNE?**

6 At the October 31 – November 3 workshop, an issue arose regarding whether
7 Qwest must unbundle fiber it leases from third parties, including affiliates. The
8 question is largely academic given that in Colorado Qwest leases only a very
9 minimal amount of dark fiber from third parties, and it leases no dark fiber from
10 any of its affiliates, including Qwest Communications Corporation (QCC), which
11 owns classic Qwest's network.² Moreover, Qwest has no duty to unbundle
12 leased dark fiber for several reasons.

13
14 First, the FCC has made very clear that 271 proceedings are not appropriate fora
15 for creating new obligations.³ There is no unbundling obligation for leased dark
16 fiber in existence. Indeed, it does not appear that the exact question has never
17 arisen directly in an FCC proceeding or judicial opinion.

18

place of business is in Colorado, and that the name change is effective there,
this pleading has been filed under the name of Qwest.

² See *UNE Remand Order* ¶325 (defining dark fiber as fiber that “does not have electronics on either end of the dark fiber segment to energize it to transmit a telecommunications service”).

³ In its *Texas 271 Order*, the FCC rejected calls for new general obligations and interpretations as “irreconcilable with this statutory scheme.” *Texas 271 Order* ¶24. The FCC relied on the limited statutory timeframe for 271 proceedings, the need for certainty of obligations in order to incent BOCs to comply with the checklist, and the FCC's authority to fix a point in time at which the BOC's 271 obligations are determined. *Id.* ¶¶23-27.

1 Second, leased dark fiber cannot meet the “impair” test for unbundling.⁴ The
2 FCC’s “impair” test asks whether, considering the availability of alternative
3 elements outside the incumbent’s network, lack of access to that element
4 materially diminishes the requesting carrier’s ability to provide the services it
5 seeks to offer.” *UNE Remand Order* ¶ 51. If dark fiber has been leased by
6 Qwest, then it is available, by definition, outside its network. Therefore, leased
7 dark fiber does not meet the impair test. In other words, if Qwest can lease it, so
8 can CLECs.

9

10 Third, leased dark fiber is inconsistent with the FCC’s TELRIC pricing standard.
11 The FCC has interpreted section 252 to mandate UNEs be leased at TELRIC
12 rates. Applied to dark fiber Qwest might lease for itself, such rates would be
13 confiscatory, violate section 252, and probably the takings clause of the
14 Constitution. Intuitively, TELRIC rates would be less than lease rates. That
15 means Qwest would be forced to lease CLECs dark fiber it leases from others at
16 a loss. Section 252(d)(1), which expressly mandates that UNE rates allow
17 Qwest to recover its costs and a reasonable profit, would be violated if it were
18 forced to sublease dark fiber as a UNE. In addition, TELRIC rates for leased
19 dark fiber would not constitute just compensation for a government taking.

20

21 Finally, a duty to unbundle leased dark fiber will unduly trammel the rights of the
22 third parties who may be leasing such fiber to Qwest. Such leases often prohibit

⁴ Indeed, leased dark fiber is not even a “network element,” so the unbundling question is beside the point. This common sense conclusion is supported by the little FCC guidance that exists on this point. In the *First Report and Order on Local Competition*, the FCC implied that, for an asset to be a network element, the BOC must have title to the asset: “We clarify that title to unbundled network elements will not shift to requesting carriers.” *Local Competition First Report and Order*, para. 268 n. 573. The FCC also stated that unbundling “does not relieve the incumbent LEC of the duty to maintain,

1 Qwest from unbundling by proscribing subleases or assignments or the like. This
2 of course makes economic sense; the owner of the fiber likely will have more
3 fiber it would like to lease, and that legitimate desire could be thwarted by
4 requiring Qwest to unbundle at TELRIC prices dark fiber the owner has leased to
5 Qwest.

6

7 All of these factors mitigate against requiring Qwest to make dark fiber that it
8 leases from a third party available to CLECs as a UNE.

9

10 **DF-13 - CLEC DF forecasts.**

11 CLECs requested Qwest to accept non-binding forecasts for dark fiber. Qwest
12 proposed the following language on this point in the initial emerging services
13 workshop:

14 9.7.2.2 CLEC may provide good faith, non-binding forecasts
15 of UDF needs to Qwest. Qwest shall have no duty to consider or use
16 such forecasts, nor shall a failure by Qwest to consider or use such
17 forecasts give rise to any liability on the part of Qwest.

18

19 See Exhibit 3-Qwest-7. This language reflects the lack of an obligation on
20 Qwest's part to build dark fiber facilities for CLECs. The CLECs were to review
21 this language and respond.

22

23 **DF-18 - 2 strand/single strand, reservations for strands.**

24 Qwest agrees to add an option in the SGAT by May 31, 2001, to permit CLECs
25 to lease a single strand of dark fiber. Qwest requires this period of time to
26 develop the product, to put an inventory tracking system in place (current product

repair, or replace the unbundled network element." Such duties generally do not exist with regard to leased assets.

1 tracking is on a two strand basis), to conduct cost studies and to make billing
2 system changes. In addition, Qwest would need to train its account teams and
3 service centers on this new offering.

4

5 Qwest understands that the primary issue around reservations of dark fiber is
6 when a CLEC needs to complete a collocation build out prior to accessing the
7 dark fiber. Qwest would agree to add a “dangling” dark fiber option to the SGAT,
8 like the new “dangling” UDIT offering, allowing CLECs to begin the process of
9 provisioning the dark fiber, prior to the collocation being complete. Thus, this
10 “dangling” option would assure the CLEC that the dark fiber would be available in
11 90 days when the collocation build out is complete.

12

13 The current lack of SGAT language on this point should not preclude 271
14 approval, however. The FCC made clear in its *Texas 271 Order* that 271
15 approval is based on the clear, existing obligations in the law and not on
16 proposed new obligations such as this one.

17

18 **DF-17 – Wavelength Unbundling**

19 Qwest is currently evaluating the request by CLECs to unbundle dark fiber
20 wavelength. As an initial matter, such wavelength does not exist on dark fiber.
21 In order for wavelength to be unbundled, there must be DWDM equipment
22 attached to the fiber. That removes the fiber from the FCC’s definition of dark
23 fiber. See *UNE Remand Order* ¶325. Thus, this issue does not belong in this
24 workshop.

25

1 Moreover, this novel issue, like single strand unbundling, is not proper for 271
2 because the FCC has not established a duty to unbundle wavelength. Indeed,
3 this very issue is an open one in the Fifth FNPRM in the FCC's CC Docket 96-98.

4

5 In addition, this issue has little practical applicability in Qwest's region because
6 Qwest has only a very limited number of DWDM systems now in across the 14
7 states. Also, a duty to unbundle DWDM wavelength would require new cost
8 studies, due to the increased cost of DWDM electronics.

9

10 **DF-4 b & c, DF-5 - Provision/reclamation issues; process/PUC rules.**

11 Qwest believes that the new proposed SGAT language for sections 9.7.2.5 &
12 9.7.2.10 (jointly developed by the parties) that was presented at the initial
13 emerging services workshop satisfies the CLECs' concerns. See Exhibit 3-
14 Qwest-7. The CLECs have a takeback to review that language and comment.

15

16 **DF-7 - Ordering process/Collocation arrangement/ Is collocation at
17 terminating office necessary?**

18 Qwest proposed revised SGAT language on this point at the initial emerging
19 services workshop. See Exhibit 3-Qwest-7. WCom responded in its December 1
20 filing of Mr. Friday's Supplemental Testimony. Qwest is still in the process of
21 reviewing that testimony. However, Qwest does note that a CLEC must establish
22 network demarcations points to access UDF-IOF when it terminates in a Qwest
23 central office. Typically, collocation procedures are followed to create network
24 demarcation points.

25

26 **DF-10 - Responsibility for ROW; cross-reference remote collocation.**

1 Qwest proposed revised language in section 9.7.2.15 for AT&T's review at the
2 initial emerging services workshop. See Exhibit 3-Qwest-7.

3

4 **DF-2a – How do you ask to get from A to C without B.**

5 Qwest submitted new language for section 9.7.3.2 for AT&T review at the initial
6 emerging services workshop. See Exhibit 3-Qwest-7.

7

8 By way of further explanation, Qwest identifies what is available for provisioning
9 using the DF inquiry process. If requesting a direct route from A-C without going
10 through B, Qwest will look for that route. It may come back no fiber route
11 available based on the CLECs direct routing request. Qwest will respond to
12 requests from A-Z locations based on route availability regardless of it passing
13 through an intermediate wire center. Exhibit KAS-1, attached hereto, contains
14 the UDF Order Process diagram.

15

16 **DF-12 - Qwest notification of available routes**

17 Qwest submitted new language for section 9.7.3.2.3 for AT&T review. See
18 Exhibit 3-Qwest-7. Exhibit KAS-1, attached hereto, contains the inquiry process
19 from the customer request to the account team.

20

21 **NO ISSUE # - Additional (intermediate office) cost to cross connect**

22 Qwest is still considering the wording of section 9.7.5.2.1. In addition, Exhibit
23 KAS-2, Example 2 (attached hereto) contains an explanation of inquiry, non-
24 recurring and recurring UDF charges Central Office - Central Office (FDP-FDP),
25 Multiple Office Route.

26

1 **DF-7 – Rate elements for UDF**

2 Qwest is still working on this takeback. The rates elements for DF can include
3 recurring charges for mileage, termination per pair, cross-connect per pair, per
4 route per pair and termination per pair at the prem. Non-recurring charges are
5 accessed per route (order), cross-connect per pair, per route/each additional pair
6 (same order) and cross-connect per pair/end. Examples of rate element
7 diagrams are in Exhibit KAS-2, attached hereto.

8
9 **DF-16 - Testing process for dark fiber- 2 options.**

10 Qwest is still reviewing this issue internally.

11

12

IV. LINE SHARING

13

14 **LS-12 and 14 – Ownership of POTS splitter**

15 As stated in my rebuttal testimony, the Qwest requirement that CLECs provide
16 POTS Splitter is consistent with FCC requirements. The FCC's *Line Sharing*
17 *Order* specifically stated that ILECs such as Qwest had the option of providing
18 line splitters itself or, in the alternative, allowing CLECs to place their splitters in
19 the ILEC's central offices.⁵ The Qwest SGAT clearly provides that CLECs can
20 place their POTS Splitters in Qwest central offices.

21

22 As stated by WCom in its December 1, 2000 filing, Qwest did agree to add in
23 SGAT section 9.4.2.1.2 that either the CLEC may purchase the POTS Splitter or
24 have Qwest purchase the POTS Splitter on its behalf. The specific language that

⁵ *Line Sharing Order* at 146.

1 will be added to this section is: "CLEC either may purchase POTS splitter or have
2 Qwest purchase POTS splitter subject to full reimbursement."

3

4 As identified in its November 17, 2000 FCC filing, Qwest has taken steps to
5 insure the quality of its installation of POTS splitters. The first document is titled
6 "Steps required for Reviewing Installation Quality for Line Sharing splitter
7 Collocation Sites." The second is "Qwest process to be used for New Splitter
8 Installation. Steps in Overall Collation Workflow."

9

10 **LS-5B - Bulk deloading.**

11 This was deferred to issues DL-20 and DL-21 regarding the bulk deloading
12 project. These issues are addressed in Ms. Liston's affidavit.

13

14 **LS-1B - Forecasting**

15 In its FCC filing on November 17, Qwest filed a Forecasting Flow diagram with
16 the FCC which outlines the process for CLECs to submit forecasts and who is
17 responsible for receiving those forecasts and ensuring they are passed to the
18 appropriate Qwest organizations. Once the organizations have received the
19 CLEC forecasts, the information is input into each organization's existing
20 planning process.

