EXHIBIT JML-1T

BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

| | | |
|---|---|---|
| IN THE MATTER OF THE INVESTIGATION INTO QWEST CORPORATION'S COMPLIANCE WITH § 271(C) OF THE TELECOMMUNICATIONS ACT OF 1996 | ) | DOCKET NO. UT-003022 |

DIRECT TESTIMONY OF

JEAN M. LISTON

RE: CHECKLIST ITEM 4 - LOOPS

ON BEHALF OF

QWEST CORPORATION

May 16, 2001

Page

# I. IDENTIFICATION OF WITNESS

**Q. WHAT IS YOUR NAME AND YOUR BUSINESS LOCATION?**

A. My name is Jean M. Liston. I am a Director, Markets and Regulatory Strategy, in Qwest Corporation (Qwest), formerly known as U S WEST Communications, Inc.[1] My office is located at 1600 7th Avenue, Room 3003, Seattle, Washington 98191.

**Q. WHAT IS YOUR EDUCATIONAL BACKGROUND?**

A. My formal education includes a Bachelor of Arts degree in mathematics from Kean College in New Jersey and a Masters of Science in Business from Steven's Institute of Technology in Hoboken, New Jersey.

**Q. WHAT HAS BEEN YOUR WORK EXPERIENCE?**

A. In 1977, I was hired as a member of the technical staff at Bell Laboratories. In 1981, I accepted a transfer to Pacific Northwest Bell (now Qwest) and since that time have held various staff and line positions in the Network Services organization, in retail marketing, in regulatory product and pricing strategy, and in witness support. In these roles, I have testified before the Wyoming Commission in the areas of Extended Area Service and long distance service. For the past two years, I have been a

[1] Qwest Corporation is the successor to U S WEST Communications, Inc.

271 witness support manager in the areas of resale, public interest and unbundled loops.

**Q. WHAT ARE YOUR CURRENT RESPONSIBILITIES?**

A. Currently, I am the 271 Director responsible for Checklist Item 4 – Unbundled Loops. In that position, I am a member of the Qwest Unbundled Loop Process Team and represent Qwest in formal 271 proceedings which are associated with unbundled loops, including xDSL compatible loops and line splitting.

## II. PURPOSE OF TESTIMONY

**Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

A. The purpose of my testimony is to provide evidence to demonstrate compliance with section 271 checklist item 4, access to unbundled loops, Network Interface Devices (NIDs), and Line and Loop Splitting. I have attached, as Exhibit JML-2, a revised Statement of Generally Available Terms and Conditions (SGAT) that reflects the most current offerings for checklist item 4. Exhibit JML-3 is a revised Exhibit C of the SGAT that reflects the various installation intervals for the unbundled loop services. These versions have been updated to incorporate changes to the SGAT agreed to in Arizona, Colorado and Multi-state 271 workshops.

## III. SUMMARY OF TESTIMONY

**Q. PLEASE SUMMARIZE YOUR TESTIMONY.**

A. My testimony provides information and performance results for Checklist Item 4: access to unbundled loops. As part of this testimony, I explain that unbundled loops are now available to Competitive Local Exchange Carriers (CLECs) under Qwest's SGAT, as well as through individually negotiated interconnection agreements. The testimony covers unbundled loops, including xDSL loops, loop conditioning, spectrum management, line and loop splitting, and Network Interface Devices (NIDs.)

**Q. WHAT DOES CHECKLIST ITEM 4 REQUIRE?**

A. Checklist item 4 of the Act requires Qwest to provide "local loop transmission from the central office to the customer's premises, unbundled from local switching or other services."[2] In the UNE Remand Order, the FCC defined the local loop as "a transmission facility between a distribution frame (or its equivalent) in the incumbent LEC central office and the loop demarcation point at an end-user customer premises, including inside wire owned by the incumbent LEC."[3] Exhibit JML-4 provides a diagram of an unbundled loop as defined by the FCC. The

[2] 47 U.S.C. § 271(c)(2)(B)(iv).
[3] 47 C.F.R. § 51.319(a)(1).

evidence in this testimony demonstrates that Qwest currently provides unbundled loops to CLECs in a timely and nondiscriminatory manner and at an acceptable level of quality. I also review language in the Qwest SGAT which demonstrates that Qwest is obligated to provide access to analog and digital loops, conditioning of loops, access to loops provisioned using Integrated Digital Loops Carriers (IDLC), and access to loop make-up information. Therefore, through its SGAT and interconnection agreements, Qwest provides access to unbundled loops in accordance with the Act and the FCC rules interpreting it.

**Q. WHAT ARE THE REQUIREMENTS IDENTIFIED IN SECTION 271 WHICH QWEST MUST MEET IN ORDER TO SATISFY CHECKLIST ITEM 4?**

A. The FCC requires Qwest to have a concrete legal obligation to provide unbundled loops to CLECs upon request and to provide such loops to CLECs at an acceptable level of quality. As will be demonstrated in my testimony, the cited facts show that Qwest offers nondiscriminatory access to unbundled loops at a quality level that is at least equal to or better than that which Qwest provides to itself, and therefore satisfies Checklist Item 4.

**Q. EARLIER YOU MENTION THE SGAT. DOES THE SGAT IMPOSE OBLIGATIONS UPON QWEST TO OFFER LOOPS?**

A. Yes. The SGAT creates a concrete and specific legal obligation for Qwest to provide CLECs with Unbundled Network Elements (UNEs) upon request in conformance with Sections 251 and 271 of the Act. In essence, the SGAT is Qwest's standard wholesale contract offer, which provides competitors with the rates, terms and conditions that Qwest commits to comply with in provisioning loops. SGAT Section 9.2 pertains to unbundled loop issues. As mentioned above, Exhibit JML-2 is an updated version of this section and the associated definitions found in Section 4. These proposed sections reflect SGAT changes agreed to in previous workshops. Additionally, JML-2 contains Exhibit A which delineates the prices for the various products. These prices were adopted in Washington in Docket No.UT-960369, et al. This docket examined costs and rates and subsequent deaveraging of those rates. Exhibit JML-3 includes the revised Exhibit C to the SGAT and identifies all relevant loop installation intervals. These exhibits reflect both the standardized SGAT language while incorporating language found in various interconnection agreements already in existence in Washington.

**Q. ARE THERE OTHER KEY PORTIONS OF YOUR TESTIMONY?**

A. Yes. My testimony also demonstrates that Qwest has processes in place to make unbundled loops available to CLECs upon request and has performance indicator definitions (PIDs) developed collaboratively in the ROC process that permit CLECs and the Commission to assess Qwest's unbundled loop service performance. These indicators and their measurements are discussed later in my testimony.

In summary, my testimony identifies those specific unbundled loops that Qwest provides, discusses Qwest's performance in providing unbundled loops, explains how Qwest provisions those loops and what responsibilities the CLECs have in ordering those loops, and finally, discusses the various installation and repair performance standards applicable to Qwest's myriad of unbundled loop offerings.

## IV. KEY DEFINITIONS IN TESTIMONY

**Q. WHAT ARE THE MOST SIGNIFICANT TERMS THAT WILL BE USED THROUGHOUT YOUR TESTIMONY? PLEASE DEFINE EACH ONE.**

A. The following are the key definitions used in this testimony:

1. Unbundled Loop: SGAT Sections 4.34 and 9.2.1. The Local Loop network element is defined as a transmission facility between a distribution frame (or its equivalent) in an incumbent LEC Central Office and the Loop Demarcation Point at an end user's premises. The Local Loop network element includes all features, functions, and capabilities of such transmission facility. Those features, functions, and capabilities include, but are not limited to, Dark Fiber, attached electronics (except those electronics used for the provision of advanced services, such as Digital Subscriber Line Access Multiplexers), and line conditioning. The Local Loop includes, but is not limited to, DS1, DS3, fiber, and other high capacity Loops.

2. Demarcation Point: SGAT Section 9.2.1.1. Defined for purposes of this section as the point where Qwest owned or controlled facilities cease, and CLEC, end user, owner, or landlord ownership of facilities begins.

3 Network Interface Device (NID): SGAT Section 9.5. Any means of interconnection of end-user customer on-premises wiring and Qwest's distribution plant, such as a cross connect device used for that purpose. Specifically, the NID is the interface or cross connection device attached to the building between the end user

customer on-premises wiring and Qwest distribution plant. Qwest shall permit a CLEC to connect its own Loop facilities to on-premises wiring through Qwest's NID, or at any other technically feasible point. The NID carries with it all features, functions and capabilities of the facilities used to connect the Loop distribution plant to the customer premises wiring, regardless of the particular design of the NID mechanism . . .[4]

4. Conditioning : As defined by the FCC, conditioning is "the removal from the loop of any devices that may diminish the capability of the loop to deliver high-speed switched wireline telecommunications capability, including xDSL service. Such devices include, but are not limited to, bridge taps, load coils, low pass filters, and range extenders."[5]

5. Line Splitting: SGAT Section 9.21. Provides CLEC/DLEC with the opportunity to offer advanced data services simultaneously with an existing UNE-P by using the frequency range above the voice band on the copper Loop. The advanced data service may be provided by the customer of record or another data service provider chosen by the customer of record. A POTS splitter must be inserted into

[4] 47 C.F.R. §51.319(b).
[5] 47 C.F.R. §51.319(a)(3).

the UNE-P to accommodate establishment of the advanced data service. The POTS splitter separates the voice and data traffic and allows the copper Loop to be used for simultaneous DLEC data transmission and CLEC provided voice service to the end user.

6. Loop Splitting: SGAT Section 9.24. This provides CLEC/DLEC with the opportunity to offer advanced data service simultaneously with an existing Unbundled Loop by using the frequency range above the voice band on the copper loop.

7. Individual Case Basis (ICB): SGAT Section 4.24(a). Each UNE or resale product marked as ICB will be handled individually on a pricing and/or interval commitment basis. Where ICB appears, the CLEC should contact their account team for pricing, ordering, provisioning or maintenance information.

**Q. ARE THESE THE PRIMARY DEFINITIONS FOUND IN THE SGAT SECTIONS ON LOOPS?**

A. Yes, they are.

**Q. THERE ARE VARIOUS REFERENCES WITHIN THE SGAT TO OTHER DOCUMENTS. PLEASE EXPLAIN THEIR NEED.**

A. The SGAT is a contractual document that demonstrates Qwest's commitment to provide CLECs with unbundled loops. However, the SGAT cannot contain within it every detail of its interaction with CLECs. Therefore, in order to provide CLECs with further technical and operational information, the SGAT references the IRRG/PCAT and various technical publications, which I describe below.

**Q. PLEASE EXPLAIN THESE CROSS-REFERENCES.**

A. Throughout the SGAT Qwest makes reference to the Interconnection Resale and Resource Guide (IRRG) which is now available as part of the Qwest Wholesale Product Catalog (PCAT) and various technical publications. In other jurisdictions, some intervenors were concerned that many of the technical details should be included in the SGAT in order to insure that Qwest demonstrates a concrete and legal obligation to provide its services. Qwest includes considerable detail in its SGAT to create this binding obligation. The inclusion of all the unbundled loop interconnection processes and technical details in the SGAT, however, would create an extremely large and unmanageable document. Also, it should be noted that with the various interconnection agreements signed in Washington, this technical detail was not included in the contract. Therefore, Qwest will continue to include in the SGAT cross-references to relevant technical publications. Qwest has made a commitment in other 271 workshops to submit changes to the IRRG and the Tech Pubs to the formal change

control process (CICMP). CLECs can access the CICMP information on-line at http://www.qwest.com/wholesale/cicmp/index.html. This formal control process ensures that CLECs will have an opportunity to review all future IRRG and Tech Pub changes.

**Q. HOW OFTEN DOES QWEST UPDATE THESE VARIOUS DOCUMENTS?**

A. Qwest updates these documents when there are changes, either in agreements with CLECs and Commissions, the FCC, or as technical parameters change. All CLECs operating in Washington will be provided notification of these changes. Additionally, Qwest has agreed to update these publications within 45 days of closing a workshop.

**Q. HAS QWEST MADE ANY ADDITIONAL CHANGES TO THE SGAT TO ACCOMMODATE THE CONCERNS ABOUT THE VARIOUS TECHNICAL DOCUMENTS?**

A. Yes, it has. Additionally, Qwest and the various intervenors in another jurisdiction reached agreement that language will be added to the SGAT that states that if there is a conflict between the SGAT and the IRRG and/or a Technical Publication, the SGAT will take precedence. With this change and with Qwest's commitment to include changes in the CICMP process, Qwest will continue to reference these documents throughout the

SGAT. Qwest believes that with the CICMP process and the inclusion of additional language in the SGAT, it does demonstrate a concrete and legally binding agreement for meeting the competitive checklist requirements.

**Q. PLEASE BRIEFLY DISCUSS THE IRRG AND THE TECHNICAL PUBLICATIONS REFERENCED EARLIER.**

A. Certainly.

IRRG: Qwest has recently updated the IRRG to match the SGAT and is continuing the process to make sure that the IRRG, the technical publications, and the SGAT are all in agreement with one another. In another workshop Qwest has agreed to update the technical publications and the IRRG 45 days after the close of the checklist item workshop. This agreement will also apply to unbundled loops. The newly revised wholesale web-site http://www.qwest.com/wholesale includes a link to the Product Catalog (PCAT) / IRRG. For purposes of this testimony, Qwest will continue to use the term IRRG.

Technical publications – CLECs are responsible for obtaining their own copies of these documents, and Qwest has provided them with instructions on how to obtain copies of the technical publications. The 45-

day update rule, mentioned above, also applies to the technical publications. The web site is http://www.qwest.com/techpub.

## V. UNBUNDLED NETWORK ELEMENTS

**Q. PLEASE IDENTIFY THE UNBUNDLED NETWORK ELEMENTS THAT QWEST PROVIDES AS PART OF ITS COMPLIANCE WITH CHECKLIST ITEM 4.**

A. Qwest provides access to various types of unbundled loops and the Network Interface Devices (NID).

**Q. PLEASE DESCRIBE IN GENERAL TERMS QWEST'S UNBUNDLED LOOP OFFERINGS.**

A. Qwest provides CLECs with access to both analog and digital loops, the conditioning of digital loops, access to loops provisioned using Integrated Digital Loop Carriers (IDLC), and access to loop make-up information. Both the FCC's old and new Rule 319 require Qwest to make both two-wire analog and four-wire analog or digital unbundled loops available. The FCC's First Local Competition Order stated:

> [This] definition [of unbundled loops] includes, for example, two-wire and four-wire analog voice-grade loops, and two-wire and four-wire loops that are conditioned to transmit the digital signals needed to provide services such as ISDN, ADSL, HDSL, and DS1-level signals.

The FCC reaffirmed this finding in the UNE Remand Order,[6] and provided additional clarification that the loops could also include fiber, attached electronics and, if requested the capability of transmitting digital signals (e.g. xDSL).

**Q. HAS QWEST PROVISIONED LOOPS IN WASHINGTON?**

A. Yes. As of March 2001, Qwest had provisioned 21 CLECs with 34,290 loops located throughout the state. That compares to a January 2000 total of only 12,323 loops for 11 CLECs in Washington State. In other words, there has been an increase of over 175% of total loops in the last 14 reported months.

The sheer volume of loops in service indicates that Qwest has made loops available to the CLECs. Exhibit JML-5 contains the specific graphs that display the analog and digital loops in service for January 2000, and by month for January 2001 through March 2001.

**Q. WHAT ARE THE SPECIFIC LOOP TYPES THAT QWEST PROVIDES ON AN UNBUNDLED BASIS?**

[6] UNE Remand Order at ¶166 and ¶167

A. Qwest provides the following loop types which are consistent with FCC and Section 271 requirements, as well as existing interconnection contracts:

**Basic 2/4 Wire Analog Loop (Voice Grade)**

The Basic 2/4 Wire Analog Loop is available as a two-wire or four-wire voice grade, point-to-point configuration suitable for local exchange type services within the analog voice frequency range. This service is a transmission path that provides a connection from the Qwest serving Central Office Distribution Frame or equivalent to the demarcation point at the end user's location. The actual Loop facilities may utilize various technologies or combinations of technologies.

**DS-1 Capable Loop**

The DS-1 Capable Loop is a transmission path between the Qwest Serving Central Office Distribution Frame, or equivalent, and the demarcation point at the end user location. The DS-1 Capable Loop transports bi-directional DS-1 signals with a nominal transmission rate of 1.544Mbps and will meet the design requirements specified in Technical Publication 77384.

It will be at Qwest's discretion to determine the medium on which the loop is provided. This could include but is not limited to the following:

- Metallic based span with HDSL or T-1 equipment
- Channel of a fiber based system
- Combination of both fiber and metallic

**DS-3 Capable Loop**

The DS-3 Capable Loop is a transmission path between a Qwest serving Central Office Distribution Frame, or equivalent, and a demarcation point at an end user location. The DS-3 Capable Loop transports bi-directional DS-3 signals with a nominal transmission rate of 44.736 MBPS that meets the design requirements specified in Technical Publications 77384 and 77324 (DS3).

Availability of the DS-3 Capable Loop is limited to those routes where DS-3 services have been deployed. Qwest will not add terminating electronic equipment to add capacity within a route.

Qwest has sole discretion as to the type of facilities that will carry the DS-3 service.

**Basic Rate ISDN (BRI) Capable Loop**

The Basic Rate ISDN (BRI) Capable Loop is a Qwest facility with a two-wire interface that provides a transmission path from the Qwest serving Central Office Distribution Frame, or equivalent, to an end user's demarcation point. This loop transports bi-directional, two-wire, signals with a nominal transmission rate of 160 KBPS and will meet the performance requirements specified in Qwest's Technical Publication 77384. It shall permit access to 144 KBPS channelized payload bandwidth for transport of services.

This Loop is typically provided in the following configurations:

- Non-loaded metallic loop technically qualified for BRI ISDN transmission without the need for additional equipment.
- A combination of a long non-loaded metallic loop, a mid-span regenerator and Central Office power unit.
- A combination of Universal Digital Loop Carrier (UDLC) channels and a qualified non-loaded metallic loop.

**2/4 Wire Non-Loaded Loop**

The 2/4 Wire Non-loaded loop is a transmission path that provides a connection from the Qwest serving Central Office Distribution Frame, or equivalent, to the end user's demarcation point. It is a metallic, wire cable pair with no load coils, and, depending on NC and NCI codes specified by the CLEC, some limited lengths of bridged taps.

**Asymmetric Digital Subscriber Loop (ADSL) Compatible Loop**

An ADSL Compatible Loop is an Unbundled 2-wire metallic facility that establishes a transmission path between a Qwest serving Central Office Distribution Frame and the demarcation point located at the end user's designated premise. This Loop will meet the performance requirements specified in Qwest's Technical Publication 77384.

**xDSL-I Capable Loop**

The xDSL-I Capable Loop is a two-wire facility that provides a transmission path from the Qwest serving Central Office Distribution Frame, or equivalent, to an end user demarcation point. This loop transports bi-directional, two-wire signals with a nominal transmission rate of 160 KBPS and will meet the performance requirements specified in Qwest's Technical Publication 77384. It shall permit access to 144 KBPS unchannelized payload bandwidth for transport of services.

This Loop is typically provided in the following configurations:

- Non-loaded metallic loop technically qualified for BRI/ ISDN transmission without the need for additional equipment.
- A combination of a long non-loaded metallic loop, a mid-span regenerator and Central Office power unit.
- A combination of Universal Digital Loop Carrier (UDLC) channels and a qualified non-loaded metallic loop.

**Fiber and Other High Capacity Loops**

CLECs may also obtain Fiber and Other High Capacity loops such as OC3, OC12, OC48, and OC192. The availability of these high capacity loops is limited to where the services have already been deployed.

**Dark Fiber Loop**

CLECs may also obtain Dark Fiber loops on an unbundled basis. Ms. Stewart will present Dark Fiber during the Emerging Services workshop. The full definition and provisioning process can be found at: http://www.uswest.com/wholesale/productsServices/irrg/udf.html

**Q. THE SGAT USES THE TERMS "CAPABLE" AND "COMPATIBLE" TO DESCRIBE VARIOUS LOOP TYPES. PLEASE DEFINE THOSE TERMS.**

A. When Qwest uses the term "Capable" to describe a loop, it means that Qwest assures that the loop is going to pass the Network Channel (NC)/Network Channel Interface (NCI) specified signal, consistent with

industry Standards. For example ANSI Standards T1.601 and T1.102 specify the ISDN and DS1 interfaces. There are test sets that indicate whether the loop is performing to the established standards. Qwest will build the capable loop using whatever equipment it takes, such as subscriber loop carrier or range extenders, to insure that the loop meets the standards.

The term "Compatible" means the Loop complies with the ordered Network Channel (NC) and Network Channel Interface (NCI) Codes. In this case Qwest makes no assumptions as to the capabilities of the CLECs central office equipment or customer premises equipment (CPE). The loop has no inspection other than for load coils, and effective low pass filter. If a CLEC uses sensitive equipment that exceeds industry standards for Signal to noise ratio, etc. it may well be able to use loops that are considered beyond normal length or loss and therefore Qwest should not restrict the use of the loop due to loop length.

**Q. DOES QWEST EQUIP LOOPS WITH EXTENSION TECHNOLOGY?**

A. Yes, Qwest provides Extension Technology if needed. Extension Technology is unique to the Basic Rate ISDN (BRI) Capable Loop and xDSL-I Capable Loop product offering; prices are Washington and contract specific. Extension Technology takes into account, for example:

the additional regenerator placement, central office powering, Mid-Span repeaters, and, if required, BRITE cards in order to provision the Basic Rate xDSL-I Loop. Extension Technology may be required in order to bring the circuit to the specifications necessary to accommodate the requested service. If the Circuit Design requires Extension Technology, then Qwest will add it at no charge to the CLEC. Extension Technology can also be requested by a CLEC to meet its specific needs. If the CLEC requests Extension Technology and the facility design does not require Extension Technology, then the CLEC will be charged for the equipment. Qwest will provision ISDN (BRI) Capable and xDSL-I Capable loops using the specifications in the Technical Publication 77384.

**Q. ARE THERE ANY OTHER UNBUNDLED LOOP TYPES THAT QWEST PROVIDES?**

A. As required by the UNE Remand Order, Qwest will also provide other fiber and high capacity loops to CLECs available on an individual case basis (ICB) where facilities are available. In an attempt to clarify these products, Qwest now lists the various fiber facilities it will provide in section 9.2.2.3.1 of the SGAT.

**Q. DOES QWEST OFFER CLECs xDSL CAPABLE LOOPS?**

A. Yes. Qwest offers a variety of xDSL capable loops, such as ADSL and 2/4 wire loops. xDSL is the generic term that refers to various types of high-speed digital services. The technical requirements for these loops vary based on the equipment placed on the loop by the CLEC. Some of these are generic loops that may require conditioning to meet the CLEC's technical specifications and others which are geared toward a specific type of xDSL service, such as ADSL. Network Channel Codes and Network Channel Interface Codes that are placed on the LSR by the CLEC define the specific needs of a CLEC.

**Q. PLEASE PROVIDE A LIST OF THE xDSL LOOPS AND THE QUALIFYING NETWORK CHANNEL CODE THAT IS NEEDED IN ORDER FOR A CLEC TO REQUEST ITS DESIRED SERVICE.**

A. Certainly.

| **Loop Type** | **Network Channel Code (NC)** |
|---|---|
| Non-Loaded 2/4 Wire Loops | LX-N |
| ADSL Compatible Loops | LXR- |
| ISDN Capable Loops | AD-- |
| xDSL-I Capable Loops | ADU- |

Exhibit JML-6 displays a copy of Tables 5, 6, and 7 of Technical Publication 77384. These tables display the Network Channel (NC) codes, the associated Network Channel Interface (NCI) codes, and the technical description of these services. The Tables display that Qwest's 2-wire Non-Loaded loop supports digital compatible xDSL, ADSL, and HDSL. Additionally, the tables display the various data speeds available on these loops. The 2-Wire Non-Loaded Loops, the ISDN Capable, the ADSL Compatible and the xDSL-I Loops will be referred to collectively as xDSL Loops for purposes of this testimony.

**Q. ARE THE FACILITIES FOR AN xDSL LOOP AND QWEST'S RETAIL DSL THE SAME?**

A. No. The xDSL loop is a dedicated facility designed to support high-speed digital transmissions that Qwest may be required to condition in order to support the CLEC's xDSL service. Conversely, the Qwest DSL (formerly known as Megabit) retail offering uses an existing line and utilizes a shared facility technology. In other words, the data signals are transmitted over the same facility as the voice signals. This is the same technology Ms. Stewart addresses in the Line Sharing portion of the Emerging Service workshop. Additionally, Qwest does not condition facilities to provision its retail DSL offering. For these reasons, it is apparent that an xDSL loop is not the same as Qwest's DSL retail offering.

**Q. YOU MENTIONED THAT QWEST WILL CONDITION A LOOP TO SUPPORT CLEC's xDSL SERVICES. PLEASE EXPLAIN LOOP CONDITIONING.**

A. Basically, loop conditioning is the term used to describe the process of removing load coils, bridge taps, and any other devices from existing copper loops that would negatively impact the transmission of a digital signal. In many cases, the data portion of the loop will not work correctly if there are load coils or certain amounts of bridge taps on the loop. Qwest provides CLECs with Loop Conditioning for xDSL compatible services upon request.

**Q. DID THE FCC MANDATE LOOP CONDITIONING?**

A. Yes. The FCC's definition of a loop requires Qwest to condition loops:

> Our definition of loops will in some instances require the incumbent LEC to take affirmative steps to condition existing loop facilities to enable requesting carriers to provide services not currently provided over such facilities. For example, if a competitor seeks to provide a digital loop functionality, such as ADSL, and the loop is not currently conditioned to carry digital signals, but it is technically feasible to condition the facility, the incumbent LEC must condition the loop to permit the transmission of digital signals . . . .[7]

[7] First Local Competition Order at ¶382.

**Q. DID THE FCC PROVIDE ANY GUIDANCE ON THE COST RECOVERY FOR CONDITIONING LOOPS FOR CLECS?**

A. Yes, it did. In the UNE Remand Order the FCC clearly ruled on this issue, including cost recovery for conditioning loops less than 18,000 feet:

> We agree that networks built today normally should not require voice-transmission enhancing devices on loops of 18,000 feet or shorter. Nevertheless, the devices are sometimes present on such loops, and the incumbent LEC may incur costs in removing them. Thus, under our rules, the incumbent should be able to charge for conditioning such loops.[8]

Therefore, the FCC authorizes conditioning charges on loops, regardless of length. Additionally, in a case in Colorado, the federal court held that Qwest has the right to recover costs it incurs to condition loops of less than 18,000 feet.[9] Therefore, both the FCC and a Colorado federal court have ruled that Qwest is entitled to recovery of costs it incurs to condition loops, including costs for conditioning loops that are less than 18,000 feet from the central office.

**Q. NOTWITHSTANDING THE FACT QWEST IS ENTITLED TO RECOVER LOOP CONDITIONING COSTS, HAS QWEST ACTED PROACTIVELY TO REDUCE THE TIMES THAT A CLEC WILL HAVE TO PAY FOR CONDITIONING?**

---

[8] UNE Remand Order at ¶193.

[9] U S WEST Communications, Inc. v. Hix, Civil Action No. 97-D-152 (consolidated), Order at 10 (D.Colo. June 23, 2000.)

A. Yes, it has. Although not required by the FCC or other laws to do so, in calendar year 2000, Qwest started a facility upgrade project to remove load coils from loops less than 18 kilofeet in length in select wire centers. To date, this project has been funded entirely by Qwest. Confidential Exhibit JML-7C displays the wire centers in which the CLECs are currently providing xDSL loops, and the wire centers that have been included in the bulk de-loading project. Qwest's bulk de-loading efforts will significantly decrease the number of loops less than 18 kilofeet in length that will require conditioning, and hence will reduce costs that a CLEC incurs. CLECs have access information regarding the de-load project via web access. Because of the type of accounting Qwest utilizes for the project, none of the costs of the project are included in its TELRIC studies. Qwest accounts for the costs of the project as "costs of removal" whereby the costs of the project will be reflected in future depreciation decisions related to its embedded plant. The depreciation rates ordered by commissions for use in setting UNE rates have not reflected any adjustment for the bulk de-loading as those rates were set, or based on information prior to the project's initiation. Therefore, the voluntary de-loading project will not result in increased costs to the CLECs, but does provide significant benefits in reducing those instances in which CLECs are faced with charges for conditioning loops of less than 18,000 feet.

**Q. WHAT ARE LOAD COILS?**

A. Load coils are actually coils of wire which look like an iron "doughnut" around which are wrapped each wire of the copper loop. Load coils were originally used in the network to boost signals in long cooper loops.

**Q. WHAT ARE BRIDGE TAPS?**

A. Bridge taps are extensions or branches off of the loop facility. For instance there may be a 25 pair cable that runs down the main road that then splits in two different directions to support two different streets. The split or the branches form the bridge tap. Exhibit JML-8 pictorially displays bridge tap and how it is measured.

**Q. WHAT IS STUB CABLE?**

A. Stub cable is short lengths (up to 100 feet) of cable that may have been placed in feeder or distribution plant for ease of future additions or changes. Stub cables are not considered “Bridged tap” needing removal in unbundled loop situations where bridge tap removal is generically requested.

**Q. IS THIS POSITION SUPPORTED BY THE INDUSTRY?**

A. Yes, the position that stub cables are not considered to be bridge tap is supported by the industry. The July 1999 establishment of the Bell Atlantic Common Language, Network Channel code for unbundled loops described as having "0 BRIDGE TAP OR NO BRIDGE TAP" clearly excluded stub cables from being considered as bridge tap. The Bell Atlantic codes were requested in a Telcordia Request 99-05322-N. There was no debate around the exclusion of stub cables from being considered as bridged tap.

**Q. HOW DID THESE LOAD COILS AND BRIDGE TAPS BECOME USEFUL IN THE NETWORK?**

A. As Qwest began to place fiber-fed digital carrier to replace long loops in the network, long copper loops were shortened and re-used, in part, for other customers closer to the central offices. Therefore, existing copper loops, which at one time needed load coils to provide voice service over longer distances, now may be utilized closer to the central office since load coils are not a hindrance to analog traffic. However, as previously mentioned, digital service often will not work properly with a load coil on the loop, thereby requiring it to be removed.

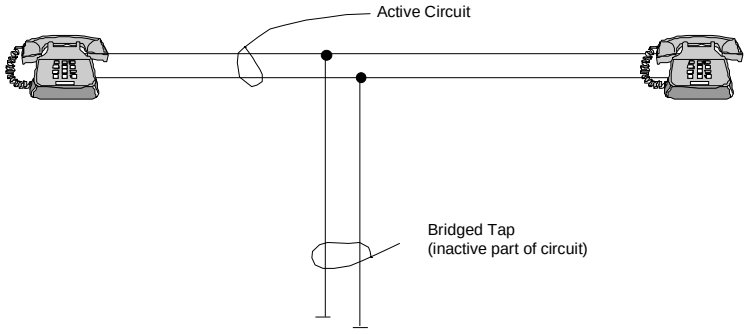


**Exhibit 1**

Bridge tap is used to provision telephone services economically, as it can assist in clearing and preventing held orders. Over a period of time, there is churn in the network. Customers come and go, but the telephone plant remains relatively constant. For example, what was once a high growth area twenty years ago may now have stagnant demand growth. Other areas where there was no growth twenty years ago may have a growing demand today (e.g., renovated residential urban areas). Given the flux in growth demands, the telephone plant that was once designed to serve one area can now be "bridged" in to serve new areas experiencing growth. (See Exhibit 1 above.)