21

22 **LS-6 - Tie cable reclassification and charges**

23 Line Sharing Tie Cable Reclassification is only relevant when a CLEC requests
24 that existing tie cables between its collocation and the Intermediate Distribution
25 Frame be designated for use with its POTS splitter located in its collocation cage.
26 The reclassification activity is necessary to allow proper voice and voice/data

1 assignments during the shared loop provisioning process. A typical collocation
2 installation would have all DS0 terminations as providing the same functionality.
3 When this same DS0 terminations are to be used with a POTS splitter, then the
4 terminations have to be re-classified to show which terminations are associated
5 with voice only and which are associated with the voice/data traffic. Therefore,
6 Qwest charges CLECs a nonrecurring charge for the physical work activity
7 associate with tie cable reclassification for the database work to change the
8 naming of those tie cables in the TIRKS and SWITCH databases and restenciling
9 of the terminations on the IDF itself. Again, Qwest is entitled to recover for the
10 work it actually performs. KAS Rebuttal at 17-18

11

12 **LS-13 - Bulk, or shelf at a time, access to splitter capacity.**

13 Deferred to loop workshop.

14

15 **LS-10 - Splitter on MDF 10K lines limit**

16

17 As stated in my rebuttal testimony, Qwest will allow a Splitter to be located on the
18 MDF in central office with fewer than 10,000 lines. Contrary to Rhythms
19 assertion, this is consistent with the language negotiated with CLECs in section
20 1.4.2 of the permanent line sharing business agreement, which reads:

21

22 If CLEC elects to have POTS splitters installed in Qwest Wire
23 centers via Common Area Splitter Collocation, the POTS splitters
24 will be installed in those Wire Centers in one of the following
25 locations: (a) in a relay rack as close to CLEC's DS0 termination
26 points as possible; (b) on an intermediate distribution frame to the

1 extent such a frame is available; or (c) where options (a) and (b)
2 are not available due to physical space limitations in the Wire
3 Centers, or in Wire Centers with network access line counts of less
4 than 10,000, on the COSMIC/MDF or in some other appropriate
5 location such as an existing Qwest relay rack or bay.

6
7 Given that parties to this agreement, including Rhythms, agreed to this provision
8 in the past, it is appropriate to include it here as well. Moreover, allowing CLECs
9 to place splitters on the MDF in central offices with greater than 10,000 lines will
10 make it difficult for Qwest to recover its cost for the current bays that house
11 splitters. This will occur because it will drive DLECs to the MDF, rather than to
12 the current available bay space. Thus, this request should be rejected.

13
14 **LS-7 - Service Intervals**

15 Issue LS-7 concerns the interval for line sharing provisioning. Qwest commits to
16 a 5-day interval. Covad contended at the workshop that 5 days is too long and
17 that the interval should, over time, come down to only one day. Covad's reason:
18 as its witness, Mr. Zulevic testified, Covad desires a "competitive edge" over
19 Qwest in the provisioning of retail services using DSL technology:

20 We have proposed going from the five-day down to a one-day
21 interval over a period of time. I don't think that's totally
22 unreasonable. But the parity issue, no, I don't think that is
23 appropriate. Just because their business plan and their customers
24 are satisfied with the 10-day interval, it doesn't mean that all of the
25 customers in the state of Colorado are satisfied with waiting 10
26 days for that service to be put in.

27
28 One of the things that we would like to offer to our customers
29 is a better quality of service as being maybe one of the *competitive*
30 *edges* that we can provide in entering in market. And in order to do
31 that, we have to be able to differentiate ourselves.
32

1 11/02/00 Workshop Tr. at 37:23-38:11 (emphasis added).

2

3 Covad misses the point. As Staff's Mr. Wendling noted at the workshop, the Act
4 and 271 do not require intervals that provide CLECs with a competitive
5 advantage. After Qwest counsel noted the impropriety of seeking a competitive
6 advantage from the 271 process, Mr. Wendling stated: "Now, to your point about
7 competitive advantage. I agree wholeheartedly. ...I agree with you 100 percent
8 that parity is – we're striving for that." 11/02/00 Workshop Tr. At 63:23-64:7.⁶

9

10 The proper standard is nondiscrimination measured by retail parity. In paragraph
11 44 of the FCC's *Texas 271 Order*, it reiterated that the overall standard for the
12 provisioning of UNEs is nondiscrimination and that,

13 [F]or those functions the BOC provides to competing carriers that
14 are analogous to the functions a BOC provides to itself in

⁶ Covad's argument is analogous to an argument rejected by the Supreme Court in the Iowa Utilities Board case. There, the FCC argued that the impairment prong of the test for unbundling was met

if "the failure of an incumbent to provide access to a network element would decrease the quality, or increase the financial or administrative cost of the service a requesting carrier seeks to offer, compared with providing that service over other unbundled elements in the incumbent LEC's network,"

Iowa Utilities Board, 119 S.Ct. 721, 735. The Supreme Court rejected that standard for, among other reasons, providing a windfall to competitors:

the Commission's assumption that any increase in cost (or decrease in quality) imposed by denial of a network element renders access to that element "necessary," and causes the failure to provide that element to "impair" the entrant's ability to furnish its desired services is simply not in accord with the ordinary and fair meaning of those terms. An entrant whose anticipated annual profits from the proposed service are reduced from 100% of investment to 99% of investment has perhaps been "impaired" in its ability to amass earnings, but has not ipso facto been "impaired . . . in its ability to provide the services it seeks to offer"

Id. Although Covad's argument is not strictly about the impairment standard, it does concern the interval for providing a UNE, and it is as misguided as the FCC's erstwhile impairment test.

1 connection with its own retail service offerings, the BOC must
2 provide access to competing carriers in “substantially the same
3 time and manner as it provides to itself. Thus, where a retail
4 analogue exists, a BOC must provide access that is equal to (*i.e.*,
5 “substantially the same as”) the level of access that the BOC
6 provides itself, its customer, or its affiliates, in terms of quality,
7 accuracy, and timeliness.

8
9 The FCC stated it would utilize this standard where “actual performance can be
10 measured to determine whether [the BOC] is providing access to its competitors
11 in ‘substantially the same time and manner’ as it does to itself.” *Texas 271 Order*

12 ¶45. Only where there is no retail analogue should a different standard apply.
13 *Id.*

14
15 This retail parity standard applies to line sharing. The FCC has directly stated
16 this:

17 As a general matter, the nondiscrimination obligation requires
18 incumbent LECs to provide to requesting carriers access to the
19 high frequency portion of the loop that is equal to that access the
20 incumbent provides to itself for *retail* DSL service its customers or
21 its affiliates, in terms of quality, accuracy and timeliness. Thus, we
22 encourage states to require, in arbitration proceedings, incumbent
23 LECs to fulfill requests for line sharing within the *same interval the*
24 *incumbent provision xDSL to its own retail or wholesale customers,*
25 regardless of whether the incumbent uses an automated or manual
26 process.

27 *Line Sharing Order* para. 173 (emphasis added).⁷ This of course makes sense
28 because line sharing provided to CLECs is “analogous to the functions [Qwest]
29 provides to itself in connection with its own retail service” called Megabit. *Texas*
30 *271 Order* ¶44.

31

⁷ Indeed, the FCC stated that the interval for line sharing should be the same as the interval for xDSL loops. *Line Sharing Order* para. 174. Qwest followed the FCC’s directive when it set the line sharing interval at 5 days.

1 Indeed, the very reason offered by DLECs and adopted by the FCC for the legal
2 requirement for line sharing is that the ILECs were performing this function for
3 themselves. The references to the ILECs using line sharing for retail services
4 are too numerous to mention.⁸ In addition to relying on retail line sharing in
5 setting the interval for wholesale line sharing, the FCC relied on retail line sharing
6 for the impairment analysis,⁹ for its conclusion that wholesale line sharing is
7 technically feasible,¹⁰ and in its discussion of pricing of wholesale line sharing.¹¹

8
9 Thus, the law is settled that the nondiscrimination standard for line sharing is
10 retail parity and that the interval for line sharing should be the same as the xDSL
11 loop interval. Qwest's standard interval for provision of Megabit is 10 days.
12 Qwest has set its line sharing interval at 5 days, the same as its xDSL loop
13 interval. Thus, Qwest is already providing CLECs with a faster interval than
14 necessitated under the law.

15
16 Moreover, as requested during the October 31-November 3 workshop, Qwest
17 has validated the existence of a retail analogue by performing a comparison of
18 the process flows for its line sharing performed for CLECs and for its own
19 Megabit service. That comparison revealed that the line sharing tasks are
20 essentially the same for Megabit and for wholesale customers. Specifically:

21 1. A service order is issued and released by the Service Order
22 processor for both Megabit and line sharing.

⁸ *Line Sharing Order* paras. 32, 33, 40, 41, 42, 55, 56, 63, 67, 68, 133, 173-75.

⁹ *Line Sharing Order* paras. 32-33, 40, 42, 55, 56 (emphasis added).

¹⁰ *Id.* paras. 63, 67.

¹¹ *Id.* para. 133.

1 2. A FOC is issued; however, this step is only necessary for wholesale
2 orders.

3 3. For both Megabit and line shared orders, the cable pairs and OE
4 are reassigned, and any required tie pairs are assigned along with
5 the xDSL-type equipment, *i.e.*, POTS splitter¹²

6 4. For both Megabit and line sharing, the CO technician performs a
7 “lift and lay” and performs loop continuity testing. At this point, line
8 sharing is complete: the shared loop is provisioned, and the line
9 sharing portion of Megabit provisioning is done.

10 Qwest's Megabit interval is 10 days; its line sharing interval is 5 days. Facially,
11 DLECs are getting more than retail parity. Indeed, the 5-day interval appears to
12 give Covad the competitive advantage it seeks. This is confirmed by discovery
13 responses from Covad in which it stated that it allots only one hour to the tasks it
14 needs to perform after receiving a shared loop from Qwest. Obviously, 5 days
15 plus 1 hour is much less than 10 days giving Covad its “competitive edge.”

16

17 In sum, Qwest's 5-day line sharing interval is amply justified by both the law and
18 the facts.

19

20 **LS-7 - Performance issues**

¹² One fact suggests that setting a five day interval may give DLECs a competitive advantage over Qwest. In this step, the SWITCH database maintains the splitter assignment information. When output from this database states that there is an error in the splitter assignment inventory that was provided by the DLEC, that means that the DLEC provided inaccurate information (*e.g.*, the splitter assignment is already in use). In that situation, Qwest must contact the DLEC to obtain accurate information. This has occurred numerous times with DLECs in Qwest's experience and has caused substantial provisioning delays without fault on the part of Qwest. This type of error does not occur on the retail side because the TIRKS database keeps track of the Qwest retail inventory and any resolution

1 Qwest filed 3 documents in its 11/17/00 FCC filing which address line sharing
2 performance issues.

3 • *First:* Line Sharing Training Documentation which details training completed
4 and in progress in the network organization. To date, 13,174 people have
5 received the initial training.

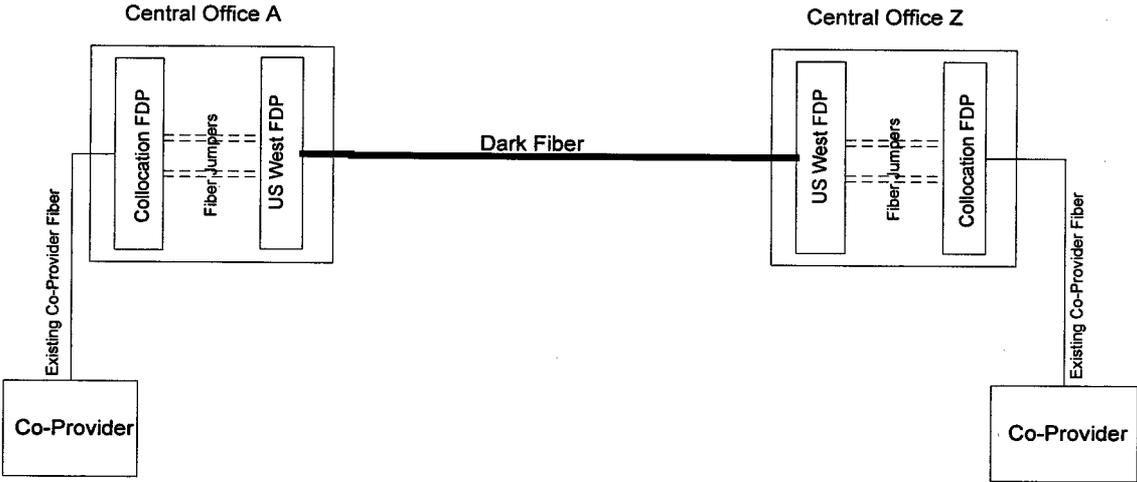
6 • *Second:* Shared Loop Jeopardy Process Flow, which diagrams the process
7 for following and documenting jeopardy situations during provisioning
8 including notification of the CLEC at each step. The process flow also
9 identifies the organization responsible for jeopardy status, creation of the RTT
10 ticket and CLEC contact.