**Q. WHY DO THESE VARIOUS DESIGNS IN THE LOOP PLANT CAUSE PROBLEMS WHEN A CLEC CHOOSES TO PURCHASE UNBUNDLED LOOPS FROM QWEST?**

A. Load coils, line extenders, bridge taps, and mixed copper gauges, all of which are suitable for voice services, degrade most digitized signals in the loop and, hence, have to be removed when a loop is used for a data service. Bridge tap weakens and reflects such signals (the non-terminated ends of the cable pair act as long antennas). They also put an obvious notch in the loop's attenuation at the frequency associated with the bridge tap's wavelength. Mixed gauges of copper reflect part of the digitized signal. Load coils and line extenders limit the available bandwidth. Therefore, to minimize these effects, digitized loops typically are "conditioned" by removing load coils and excessive bridge taps.

**Q. IS THE FCC CONDITIONING REQUIREMENT OF QWEST UNLIMITED IN ITS NATURE?**

A. No. This conditioning provision is subject to a technical feasibility standard:

> Incumbent LECs are required to provide access to these transmission facilities only to the extent technically feasible. That is, if it is not technically feasible to condition a loop facility to support a particular functionality, the incumbent LEC need not provide unbundled access to that loop so conditioned. For

example, a local loop that exceeds the maximum length allowable for the provision of a high-bit-rate digital service could not feasibly be conditioned for such service. . . .[10]

**Q. PLEASE PROVIDE DIFFERENT SITUATIONS IN WHICH THE CLEC MAY REQUEST CONDITIONED LOOPS FROM QWEST.**

A. The Qwest SGAT provides for loop conditioning in several different situations:

- CLECs may request a Non-Loaded Unbundled Loop. In the event that no such facilities are available, Qwest can be requested to 'condition' existing spare facilities to meet this specification. CLECs indicate on the LSR that they pre-approve conditioning if needed. Qwest will dispatch a technician to 'condition' the loop by removing load coils and excess bridge tap, if necessary, in order to provide the CLEC with a Non-Loaded Loop. The CLEC will be charged the non-recurring conditioning charge (i.e., cable unloading and bridge tap removal), if applicable, in addition to the Unbundled Loop installation non-recurring charge.[11]

- When a CLEC requests a Basic Rate ISDN capable Loop, Qwest will dispatch a technician, if necessary, to provide Extension Technology (as defined in the IRRG), that takes into account for example: the additional regenerator placement, central office powering, Mid-Span repeaters, if required, BRITE cards in order to provision the Basic Rate xDSL-I Loop. Extension Technology may be required in order to bring the circuit to the specifications necessary to accommodate the requested service. If the Circuit Design requires Extension Technology, it will be added by Qwest at no charge to the CLEC. Extension Technology can also be requested by a CLEC to meet their specific needs. Requested Extension Technology will result in charges to the CLEC. Qwest will provision ISDN (BRI) Capable and xDSL-I Capable loops using the

[10] First Local Competition Order at ¶381.
[11] See SGAT at 9.2.2.4.

specifications in the Technical Publication 77384. The CLEC will be charged an Extension Technology recurring charge in addition to the Unbundled Loop recurring charge, if applicable, as specified in Exhibit A of the SGAT. [12]

- For DS1 or DS3 Capable Loop, Qwest will provide the necessary electronics at both ends including any intermediate repeaters. In addition, the CLEC will have access to these terminations for testing purposes.[13]

- When a CLEC requests an ADSL Compatible Loop, the CLEC will use the ADSL Loop Qual tool to pre-qualify the requested circuit, utilizing the existing telephone number or address to determine whether it meets ADSL specifications. The qualification process tests the circuit for compliance with the design requirements specified in Technical Publication 77384.[14]

**Q. ONCE IT IS DETERMINED THAT IT IS TECHNICALLY FEASIBLE FOR CONDITIONING TO OCCUR, WHAT IS THE PROCESS BY WHICH QWEST CONDITIONS THE REQUESTED LOOP?**

A. There are several steps required to remove a load coil or bridge tap. First, an engineer researches the records to determine where the load coils or a bridge tap are located in the field and issues a work order to the construction forces. Next, a construction technician is dispatched to the field to cut away from the load coil cable stub and re-splice the loop together. Once the engineering is complete, the physical act of conditioning a loop requires, on average, about four hours per manhole.

[12] See SGAT Section 9.2.2.5.
[13] See SGAT Section 9.2.2.6
[14] See SGAT Section 9.2.2.8.

Many conditioning jobs require entering more than one manhole, meaning that the average time to complete each job is well in excess of four hours. Exhibit JML-20 is a flow chart that depicts the tasks associated with conditioning a loop.

**Q. ARE THERE ANY OTHER ISSUES RELATED TO CONDITIONING WHICH THE COMMISSION NEEDS TO KNOW?**

A. Yes. As will be discussed later, Qwest has developed a loop qualification tool that allows CLECs to identify the underlying loop make-up from which it can determine whether a loop needs conditioning in advance of ordering the loop from Qwest.

## VI. INTEGRATED DIGITAL LOOP CARRIER

**Q. WHAT OTHER REQUIREMENTS ARE THERE TO PROVIDE UNBUNDLED LOOPS?**

A. Except where technically infeasible, such as an inaccessible bridge tap in a stub cable, discussed above, Qwest commits to provide unbundled loops to CLECs. Additionally, where technically feasible, Qwest is obligated to provide unbundled loops when the loop is served with Integrated Digital Loop Carrier (IDLC) or similar technologies. In its First Local Competition Order, the FCC addressed the issue of IDLC and required ILECs to unbundle loops served by IDLC:

> . . . If we did not require incumbent LECs to unbundle IDLC-delivered loops, end users served by such technologies would not have the same choice of competing providers as end users served by other loop types. Further, such an exception would encourage incumbent LECs to "hide" loops from competitors through the use of IDLC technology.
>
> We find that it is technically feasible to unbundle IDLC-delivered loops. One way to unbundle an individual loop from an IDLC is to use a demultiplexer to separate the unbundled loop(s) prior to connecting the remaining loops to the switch. Commenters identify a number of other methods for separating out individual loops from IDLC facilities, including methods that do not require demultiplexing. Again, the costs associated with these mechanisms will berecovered from requesting carriers.[15]

**Q. HAS THE FCC MODIFIED ITS POSITION ON IDLC SINCE THE FIRST LOCAL COMPETITION ORDER?**

A. Yes. In the UNE Remand Order, the FCC recognized that unbundling IDLC is not always technically feasible and is impossible in some instances. For example, in paragraph 217 and specifically footnote 418 of paragraph 217 of the UNE Remand Order, the FCC stated that "[i]n the three years since the Local Competition First Report and Order, such methods [such as use of a multiplexer to separate the unbundled loop prior to connecting the remaining loops to the switch] have not proven practicable." In footnote 390 of paragraph 204, the FCC noted that providing unbundled loops when there is IDLC is difficult "or even

[15] First Report and Order, ¶¶383-384.

impossible" under some circumstances. In fact, the use of IDLC in incumbent LEC networks was one of the justifications the FCC identified for requiring incumbent LECs to provide subloop elements.[16]

**Q. ARE THERE ANY EXAMPLES YOU CAN CITE WHICH WILL CLARIFY THIS ISSUE?**

A. Yes. For example, when a CLEC requests a two-wire analog unbundled loop to an address where the existing loops are now IDLC, Qwest will attempt to provide the requested unbundled loop through an alternative solution, such as copper or Universal Digital Loop Carrier (UDLC). UDLC is a form of pair gain that is not integrated with the switch, and therefore each individual loops may be able to be de-multiplexed at the central office for potential delivery to a CLEC. As discussed above, the FCC recognized in its UNE Remand Order that there may be some circumstances in which it is not technically feasible to unbundle the IDLC. Qwest has determined that in Washington, approximately 6.3% of all access lines are provisioned using IDLC. Only 4% of the lines are located in areas where more than 75% of the facilities are served by IDLC technology. Because of this low usage of IDLC in Washington, Qwest believes that in the vast majority of situations, unbundled loops can be provisioned using an alternative to unbundling the IDLC.

---

[16] UNE Remand Order ¶217.

**Q. WHAT IS THE PROCESS QWEST WILL FOLLOW TO DETERMINE IF THERE IS AN ALTERNATIVE TO UNBUNDLING THE IDLC?**

A. Qwest will look for alternatives before it actually unbundles Integrated Digital Loop Carrier (IDLC). Exhibit JML-9 displays the engineering decision tree for determining the best methodology for unbundling the loop. Qwest will always look for a copper alternative as the first step. Qwest employs an 11-step assignment process to look for alternative facilities as outlined in Exhibit JML-10. This process involves looking for spare copper, line and station transfers or recovery of defective copper pairs. If Qwest is able to find an alternative copper pair the order will be provisioned within the standard interval displayed in Exhibit C of the SGAT. If a copper solution is not available, then Qwest look to see if there is a Universal Digital Loop Carrier solution. This solution can also be provisioned within the standard installation intervals.

**Q. WHAT IF NONE OF THE ABOVE SOLUTIONS IS AVAILABLE?**

A. If none of the above solutions is possible, then Qwest will investigate other alternatives. The first alternative is to determine if the IDLC is Integrated Network Access (INA) capable. The INA Digroup solution requires the use of a D4 channel bank and a dedicated DS1 and is only possible in systems with Time Slot Interchange (TSI) components. If the office is

equipped to support the INA Digroup solution, then Qwest provisions the service within 15 business days.

If the IDLC is not INA capable, but it is supported by ISC303, then Qwest will determine if there is a remote, non-Central Office, solution using an existing Universal Digroup. If the loop can be provisioned using an existing Universal Digroup, then the loop can be provisioned within the standard interval.

If none of the above solutions are available, then Qwest will investigate a Central Office Terminal (COT) solution. There are different types of COTs, such as 1/0 DCS and Litespan 2000, that vary based on the types of central office equipment and outside plant facilities. If a COT solution is possible, then the loop will be provisioned within the standard interval. However, if a COT is not currently installed in the Central Office, then Qwest will assess the viability of hairpinning. Exhibit JML-11 describes the hairpinning process. The decision to hairpin requires a director approval, which takes 72 hours. Once director approval is received, Qwest will move forward to do the hairpin. Then the loop can be installed in 15 business days.

**Q. PLEASE EXPLAIN HAIRPINNING IN MORE DETAIL.**

A. Hairpinning is used on a very limited basis, 3 or less per pair gain system, due to the impact on all other services. Qwest only deploys IDLC when there are not enough copper pairs to provide one pair per customer. Mode I digital loop carrier systems provide 96 customer lines over four DS1's. In the case of IDLC the DS1's pass through the Integrated Digital Carrier Unit (IDCU) to the switch. The 40 DS1's are terminated on the IDCU, which is capable of supporting ten pair gain systems each requiring 4 DS1's per system. The pair gain systems may be located at ten separate Remote Terminals. Unbundling the loop by hairpinning requires taking one of the DS1's supporting the pair gain system from the IDCU to a D4 channel bank. This results in eliminating one quarter of the pair gain system, or the equivalent of 24 customer lines at the RT. If 1 DS1 per system were used for unbundling loops it would be equivalent to loss of 230 customer lines at the IDCU. Furthermore, the remaining 23 DS0's on the DS1 are also lost, unless additional unbundled loops are deployed in that system.

If a COT does not exist in the Central Office, then Qwest will install the COT. The installation of a new COT requires a Central Office job that can take from 90 to 120 days.

**Q. HAS QWEST DEVELOPED ANY OTHER PROCESSES TO ADDRESS IDLC UNBUNDLING?**

A. Yes. As discussed below, Qwest recently created a new control center for coordinated installations, the QCCC. The QCCC will also have a dedicated manager associated with handling of loops provisioned over IDLC. Qwest believes that the new center will facilitate the provisioning of unbundled loops that are provisioned over IDLC. The new team will be trained to focus on the proper escalation process and the special handling required to unbundle these facilities.

Qwest SGAT Section 9.2.2.2.1 provides additional detail on its IDLC unbundling process.

## VII. PLACING AN ORDER FOR SERVICE

**Q. HAS QWEST DEVELOPED AN ORDERING PROCESS FOR UNBUNDLED LOOPS?**

A. Yes, it has. As mentioned previously, Qwest has provisioned 34,290 unbundled loops in Washington under the terms of its current interconnection agreements. There are over 161,000 loops in service in Qwest's 14-state region. Over the past two years Qwest has gained a great deal of experience in loop provisioning.

Because of this experience, there is now a well-developed process in place that allows CLECs to order loops from Qwest. The loop ordering process is also defined in the Interconnection and Resale Resource Guide, IRRG, at http://www.uswest.com/wholesale/productsServices/irrg/index.html

**Q. WHAT ACTIVITIES CAN OR MUST A CLEC USE IN ITS ORDERING OF AN UNBUNDLED LOOP?**

A. A CLEC first utilizes pre-order transactions to gather information necessary for their loop order. The CLEC then orders an unbundled loop by submitting a Local Service Request (LSR) via Interconnection Mediated Access (IMA), Electronic Data Interexchange (EDI), or facsimile (fax). The CLEC order is processed and entered into the Qwest service order processor (SOP) which then issues a Firm Order Confirmation (FOC) to the CLEC. This constitutes the normal ordering procedure for the CLEC.

**Q. ARE THERE ANY SPECIAL PRE-ORDER TRANSACTIONS ASSOCIATED WITH LOOPS?**

A. Yes. If the CLEC is ordering one of the xDSL loops, then the CLEC should obtain the loop make-up using one of the pre-order transactions.

Exhibit JML-12 delineates the various loop qualification tools available for a CLEC's use. Qwest's OSS version 4.2, released in October 1999, included a pre-order "ADSL loop qualifying tool" and version 6.0 released in December 2000 included a Raw Loop Data tool (RLD) that provides the actual loop makeup. The tools enable the CLECs to determine if conditioning is required and/or to determine if a prospective loop might or might not support their xDSL service.[17]

**Q. HOW DOES THIS PROCESS WORK?**

A. To determine if a prospective end user customer has a compatible loop, the CLEC submits an ADSL loop qualification or RLD pre-order transaction via IMA/EDI. It enters the prospective end user's telephone number or street address and receives the loop make-up information. Exhibit JML-12 contains copies of the IMA ADSL loop qualification request and response screens and the RLD request and response screens.

**Q. PLEASE IDENTIFY THE LOOP MAKE-UP INFORMATION PROVIDED BY THE ADSL LOOP QUALIFICATION TOOL.**

A. The ADSL Loop Qualification tool provides the CLECs with the following raw, non-manipulated cable make-up data:

[17] The Release 4.0 loop pre-qualification tool was labeled "ADSL" because it identifies if a loop qualifies for ADSL service. However, from the very beginning, it provides loop make-up information for any facility and is not dependent on the type of service the CLEC offers.

- The results of an ADSL qualification test. A "Y" indicates the loop meets ADSL specifications
- The number of lines
- Total loop length in kilofeet
- Bridge tap length in kilofeet
- Loop type copper or pair gain
- The number of wires, i.e. 2 or 4 wire
- The Insertion Loss calculated at 196 kilohertz frequency with 135 ohm termination

**Q. PLEASE IDENTIFY THE LOOP MAKE-UP INFORMATION PROVIDED BY THE RLD TOOL.**

A. The RLD tool provides the CLEC with the same loop make-up information that is used to qualify lines for Qwest's retail DSL. This pre-order IMA tool provides the CLECs with the following raw loop make-up information:

- Telephone number
- Address
- Common Language Location Identification (CLLI)
- Mechanized Loop Test (MLT) distance
- Terminal ID
- Cable Name
- Pair Gain Type
- Pair Number
- Load Type
- Number of Load Coils
- Bridge Tap Offset by Segment

- Cable Gauge by Segment

**Q. DO THESE LOOP QUALIFICATION TOOLS MEET THE SPECIFICATIONS IN THE FCC UNE REMAND ORDER?**

A. Yes, they do. These tools provide the CLECs with the loop make-up needed to determine if the loop can support their xDSL service and if conditioning is required. The information contained in the RLD tool is the same raw loop information that is utilized to qualify Qwest's retail DSL service. As the FCC noted in its UNE Remand Order: "…an incumbent LEC must provide the requesting carrier with nondiscriminatory access to the same detailed information about the loop that is available to the incumbent…"[18]

Additionally, Covad, in a FCC ex-parte filing, stated that the Qwest loop qualification tools meet all of the FCC requirements. Exhibit JML-13 is an excerpt from that filing.

**Q. ARE THERE ANY ADDITIONAL ENHANCEMENTS TO THE LOOP MAKE-UP PROCESS THAT QWEST HAS PERFORMED?**

A. Yes. In addition to providing the CLECs with loop make-up information on a pre-order IMA/EDI basis, Qwest introduced a mechanized bulk wire center loop make-up tool in August 2000. The batch files Qwest provides

[18] UNE Remand Order, ¶427.

to CLECs contain a list of all active telephone numbers within a particular wire center as well as detailed raw loop information for each telephone number listed. CLECs can access these wire center level loop files through a CLEC-accessible, Qwest web site http://econ.uswest.com. Exhibit JML–14 displays a copy of the notification sent to the CLECs describing this tool. The customer notification includes a list of all the loop make-up information provided to the CLEC.

**Q. HOW OFTEN ARE THESE FILES UPDATED?**

A. The batch files are refreshed on a rolling basis monthly. As described in the CLEC notification, approximately 60 wire centers will be refreshed or updated each business day and it takes approximately 20 business days to update all of the wire centers. Additionally, if the wire center level data changes, then it is refreshed that evening.

**Q. DOES QWEST PROVIDE CLECS WITH THE SAME INFORMATION IT PROVIDES TO ITS RETAIL OPERATIONS?**

A. Qwest reiterates that the database that supports the wholesale Raw Loop Data tools is the same database that is used to support the tool used by Qwest retail representatives to determine if a loop qualifies for DSL service. Therefore, the loop make-up provided to CLECs in Washington

contains the same information that is used to qualify loops for Qwest's retail DSL service.

**Q. IS QWEST MAKING EFFORTS TO IMPROVE THE QUALITY OF THIS DATABASE?**

A. Yes. Qwest is continually improving the data in the LFACS database. For example, Qwest is working to update the database to include both F1 facilities (feeder) and also F2 and F3 facilities (distribution). Specifically, Qwest began a Cable Make Up (CMU) process in third quarter 1999 and data loading into LFACS began in first quarter 2000. The loading began with the distribution or F2 portion of the loop, since the majority of such loops did not have actual CMUs in the LFACs database. This portion of the project was completed in second quarter 2000 for the top 300 wire centers in the Qwest region. The next step was the development of F1 (feeder) CMUs for non-loaded copper terminals. This was begun in third quarter 2000. The projected completion date for this portion of the project is third quarter 2001. This is for the top 300 wire centers. In Washington, approximately 87.1% of the applicable access lines have already been updated in LFACS. By end of third quarter 2001, approximately 89% of the applicable loops will be updated in Washington. The F1 and F2 CMUs for nonloaded copper terminals are scheduled to be loaded in LFACS in all 534 wire centers by the end of 2001.

**Q. WHAT DOES QWEST DO TO UPDATE THE RECORDS ON AN ON-GOING BASIS?**

A. If an inaccuracy in LFACS is discovered, such as Bridge Tap or Load Coils being present but not reflected in the record, the Loop Provisioning Center (LPC) notifies the engineer, who then updates all the systems to reflect the correct information. These types of updates and corrections to the system are part of Qwest's on going efforts to ensure that both Qwest and CLECs obtain accurate loop make up information. As a means of clarification, included as Exhibit JML-15 is a copy of a notification sent to the installation forces regarding the need to update the LFACs database and the process by which that can be done on an on-going basis.

**Q. WHAT INFORMATION HAS QWEST PROVIDED TO THE CLECS REGARDING THE LOOP QUALIFICATION DATA?**

A. Qwest provides the CLECs with the IMA training associated with the various IMA loop qualification tools. This training is available through the IMA training process. Additionally, if a loop qualification tool is introduced or changed during an IMA release, then that “tool’s” training is included with the Release training and information. In addition to the IMA training, Qwest has provided the CLECs with product announcements to introduce new or changed loop qualification tools. An example of this type of

coverage was the product announcement introducing the web-based wire center raw loop make-up.

**Q. ONCE A CLEC ACCESSES THIS TOOL, CAN THEY DETERMINE THE LOOP MAKE-UP FOR A SPECIFIC CUSTOMER?**

A. Yes. The file contains the loop make-up by telephone number that allows a CLEC to have access to all the loop information Qwest can access. It is important to note that the batch loop files are not loop qualification files per se; they do not attempt to give a CLEC a definitive answer as to whether a certain loop qualifies for xDSL. Per the FCC guidelines, the batch files provide underlying loop information from which CLECs may make their own determination as to whether the loop can support their xDSL service. Additionally, the CLECs can use the file to determine the percentage of loops from the wire center that will be capable of supporting their xDSL service and determine if they want to serve that area.

**Q. DOES IMA/GUI AND IMA/EDI PROVIDE THE CLECS WITH ANY OTHER LOOP QUALIFICATION TOOLS?**

A. Yes. The IMA OSS provides the CLECs with three additional tools: the POTS to Unbundled Loop Conversion; the MegaBit Qualification tool; and, the ISDN Qualification tool. As noted earlier, Exhibit JML-12 summarizes all of the loop qualification tools that Qwest makes available to the CLECs.

This Exhibit includes a description of each tool and copies of the IMA screens.

**Q. HOW DO CLECS ORDER LOOPS?**

A. After completing any pre-order transactions, CLECs complete an LSR to order loops.

**Q. HOW DOES THE CLEC SPECIFY THE TYPE OF LOOP REQUIRED?**

A. As mentioned earlier, every loop type is defined by an NC/NCI code. These codes are entered onto the LSR to notify Qwest of the loop type required.

**Q. HOW DOES THE CLEC IDENTIFY WHERE THE LOOP SHOULD BE WIRED IN THE CENTRAL OFFICE?**

A. The CLEC enters the Connecting Facility Assignment (CFA) on the LSR.

**Q. ARE THERE ANY GUIDELINES OR REQUIREMENTS ASSOCIATED WITH THE DESIRED DUE DATE ENTERED ON THE LSR?**

A. Yes. The CLEC is responsible for entering a desired due date. The CLEC can request a due date that matches the Qwest standard interval or exceeds it. If the CLEC requests installation after the normal field installation business hours of 8:00 A.M. to 5:00 P.M., then additional out-of-hours charges apply.

**Q. WHAT ARE THE QWEST STANDARD INSTALLATION INTERVALS FOR THE PROVISIONING OF UNBUNDLED LOOPS?**

A. The installation interval for unbundled loops varies based upon the type of loop and the number of loops being installed in one location. The interval also depends on the need to condition the loop. Qwest provides the CLECs with a complete list of all the standard intervals in Exhibit C of the SGAT and the Interconnection Service Interval Guide located at http://www.uswest.com/wholesale/guides/sig/resale/index.html.

**Q. HAVE THESE INSTALLATION INTERVALS BEEN CHANGED?**

A. Yes. In the Colorado workshop, Qwest agreed to eliminate the difference between High and Low-Density areas. With this change the installation intervals are the same regardless of the location of the end user.

**Q. PLEASE IDENTIFY THE STANDARD INSTALLATION INTERVALS FOR THE VARIOUS LOOP TYPES.**

A. Certainly. For the various loop types, the following installation intervals apply:

- Voice Grade 2/4 Wire Analog Loops, Non-Loaded 2/4 Wire Loops, ISDN Capable, ADSL Capable, and DS1 Capable,

  - 1 - 8 loops 5 business days
  - 9 – 16 loops 6 business days

- 17 – 24 — 7 business days
- 25+ — ICB

- DS3 Capable loops,

  - 1 - 8 — 7 business days
  - 9 - 16 — 8 business days
  - 17 - 24 — 10 business days
  - 25+ — ICB

- xDSL-I Capable,

  - 1 - 8 loops — 10 business days
  - 9 + — ICB

- Fiber and Other High Capacity Loops - ICB

**Q. DO THESE INSTALLATION INTERVALS APPLY FOR xDSL LOOPS FOR OBTAINING CONDITIONING?**

A. No. In the fall of 2000 Qwest introduced a 24 calendar day standard interval for any xDSL loop that requires conditioning. Effective January 2, 2001, this interval has been shortened to 15 business days.

**Q. WHAT IS THE PROCESS FOR ORDERING A LOOP WITH CONDITIONING?**

A. In the fall of 2000, Qwest simplified the process for CLECs to request loop conditioning. The IMA OBF standards include a field entry for Special Construction Authorization (SCA). Qwest's process utilizes this industry field for the CLEC authorization to condition a loop. The CLEC simply enters a "Y", (Yes), in the SCA field of the LSR. This indicates that the CLEC approves loop conditioning, if needed. Qwest will remove where physically possible, bridge taps, load coils and any other devices that interfere with transmission of digital signals. If conditioning is required, then the CLECs will receive an installation interval of 15 business days. However, if conditioning is not required, then the due date will be consistent with the installation interval based on loop type and the number of loops ordered, as previously described. Even if a CLEC enters a "Y" in the SCA field, conditioning charges apply only if Qwest actually performs work on that requested loop.

**Q. WHAT HAPPENS IF CONDITIONING IS REQUIRED AND THE CLEC DID NOT PRE-APPROVE THE CHARGE?**

A. If the CLEC did not enter the "Y" in the SCA field and Qwest determines that conditioning is required, then Qwest will contact the CLEC, advise of the need for conditioning and wait for a supplemental order requesting conditioning and approving the charges for conditioning before continuing the provisioning process. Basically, the process stops until the

supplemental LSR is received. The CLEC has 48 hours to supplement the order or the LSR will be rejected and the order canceled. Therefore, it is in the best interest of all parties for the CLECs to pre-approve conditioning. There are no negative impacts associated with the pre-approval. If conditioning is not required, no charges will be incurred.

**Q. HOW WERE CLECs NOTIFIED OF THIS PROCESS?**

A. CLECs were notified by an electronic (e-mail) process change letter. Exhibit JML-16 is a copy of the letter explaining the conditioning process and the 15 business day interval.

**Q. ARE THERE ANY OTHER SPECIAL REQUIREMENTS FOR ORDERING A LOOP?**

A. Yes. As described in the proposed Qwest SGAT there are six options for installing unbundled loops.[19] The installation options are:

- Basic Installation
- Basic Installation with Performance Testing
- Basic Installation with Cooperative Testing
- Coordinated Installation With Cooperative Testing
- Coordinated Installation Without Cooperative Testing
- Coordinated Project Installation

19 SGAT Sections 9.2.2.9.1 to 9.2.2.9.4.

The CLEC determines the installation option that best meets their needs. If the CLEC selects one of the Coordinated installation options then an appointment time must be entered on the LSR.

**Q. PLEASE DESCRIBE THE BASIC INSTALLATION OPTION.**

A. Basic Installation may be ordered for new or existing unbundled loops.

For an existing end-user, the Basic Installation option is a "lift and lay" procedure. The Central Office Technician (COT) "lifts" the loop from its current termination and "lays" it on a new termination connecting to the CLEC. There is no associated circuit testing performed.

For new end-user service, the Basic Installation option involves the COT and Field Technician (CST/NT) completing circuit wiring and performing the required performance tests to ensure the new circuit meets the required parameter limits. The test results are not provided to the CLEC.

**Ordering Requirements:**
Basic is assumed unless the CHC and APPTIME fields are completed or Basic with Testing is noted in the Remarks section of the LSR.

**Q. PLEASE DESCRIBE BASIC INSTALLATION WITH PERFORMANCE TESTING .**

A. Basic Installation with Performance Testing may be ordered for new or existing unbundled loops.

For an existing end-user, Basic Installation with Performance Testing is a "lift and lay" procedure. The Central Office Technician (COT) "lifts" the loop from its current termination and "lays" it on a new termination connecting to the CLEC. The COT and Implementor/Tester perform the required performance tests to ensure the new circuit meets the required parameter limits. The Qwest Implementor/Tester reads these test results to the CLEC on closeout.

For new end-user service, Basic Installation with Performance Testing requires a dispatch to the end-user premise. The COT and Field Technician (CST/NT) complete circuit wiring and perform the required performance tests to ensure the new circuit meets the required parameter limits. The Qwest Implementor/Tester reads these test results to the CLEC on closeout.

**Ordering Requirements:**
CHC = ‘N’ or Blank
TEST=A (FOR PERFORMANCE TESTING)

**Q. PLEASE DESCRIBE THE BASIC INSTALLATION WITH COOPERATIVE TESTING OPTION.**

A. Basic Installation with Cooperative Testing may be ordered for new or existing unbundled loops.

For an existing end-user, Basic Installation with Cooperative Testing is a "lift and lay" procedure with Cooperative Testing on the Due Date. The Central Office Technician (COT) "lifts" the loop from its current termination and "lays" it on a new termination connecting to the CLEC. Upon completion of Qwest's performance testing, the Qwest implementor/tester will contact CLEC, read the Qwest test results, and begin CLEC cooperative testing. The CLEC will be contacted to perform a loop back acceptance test, accept the loop and exchange demarcation information.

For new end-user service, the Basic Installation with Cooperative Testing option requires a dispatch to the end-user premise. The COT and Field Technician (CST/NT) complete circuit wiring and perform the required performance tests to ensure the new circuit meets the required parameter limits. The Qwest Implementor/Tester reads these test results to the CLEC on closeout. The CLEC will be contacted on the due date to perform a loop back acceptance test, accept the loop, and exchange

demarcation information. If Qwest fails to perform the cooperative test(s) due to Qwest's own fault and the CLEC forgoes the test, then Qwest will waive the non-recurring installation charge.

**Ordering Requirements:**
CHC = 'N' or Blank
TEST = B (for Cooperative Testing)

**Q. PLEASE DESCRIBE THE COORDINATED INSTALLATION WITH COOPERATIVE TESTING OPTION.**

A. Coordinated Installation with Cooperative Testing may be ordered for new or existing service.

For an existing end-user, the Coordinated Installation with Cooperative Testing option is a "lift and lay" procedure with Cooperative Testing. The CLEC must designate a specific "Appointment Time" when the LSR is submitted. On the Due Date (DD), at the CLEC designated "Appointment Time," the Qwest Implementor/Tester contacts the CLEC to ensure they are ready for the Installation. The COT completes the installation in the CO. Tests requested by the CLEC are performed at this time. If Qwest is late for the appointment by more than 30 minutes, then Qwest will waive the non-recurring installation charge. Any CLEC requested Unbundled Loop provisioning test not defined in the Qwest Technical Publication 77384 is billable.

For new end-user service, Coordinated Installation with Cooperative Testing requires a dispatch to the end-user premise. The CLEC must designate a specific "Appointment Time" when the LSR is submitted. On the Due Date (DD), at the CLEC designated "Appointment Time", the Qwest Implementor/Tester contacts the CLEC to ensure they are ready for the Installation. The COT and Field Technician (CST/NT) complete circuit wiring and perform the required performance tests to ensure the new circuit meets the required parameter limits. The Qwest Implementor/Tester reads these test results to the CLEC on closeout. Additional tests requested by the CLEC are performed at this time. If Qwest fails to perform the cooperative test(s) due to Qwest's own fault and the CLEC forgoes the test, then Qwest will waive the non-recurring installation charge. Again, any CLEC requested Unbundled Loop provisioning test not defined in the Qwest Technical Publication 77384 is billable.