11 • *Third:* The Qwest Line Sharing Quality Review outlines the process to
12 physically verify cross-connects have been run correctly on existing line-
13 sharing accounts. Interim reviews will be conducted until the EDI-based real-
14 time completion report capability is available.

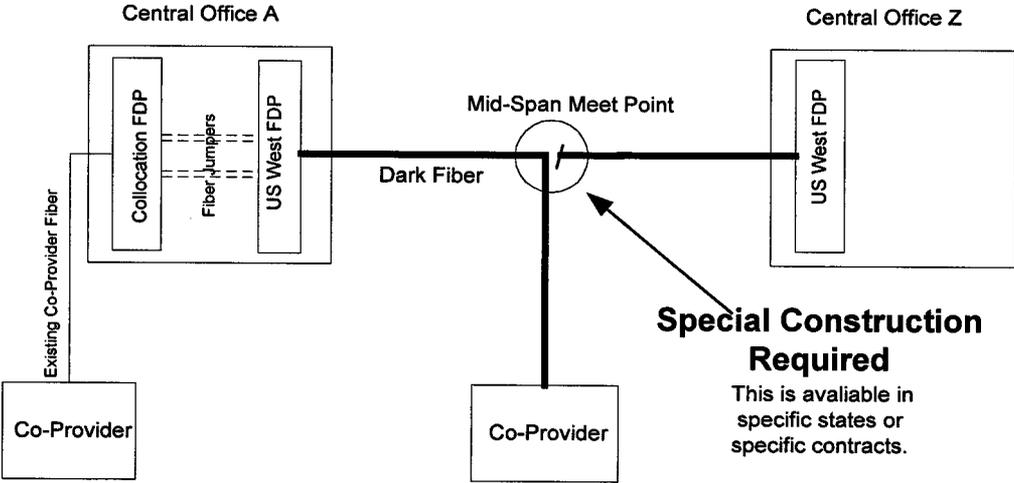
15

can be resolved without going back to Enterprise, but the DLEC keeps track of its inventory itself.

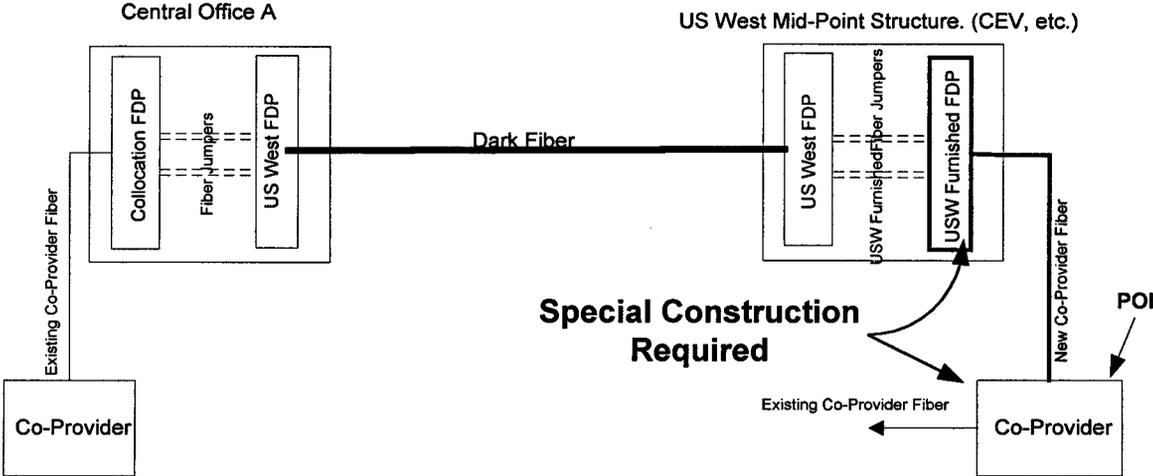
UDF-IOF, USWEST Central Office to USWEST Central Office



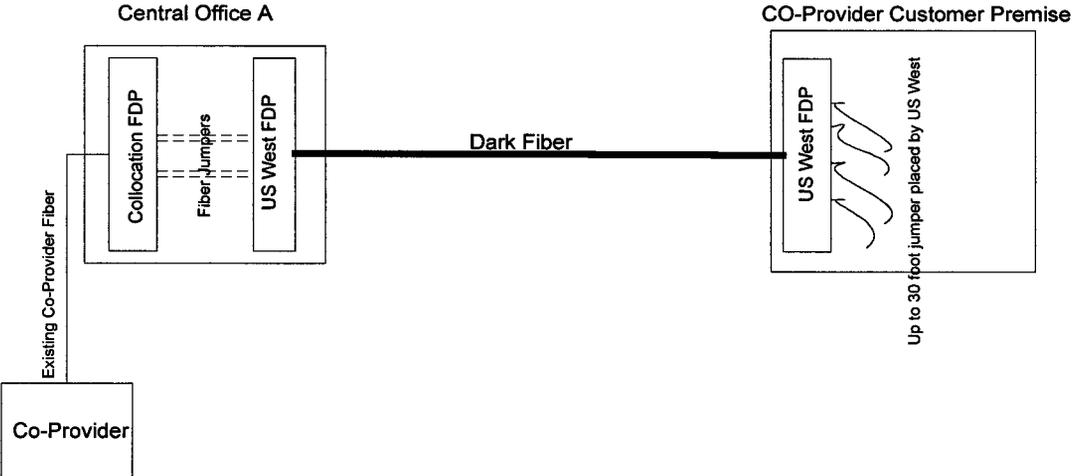
UDF-IOF, USWEST Central Office to Mid-Span Meet



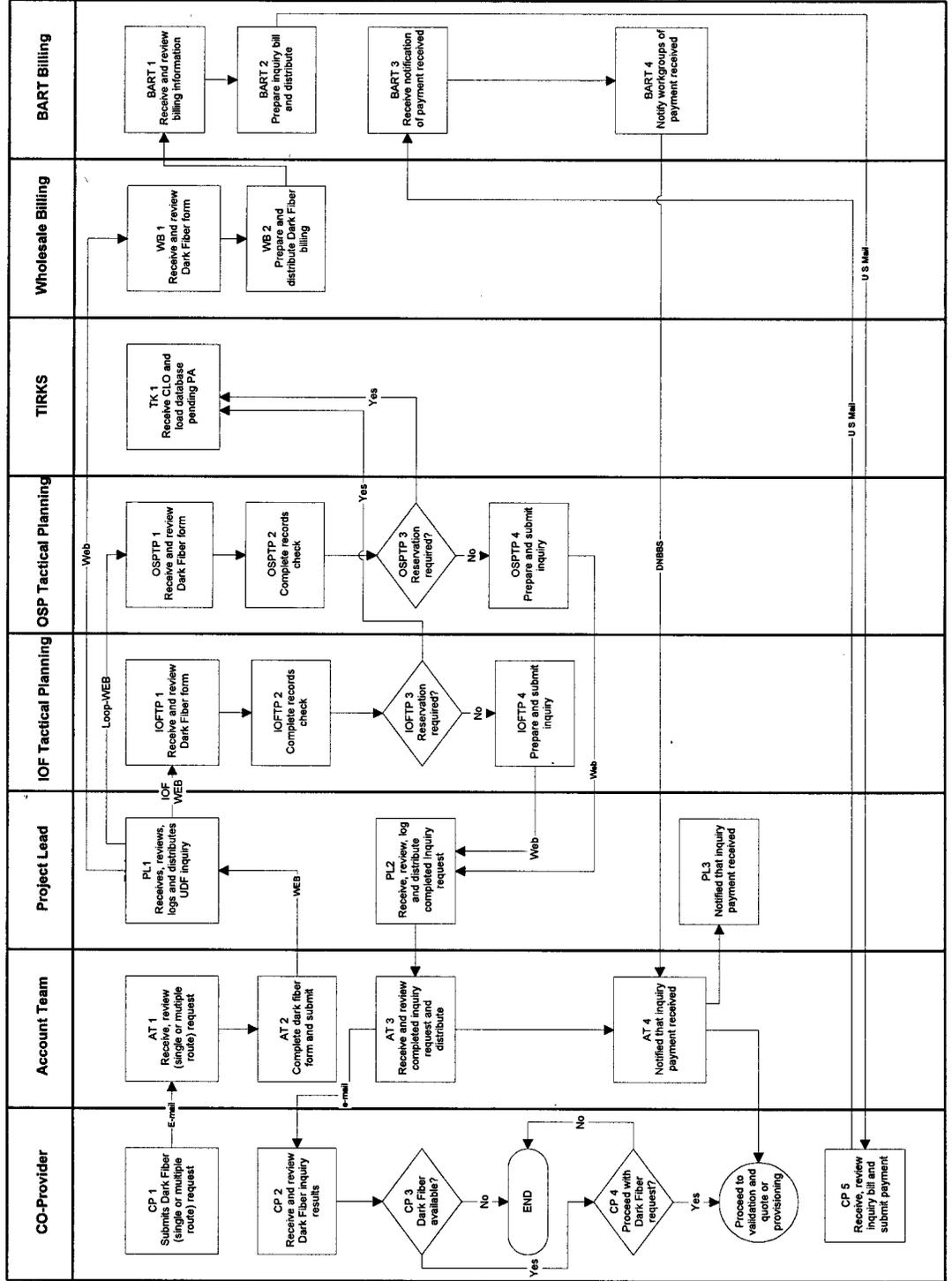
UDF-IOF, USWEST Central Office to US WEST MID-POINT STRUCTURE,CEV, etc.



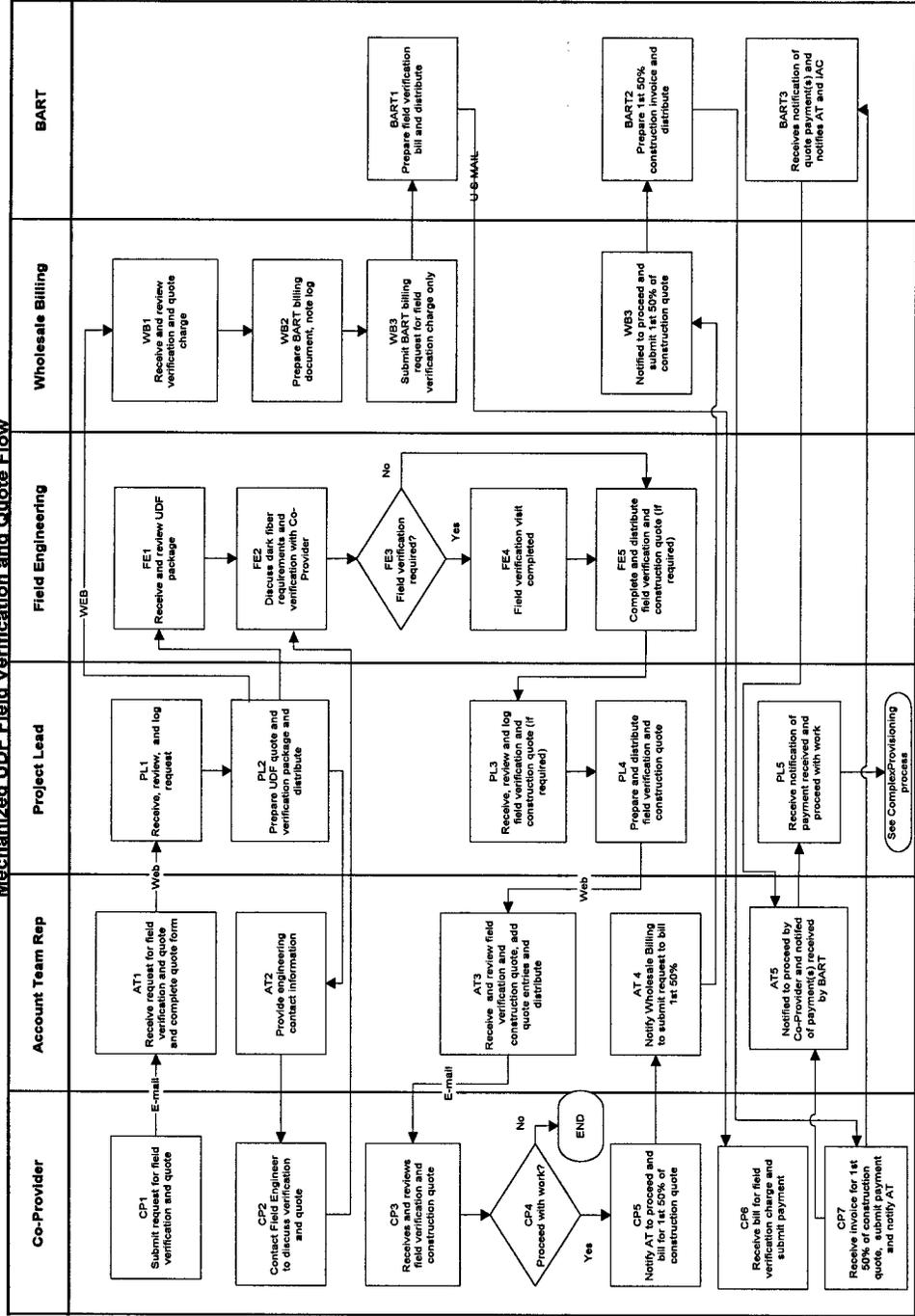
UDF-Loop, USWEST Central Office to Co-Provider Customer Premise