**Ordering Requirements:**
CHC = Y
APPTIME - to be populated with a time in military format
TEST = B (for Cooperative testing)

**Q. PLEASE DESCRIBE THE COORDINATED INSTALLATION WITHOUT COOPERATIVE TESTING OPTION.**

A. Coordinated Installation without Cooperative Testing may be ordered for new or existing service.

For an existing unbundled loop this option remains a "lift and lay" procedure (no Premise Dispatch required) but offers the CLEC the ability to coordinate the conversion activity.

Again, the CLEC must designate a specific "Appointment Time" when the LSR is submitted. On the Due Date (DD), at the CLEC designated "Appointment Time," the implementor/tester will contact the CLEC to notify them that the work activity is beginning. Once the work has been completed, the Qwest implementor advises the CLEC that the "lift and lay" procedure has been completed. If Qwest is late for the appointment by more than 30 minutes, then Qwest will waive the non-recurring installation charge.

For new unbundled loops, a dispatch may be required to ‘tie-down’ the new circuit at the Customer Premise. The CLEC may elect to specify that no Dispatch is requested. This will signal Qwest that the Field Technician (CST/NT) will not need to stay on the premise to perform the Cooperative test once the circuit is in place. The CLEC must designate a specific "Appointment Time" when the LSR is submitted. On the Due Date (DD), at the CLEC designated "Appointment Time," after the circuit is in place, the Qwest implementor/tester contacts the CLEC to ensure they are ready

for the installation. The COT completes the installation in the CO. The COT and implementor/tester complete the required Performance Tests to ensure the new circuit meets the required parameter limits. The test results are not provided to the CLEC. When installation is complete, Qwest will notify the CLEC.

**Ordering Requirements:**
CHC = Y
APPTIME - to be populated with a time in military format
TEST = N (for no cooperative testing required)

**Q. PLEASE DESCRIBE THE COORDINATED PROJECT INSTALLATION PROCESS.**

A. Qwest is adapting the Local Number Portability (LNP) Managed Cut process to apply to unbundled loops provided by Qwest with or without LNP. This installation option, called Project Coordinated Installation, is described in Exhibit JML-2, SGAT Section 9.2.2.9.7. The Project Coordinated Installation provides CLEC with an option for installing DS1s and DS3s in a highly structured manner that may involve, at the CLECs request, having all the impacted employees on the line throughout the cut. Qwest has also expanded the concept to provide Coordinated Project Installations for any group of 25 or more DS0 loops at a single address. CLECs will request this option in the Remarks section of the LSR.

**Q. ARE THERE ANY ADDITIONAL OPTIONS AVAILABLE TO A CLEC FOR ORDERING SERVICE?**

A. Yes, there is a final offering. Qwest has created a shorter installation interval for analog loops called Quick Loops. Quick Loop is available in all fourteen states. Exhibit JML-17 is a copy of the CICMP announcement that was distributed to the CLECs describing Quick Loop.

**Q. WHAT DOES THE QUICK LOOP INSTALLATION OPTION PROVIDE?**

A. Basically, Quick Loop provides for a three-day basic installation interval for converting 2-wire analog loops from existing service. This shortened interval is not available for Coordinated Installations or Cooperative Testing. For a Quick Loop, the CLEC must enter the following information on the LSR:

- Unbundled Loop with activity type "conversion as specified" or "transfer" (REQTYP must be 'AB' and ACT must be 'V' or 'T')
- CLEC requires no coordination with Qwest. (CHC field must be 'N' or blank)
- CLEC requires no testing (TEST must be 'N' or blank)
- LSR must include the existing NC and NCI codes for 2/4 Wire Analog Loop as stated in the Qwest Technical Publication 77384.

**Q. IN WHICH SGAT SECTION IS THIS OPTION DESCRIBED?**

A. Quick Loop is found in SGAT Section 9.2.2.9.1.3.

**Q. WHAT ADDITIONAL STEPS HAS QWEST TAKEN TO INSURE COORDINATED INSTALLATIONS RUN SMOOTHLY?**

A. Qwest has established a new control center primarily dedicated to coordinated installations. The Qwest CLEC Coordination Center, QCCC, was established in March 2001 for seven states initially, and then expanded in April to include all fourteen states. The QCCC will coordinate all installations that involve coordinated start times. It will also include special teams for Hot Cuts, loops provisioned on IDLC, projects and service warranty.

**Q. HAS THIS CENTER HELPED QWEST IN IMPROVING ITS PERFORMANCE RESULTS?**

A. Yes, it has. The FCC's approval of Bell Atlantic's Cut performance is based upon a three-part test. Exhibit JML-18 displays the test utilized for the New York approval and compares them against the Qwest measurements. The chart displays the most current official OP-13 results, Coordinated Installations met on Time, and also the unofficial results based on the new QCCC process. Based on the April data, Qwest performance exceeds the results approved by the FCC in New York.

**Q. PLEASE SUMMARIZE THE ORDERING PROCESS FOR UNBUNDLED LOOPS.**

A. Qwest has processes in place that enable CLECs to place an order in an efficient manner while also providing access to additional tools that can be utilized to identify loop make-up for either an entire wire center or a specific customer. Additionally, the Qwest Wholesale Markets web-site, http://www.uswest.com/wholesale, provides the CLECs with product, process, pre-order and ordering information.

## VIII. PROVISIONING PROCESS

**Q. WHAT IS MEANT BY THE TERM PROVISIONING PROCESS?**

**A.** The provisioning process identifies the tasks required by Qwest employees and the CLECs to provide the loop to the CLEC. I will describe this process in three parts:

- Basic Provisioning
- Conditioning
- Coordinated Installations

**Q. WHAT IS THE BASIC PROVISIONING PROCESS ONCE QWEST HAS RECEIVED THE LSR FROM THE CLEC?**

A. The LSR is converted into Qwest orders and the order is processed using the same systems that process orders for Qwest retail service offerings. When Qwest provisions an unbundled loop, a central office technician must be dispatched to run jumpers connecting the unbundled loop to the CLEC's facilities as specified on the LSR by the CLEC. Additionally, a Field Technician may need to be dispatched to provision the loop. The provisioning process as shown in Exhibit JML–19 delineates the tasks performed by Qwest personnel to install an unbundled loop. This flow chart, along with the task descriptions, describes the process that Qwest follows each and every time it provisions an unbundled loop.

**Q. IS THE PROCESS THE SAME AS IT IS FOR A QWEST RETAIL CUSTOMER?**

A. Not exactly. From a provisioning standpoint, there is no exact retail analogue to the provisioning of an unbundled loop. The FCC acknowledged this point in its Order regarding Bell South's second 271 application in Louisiana. The FCC stated: "Because the provisioning of unbundled local loops has no retail analogue, (the BOC) must demonstrate that it provides unbundled loops in a manner that offers an

efficient carrier a meaningful opportunity to compete."[20] In workshops in Arizona, it was widely acknowledged that the closest retail comparative to an unbundled loop is the provision of POTs with a dispatch. It was determined that Qwest met its performance obligations for provisioning loops if it met or exceeded average commitments met and installation intervals for POTs with a dispatch. Subsequently, however, the Regional Oversight Committee (ROC), with input from CLECs, modified this performance measure and established performance benchmarks for certain unbundled loops. Now, Qwest must provision unbundled loops, on average, by set intervals. Qwest is committed to providing unbundled loops within the required intervals and has established performance measures and processes to ensure successful provisioning.

**Q. ARE THERE ANY SPECIAL PROVISIONING ACTIVITIES FOR LOOPS?**

A. Yes. Qwest is required to condition loops for the CLECs. I described loop conditioning previously in my testimony.

**Q. ARE THERE ANY ADDITIONAL PROVISIONING ISSUES WHICH ARE LIKELY TO OCCUR WITH A CLEC ORDERING AN UNBUNDLED LOOP FROM QWEST?**

A. Yes. As mentioned in the ordering section, CLECs have a choice of

[20] FCC BellSouth Louisiana II Order, October 13, 1989 at ¶198.

installation options. Coordinated installation and testing are quite often needed by CLECs and Qwest in order to have a seamless installation for the end user customer. This need is accommodated through the unbundled loop provisioning flow. When a CLEC requests a coordinated installation with cooperative testing, Qwest will perform testing with the CLEC to ensure connectivity between a CLEC's collocated equipment and its network demarcation point. Quest also ensures that a customer is only out of service for a short period of time as the coordinated cut-over is completed.

**Q. PLEASE EXPLAIN HOW COORDINATED INSTALLATION WORKS.**

A. The coordinated installation options allow the CLEC to designate a specific appointment time when Qwest will begin the installation of an unbundled loop. CLECs most often request a coordinated installation to coordinate work between Qwest and CLEC when the service is associated with an existing working line. On the order due date at the coordinated time, a Qwest employee coordinates activities between the CLEC and Qwest. A call is placed to the CLEC in order to determine if the CLEC is ready for the service to be transferred. If the CLEC indicates that it is ready, Qwest central office and fieldwork is performed. If the CLEC indicates that it is not ready, Qwest will wait up to 30 minutes from the

appointment time. If the CLEC is still not ready, then a new appointment (date and time) is scheduled via a supplement to the LSR.

**Q. HOW DOES THIS COORDINATED INSTALLATION PROCESS HELP THE CLEC AND ITS CUSTOMERS?**

A. Coordinated installation provides the CLEC with the ability to establish a specific service installation time for its customer, allowing both the CLEC and its end user to pre-plan for minimal service interruption. This installation option establishes a critical link between Qwest and the CLEC to ensure that the work activities are performed at the same time to minimize the impact to the CLECs' customer. When coordinated installations involve existing customers they are often referred to as "Hot Cuts." Based on the OP-7 results there were 2117 "Hot Cuts" performed in Washington. On average these "hot cuts" were "lift, layed and tested" OK within 8 minutes. Exhibit JML–21a displays the process flow of due date activities for "Hot Cuts" for existing services. Page two of the Exhibit defines the tasks and page three is a sample of the data collected by Qwest implementers to track the coordinated installation.

In addition to coordinated cuts for existing customer, Qwest also performs coordinated installations for customers who were not previously served by

Qwest, or "new loops." Exhibit JML-21b displays the process flow for new loops and page two of the exhibit defines the tasks.

**Q. HAS THE FCC ESTABLISHED A PRECEDENCE FOR EVALUATING AN ILEC'S PERFORMANCE FOR COORDINATED INSTALLATIONS OR HOT CUTS?**

A. Yes. Exhibit JML-35 explains the FCC three-part test and then compares the New York results to Qwest's results. As noted in Section XIV of my testimony, Qwest's results compare very favorably to those of Verizon. This is of significance because the results were considered by the FCC and deemed to be demonstrative of providing the CLECs with the ability to meaningfully compete. Qwest, therefore, can be deemed to have met this same standard for 271 compliance. (See Section XIV for more details about this three part test.)

**Q. PLEASE SUMMARIZE THE PROVISIONING PROCESS OF THE LOOP ORDERED BY A CLEC.**

A. When Qwest provisions an unbundled loop, the same processes and systems are used that Qwest normally uses to provide service for its end users. First, since the unbundled loop is a dedicated facility, it is provisioned using a circuit identifier. Second, the unbundled loop order is routed to the systems that contain inventory information about loop

facilities and the order is handled by employees with experience and the specialized unbundling training to ensure that timely coordination with the CLEC is accomplished when needed. Third, the unbundled loop flow also allows Qwest to provide data regarding the design of the service to the CLEC via the Design Layout Report (DLR) process. This is important because an unbundled loop can be configured in different ways depending on the manner in which a CLEC chooses to interconnect with Qwest. The actual installation intervals are documented, coordinated installation is available, and flow charts have been developed so that all parties to the service understand how the process works.

When examined in totality, Qwest's provisioning process provides the CLEC with the ability to meaningfully compete with Qwest and other carriers.

**Q. PLEASE DESCRIBE THE PROCESS IF THE LOOP ORDER INCLUDES LOCAL NUMBER PORTABILITY.**

A. The process for a coordinated installation with number portability is basically the same. The primary difference is the coordination with the Qwest translation organization and the CLEC's responsibility for porting the number to its switch. Exhibit JML-22 displays a few different loop and LNP scenarios associated with the activities that may occur on the due date. This Exhibit is not intended as a complete depiction of all possible

scenarios; rather, it illustrates a few situations that result in extra coordination steps that occur on the due date.

**Q. HAS QWEST MADE ANY EFFORTS TO IMPROVE ITS ORDERING PROCESSES?**

A. Yes. To further enhance its performance, Qwest implemented a two-month trial in Colorado that ran in March and April of this year. Exhibit JML-23 describes this trial. The purpose of the trial was to evaluate the FOC (Firm Order Commitment) process. A key element was to deliver a meaningful FOC to the CLECs, and to validate the Raw Loop Data tool.

**Q. WHAT WERE THE RESULTS OF THE COLORADO xDSL FOC TRIAL?**

A. The Colorado xDSL FOC trial ended on April 30, 2001. During the 2-month period, 10 different CLECs placed 2,375 DSL orders. Exhibit JML-24 displays the trial results through April 20, 2001. As reflected in this exhibit, Qwest provided meaningful FOCs within 72 hours 91% of the time in March and 98% of the time in April. The due date was met 98% of the time for both months. Additionally, the actual installation interval for non-conditioned loops was 5 days and for conditioned loops it was 10 days for March and 11 days for April. Qwest was able to provision the conditioned loops in less than the standard 15 days due to a pre-survey dispatch and a rapid recovery process. Qwest has deployed the rapid recovery in the

Seattle Metro area and to the extent possible engages in a pre-survey dispatch.

**Q. DID THE TRIAL PARTICIPANTS HAVE AN OPPORTUNITY TO RECONCILE TRIAL DATA?**

A. Yes. Qwest provided all the participating CLECs with the opportunity to reconcile the trial data with their own CLEC-specific data. Only two CLECs have chosen to participate in the reconciliation process.

**Q. WHAT IS QWEST'S ASSESSMENT OF THE TRIAL RESULTS?**

A. Based on the trial results Qwest believes that the trial demonstrates that the xDSL FOC process proposed in the trial improves the accuracy of the FOCs, and the percent Due Dates met have exceeded the 90% benchmark. Qwest believes that the xDSL FOC process is beneficial to CLECs and should be endorsed on a going forward basis for all 14 states.

**Q. THE TRIAL ALSO CONSISTED OF A VALIDATION OF THE IMA RAW LOOP DATA TOOL. WHAT WERE THOSE RESULTS?**

A. Qwest accessed the IMA Address Validation tool and then requested raw loop data for all the LSRs that were submitted during the trial. Exhibit JML-25 displays the results of this analysis. For approximately 6% of the orders, the Raw Loop Data Tool indicated that the loop was on a loaded

pair. However, Qwest was able to find copper loops to provision the service, and as a result, conditioning was not required. For another 6% of the orders, the Raw Loop Data said the facility was on pair gain. However, Qwest was able to provision the service on a copper loop. The CLECs expressed concerns regarding conditioning being identified after the FOC or on the Due Date (DD). During the 2-month trial, only 7 LSRs had conditioning identified after the FOC was issued, and there were no DD occurrences. The analysis also revealed that 35% of the requested addresses resulted in a No Working Telephone Number response. Qwest investigated these issues and system enhancements to fix 79% of the No Working Telephone Number response are pending an IMA system enhancement.

**Q. HOW WILL PARITY BETWEEN THE RETAIL AND WHOLESALE LOOP QUALIFICATION TOOLS BE EVALUATED?**

A. As part of the ROC Master Test Plan, the third-party test will validate whether Qwest provides CLECs with loop qualification at parity. Specifically, the OSS Test, item 12.7, will validate that:

- The wholesale tool is in parity with the retail qualification tool and that the results from the wholesale and retail tools are the same.

- The databases that feed the tools use the same source data and are updated in the same time frame.

Based on the above facts, Qwest believes that the xDSL trial results have presented CLECs with meaningful FOCs, and that final validation of the loop qualification tools will be tested during the OSS test.

**Q. HAS QWEST ESTABLISHED A PROCESS FOR THE PROVISIONING OF UNBUNDLED LOOPS THAT TRANSFER FROM ONE CLEC TO ANOTHER?**

A. Yes. Qwest has deployed the OBF standard, CLEC-to-CLEC transfer process. Exhibit JML-36 is a copy of the CICMP notice that was distributed to the CLECs describing this process. Additionally, the process is identified in Section 9.2.2.15 of the SGAT. The process enables CLECs to reuse the existing facilities and transfer the loop to the new CLEC. Additionally, if the new CLEC does not have the circuit ID, then they can ask Qwest to furnish the information.

## IX. UNBUNDLED LOOP MAINTENANCE AND REPAIR

**Q. PLEASE PROVIDE THE LEGAL STANDARD THAT QWEST MUST SATISFY TO MEET ITS LOOP MAINTENANCE AND REPAIR OBLIGATIONS.**

A. Unlike loop provisioning, where the FCC has acknowledged that there is not a retail analogue, there is a direct retail analogue for the maintenance

and repair of an unbundled loop. The FCC has ruled that repair and maintenance of UNEs should be conducted in the same time and manner as repair and maintenance of retail services.[21]

**Q. WHAT IS THE MAINTENANCE AND REPAIR PROCESS DEVELOPED BY QWEST?**

A. Qwest maintains unbundled loops utilizing a defined maintenance and repair flow. Exhibit JML-26 contains a flowchart that delineates the tasks performed by Qwest personnel to maintain unbundled loops. This exhibit also includes a matrix that describes each of the work tasks identified in the flow chart. Qwest follows these steps each time Qwest receives a trouble report from a CLEC.

**Q. CAN A CLEC PERFORM A MECHANIZED LOOP TEST (MLT) ON AN UNBUNDLED LOOP?**

A. No. MLT can only be performed on facilities that are connected to the Qwest switch. The very nature of an unbundled loop is that it is connected to a CLEC switch, not Qwest's switch. Qwest does provide CLECs with mechanized access to MLT for resale services and for UNE-P services that are connected to a Qwest switch.

[21] FCC BellSouth Louisiana II Order, October 13, 1998, ¶145.

**Q. PLEASE SUMMARIZE THE TROUBLE TICKET PROCESS.**

A. A CLEC can report repair problems by issuing repair tickets using Electronic Bonding-Trouble Administration (EB-TA) or by calling Qwest's repair center. Qwest accepts trouble reports only from the CLEC—not the CLEC's customer. A trouble ticket is created and is processed using the same systems as trouble tickets for Qwest retail services. The trouble ticket is passed to the appropriate groups to analyze, test and fix any Qwest problems that are identified. The repair technician closes the ticket when the CLEC is notified that the trouble is resolved. Qwest will also advise the CLEC if no trouble is found, or if the problem is not in the Qwest network.

**Q. DOES THIS PROCESS MEET FCC REQUIREMENTS FOR REPAIR AND MAINTENANCE?**

A. Yes, it does.

## X. UNBUNDLED LOOP PERFORMANCE MEASUREMENTS

**Q. WHAT ARE THE REQUIREMENTS QWEST MUST MEET IN ORDER TO BE DEEMED FULFILLING ITS OBLIGATIONS UNDER 271?**

A. The FCC stated, "Because the provisioning of unbundled local loops has no retail analogue, (the BOC) must demonstrate that it provides unbundled loops in a manner that offers an efficient carrier a meaningful opportunity to compete."[22] To ensure its compliance with this requirement, Qwest, the ROC and the CLECs have developed extensive performance measurements in order to monitor Qwest's performance in providing unbundled loops to CLECs.

Additionally, as part of the ROC Third Party OSS Test, the provisioning and repair measures have been established for unbundled loops. The attached SGAT will be revised to include performance measures when they are finalized in the Third Party OSS Test and Workshop process.

**Q. HOW ARE THE PERFORMANCE MEASURES DOCUMENTED?**

A. The performance measures are formally documented in the Performance Indicator Descriptions or the PIDs. The PIDs include a definition of the measure, the actual formula used to calculate the measure, and any exclusions. The performance measures for loops primarily fall into the provisioning and maintenance and repair categories. Exhibit JML-27 contains the ROC-PID definitions that pertain to loops.

[22] FCC BellSouth Louisiana II Order, October 13, 1989, ¶198.

**Q. PLEASE IDENTIFY THE PERFORMANCE MEASURES QWEST UTILIZES IN ITS PROVISIONING OF UNBUNDLED LOOPS.**

A. As stated before, there is no direct retail comparative for the ordering and provisioning of unbundled loops. As a result, for each of the following performance measures, the measurements indicated have been agreed upon with the ROC and the CLECs. These are benchmarks that, when met, will establish unequivocal evidence that Qwest meets this checklist item.

OP-3 - Installation Commitments Met: evaluates the extent to which Qwest installs service by the scheduled due date.

OP-4 – Installation Interval: focuses on the average time to install service.

OP-5 – New Service Installation Quality: evaluates the number of new orders that are trouble free for 30 days following installation. Additionally it focuses on the percentage of new service installations that experienced a trouble report during the period from the installation date to the date the order is posted complete.

OP-6 – Delay Days: evaluates the average number of days that late orders are completed beyond the due date.

OP-7 – Coordinated "Hot Cut" Intervals: focuses on the time involved to disconnect a customer from the Qwest network and connect it to the CLEC.

OP-13 – Coordinated Cuts On Time: evaluates the timeliness of coordinated installations and the percent of orders started prior to the scheduled time without the CLECs approval.

OP-15 – Pending Past Due: evaluates the average number of days the pending orders are delayed past the due date.

**Q. HAVE PERFORMANCE STANDARDS ALSO BEEN IDENTIFIED FOR THE REPAIR AND MAINTENANCE PERFORMANCE MEASUREMENTS FOR UNBUNDLED LOOPS?**

A. Yes, they have. Unlike loop provisioning, the FCC ruled that there is a retail analogue for the repair and maintenance of unbundled loops. Qwest is merely repairing a loop, much as it would for retail service. As a result, for each of the following performance measures, the ROC and the CLECs have agreed that Qwest meets this checklist item if it provides repair in "substantially the same time and manner" as it does for comparable retail service.

MR-3 – Out of Service Cleared within 24 Hours: evaluates the timeliness of out service repair for 2 /4-wire analog loops, 2-wire non-loaded loops and ADSL qualified loops.

MR-4 – All Troubles Cleared within 48 Hours: evaluates the repair timeliness of all types of trouble cases for 2 /4-wire analog loops, 2-wire non-loaded loops and ADSL qualified loops.

MR-5 – All Troubles Cleared within 4 Hours: evaluates the timeliness of repair for 4-wire non-loaded loops, ISDN Capable, xDSL-I capable, DS1 Capable, and DS3 Capable loops.

MR-6 – Mean Time to Restore: focuses on how long it takes to restore service.

MR-7 – Repair Repeat Report Rate: focuses on the number of repeated trouble reports for the same loop received within 30 days.

MR-8 – Trouble Rate: evaluates the number of troubles as a percentage of the total number of loops in service.

MR-9 – Repair Appointment Met: evaluates the extent to which repairs service by the appointment date and time.

**Q. HOW ARE THESE RESULTS REPORTED TO THE COMMISSION AND CLECS?**

A. The performance results for each measure are disaggregrated by specific loop type and Zone 1 and Zone 2 density areas where Zone 1 represents a higher density. As mentioned earlier, although Qwest has eliminated the installation interval difference between high and low density, the performance reporting still reflects this distinction. Qwest, the ROC, and the CLECs reviewed each measure in great detail and established the benchmark performance requirements. Exhibit JML–28 displays the actual performance results through March 31, 2001. The state report displays both the installation and repair results by loop type.

**Q. PLEASE EXPLAIN THE PERFORMANCE RESULTS FOR MEASURING OP-3 – ANALOG INSTALLATION COMMITMENTS MET GRAPH.**

A. As mentioned earlier this measurement reflects the percentage of orders that Qwest provisions completed by the due date. In October of 1999, the Arizona Technical Advisory Group (TAG) established the Analog Loop Installation Commitments Met benchmark as parity with retail residence and business service that required a dispatch. In July 2000 the ROC established a benchmark of 90% Commitments Met. For Washington, Exhibit JML-28 displays for March 31, 2001, the analog loop results in

Zone 1 or Zone 2 areas, the Qwest retail results for dispatched retail basic exchange service, and the new loop benchmark of 6 days.

**Q. PLEASE EXPLAIN THE OP-3 AND OP-4 PERFORMANCE RESULTS FOR 2 WIRE NON-LOADED LOOPS.**

A. In the early part of 2001, Qwest introduced a 15 business day interval for conditioning loops. The current performance results still combines the results for Wire Non-Loaded that require conditioning with those that do not require conditioning. This has an impact on all of the installation performance results.

**Q. COULD YOU PLEASE EXPLAIN THE IMPACT?**

A. Certainly. In many instances the original 2 wire Non-Loaded order is issued with a 5 day due date, because the need to condition has not been identified. The OP-3 measurement looks at the percent of order that meet the first due date on the order. So if the 5 day due date is missed but the loop is provisioned within 15 days, it is still counted as a miss. Additionally, the installation of 15 days is combined with the orders that should be completed in 5 days.

**Q. PLEASE EXPLAIN THE OP-15 MEASUREMENT.**

A. The OP-15 measure is based on the pending past due orders. The actual measurement indicates the average number of days that transpired after the due date. The March OP-15 result for analog loops in Washington indicates no past due orders and for 2-wire non-loaded loops it shows an average of 5 days.

**Q. PLEASE EXPLAIN QWEST'S NETWORK BUILD POLICY.**

A. Effective in May of 2001, Qwest started the implementation of its Network Build plan to clarify its policy on building facilities. Exhibit JML-37 is a copy of the Qwest Network Build position for the unbundled loop (UBL) that was distributed to the CLECs via the CICMP process, on March 27th, 2001. As this document explains, Qwest will only build facilities for primary DS0, 2-wire analog, loops under certain circumstances. When high capacity facilities do not exist, all carriers, including Qwest, are equally disadvantaged. If there are no high capacity facilities in place in a particular area, then no competitor can provide the end user's service unless some provider (Qwest or a CLEC) decides to build them. All carriers are equally capable of building these facilities, and no carrier has a competitive disadvantage in this situation than does Qwest itself. If, however, Qwest has scheduled a growth job that would meet the CLECs needs, then Qwest will provide the requested service to the CLEC upon

completion of the construction. Qwest describes this plan in Section 9.1.2.1 of the SGAT.

The plan also addresses the pending past due orders. The CLECs were given an opportunity to review their pending orders. Effective May 10, Qwest started canceling pending past due orders that were not for primary DSO service. The result of the build plan and cancellation of orders for which no facility build is planned or required will provide CLECs more certainty when placing orders.

**Q. PLEASE PROVIDE THE REPAIR RESULTS FOR UNBUNDLED LOOPS.**

A. Exhibit JML-28 also displays the repair results and associated benchmarks.

1. The first measurement, "**Trouble Rate**," (MR-8), measures the percentage of lines in service that experience trouble in any one month compared to the total number of lines in service. As shown in JML–28 Qwest reports performance results separately for "Trouble Rate" for analog unbundled loops combined for Zone 1 and 2, versus Qwest retail exchange services. The performance results demonstrate that CLECs experience a much **lower** trouble report rate for analog loops, than Qwest's retail customers.

2. The measurement "**Out-of-Service Cleared within 24 Hours**," (MR-3), measures the percentage of time that Qwest clears an out-of service situation within 24 hours of receipt of notification. Qwest reports "Out-of-Service Cleared within 24 Hours" performance for analog unbundled loops versus Qwest retail exchange services. The performance results provided in Exhibit JML-28 demonstrate that Qwest consistently clears out of service troubles within 24 hours for CLECs more frequently than Qwest does for its retail end users.

3. The next measurement, "**All Troubles Cleared within 48 Hours**," (MR-4), measures the percentage of time that Qwest clears all trouble reports, whether it be out-of-service or otherwise, on non-designed services within 48 hours from notification. Qwest reports "All Troubles Cleared within 48 Hours" performance results for analog unbundled loops versus Qwest retail residential and business end users. The performance results provided in Exhibit JML-28, demonstrate that Qwest consistently clears trouble within 48 hours for CLECs at rates that are nondiscriminatory, and are, in fact in many situations above Qwest's retail results.

4. The next measurement, "**Mean Time to Restore**," (MR-6), measures the average time Qwest takes to resolve repair requests. Qwest reports performance results for "Mean Time to Restore" for analog

unbundled loops versus Qwest retail end users. In all months of the reporting period, Qwest provided superior performance results for CLECs who purchased analog unbundled loops.

**Q. AFTER EXAMINING THE VARIOUS PROVISIONING AND REPAIR RESULTS AND COMPARING THOSE RESULTS TO EITHER THE ROC STANDARDS OR THOSE AGREED UPON BY CLECS IN OTHER STATE WORKSHOPS, WHAT DO YOU CONCLUDE?**

A. When the results are viewed as a whole, Qwest is providing CLECs with nondiscriminatory repair of trouble for analog unbundled loops, thereby providing compliance with 271 guidelines.

## XI. SPECTRUM MANAGEMENT

**Q. WHAT IS SPECTRUM MANAGEMENT?**

A. Spectrum Management is the ability to administer loop plant in such a manner that it enhances the required results in spectrum compatibility. Spectrum Compatibility, in general, refers to the ability of loop technology to operate and reside in the same or adjacent binder group without causing an unacceptable degradation of service from the user's perspective.[23]

[23] FCC Line Sharing Order, FCC 99-355, at ¶178.

**Q. WHAT IS QWEST'S ROLE IN MANAGING SPECTRUM IN THE NETWORK?**

A. Qwest will abide by the regulations and rules set forth in the various FCC Advanced Services orders. Qwest, therefore, will handle spectrum issues in a manner that provides CLECs the ability to deploy advanced services technology through the use of industry standards and appropriate practices with regard to spectrum management.[24]

**Q. IS THERE A NATIONAL INDUSTRY FORUM TO DISCUSS SPECTRUM STANDARDS AND FOR MANAGING THE SPECTRUM?**

A. Yes. Two such industry forums are T1E1.4 and the Network Reliability and Inoperability Council (NRIC), Focus Group 3. Specifically, the FCC has charged NRIC with developing a process for Spectrum Management.

**Q. WHAT WAS THE RESULT OF THESE MEETINGS?**

A. As a result of these various meetings, the NRIC closely monitored the development of American National Standard T1.417, *American National Standard for Telecommunications - Spectrum Management for Loop Transmission Systems*. That Standard was approved on January 5, 2001. Its approval required an American National Standards Institute (ANSI) review that assured the development of T1.417 met requirements for due

[24] Advanced Services Order, FCC 99-48 at ¶72; Line Sharing Order at ¶180.

process, consensus and other criteria. Exchange Carriers, Interexchange Carriers, Manufacturers and General Interest Organizations participated in the development of the T1.417 Standard. T1.417 established 9 Spectrum Management Classes (SMCs). Also, the NRIC has recommended the application of these SMCs for spectrum management.

Anticipating T1.417 approval, the industry requested that Network Channel Interface (NCI) codes be established by the Common Language Technical Advisory Group (TAG) to enable ordering unbundled loops using Spectrum Management Class identification. The Common Language TAG has approved NCI codes corresponding to the nine, T1.417 classes. Confidential Exhibit JML-29C displays some industry standard, SMC NCI codes.

**Q. DID THE INDUSTRY FORUMS DETERMINE WHOSE RESPONSIBILITY IT IS TO MANAGE SPECTRUM?**

A. Yes. During the industry forum, it was agreed that the loop provider has responsibility to manage spectrum. This position is in compliance with the FCC order and rule in the Line Sharing Order, FCC 99-355.[25] Specifically the FCC stated:

> Some incumbent LECs argue that they require certain information on a requested deployment in order to be able to

[25] Line Sharing Order, FCC 99-355, at ¶204.