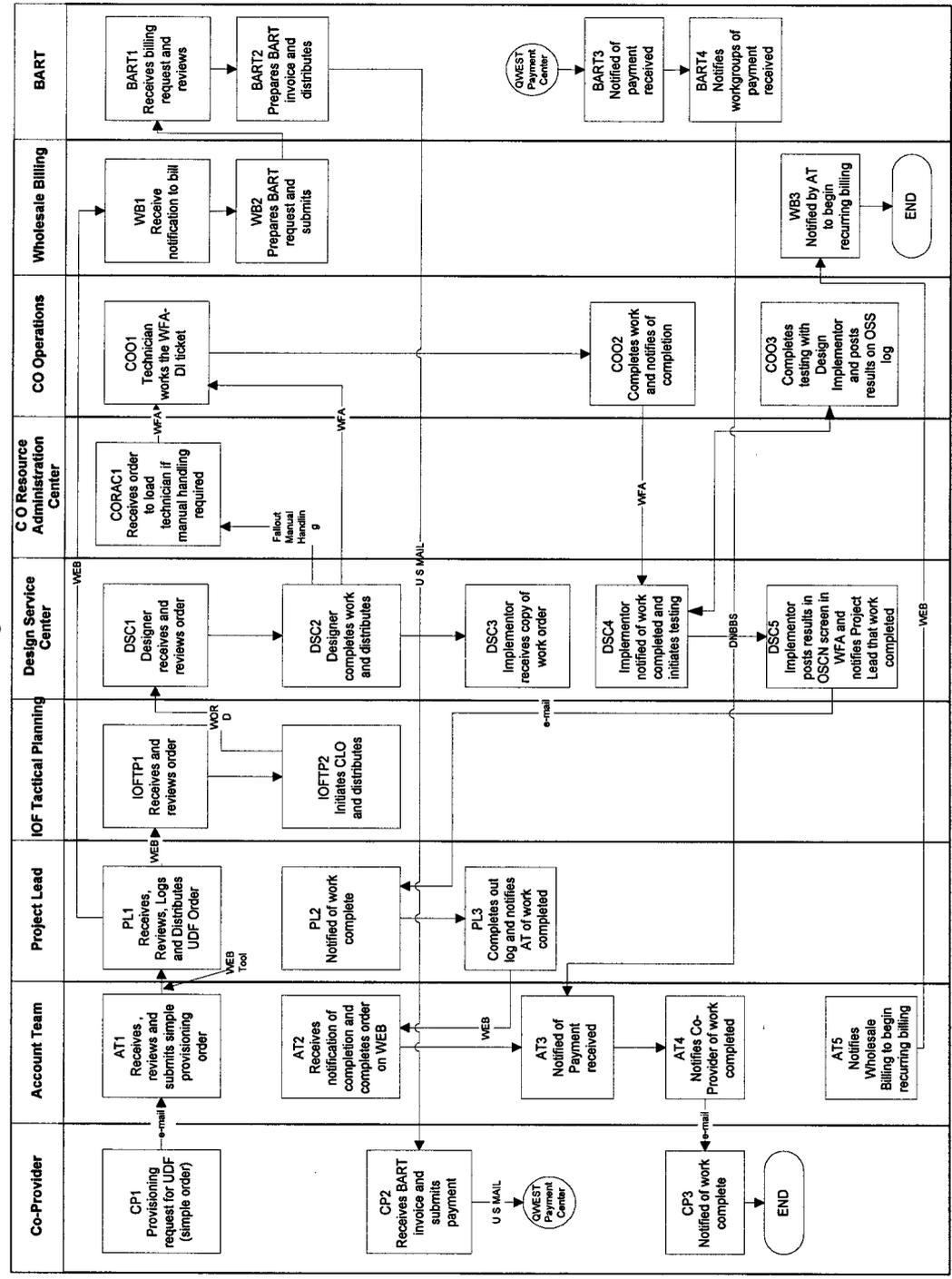
Unbundled Dark Fiber Inquiry Process

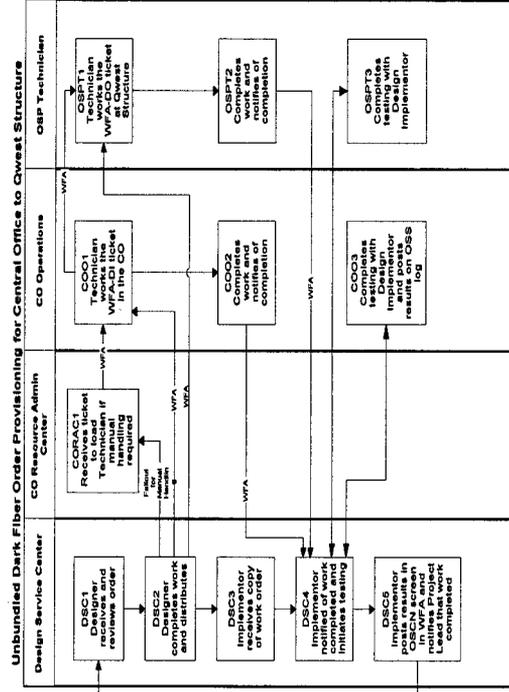


Mechanized UDF Field Verification and Quote Flow



Unbundled Dark Fiber Order Provisioning for Central Office to Central Office Order





From
Page 1

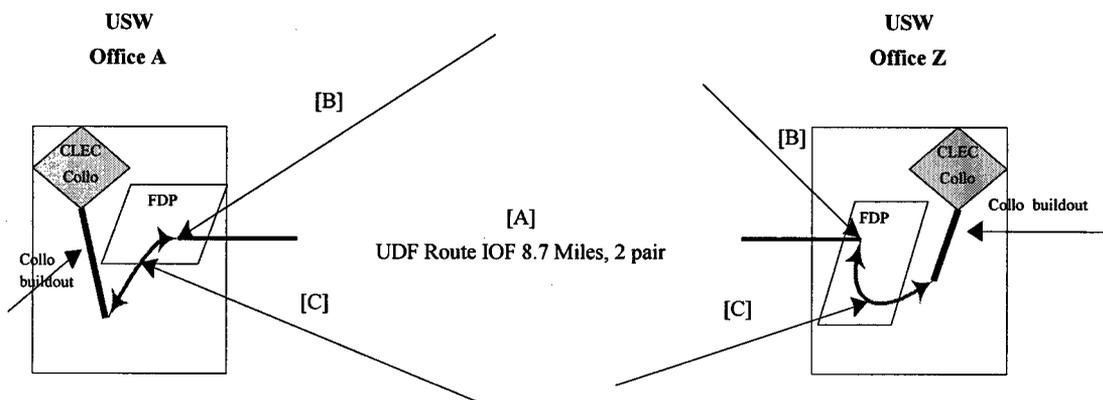
To
Page 1

U S WEST COMMUNICATIONS UNBUNDLED DARK FIBER AVAILABILITY INQUIRY & REQUEST	
BAN NUMBER: _____	INITIAL INQUIRY SIMPLE __ COMPLEX __ THIS INQUIRY IS RECORDS BASED ONLY AND DOES NOT GUARANTEE THE AVAILABILITY OF SPARE UDF
<i>Each Section must be answered, failure to do so will result in a delay and the form may need to be resubmitted. One route (CLLI location A to CLLI location Z) allowed per inquiry form. This is a records check and no guarantee that spare facilities actually exist.</i>	
CLEC SECTION (COMPLETED BY ACCOUNT MGR & CLEC)	
CLEC: _____ Date Submitted: _____ [] 5 day or [] 10 day (response required)	
Contact Name: _____ ACNA: _____	
Telephone number: _____ Facsimile number: _____	
Date of Interconnection Agreement: _____ Contract Number: _____	
Contract indicates pair reservation is required*: [] Y or [] N, "only if yes"...IS CLEC REQUESTING RESERVATION: [] Y or [] N. Note: If both "Y", USWEST will initiate recurring billing immediately.	
Remarks: _____	
UNBUNDLED DARK FIBER SECTION (COMPLETED BY ACCOUNT MGR & CLEC)	
Number & Type of Fibers Requested*: _____ [] IOF [] IOF Splice Point [] Loop Premise [] Loop Structure.	
Important - a labeled map drawing required when Splice Point selected	
Single Mode _____ Multi Mode _____	
Location A CLLI _____ Location Z CLLI _____	
Street address _____ Street address _____	
City, State _____ City, State _____	
Remarks: _____	
<i>Account Mgr. must now contact the IAC (303-792-4481) and fax this request (303-792-6516)</i>	
NETWORK SECTION (COMPLETED BY OR THROUGH THE IAC)	
IAC Project Manager: _____ Date Received _____ Date Due _____ Date Complete _____	
Telephone #: _____ Fax #: _____	
Routed to: _____ CLO Issued: _____	
TIRKS Facility Reservation: Y N RID date for TIRKS: _____	
IOF Planning Engineer: _____ Telephone #: _____	
CP Engineer: _____ Telephone #: _____	
Date Returned to IAC: _____ Date Sent to ATR: _____	
Spare IOF Fibers Avail: _____ Route #: _____ Record #: _____ # Cr Conn: _____	
Splice Location: _____	
Mileage from A location to Z location: _____ Mileage Span from FDP to FDP: _____	
# of Fiber Cross Connects required _____ # of Fiber Terminations required _____	
CP Completed by: _____ Telephone # _____	
Remarks _____	
Returned to Account Manager _____ Date: _____	
WHOLESALE BILLING INSTRUCTION (COMPLETED BY ACCOUNT MGR.)	
[] Unbundled Dark Fiber Initial Inquiry ; Simple, Bill @ \$300.00 per route. Complex, Bill \$350.00 per route. \$ _____.	

U S WEST COMMUNICATIONS UNBUNDLED DARK FIBER AVAILABILITY INQUIRY & REQUEST	
BAN NUMBER: _____	FIELD VERIFICATION QUOTE (FVQ) <input type="checkbox"/> IOF SPLICE POINT OR <input type="checkbox"/> LOOP STRUCTURE (CEV, ETC.)
<i>Each Section must be answered, failure to do so will result in a delay and the form may need to be resubmitted. One route (CLLI location A to CLLI location Z) allowed per Field Verification Quote form.</i>	
<i>BAN number must match the initial records inquiry BAN (A CLLI to Z CLLI route)</i>	
CLEC authorized agent requesting this FVQ. Name: _____ Date: _____	
CLEC SECTION (COMPLETED BY ACCOUNT MGR & CLEC)	
Co-Carrier Name: _____ Date Submitted: _____ (20 day response)	
Contact Name: _____ ACNA: _____	
Telephone number: _____ Facsimile number: _____	
Date of Interconnection Agreement: _____ Contract Number: _____	
Contract indicates pair reservation is required*: <input type="checkbox"/> Y or <input type="checkbox"/> N, "only if yes"...DID CLEC REQUEST RESERVATION: <input type="checkbox"/> Y or <input type="checkbox"/> N.	
Remarks: _____	
UNBUNDLED DARK FIBER SECTION (COMPLETED BY ACCOUNT MGR & CLEC)	
Number & Type of Fibers Requested*: _____ <input type="checkbox"/> IOF <input type="checkbox"/> IOF Splice Point <input type="checkbox"/> Loop Premise <input type="checkbox"/> Loop Structure	
Single Mode _____ Multi Mode _____	
Location A CLLI _____ Location Z CLLI _____	
Street address _____ Street address _____	
City, State _____ City, State _____	
Remarks: _____	
NETWORK SECTION (COMPLETED BY OR THROUGH THE IAC)	
IAC Project Manager: _____ Date Received _____ Date Due _____ Date Complete _____	
Telephone #: _____ Fax #: _____	
Routed to: _____ CLO Issued: _____	
TIRKS Facility Reservation: Y N RID date for TIRKS: _____	
IOF Planning Engineer: _____ Telephone #: _____	
CP Engineer: _____ Telephone #: _____	
Due Date: _____ Date Returned to IAC: _____ Date Sent to ATR: _____	
Spare IOF Fibers Avail: _____ Route #: _____ Record #: _____ # Cr Conn: _____	
Splice Location: _____	
Mileage from A location to Z location: _____ Mileage Span from FDP to FDP: _____	
# of Fiber Cross Connects required _____ # of Fiber Terminations required _____	
CP Completed by: _____ Telephone # _____	
Remarks _____	
Quote Prepared by: _____ Date: _____	
Returned to Account Manager _____ Date: _____	
WHOLESALE BILLING INSTRUCTION	
<input type="checkbox"/> Unbundled Dark Fiber Field Verification and Quote Process; Billed @ \$1470.00 per route requested. \$ _____.	

U S WEST COMMUNICATIONS UNBUNDLED DARK FIBER AVAILABILITY INQUIRY & REQUEST	
BAN NUMBER: _____	PROVISIONING (ORDER)
<i>Each Section must be answered, failure to do so will result in a delay and the form may need to be resubmitted. One route (CLLI location A to CLLI location Z) allowed per ORDER form.</i>	
<i>BAN number must match the initial records inquiry BAN (A CLLI to Z CLLI route)</i>	
CLEC authorized agent ORDERING UDF. Name: _____ Date: _____	
CLEC SECTION (COMPLETED BY ACCOUNT MGR & CLEC)	
Co-Carrier Name: _____ Date Submitted: _____	
Contact Name: _____ ACNA: _____	
Telephone number: _____ Facsimile number: _____	
Date of Interconnection Agreement: _____ Contract Number: _____	
Contract indicates pair reservation is required*: [] Y or [] N, "only if yes"...DID CLEC REQUEST RESERVATION: [] Y or [] N	
Remarks: _____	
UNBUNDLED DARK FIBER SECTION (COMPLETED BY ACCOUNT MGR & CLEC)	
Number & Type of Fibers Requested*: _____ [] IOF [] IOF Splice Point [] Loop Premise [] Loop Structure	
Single Mode _____ Multi Mode _____	
Location A CLLI _____ Location Z CLLI _____	
Street address _____ Street address _____	
City, State _____ City, State _____	
Remarks: _____	
NETWORK SECTION (COMPLETED BY OR THROUGH THE IAC)	
IAC Project Manager: _____ Date Received _____ Date Due _____ Date Complete _____	
Telephone #: _____ Fax #: _____	
Routed to: _____ CLO Issued: _____	
TIRKS Facility Reservation require: Y N RID date for TIRKS: _____	
IOF Planning Engineer: _____ Telephone #: _____	
CP Engineer: _____ Telephone #: _____	
Due Date: _____ Date Returned to IAC: _____ Date Sent to ATR: _____	
Spare IOF Fibers Avail: _____ Route #: _____ Record #: _____ # Cr Conn: _____	
Splice Location: _____	
Mileage from A location to Z location: _____ Mileage Span from FDP to FDP: _____	
CP Completed by: _____ Telephone # _____	
Remarks _____	
Prepared by: _____ Date: _____	
Returned to Account Manager _____ Date: _____	
WHOLESALE BILLING INSTRUCTION	
[] Unbundled Dark Fiber confirmation to provision has been received. Bill @ 50% of quoted charges for Splice Point or Loop Structure. Billed at \$ _____.	
[] Unbundled Dark Fiber provisioning complete. Bill the remaining 50% of the quoted chares for Splice Point or Loop Structure. Bill non-recurring installation and recurring monthly charges. \$ _____.	
[] Unbundled Dark Fiber provisioning complete. Bill one time turn up, non-recurring and recurring monthly charges. \$ _____. (100% - FVQP not required IOF or Loop request)	

Example 1
Explanation of Inquiry, Non-Recurring and Recurring UDF Charges
Central Office to Central Office (FDP-FDP), no Intermediate Office
(Using Arizona Pricing)

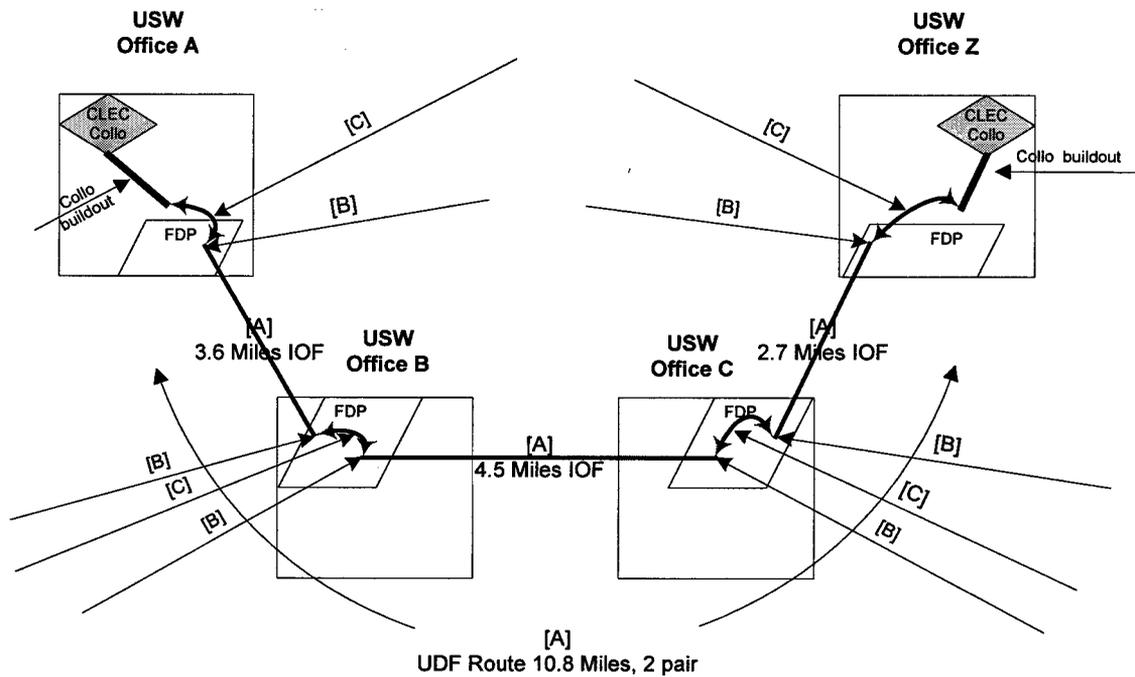


Using AZ pricing, IOF route

	[A] RC-per mile per pair	[B] RC- Termination/pair	[C] RC- Xconnect/ Pair (WC)	NRC-per route/ (order)	NCR-per route/each additional pair(same order)	(C) NRC- Xconnect/ Pair/End
	88.75	8.60	4.78	568.94	284.67	21.76
	8.7 round to 9	2 term/pair	2 Xc/pair			2 Xc/Pair
	88.75 x 2 pair x 9	17.20 x 2 pair	9.48 x 2 pair			43.52 x 2 pair
Final Price	1597.50	34.40	18.96	568.94	284.67	87.04

This Example would have the applicable "Initial Records Inquiry" charge of \$161.00.

Example 2
Explanation of Inquiry, non-recurring and recurring UDF Charges
Central Office-Central Office (FDP-FDP, Multiple Office Route)

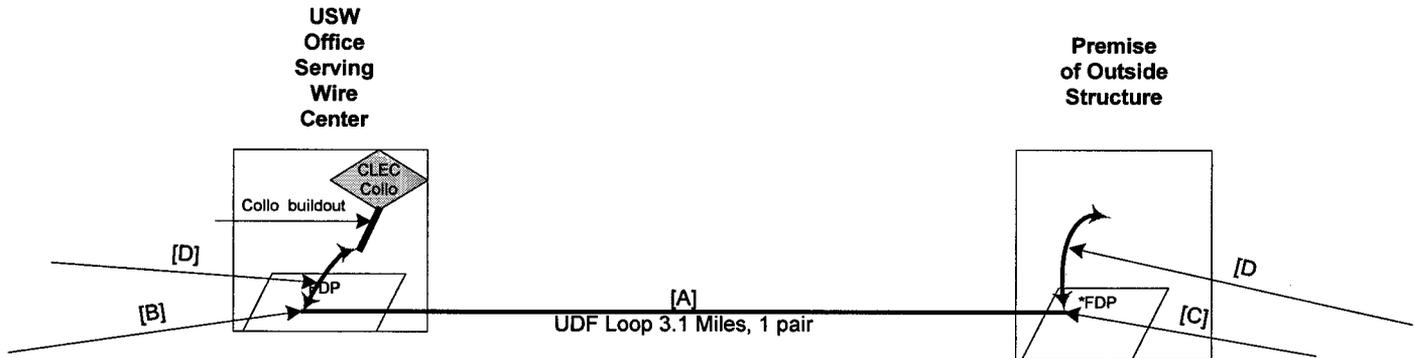


Example 2 using AZ pricing, IOF route

	[A] RC-per mile per pair	[B] RC- Termination /pair	[C] RC- Xconnect/ Pair (WC)	NRC-per route/ (order)	NRC- Xconnect/ Pair
	88.75	8.60	4.78	558.94	21.76
	10.8 round to 11	6 term/route	4 Xc/route		4 Xc/route
	88.75 x 11 x 2 pair	51.60 x 2 pair	18.96 x 2 pair		87.04 x 2 pair
Final Price	1952.50	103.20	38.24	550.18	174.08

This Example would have the applicable "Initial Records Inquiry" charge of \$161.00

Example 3
Explanation of Inquiry, non-recurring and recurring UDF Charges
Central Office-Premise or Outside Structure (FDP-FDP), Loop



* This example is not intended to explain the work associated with CLEC responsibility at a Premise or additional U S WEST and CLEC work required at an Outside Structure. Additional costs are associated with accessing an outside structure and are identified through the UDF- Field Verification and Quote Process (FVQP)

Example 3 using AZ pricing, Loop Route

	[A] RC-per route/pair	[B] RC- Termination /pair @ WC	[C] RC- Termination/ pair @ Prem	[D] RC- Xconnect/ Pair	NRC-per route/ (order)	[D] NRC- Xconnect/ Pair
	131.85	7.85	7.03	4.78	568.94	21.76
	Miles not a factor in Loop			2 Xc/route		2 Xc/route
Final Price	131.85	7.85	7.03	9.56	568.94	43.52

This Example would have the applicable "Initial Records Inquiry" charge of \$161.00

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF COLORADO

Docket No. 97I-198T

IN THE MATTER OF THE INVESTIGATION INTO QWEST CORPORATION
COMPLIANCE WITH § 271(C) OF THE TELECOMMUNICATIONS ACT OF 1996.

EXHIBITS OF KAREN S. STEWART

**Supplemental Testimony
Regarding Emerging Services**

Qwest Corporation

December 5, 2000

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF COLORADO
Docket No. 97I-198T

IN THE MATTER OF THE INVESTIGATION INTO U S WEST COMMUNICATIONS,
INC.'S COMPLIANCE WITH § 271(C) OF THE TELECOMMUNICATIONS ACT OF 1996.