> assess properly the prospects of the deployment significantly degrading the performance of other services. In the *Advanced Services First Report and Order*, we required incumbent LECs to disclose to requesting carriers information with respect to the number of loops using advanced services technology within the binder and type of technology deployed on those loops.
>
> * * *
>
> Consistent with the information disclosure requirements that we applied to incumbent LECs in the *Advanced Services First Report and Order*, we agree that competitive LECs must provide to incumbent LECs information on the type of technology that they seek to deploy, including Spectrum Class information where a competitive LEC asserts that the technology it seeks to deploy fits within the generic PSD mask. We further agree that competitive LECs must provide this information in notifying the incumbent LEC of any proposed change in the advanced services technology that the carrier uses on the loop, so that the incumbent LEC can correct its records and anticipate the effect that the change may have on other services in the same or adjacent binder groups.[26]

**Q. WHAT RESPONSIBILITES DO THE CLECS HAVE?**

A. The CLEC needs to inform Qwest of the technology that it wishes to deploy. Currently, every loop type has a specific NC/NCI code set that defines the technical parameters of the requested loop and its interfaces. Qwest will introduce the industry standard spectrum NC/NCI codes to support spectrum requirements. By requesting an unbundled loop using these new codes, Qwest will be better positioned to provision the unbundled loop to meet the CLEC needs. All future changes to the IRRG

[26] Id. (footnotes omitted).

and the technical publications relating to spectrum management issues will be done via the CICMP process.

**Q. WHAT HAPPENS IF INTERFERENCE OCCURS ON A LOOP?**

A. If a provider's end user experiences interference problems, Qwest will provide binder group information to the CLEC. Revised Sections 9.2.6.5 and 9.2.6.6 of the SGAT address this issue. In the trouble isolation process, the CLEC will test the pairs in the binder group and identify the spectrum class causing the problem. Qwest will then provide the CLEC with names of the providers that are utilizing that spectrum class in that cable. The CLEC is then responsible for contacting the providers to determine whose service is causing the interference. Once the causing carrier is identified, their technology needs to be brought into compliance with the spectrum standards.

## XII. NETWORK INTERFACE DEVICES

**Q. DOES QWEST PROVIDE CLECS WITH ACCESS TO NETWORK INTERFACE DEVICES OR NIDS?**

A. Yes. Section 9.5 of the SGAT (see Exhibit JML-2) represents Qwest's legally binding obligation to provide CLECs with access to the NIDs. This

version has incorporated updates and revisions discussed in other states' workshops.

**Q. PLEASE EXPLAIN QWEST'S RESPONSIBILITY TO PROVIDE ACCESS TO NIDS.**

A. Certainly. In the First Report and Order the FCC defined this requirement and further clarified it in its UNE Remand Order:

The FCC defines the network interface device network element as:

> "any means of interconnection of end-user customer premises wiring to the incumbent LEC's distribution plant, such as a cross connect device used for that purpose. An incumbent LEC shall permit a requesting telecommunications carrier to connect its own loop facilities to on-premises wiring through the incumbent LEC's network interface device, or at any other technically feasible point."[27]

**Q. HAS THE FCC PROVIDED ANY FURTHER CLARIFICATION ABOUT THE PROVISIONING OF THE NID AND ITS FUNCTIONS?**

A. Yes, it does. It further clarifies that when a CLEC receives a NID from Qwest, it includes "all features, functions, and capabilities of the facilities used to connect the loop distribution plant to the customer premises wiring, regardless of the particular design of the NID mechanism."[28]

---

[27] 47 C.F.R. § 51.319(b).
[28] UNE Remand Order at ¶233.

**Q. DO THE FCC's TWO COMMENTS PROVIDE FLEXIBILITY IN THE DEFINITION OF A NID?**

A. Yes, they do. The FCC's intent is to provide a NID definition that is "flexible and technology neutral"; in other words, a flexible definition that will allow for any current and future technologies to be included in the definition. Therefore, they defined the NID broadly to allow for "design variations among the hardware interfaces…"[29]

The definition proposed by Qwest meets the FCC guidelines and to help in clarification of the NID, has divided the NID into three different types. Additionally, it should be noted that this generalized definition takes into account the use of a wide variety of NIDs. The FCC specifically recognized that it wanted flexible language in order to take into account the wide panoply of NIDs. The Qwest definition includes the features and functions of the NID and meets the flexibility and encompassing nature of the NID.

**Q. DOES THE SGAT REFLECT THE NEW FCC UNE REMAND DEFINITION?**

A. Yes, it does, in Section 9.5.1. The SGAT language reads:

[29] UNE Remand Order at ¶234.

> The NID is defined as any means of interconnection of end-user customer on-premises wiring and Qwest's distribution plant, such as a cross connect device used for that purpose. Specifically, the NID is the interface or cross connection device attached to the building between the end user customer on-premises wiring and Qwest distribution plant. Qwest shall permit CLEC to connect its own Loop facilities to on-premises wiring through Qwest's NID, or at any other technically feasible point. The NID carries with it all features, functions and capabilities of the facilities used to connect the Loop distribution plant to the customer premises wiring, regardless of the particular design of the NID mechanism. . The NID contains a protective ground connection that protects the customer's on-premises wiring against lightning and other high voltage surges and is capable of terminating media such as twisted pair cable. If CLEC orders Unbundled Loops on a reuse basis, the existing drop and Qwest's NID will remain in place and continue to carry the signal over the customer's on-premises wiring to the end user's equipment. Not withstanding the foregoing, an Unbundled Loop and any Subloop terminating at a NID shall include the existing drop and the functionality of the NID as more specifically set forth in Section 9.2. The NID is offered in three (3) varieties:

The SGAT then goes on to define the three types of NIDs.

**Q. IS THE NID THE ONLY TYPE OF ACCESS AT AN END USER CUSTOMER PREMISES?**

A. No. There may be other types of network terminals in a high rise building or campus situation. In these environments, the Multi Tenant Equipment (MTE) may not be a demarcation point, but instead a point of interface with Qwest owned facilities on either side. In that situation, the MTE is really an "accessible terminal" subject to sub-loop unbundling, not a NID. A CLEC's access to such network terminals on an end user customer premise, other than the NID, is addressed in section 9.3 Sub-Loop

Unbundling. The FCC recognized this situation in its definition of sub-loop:

> "We define subloops as portions of the loop that can be accessed at terminals in the incumbent's outside plant. An accessible terminal is a point on the loop where technicians can access the wire or fiber within the cable without removing a splice case to reach the wire or fiber within. These would include a technically feasible point near the customer premises, such as the pole or pedestal, the NID, or the minimum point of entry to the customer premises (MPOE)."[30]

**Q. DO QWEST'S DEFINITIONS MEET THE FCC GUIDELINES IDENTIFIED IN THE UNE REMAND ORDER?**

A. Definitely. As the FCC directed, the NID definition includes all aspects of the NIDs and further has allowed for future flexibility in the understanding of the NID so those technological advances will be covered.

**Q. PLEASE DESCRIBE THE THREE DIFFERENT TYPES OF NIDS.**

A. Certainly.

- Simple NID – is typically found in single family residences or small businesses.
- Smart NID – is typically associated with DS1 services and provides special testing capabilities.

[30] UNE Remand Order at ¶206.

- MTE NID – is associated with Multi-Tenant Equipment. The MTE is considered a NID when it serves as a demarcation point between Qwest facilities and customer wiring.

**Q. ARE THERE ANY SPECIAL PROVISIONS ASSOCIATED WITH ACCESSING MTE TERMINALS?**

A, Yes. Prior to accessing an MTE, the CLEC must contact Qwest to determine if the MTE terminal equipment is a NID. If the MTE is not a NID, then the CLEC must access that loop according to the sub-loop terms and conditions identified in Section 9.3. If the MTE terminal is a NID, then the CLEC can access it according to the NID terms and conditions, Section 9.5.

Q. **HOW CAN THE CLEC ACCESS THE NID?**

A. The NID can be accessed by the CLEC from the protector field or the customer side of the NID, space permitting. This flexibility exceeds the provisions established by other ILECs. For instance, Verizon does not allow the CLEC to do its own wiring at the NID.

If the CLEC elects to access the NID from the protector field, then the CLEC must submit an LSR and the CLEC will be charged a monthly recurring rate as displayed in Exhibit A of the SGAT. However, if the CLEC accesses the NID from the customer's side, then no LSR is required and there is no charge to the CLEC.

**Q. ARE THERE ANY ADDITIONAL COMMENTS ABOUT QWEST'S RESPONSIBILITIES AS IT RELATES TO THE NID?**

A. Yes. It should be noted that Qwest is not under any obligation to remove its own wires from a NID, and such a request conflicts with the National Electric Code and the National Electric Safety Code. If space is unavailable in the NID, then the CLEC has alternatives available to it, such as a NID to NID connection. The CLEC can provide the new NID or may request Qwest to provide it. Again, the FCC Remand Order is clear that if space is unavailable, then CLECs can connect to the Qwest loop or inside wire at any other technically accessible terminal.[31] This issue is further addressed in SGAT Section 9.5.2.1.

**Q. ARE THERE ANY REQUIREMENTS THAT THE CLEC MUST ABIDE BY WHEN ACCESSING THE NID?**

A. Yes. As a safety measure for Qwest, the CLECs, and all customers, Qwest has added language requiring all carriers to follow the National Electric Safety Code and the National Electric Code. These codes specify that all connections must be in compliance with FCC 88-57, NESC Sec. 315, and NEC Sec. 800-30. This has been added to recognize the fact that all carriers must protect locations from foreign voltage. This safety requirement is contained in Section 9.5.2.5

[31] UNE Remand Order at Appendix C, pages 4 – 5.

**Q. WITH THE ABOVE CHANGES AND CLARIFICATIONS TO THE SGAT REGARDING NIDS, DOES QWEST ADHERE TO THE OBLIGATION TO PROVIDE NIDS AS SEPARATE UNBUNDLED ELEMENTS?**

A. Yes. Qwest provides unbundled access to the NID. Qwest allows competitors to connect their loops to a retail customer's inside wiring either via their own NID or the Qwest NID. This connection can be either from the protector field or the customer side of the NID. CLECs can terminate their loop in the Qwest NID as long as there is space for the connection.[32] If there is no spare capacity in the Qwest NID, the CLEC may access the customer wire in Qwest's NID through a NID to NID connection.

**Q. DOES QWEST REPLACE NIDS IF THEY UTILIZE OLDER TECHNOLOGY?**

A. As a general policy, if field visits are made by a technician and a customer has the old type of protector which does not allow a customer to isolate trouble, the technician will replace the protector with a standard Network Interface Device. For example, if a technician makes a field visit and a customer has the old 123a type of protector which does not allow a

[32] Third Interconnection Order and Fourth Further Notice of Proposed Rulemaking at ¶237.

customer to isolate trouble, the technician will replace the protector with a standard Network Interface Device.

**Q. WILL QWEST REPLACE BROKEN OR DEFECTIVE NIDS?**

A. If a technician is dispatched to an end user premises on a maintenance call and finds the NID to be defective and it can not be repaired, Qwest will replace the NID at no charge to the CLEC.

**Q. IF A CLEC MAKES THE REQUEST TO CHANGE OUT A NID, WHAT IS QWEST'S POLICY?**

A. As noted in the SGAT at 9.5.3, Qwest will install a new NID and charge the CLEC the applicable time and material charges. The CLEC will receive a prorated charge based on the specific request. For instance, if the CLEC request the NID to be replaced and wants two loops and Qwest installs a six pair NID, then the CLEC will only pay one third of the cost. Also, it should be noted that the CLEC has the option of placing its own NID or of having Qwest place a NID. Section 9.5.2 helps to clarify this policy.

**Q. A CLEC CAN UTILIZE EITHER ITS OWN NID OR A QWEST NID TO ACCESS THE CUSTOMER'S INSIDE WIRING?**

A. That is correct. Qwest allows competitors to connect their loops to the customer's inside wiring via either their own NID or the Qwest NID. CLECs can terminate their loop in the Qwest NID as long as there is space for the connection. The CLEC has the option of connecting to the protector field or the customer side of the NID. If there is no spare capacity in the Qwest NID, the CLEC may access the customer wire in Qwest's NID through a NID to NID connection. Again, this is in conformance with federal regulations. SGAT Sections 9.5.2.1 and 9.5.2.1.1 explain this policy.

**Q. WHAT ARE THE PROVISIONING REQUIREMENTS IF THE CLEC WISHES TO ACCESS THE NID FROM THE PROTECTOR FIELD?**

A. The CLEC must issue an LSR as explained earlier.

**Q. DOES QWEST RETAIN OWNERSHIP OF ITS NIDS AND ATTACHED CABLES ON THE CENTRAL OFFICE SIDE OF THE DEMARCATION POINT?**

A. Yes, it does. As Section 9.5.2.2 notes, Qwest will retain ownership of the NID and its attached cable on the Qwest side of the demarcation point. The FCC has not mandated that Qwest relinquish ownership of any of its cable and interface facilities that it allows a CLEC to use. That is why Unbundled Loops are *leased* by a CLEC – not *owned* by a CLEC.

Obviously, the CLEC can place its own facilities and thereby own its own plant. It only "leases" the facilities from Qwest.

**Q. ARE THERE ANY MECHANIZED ORDERING ISSUES STILL UNDER DEVELOPMENT?**

A. Yes. Currently, a CLEC orders access to the protector field of a NID by issuing a LSR. The LSR must be faxed or the NID request placed in the Remarks section of an LSR. Qwest is investigating a mechanized IMA solution. Currently, no CLEC has requested stand-alone access to the protector field of the NID.

**Q. IS THERE ANY DIFFERENCE BETWEEN A STANDARD NID AND NIDS IN A MULTIPLE TERMINAL ENVIRONMENT?**

A. Yes, there is. Qwest would like to address one additional NID related issue associated with NIDs in a Multiple Terminal Environment (MTE). Qwest allows direct access to MTE terminals, however, it is critical that the CLEC activity is performed in a manner that does not disrupt or rearrange Qwest owned facilities. Good engineering practice must be followed to prevent customer-impacting problems when CLEC and Qwest technicians perform their duties within the MTE terminal. Also the National Electric Code and National Electric Safety Code (NESC) must be adhered to by CLEC and Qwest technicians alike to prevent the potential for hazardous

and damaging conditions CLEC technicians must be required to follow prescribed methods and procedures. Exhibit JML-30 displays an excerpt from the NESC.

**Q. DOES THE CLEC'S ACCESS TO TERMINALS VARY?**

A. Yes. How the CLECs access the NID in an MTE terminal depends upon whether or not a cross-connect field exists at the MTE that will allow the CLEC to run jumpers. If a cross-connect field exists the CLECs can perform the lift and lay procedure to access the customer side of the cross-connect. However, if a cross-connect field does not exist, then the MTE is "hard-wired."

Section 9.3.5.4.5.2.3 of the SGAT specifically states how CLECs can obtain access to MTE terminals that do not contain a cross-connect field. The SGAT states that in those circumstances:

> 9.3.5.4.5.2.3 To the extent CLEC seeks access to a MTE terminal that does not contain a cross-connect field and is not connected to an adjacent MTE Terminal with a cross-connect field, CLEC shall access each Subloop in such a MTE Terminal using a bridging clip that overlays Qwest's termination pin for the particular end user customer on the connecting terminal block, and CLEC shall replace the Qwest line protector dedicated to that end user with a service denial protector or equivalent DC continuity interrupter….

**Q. IS THIS A COMPLICATED PROCESS?**

A. While this sounds complicated, this process is actually incredibly simple and inexpensive. The concern Qwest has about hard-wired MTE terminals is ensuring that its facilities do not create a safety hazard or are not damaged thereby preventing use by Qwest and/or future CLECs. This method allows Qwest's facilities to remain connected to the MTE Terminal and ground protection. The CLEC installs a "bridging clip," which is simply an adapter that overlays Qwest's facilities. This allows CLEC and Qwest facilities to be connected to the MTE Terminal at the same time.