**SECOND SUPPLEMENTAL AFFIDAVIT OF KAREN A. STEWART
EMERGING SERVICES UPDATES FOR
DARK FIBER PORTION OF COLORADO WORKSHOP NO. 4**

JANUARY 9, 2001

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I. IDENTIFICATION OF AFFIANT

My name is Karen A. Stewart. I am a Director in the Qwest Corporation (Qwest), formerly known as U S WEST Communications, Inc. Policy and Law organization.¹ My office is located at 421 SW Oak Street, Portland, Oregon. I am the same Karen A. Stewart that testified in the Emerging Services workshop on December 12-15, 2000.

II. PURPOSE OF AFFIDAVIT

The purpose of this affidavit is to respond to several dark fiber open issues that resulted from the Emerging Services workshop held on December 12-15, 2000. For ease of review, I have used the COIL issues list numbering to identify each issue. Exhibit KAS-1 is a revised SGAT Section 9.7 reflecting the changes I discuss in this affidavit.

III. DARK FIBER

DF-2B. CLECs want to ensure that dark fiber is available at the time a collocation build out has been competed.

¹ Qwest Corporation is the successor to U S WEST communications, Inc. Qwest filed an Authority to Transact Business application with the Commission on July 6, 2000. That application is pending. Nevertheless, given that Qwest's principal place of business is in Colorado, and that the name change is effective there, this pleading has been filed under the name of Qwest.

1 In the Colorado Emerging services Workshop, Qwest agreed to add a
2 “dangling” dark fiber option to the SGAT so that a CLEC can “hold” dark
3 fiber while they complete a collocation build out. Upon further review by
4 Qwest, subsequent to the workshop, it was determined that the most
5 effective option was to allow the CLEC to “reserve” dark fiber. This would
6 allow the CLEC to reserve the dark fiber without delay if a TIRKS inquiry
7 located suitable dark fiber.

8 As shown in Exhibit KAS-1 of my supplemental affidavit filed on December
9 5, 2000, the inquiry form and process flow already contain the information
10 necessary to perform dark fiber reservations. Previously, the option to
11 reserve dark fiber was only available to CLECs who opted into an
12 Interconnection Agreement that contained dark fiber reservation language.
13 As a result of numerous CLECs’ concerns regarding the availability of dark
14 fiber upon completion of a collocation build out, Qwest now agrees to
15 make dark fiber reservations a standard option in the SGAT. Qwest
16 proposes the following SGAT modifications:

17 9.7.3.5 CLEC may reserve dark fiber for CLEC during
18 collocation builds. Prior to reserving space, CLEC must place an
19 inquiry pursuant to section 9.7.3.1 of this Agreement and receive a
20 UDF Inquiry Response that reflects that the route to be reserved is
21 available. CLEC is also strongly encouraged to request a Field
22 Verification that the route to be reserved is available. If CLEC
23 does not obtain Field Verification, CLEC assumes the risk that
24 records upon which the UDF Inquiry Response is based may be in
25 error. CLEC may reserve UDF for 30, 60, or 90 days. CLEC may
26 extend or renew reservations if there is delay in completion of the
27 collocation build. All applicable UDF recurring charges specified
28 in sections 9.7.5.2 will be assessed at the commencement of the
29 reservation. Non-recurring charges for provisioning and cross
30 connects will be assessed at the time of installation.

31 Qwest would note that the standard process flow for a Dark Fiber Inquiry
32 reflects that it is a records-only confirmation of dark fiber availability.
33 While Qwest is not aware of any specific problem with its TIRKS inventory
34 of dark fiber, it would recommend that a CLEC consider a Field

1 Verification of dark fiber availability prior to beginning a collocation build
2 out. Qwest is making this recommendation in particular for situations where
3 the availability of dark fiber is a critical component in the decision to install
4 the collocation arrangement. The option of Field Verification is an actual
5 physical inspection of the dark fiber cable to determine if there are indeed
6 spare stands.² The rate element for the new Field Verification option is in
7 section 9.7.5.1(c):

8 (c) Field Verification. This rate element is a work effort
9 performed at CLEC's option before placing a request to reserve
10 UDF to verify the availability of UDF that CLEC desires to reserve.

11
12 **DF-7D WCom requested that Qwest modify the SGAT to indicate**
13 **that dark fiber may be accessed in a Qwest central office without**
14 **collocation.**

15 Qwest recommends the following revised SGAT language to address
16 WCom's concern:

17 9.7.2.12 CLEC must have established Collocation or other
18 technically feasible means of network demarcation pursuant to
19 section 9.1.4 of this Agreement at both terminating points of the
20 UDF-IOF or at the Serving Wire Center of either the UDF-Loop or
21 the E-UDF unless loop and transport combinations are ordered.
22 Qwest will provide fiber cross connects at the serving Wire Center
23 to connect UDF-Loop or E-UDF with the UDF-IOF if such
24 elements are ordered in combination. No collocation is required in
25 intermediate central offices within a UDF or at central offices
26 where CLEC's UDFs are cross connected. CLEC has no access
27 to UDF at those intermediate central offices.

28 ...

² Qwest has also amended section 9.7.5.1(b) to reflect that a CLEC that has paid for Field Verification for a reservation of UDF need not also pay for the Field Verification portion of the FVQP if the CLEC places an order for the same UDF that it currently has reserved.

1 9.7.3.2 Prior to placing an order for UDF to be provisioned, CLEC
2 must first establish a collocation arrangement or other network
3 demarcation point pursuant to section 9.7.2.12 of this Agreement to
4 accommodate UDF optical terminations in each Qwest wire center where
5 the UDF terminates. After collocation or other network demarcation
6 arrangements are complete, CLEC may place an order for UDF or place
7 an order to provision previously leased UDF.

8 Although this SGAT language does contain a slight modification (the
9 referral to section 9.1.4) from the draft language proposed by WCom, this
10 reference is for purposes of clarification and not intended to alter the
11 intent. With the above changes, I believe we have taken care of WCom's
12 concerns.

13 Qwest does believe that, with the existence of ICDF collocation in the
14 SGAT, that ICDF collocation would be the most cost effective way for a
15 CLEC to create "network demarcations" to access dark fiber if the CLEC
16 did not have any plans to install equipment in a Qwest central office.

17 **DF-7E. AT&T requested SGAT language for E-UDF rate elements and**
18 **a more general review of the dark fiber rate elements to ensure the**
19 **SGAT adequately reflected the application of the each rate element.**

20 Qwest has reviewed the rate elements and has made revisions to section
21 9.7.5 to add E-UDF rate elements and to clarify the application of the
22 individual rate elements. Please see the attached Exhibit KAS-1 to review
23 the revised section 9.7.5.

24 **DF-15. Treatment of Qwest Affiliates' Dark Fiber**

25 There were four take backs regarding this issue:

26 1. Confirm Classic Qwest (shorthand for the entities that were Qwest
27 before the merger of Qwest and U S WEST) provided no local exchange
28 service in Colorado before the merger and that it does not do so now;

- 1 2. Confirm there is no scheme to avoid unbundling obligations as feared
2 by some CLECs;
- 3 3. State whether there is an unbundling obligation regarding the dark fiber
4 of affiliates; and
- 5 4. State whether “deployed” as used in the SGAT includes dark fiber
6 owned by affiliates.

7 **First**, I confirm what was said at the last workshop: Classic Qwest
8 provided no local exchange service in Colorado before the merger, and it
9 does not do so now.

10 **Second**, I confirm that the fears of CLECs regarding some scheme to
11 avoid unbundling obligations are unfounded. In particular, CLECs stated
12 they were concerned that Qwest Corporation, which is the RBOC entity in
13 the Qwest corporate family, may be selling network elements, such as
14 dark fiber, to affiliates and then either obtaining a lease back of the
15 network elements or simply providing telecommunications service through
16 the affiliates involved. The proffered purpose, said the CLECs, would be
17 to enable a claim that such network elements were not subject to
18 unbundling obligations. Qwest Corporation engages in no such scheme
19 or anything remotely similar to it.

20 **Third**, there is no obligation to unbundle the dark fiber owned by Qwest
21 affiliates. Obviously, Qwest itself cannot have such an obligation
22 regarding an asset it does not own.³ Qwest’s affiliates, on the other hand,
23 are not ILECs and therefore the unbundling obligations of section 251(c)
24 do not apply.

³ As discussed in my prior testimony, if such dark fiber is leased by an affiliate to Qwest, there is no unbundling obligation either.

1 **Fourth**, the term “deployed” in the SGAT does not include dark fiber
2 owned by affiliates. The unbundling provisions of the SGAT apply only to
3 assets of Qwest and not to those of its affiliates.⁴

4 **DF-16. CLECs are concerned that Qwest did not test dark fiber prior**
5 **to turn up to CLEC.**

6 Qwest understands that the primary concern of the CLECs is that, when
7 there is a problem with the dark fiber at the time of installation, the CLEC
8 is directed to call repair to resolve any concerns. The CLEC is directed to
9 call repair because the order has been “completed” by the time the CLEC
10 can first access the dark fiber and attempt to light the fiber. CLECs
11 perceive that calling repair is not an efficient way to address installation
12 related issues.

13 In the workshop on December 12-15, Qwest had proposed allowing the
14 CLECs to call into the Design Center within 72 hours of order completion
15 to address the CLECs concerns. However, upon further review, Qwest
16 has determined that there is a better approach. Qwest recommends that
17 a continuity test be included with the turn-up of every dark fiber
18 installation. This continuity test would be cooperative in the sense that the
19 CLEC is required to place light generating equipment on the fiber and
20 Qwest is required to place a light detector on the other end of the fiber in
21 order for the test to be completed.

22 In order to effect this change, Qwest proposes the following modifications
23 to its methods and procedures for dark fiber installation. Qwest would
24 conduct cooperative continuity testing with the CLEC. The testing would
25 be performed jointly and cooperatively with the CLEC on the Plant Test

⁴ Again, as discussed in my prior testimony, this statement pertains to dark fiber
leased by Qwest regardless of whether the owner of the dark fiber is an affiliate.

1 Date (PTD)⁵. This will allow the CLEC to put their electronics (light
2 generating equipment) onto the fiber to light the fiber prior to the actual
3 Due Date (DD) of the order.

4 This continuity testing will require the coordination of a test time and date
5 to ensure that Qwest and CLEC personnel are available to perform the
6 testing. This continuity testing allows the CLEC to determine prior to the
7 DD whether the fiber is working. If the continuity test reveals that the fiber
8 is not working, the CLEC will be able to work directly with Qwest
9 provisioning groups rather than opening up a repair ticket.

10 Qwest is not proposing any additional charges for this cooperative
11 continuity testing at this time, but will review the non-recurring cost
12 associated with dark fiber and will determine if any additional cost
13 recovery would need to be proposed in the cost docket.

14 Qwest has modified the SGAT to acknowledge this continuity testing.
15 Qwest will require 30 days to modify its internal methods and procedures
16 (and communicate these changes to its provisioning organizations) prior to
17 implementing this change and having it actually available for CLECs.

18 The following SGAT sections contain the continuity testing commitment:

19 9.7.2.17 Qwest and CLEC will jointly participate in continuity testing within
20 the provisioning interval established in Exhibit C. Qwest and CLEC must
21 coordinate on the date and time for this continuity testing. As part of their
22 respective duties regarding this continuity test, Qwest shall furnish a light
23 detector at one termination point of the UDF, and CLEC shall furnish light
24 generating equipment at the other termination point of the UDF as described
25 below:

26 9.7.2.17.1 **UDF-IOF:** Qwest and CLEC shall mutually agree on the Wire
27 Center at which Qwest must provide a light detector and the Wire Center at
28 which CLEC must provide light generating equipment.

⁵ For example, on a UDF-Loop this would be approximately day 17 of the standard 20 day installation interval.

1 9.7.2.17.2 **UDF-Loop:** Qwest will provide the light detector at the serving
2 Wire Center, and CLEC will provide the light generating equipment at the
3 appropriate outside plant structure or end-user customer Premises.

4 9.7.2.17.3 **E-UDF:** Qwest will provide the light detector at the serving
5 Wire Center, and CLEC will provide the light generating equipment at the
6 CLEC Wire Center.

7
8 **DF-18. CLECs' request for ability to purchase a single strand of dark**
9 **fiber.**

10 As of May 31, 2001, Qwest will allow CLECs to purchase a single strand
11 of dark fiber. Qwest proposes the following SGAT modification:

12 9.7.2.4 Qwest will provide Unbundled Dark Fiber to CLEC in increments
13 of two (2) strands (by the pair). In addition, after May 31, 2001, Qwest will
14 provide Unbundled Dark Fiber to CLEC in increments of one (1) strand. CLEC
15 may obtain up to twenty five percent (25%) of available dark fibers or four (4)
16 dark fiber strands, whichever is greater, in each fiber cable segment over a
17 twelve (12) month period. Before CLEC may order additional UDF on such fiber
18 cable segment, CLEC must demonstrate efficient use of existing fiber in each
19 cable segment. Efficient use of interoffice cable segments is defined as
20 providing a minimum of OC-12 termination on each fiber pair. Efficient use of
21 loop fiber is defined as providing a minimum of OC-3 termination on each fiber
22 pair. Efficient use of E -UDF is defined as providing a minimum of OC -3
23 termination on each fiber pair. CLEC may designate 5% of its fibers along a fiber
24 cable segment, or 2 strands, whichever is greater, for maintenance spare, which
25 fibers or strands are not subject to the termination requirements in this
26 paragraph.

27 Prior to May 31, 2001, Qwest will modify the IRRG, the Dark Fiber Inquiry
28 form and internal procedures to incorporate this change. In addition,
29 Qwest was unable to complete an in-depth cost review to determine what
30 modifications would need to be done to the various rate elements. Qwest
31 will amend its cost studies (and amend any cost studies on file in the cost
32 docket) to include a single stand option for UDF. Qwest, at this time,
33 anticipates that the existing two strands rate elements would be duplicated
34 and re-listed as new single stand rate elements, versus modifying the

1 current rate elements (that have two-strand economies of scale assumed)
2 to become single strand rate elements.

3 **DF-19 AT&T requests that the SGAT state that Cross Connect**
4 **charges will not apply if the cross connection is already in place at**
5 **the time the CLEC UDF order is placed.**

6 Qwest confirms that cross connection non-recurring charges will not apply
7 if the cross connection is already in place at the time the CLEC places a
8 UDF order. This is because the non-recurring charge is to recover the
9 cost of a technician doing the actual cross-connect work. However, the
10 recurring charges will continue to apply. The recurring charges will
11 continue to apply because they reflect the on-going cost of having a cross
12 connection in place. The SGAT has been modified in sections
13 9.7.5.2.1(c), 9.7.5.2.2(c) and 9.7.5.2.3(c) to reflect this clarification.

14 This concludes my affidavit.

9.7 Unbundled Dark Fiber

9.7.1 -Description

9.7.1 Unbundled Dark Fiber (UDF) is a deployed, unlit pair of fiber optic cable or strands that connects two points within Qwest's network. UDF is a single transmission path between two Qwest Wire Centers or between a Qwest Wire Centers, between a Qwest Wire Center and a CLEC Wire Center, or between a Qwest Wire Center and an end user customer premisePremises in the same LATA and state. UDF exists in ~~two~~three (3) distinct forms: (a) UDF Interoffice Facility (UDF-IOF), which constitutes an ~~existing~~deployed route between two Qwest Wire Centers; and (b) UDF-Loop, which constitutes an ~~existing~~deployed loop between a Qwest Wire Center and either a fiber distribution panel located at an appropriate outside plant structure or an end-user customer premisesPremises; and (c) Extended UDF (E-UDF) which constitutes a deployed route between a Qwest Wire Center and a CLEC Wire Center.

~~9.7.1 Unbundled Dark Fiber (UDF) is a deployed, unlit pair of fiber optic cable or strands that connects two points within Qwest's network. UDF is a single transmission path between two Wire Centers or between a Qwest Wire Centers, between a Qwest Wire Center and a CLEC Wire Center, or between a Qwest Wire Center and an end user customer premisePremises in the same LATA and state. UDF exists in twothree (3) distinct forms: (a) UDF Interoffice Facility (UDF-IOF), which constitutes an existingdeployed route between two Qwest Wire Centers; and (b) UDF-Loop, which constitutes an existingdeployed loop between a Qwest Wire Center and either a fiber distribution panel located at an appropriate outside plant structure or an end-user customer premisesPremises; and (c) Extended UDF (E-UDF) which constitutes a deployed route between an Qwest Wire Center and CLEC Wire Center.~~

9.7.2 Terms and Conditions

9.7.2.1 Qwest will provide CLEC with non-discriminatory access to UDF in accordance with section 9.1.2. ~~-IOF and UDF-Loop. will provide UDF of substantially the same quality as the fiber facilities that uses to provide service to its own end user customers within a reasonable time frame.~~ Qwest will provide UDF of substantially the same quality as the fiber facilities that Qwest uses to provide retail service to its own end user customers.

9.7.2.2 CLEC will provide ~~with non-discriminatory access to UDF-IOF and UDF-Loop. CLEC will provide UDF of substantially the same quality as the fiber facilities that CLEC uses to provide service to its own end user customers within a reasonable time frame.~~ Reserved for Future Use.

9.7.2.3 Qwest will provide CLEC with access to ~~existing~~deployed Dark Fiber facilities. CLEC shall be responsible for obtaining and connecting electronic equipment, whether light generating or light terminating equipment, to the Dark Fiber. Qwest will not remove, and CLEC shall be permitted to use, regenerating equipment that already exists in mid-span.

9.7.2.4 Qwest will provide Unbundled Dark Fiber to CLEC in increments of two (2) strands (by the pair). In addition, after May 31, 2001, Qwest will provide UDF to CLEC in increments of one (1) strand. CLEC may obtain up to twenty five percent (25%) of available dark fibers or four (4) dark fiber strands, whichever is greater, in each fiber cable segment over a twelve (12) month period. Before CLEC may order additional UDF on any such fiber cable segment, CLEC must demonstrate efficient use of existing fiber in each cable segment. Efficient use of interoffice cable segments is defined as providing a minimum of OC-12 capacity termination on each fiber pair. Efficient use of loop fiber is defined as providing a minimum of OC-3 capacity termination on each fiber pair. Efficient use of E-UDF is defined as providing a minimum of OC-3 capacity termination on each fiber pair. CLEC may designate 5% of its fibers along a fiber cable segment, or 2 strands, whichever is greater, for maintenance spare, which fibers or strands are not subject to the termination requirements in this paragraph.

9.7.2.5 Qwest shall not have an obligation to unbundle Dark Fiber in the following circumstances:

(a) Qwest will not unbundle Dark Fiber that Qwest utilized for maintenance or reserved for maintenance spare for Qwest's own use. Qwest shall not reserve more than 5% five percent (5%) of the fibers in a sheath, or two (2) strands, whichever is greater, for maintenance or maintenance spare for Qwest's own use.

~~(b) U S WEST~~ Qwest will not unbundle Dark Fiber that, as of the day CLEC submits its order for Unbundled Dark Fiber, U S WEST Qwest has already designated for use in an approved, or pending job on behalf of U S WEST Qwest or another CLEC.

(be) Qwest will not be required to unbundle Dark Fiber if Qwest demonstrates to the Commission by a preponderance of the evidence that such unbundling would create a likely and foreseeable threat to its ability to provide its services as required by law meet its carrier of last resort obligations as established by any regulatory authority. Qwest shall initiate such proceeding within seven (7) calendar days of denying CLEC's request (by written notice) to unbundle dark fiber where such fiber is available. In this proceeding, Qwest shall not object to using the most expeditious procedure available under state law, rule or regulation. In such circumstances, Qwest shall be relieved of its unbundling obligations, related to the specific Dark Fiber at issue, during the pendency of the proceeding before the Commission. If Qwest fails to initiate such proceeding within such seven (7) day period, CLEC's request to unbundle Dark Fiber shall be reinstated and the ordering and provisioning processes of Section 9.7.3 shall continue.

9.7.2.6 Qwest will provide CLEC with access to the existing deployed Dark Fiber in its network in either single-mode or multi-mode. During the inquiry process, Qwest will inform CLEC of the availability of single-mode and multi-mode fiber.

9.7.2.7 Specifications, interfaces and parameters for Dark Fiber are described in Qwest's Technical Publication 77383.

9.7.2.8 CLEC is responsible for trouble isolation before reporting trouble to Qwest.

9.7.2.9 CLEC shall not use UDF as a substitute for special or switched access services, except to the extent CLEC provides "a significant amount of local exchange traffic" to its end users over the UDF as set forth by the FCC. (See 9.23.3.7.2).

9.7.2.10 ~~Upon reasonable twelve (12) month thirty calendar days notification to the CLEC, or as defined by Commission, Qwest may initiate a proceeding to reclaim Dark Fiber strands from CLEC that were not serving end user customers at the time of Qwest's notice to CLEC. In such proceeding, Qwest shall have the burden to prove that Qwest needs reserves the right to reclaim in part or in whole, but such fiber strands only to the extent necessary for Qwest in order to meet its carrier of last resort obligations to serve under as established by any regulatory authority. In this such proceeding, CLEC shall not object to using the most expeditious procedure available under state law, rule or regulation. CLEC shall be entitled to retain such strands of Dark Fiber during the pendency of the proceeding before the Commission, UDF previously obtained by the CLEC. This condition would arise in those cases where U S WEST is in jeopardy of meeting or maintaining Qwest has demonstrated to the Commission that a likely and foreseeable threat exists to Qwest's ability to meet or maintain control of its obligation to provide services as required by law under regulatory authority. CLEC may designate five percent (5%) of its fibers along a fiber cable segment, or 2 strands, whichever is greater, for maintenance spare, which fibers or strands are not subject to the reclamation requirements in this paragraph.~~

9.7.2.11 ~~U S WEST will not combine a Dark Fiber element with another Unbundled Network Element or U S WEST services, or CLEC facilities. CLEC is responsible for connecting Dark Fiber with CLEC fiber optic terminal or other equipment. Reserved for Future Use.~~

9.7.2.12 ~~CLEC must have established Collocation or other technically feasible means of network demarcation pursuant to section 9.1.4 of this Agreement at both ends terminating points of the UDF-IOF or at the Serving Wire Center of either the UDF-Loop-UDF-Loop or the E-UDF unless loop and transport combinations are ordered. Qwest will provide fiber cross connects at the serving Wire Center to connect UDF-Loop or E-UDF with the UDF-IOF if such elements are ordered in combination. No collocation is required in intermediate central offices within a UDF or at central offices where CLEC's UDFs are cross connected. CLEC has no access to UDF at those intermediate central offices.~~

9.7.2.13 ~~For UDF-Loop, CLEC is responsible for all work activities at the end-user premise premises. All negotiations with the premise Premises end-user and or premise Premises owner are solely the responsibility of the CLEC.~~

9.7.2.14 For a UDF-Loop terminating at an existing end-user premises FDP, Qwest will provide to the CLEC an optical "jumper", not to exceed 30 feet in length, connected to the Qwest UDF-Loop FDP.

9.7.2.15 CLEC is responsible for all permits, licenses, bonds, or other necessary legal authority and permission, at the CLEC's sole expense, in order to perform its obligations. The remote collocation provisions of this Agreement apply where CLEC needs to gain access to UDF at an outside plant structure. The As may be required by Section 10.8 of this Agreement, CLEC shall contact all owners of public and private Rights-of-Way to obtain their permission required to perform the necessary work to access UDF. CLEC facilities shall be placed and maintained in accordance with the requirements and specifications of applicable Fiber Communications Standards, the National Electrical code, the National Electrical Safety Code, the rules and regulations of the Occupational Safety and Health Act, and any governing authority having jurisdiction. Access to Right-of-Way shall be in accordance with Section 10.8 (Access to Poles, Ducts, Conduit, and Right-of-Way). Conduits and Rights of Way Section.

9.7.2.16 The CLEC will incur all costs associated with returning the UDF to its original condition when they disconnect UDF, disconnecting the UDF from its side of the network demarcation point.

9.7.2.17 Qwest and CLEC will jointly participate in continuity testing within the provisioning interval established in Exhibit C. Qwest and CLEC must coordinate on the date and time for this continuity testing. As part of their respective duties regarding this continuity test, Qwest shall furnish a light detector at one termination point of the UDF, and CLEC shall furnish light generating equipment at the other termination point of the UDF as described below:

9.7.2.17.1 UDF-IOF: Qwest and CLEC shall mutually agree on the Wire Center at which Qwest must provide a light detector and the Wire Center at which CLEC must provide light generating equipment.

9.7.2.17.2 UDF-Loop: Qwest will provide the light detector at the serving Wire Center, and CLEC will provide the light generating equipment at the appropriate outside plant structure or end-user customer Premises.

9.7.2.17.3 E-UDF: Qwest will provide the light detector at the serving Wire Center, and CLEC will provide the light generating equipment at the CLEC Wire Center.

9.7.3 Ordering Processes

Ordering processes and installation intervals are as follows:

9.7.3.1 Prior to placing an order for UDF, CLEC must first establish a Collocation arrangement in each of the necessary U S WEST Qwest Wire Centers. The CLEC must establish proper ICDF network demarcation points as part of their collocation. Its Collocation build in order to accommodate the UDF optical terminations. 9.7.3.2 The first step of the UDF ordering process is

~~the inquiry process. The CLEC must submit a UDF inquiry through their~~
~~account team. The UDF inquiry is used to determine the availability of UDF~~
~~between the any two requested locations: between 2 Qwest wire centers,~~
~~between a Qwest wire center and an end user premises, or between a Qwest~~
~~wire center and an appropriate outside plant structure, or a Qwest wire center~~
~~and a CLEC wire center. UDF-IOF or UDF-Loop. The UDF-IOF, UDF-Loop or~~
~~E-UDF. CLEC must specify the two U S WEST(2) Qwest offices or End-user~~
~~Premiseend-user Premises location and the number of fibers requested.~~
~~U S WESTQwest will inform CLEC of the availability of dark fiber that will~~
~~meetthe CLEC's request, if any, within 10ten (10) business days for an Initial~~
~~Records Inquiry (IRI) and 30 business days for a Mid-Point Structure Inquiry~~
~~(MPSI).~~

9.7.3.1.1 CLEC must submit a UDF inquiry through its account team. CLEC must specify the two locations and the number of fibers requested.

9.7.3.1.2 Qwest will inform CLEC if there is UDF available via the UDF Inquiry Response within the interval set forth in Exhibit C of this Agreement. Qwest will notify CLEC, within the interval set forth in Exhibit C of this Agreement, that: (i) UDF is available to satisfy CLEC's request, (ii) UDF is not available to satisfy CLEC's request; or (iii) Qwest, in writing, denies CLEC's request pursuant to Section 9.7.2.5 (b), Qwest shall provide written notice of denials pursuant to (iii) above.

9.7.3.1.3 The UDF Inquiry Response will contain up to five available UDF routes between the CLEC-specified end locations. If additional routes are available, Qwest will notify CLEC that such additional routes exist and negotiate how that additional information will be made available.

9.7.3.2 Prior to placing an order for UDF to be provisioned, CLEC must first establish a collocation arrangement in each Qwest wire center where the UDF terminates. As part of its collocation build, CLEC will establish network demarcation points to accommodate UDF optical terminations. After collocation arrangements are complete, CLEC may place an order for UDF or place an order to provision previously leased UDF.

9.7.3.3 Based on the CLEC request (UDF-Loop or UDF-IOF), (UDF-Loop, UDF-IOF or E-UDF), there are two (2) possible termination scenarios.

9.7.3.3.1 Termination at an Mid-PointOutside Plant Structure: If spare fiber is available, andthe CLEC chooses to proceed, and the requests is for UDF-Loop going to an mid-pointoutside plant structure such as a Controlled Environmental Vault (CEV), or Remote Terminal (RT), the remote collocation provisions of this Agreement will apply. the CLEC will submit the Field Verification Quote Preparation (FVQP) form. U S WEST Qwest will prepare and submit tothe CLEC a quote along with the original Field Verification Quote Preparation form (FVQP) within the interval set forth in Exhibit C. 20twenty (20) business days of the submission of the FVQP form bythe CLEC. Quotes are on an Individual Case Basis (ICB) and will include costs and an interval in accordance

with Exhibit C. number of days required to provision the service.

9.7.3.3.2 ~~U S WEST~~Qwest will begin the provisioning process upon notification from the CLEC to proceed and the receipt of 50%~~fifty percent~~ (50%) of the quoted amount. The notification to proceed is accomplished by completing, signing and returning the original FVQP to the account manager. The account manager will notify the CLEC when provisioning is complete and the remaining quoted amount, the non-recurring charges, and recurring charges will be billed.Reserved for Future Use

Termination at U S WEST Wire Center or End-user Premise~~Qwest Wire Center, End-user Premises or CLEC Wire Center~~

9.7.3.3.3 **Termination at Qwest Wire Center, End-user Premises or CLEC Wire Center:** If spare fiber is available, and the CLEC chooses to proceed, and the request is for a ~~UDF-IOF or a~~UDF-IOF, UDF-Loop going to an end-user premise, U S WEST Premises, or E-UDF going to a CLEC Wire Center, Qwest will begin the provisioning process upon notification from the CLEC to proceed and the receipt of 50% of the non-recurring charges. The notification to proceed is accomplished by completing, signing and returning the original inquiry request to the account manager. Provisioning ~~of intervals for~~ this type of request will take ~~20~~twenty (20) business days are set forth in Exhibit C. The CLEC will be notified that provisioning is complete and the remaining non-recurring charges and associated recurring charges will be billed.

9.7.3.4 An order may be canceled any time up to and including the service date. Cancellation charges will apply.

9.7.3.5 CLEC may reserve dark fiber for CLEC during collocation builds. Prior to reserving space, CLEC must place an inquiry pursuant to section 9.7.3.1 of this Agreement and receive a UDF Inquiry Response that reflects that the route to be reserved is available. CLEC is also strongly encouraged to request a Field Verification that the route to be reserved is available. If CLEC does not obtain Field Verification, CLEC assumes the risk that records upon which the UDF Inquiry Response is based may be in error. CLEC may reserve UDF for 30, 60, or 90 days. CLEC may extend or renew reservations if there is delay in completion of the collocation build. All applicable UDF recurring charges specified in sections 9.7.5.2 will be assessed at the commencement of the reservation. Non-recurring charges for provisioning and cross connects will be assessed at the time of installation.

9.7.4 Maintenance and Repair

9.7.4.1 The Parties will perform cooperative testing and trouble isolation to identify where trouble points exist. CLEC cross connections will be repaired by CLEC and Qwest cross connections will be repaired by Qwest. Maintenance and Repair processes are contained in ~~Section 12 (Operational Support~~the Support Functions Section of this ~~Systems (OSS))~~Agreement

9.7.5 Rate Elements

9.7.5.1 Dark Fiber rates are contained in Exhibit A of this Agreement and include the following elements:

(a) Initial Records Inquiry (IRI). This rate element is a pre-order work effort that investigates the availability of UDF. This is a one-time charge for each route check requested by the CLEC. A simple IRI determines if UDF is available between two Qwest wire centers or between a Qwest wire center and Qwest - will bill the CLEC the IRI immediately upon receipt of the inquiry.

~~b) Mid-Point Structure Inquiry (MPSI) (Loop only). This rate element is a pre-order records research effort that (1) includes IRI to determine the availability of UDF and (2) records research to locate the closest customer Premises. A complex IRI determines if UDF is available between a Qwest wire center and an outside structure (CEV, Hut, etc.) along the Loop fiber route. -will locate the closest point in Qwest will bill CLEC the IRI immediately upon receipt of the inquiry. The IRI is a record search and does not guarantee the availability of UDF.~~

~~which access is available (via an existing structure and FDP).~~

~~e)(b) Field Verification and Quote Preparation (FVQP). This rate element is a pre-order work effort to estimate the cost of providing UDF access to the CLEC at locations other than Qwest Wire Centers or an end-user premises. Qwest will prepare a quote which will explain what work activities, timeframes, and costs are associated with providing access to this FDP location. This quote will be good for 90 calendar days. This charge is not applied when the demarcation points are in a Wire Centers or an end-user premises thirty (30) calendar days. The FVQP is not necessary when the request is between Qwest wire centers or between a Qwest wire center and customer Premises (i.e., IRI). If FVQP is applicable pursuant to this section and CLEC orders UDF that has been reserved after a Field Verification has been performed, then the charge for FVQP will be reduced by the amount of the Field Verification charge assessed in the context of the reservation.~~

(c) Field Verification. This rate element is a work effort performed at CLEC's option before placing a request to reserve UDF to verify the availability of UDF that CLEC desires to reserve.

9.7.5.2 The following rate elements are used once the availability of UDF has been established and the CLEC chooses to access UDF.

9.7.5.2.1 Unbundled Dark Fiber - IOF Rate Elements

(a) UDF-IOF Termination (Fixed) Rate Element. This rate element ~~has both a recurring and non-recurring component rate element~~ and provides a termination at the interoffice FDP within

~~the U S WEST~~Qwest Wire Center. Two UDF-IOF terminations apply per pair. Termination charges apply for each intermediate office terminating at an FDP or like cross-connect point.

(b) UDF-IOF Fiber Transport, (Per MilePair) Rate Element. This recurring rate element has both a recurring and a non-recurring component and applies per pair. This rate element provides a transmission path between Qwest Wire Centers. The recurring component of this rate element is a mileage sensitive element-based on the route miles of the UDF rounded up to the next mile.

(c) UDF-IOF Fiber Cross-Connect Rate Element. This rate element has both a recurring and non-recurring component and is used to extend the optical connection from the IOF FDP to the CLEC's optical demarcation point (ICDF). TwoA minimum of two UDF-IOF fiber cross-connects apply per pair. Cross-connect charges apply for each intermediate office terminating at an FDP or like cross-connect point. The non-recurring rate will not be charged for cross-connects already in place prior to CLEC's order for UDF-IOF.

9.7.5.2.2 Unbundled Dark Fiber - Loop Rate Elements

(a) UDF-Loop Termination (Fixed) Rate Element. This rate element is a recurring rate element and provides a termination at the interoffice FDP within the Qwest Wire Center and at either the customer Premises or an appropriate outside plant structure. Two UDF-Loop terminations apply per pair.

(b) UDF-Loop Fiber (Per Pair) Rate Element. This rate element has both a recurring and a non-recurring component, and it applies per pair. This rate element provides a transmission path between the Qwest Serving Wire Center and either the customer Premises or an appropriate outside plant structure.

(c) UDF-Loop Fiber Cross-Connect Rate Element. This rate element has both a recurring and non-recurring component, is applied per pair, and is used to extend the optical connection from FDP to FDP. The non-recurring rate will not be charged for cross-connects already in place prior to CLEC's order for UDF-Loop.

~~(a) UDF-Loop Fiber Non-Recurring Charge: This rate element includes the termination and cross connects at both ends.~~

~~(b) UDF-Loop Fiber Recurring Charge: This rate element include transport per pair calculated as the average mileage between the originating U S WEST~~Qwest Wire Center and the End-user Premises and the terminations and cross connects at both ends.

~~These rate elements are flat-rated charges to recover the cost of (1) UDF between the Qwest wire center and end user premises and (2) terminations and cross connects at each location.~~

9.7.5.2.3 Extended Unbundled Dark Fiber Rate Elements

(a) E-UDF Termination (Fixed) Rate Element. This rate element is a recurring rate element and provides a termination at the interoffice FDP within the Qwest Wire Center and at the CLEC Wire Center. Two E-UDF terminations apply per pair.

(b) E-UDF Fiber (Per Pair) Rate Element. This rate element has both a recurring and a non-recurring component, and it applies per pair. This rate element provides a transmission path between the Qwest Serving Wire Center and the CLEC Wire Center.

(c) E-UDF Fiber Cross-Connect Rate Element. This rate element has both a recurring and non-recurring component, is applied per pair, and is used to extend the optical connection from FDP to FDP. The non-recurring rate will not be charged for cross-connects already in place prior to CLEC's order for E-UDF.

[Under development]