Then the CLEC removes the Qwest line protector and replaces it with a service denial protector, or equivalent DC continuity interrupter. Without the installation of a DC continuity interrupter, difficulty might arise because Qwest facilities would remain connected to the end user's inside wire and would appear as bridged tap, which could cause transmission problems for the CLEC's facilities. A DC continuity interrupter protector that grounds the facility (thereby protecting the customer and facilities against lightening strike) and eliminates the bridged tap would then allow for clean and easy access to the intra-building subloop by the CLEC. Qwest's initial estimates are that the bridging clips and the protector devices are readily available in the marketplace and collectively cost less than $3.00 per unit.

Again, Qwest requires the CLEC to use best engineering practices in accordance with industry standards and requires that all wiring shall be neatly dressed. Qwest proposes the following SGAT language:

> 9.5.2.3 When CLEC accesses a Qwest NID, it shall employ generally accepted best engineering practices in accordance with industry standards. At MTE NIDs, CLEC shall clearly label the CLEC cross-connect wires it uses.

**Q. HAS QWEST MET ITS LEGAL OBLIGATION FOR CLECS TO HAVE ACCESS TO NIDS AS SPECIFIED BY THE FCC?**

A. Definitely. Qwest has a concrete legal obligation to make NIDs available to CLECs upon request. Qwest makes NIDs available at an acceptable level of quality. As of March 31, 2001, Qwest has provisioned over 34,290 unbundled loops in Washington, many of which had a NID as the demarcation point. Qwest, therefore, makes NIDs available to CLECs as required by the Act.

## XIII. LINE SPLITTING

**Q. WHAT IS LINE SPLITTING?**

A. Line Splitting is when competitive carriers will provide both the voice and data service over a single loop.[33] This can be contrasted to "line sharing" which occurs when the ILEC provides the voice service and another CLEC provides the data service.[34] Line Splitting provides CLEC with the opportunity to offer advanced data services simultaneously with an existing UNE-P or unbundled loop by using the frequency range above the voice band on the copper loop. This frequency range will be referred to herein as the High Frequency Spectrum Network Element ("HUNE"). A POTS splitter must be inserted into the UNE-P to accommodate the establishment of the advanced service on the existing voice loop. The POTS Splitter separates the voice and data traffic and allows the copper loop to be used for simultaneous data transmission and voice service. For purposes of this section of my testimony CLEC will refer to the voice service provider and DLEC will refer to the advanced service provider. The CLEC and the DLEC may be the same entity. Exhibit JML-31 displays the differences between the line splitting, loop splitting, and line sharing.

[33] SBC Texas 271 Order, FCC 00-238, CC Docket No. 00-65 at ¶330.
[34] Texas Order at ¶324.

**Q. WHAT IS QWEST'S OBLIGATION TO PROVIDE LINE SPLITTING?**

A. As defined by the FCC, Qwest's obligation to provide line splitting on a UNE-P line, is to allow competing carriers the opportunity to cooperatively provide voice and data services on a single unbundled loop that is part of a UNE-P combination. Qwest will permit competing carriers to provide voice and data services over a single UNE-P loop. Exhibit JML-2, the revised SGAT, describes Line Splitting in Section 9.21 and Loop Splitting in Section 9.24.

**Q. DOES QWEST OFFER LINE SPLITTING AS A PRODUCT TO A CLEC?**

A. Yes. Qwest provides CLECs with access to Line Splitting. This issue has been discussed in the CLEC/Qwest joint sub-team, which meets on a regular basis. These meetings provide an opportunity for collaboration between Qwest and all interested CLECs/DLECs in the refinement of this product. Exhibit JML-33 displays the various Line Splitting scenarios that have been identified by the subteam. The chart identifies eleven different Line Splitting scenarios and identifies the Qwest, CLEC, and DLEC actions required to support each scenario. This matrix is a copy of a working document and is updated as the industry team works cooperatively through issues.

**Q. DOES QWEST PROVIDE ITS OWN RETAIL DSL SERVICE IN ANY OF THE LINE SPLITTING SCENARIOS?**

A. No. There are really two issues here. First, as previously mentioned, line splitting occurs when CLECs and DLECs share the facility. Second, under no circumstances does Qwest provision its retail DSL product using an UNE-P POTS platform. Basically this would entail combining finished retail service with UNEs. Qwest does not believe that the UNE Remand Order or any of the Advanced Services orders indicate that there is a legal obligation to combine finished services and UNEs.

**Q. HAS THE FCC RULED ON THIS ISSUE IN ANY JURISDICTION?**

A. Yes. In its Texas 271 order, the FCC addressed this issue. They stated:

> Other issues. We reject AT&T's argument that we should deny this application on the basis of SWBT's decision to deny its xDSL service to customers who choose to obtain their voice service from a competitor that is using UNE-P (fn omitted). Under our rules, the incumbent LEC has no obligation to provide xDSL service over this UNE-P carrier loop…In sum; we do not find this conduct discriminatory.[35]

Qwest is under no 271 obligation to provide its retail DSL service over an UNE-P arrangement.

The FCC, therefore, has explicitly ruled that the ILEC is NOT required to continue to offer its own retail DSL service in a line splitting arrangement. Moreover, it should never be a requirement in a competitive marketplace

[35] Texas Order at ¶330.

such as the telecommunications market, that one competitor dictates to another competitor how and what services to offer in a retail environment.

**Q. WHAT IS QWEST'S POLICY REGARDING POTS SPLITTERS FOR LINE SPLITTING?**

A. Qwest provides the same POTS splitter option for Line Splitting as it does for Line Sharing. As stated in the SGAT Section 9.4.2.1.6:

> …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….

**Q. IS QWEST OBLIGATED TO PROVIDE QWEST-OWNED POTS SPLITTERS TO A CLEC OR DLEC?**

A. No, it is not. In the FCC's Texas 271 opinion, the FCC specifically rejected an argument presented by AT&T that Southwestern Bell must provide the splitter. Specifically the FCC stated:

> "327. We reject AT&T's argument that SWBT has a present obligation to furnish the splitter when AT&T engages in line splitting over the UNE-P. The Commission has never exercised its legislative rulemaking authority under section 251(d)(2) to require incumbent LECs to provide access to the splitter, and the incumbent LECs therefore have no current obligation to make the splitter available."[36]

[36] Texas 271 Order at ¶327.

**Q. PLEASE EXPLAIN IN MORE DETAIL QWEST'S POSITION ON NOT BEING REQUIRED TO PROVIDE AND OWN THE POTS SPLITTER.**

A. Qwest's position, as noted above, is that it is not required to provide and own the splitters in a line splitting arrangement. Additionally, it should be noted that the only splitters used in Qwest's central offices are those that are part of the DSLAM unit. The splitter itself is located within the DSLAM card that provides the Qwest retail DSL, formerly called Megabit. Therefore, it is impossible to provide access for another provider to the Qwest-owned splitter. Outboard splitters, therefore, are not used by Qwest and are not available from Qwest.

**Q. THE TEXAS COMMISSION ORDERED THAT SBC PROVIDE THE POTS SPLITTER IN A LINE SPLITTING ARRANGEMENT. DOES ITS RULING APPLY TO QWEST AND ITS CURRENT SITUATION?**

A. No. In the case of Southwestern Bell (SWB), it was already utilizing outboard splitters as part of a managed line service it was offering. Because it was available, the Commission mandated that all the CLECs could have SWB provide the splitters. Additionally, the Texas Commission clarified in its order:

> "The Commission clarifies that this finding applies only to "stand-alone" splitters, as requested by AT&T in this docket. This does not apply to a splitter that has been incorporated into a DSLAM."[37] (*emphasis added*)

[37] Order Approving Revised Arbitration Award, PUC Docket No. 22315, Public Utility Commission of Texas, page 9.

**Q. QWEST IS NOT OBLIGATED, EITHER BY THE FCC OR BY THE PRECEDENCE OF THE TEXAS COMMISSION, TO PROVIDE THE POTS SPLITTER IN A LINE SPLITTING ENVIRONMENT?**

A. That is correct. Qwest does not use outboard splitters and so there is no parallel between Qwest and SWB. Therefore, the POTS splitting in Washington must be provided by the CLEC or DLEC and not by Qwest. Both the FCC and the Texas Commission support that position.

**Q. WHAT IS THE INSTALLATION INTERVAL FOR UNE-P POTS WITH LINE SPLITTING?**

A. Effective July 1, 2001, for both Line Splitting and Line Sharing (not Loop Splitting), the installation interval is based on the number of lines installed at the same end user premises. Just as for loops, the standard installation intervals are:

| Number of Lines | Number of Business Days |
|---|---|
| 1 to 8 | 3 |
| 9-16 | 6 |
| 17 –24 | 7 |
| 25 + | ICB |

**Q. PLEASE EXPLAIN LOOP SPLITTING.**

A. Loop Splitting is an arrangement in which Qwest plays a very minor role. Exhibit JML-38 provides a network diagram of Loop Splitting. Primarily this is an agreement between the CLEC and DLEC. If the CLEC and DLEC enter into an agreement between themselves to share a loop, Qwest will help to facilitate the effort. Such a contract between the two companies would necessarily include their own pricing, billing, POTS splitter arrangement, and trouble handling. These issues would be contractual ones between the CLEC and the DLEC.

However, it must be recognized that the sharing of a loop is between the CLEC and the DLEC. Qwest's contract would still only be in effect between itself and the company to whom it leased the unbundled loop. There are certainly issues which must be resolved from Qwest's perspective – the primary one being how and who would be authorized to report repair troubles. Qwest could only take such reports from the carrier with whom they have a contract. For purposes of this testimony, Qwest will use the term "customer of record" to mean the company that has the agreement with Qwest. In most cases, the company that leases the loop from Qwest will be the customer of record. Qwest will allow for a change to the customer of record. The CLEC and the DLEC would need to

develop a procedure to coordinate repair troubles prior to the "customer of record" calling Qwest to report the trouble.

**Q. HAS QWEST DEVELOPED SGAT LANGUAGE FOR LOOP SPLITTING?**

A. Yes, it has. That can be found in Section 9.24. Additionally, Qwest has agreed to discuss Loop Splitting in the transition scenarios in the Loop Splitting industry forum. Exhibit JML-32 is a list of various Loop Splitting scenarios that Qwest expects will be addressed in the industry forum. The Loop Splitting industry forum, like the Line Splitting industry forum, provides an opportunity for collaboration between Qwest and all interested CLECs/DLECs in the refinement of this important product offering.

**Q. DID INTERVENORS IN OTHER JURISDICTIONS ASK FOR ANY OTHER LINE SPLITTING ARRANGEMENTS OTHER THAN UNE-P AND UNBUNDLED LOOPS?**

A. Yes, they have. There were requests to offer Line Splitting over resold lines and EELs. As noted above, the offering using unbundled loops for line splitting will be developed in the Qwest/CLEC Line Splitting Forum. Currently the industry OBF standards have not been established for Loop Splitting, so Qwest and the CLECs will be covering new territory. No ILEC in the nation is currently providing Loop Splitting. At a national level,

Qwest is unaware of any discussions regarding EEL Splitting. Therefore, Qwest does not believe there is a need to develop EEL Splitting at this time. If a CLEC wishes to pursue EEL Splitting, this issue can be raised in the Qwest/CLEC Forum. However, Qwest will not agree to develop a standard UNE offering for EEL Splitting at this time, since there is no evidence of sufficient reasonably foreseeable demand. The issue associated with Resale Splitting is a little different. Qwest does not believe that it has any obligations to combine resale and unbundled elements. Additionally, the resale voice grade line can easily be converted to UNE-P voice, at which point UNE-P Line Splitting is available. For all the above reasons Qwest will not be developing an EEL Splitting or Resale Splitting offering.

**Q. DOES SGAT SECTIONS 9.21 AND 9.24 REFLECT THE MANDATES OF THE FCC AS WELL AS DISCUSSIONS AND CHANGES THAT OCCURRED IN OTHER JURISDICTIONS?**

A. Yes, it does.

**Q. DOES QWEST MEET ITS OBLIGATION IN PROVIDING LINE SPLITTING?**

A. Yes, it does. It allows the CLECs or DLECs to place POTS splitters in its Wire Centers and thereby allowing the CLECs to provide Line Splitting.

**Q. PLEASE SUMMARIZE QWEST'S LINE SPLITTING POSITION.**

A. Qwest's current Line Splitting and Loop Splitting policy and process comply with the FCC requirements. Qwest provides the CLECs with the ability to share a facility for the purposes of providing voice and data. Additionally, Qwest is meeting with the CLECs on a regular basis to continue working on nondiscriminatory processes to meet the various ordering possibilities.

## XIV. COMPARISON OF QWEST TO OTHER RBOCS

**Q. HAS QWEST EXAMINED HOW OTHER RBOCS ARE COMPLYING WITH THE 271 REQUIREMENTS?**

**A.** Yes, it has. Specifically, we have examined the web site of Verizon, (http://www.bellatlantic.com/wholesale/html/handbooks/clec/volume_3/c3s2_3.htm) which provides information about its products as well as its ability to handle provisioning, repair and maintenance of unbundled loops.

**Q. BASED ON THIS ANALYSIS, IS QWEST PROVIDING UNBUNDLED LOOP SERVICES THAT ARE SIMILAR TO THOSE OF VERIZON?**

A. Yes, it is.

**Q. PLEASE PROVIDE SPECIFIC EXAMPLES OF THESE SIMILARITIES.**

A. Verizon offers a variety of services, including 2-wire analog, ADSL, wire HDSL, and ISDN BRI. These products are also offered by Qwest and have been covered in this testimony. Verizon also offers line conditioning, repair and maintenance handling, and ordering and billing options. As noted throughout my testimony, these same types of offerings are available with Qwest and are in fact, being ordered across the 14-state region by many CLECs.

**Q. HAS VERIZON RECEIVED APPROVAL FOR 271 AND IF SO, DOES QWEST'S INSTALLATION INTERVALS COMPARE FAVORABLY WITH THOSE OF VERIZON?**

A. Verizon received 271 approval in New York and Massachusetts and the order issued supported the use of benchmark installation intervals developed in a collaborative process. The order stated: "During Verizon's original proceeding, Verizon and competing carriers reached consensus to eliminate the retail analogue and instead set a 95 percent benchmark standard for the percent completed within 6 days measure. Consensus was also reached to exclude orders that were not pre-qualified, orders requesting intervals outside of the standard interval and orders missed for lack of facilities."[38]

[38] FCC Verizon Massachusetts Order at ¶141, n 440.

**Q. HOW WERE QWEST'S BENCHMARKS DEVELOPED?**

**A.** The development of the benchmarks for 2/4-wire analog, 2/4 wire non-loaded and ADSL compatible loops for Qwest followed a similar process as those for Verizon in Massachusetts. As discussed at various workshops, Qwest is of the belief that the installation intervals found in SGAT Exhibit C formed the foundation for the creation of the Performance Indicator Definitions (PID) and associated benchmarks established collaboratively with CLECs in the Regional Oversight Committee (ROC) process. Qwest relies on the following information to support this position:

- The benchmarks for unbundled loops were discussed over several months in the ROC TAG. During the course of discussions the benchmarks changed and so did the actual installation intervals.
- Exhibit JML-34 displays the changes in the OP-4 measurements negotiated by ROC TAG participants.
- When the discussions started, the installation interval for 2/4 wire non-loaded loops and ADSL compatible loops was 6 days. Based upon CLEC input and negotiations, the interval was adjusted downward to 5 days to match the interval for analog loops.

**Q. COMPARING THE PROCESS AND THE RESULTS TO VERIZON, ANOTHER ILEC, FURTHER DEMONSTRATES QWEST'S COMPLIANCE WITH 271 REQUIREMENTS?**

A. Definitely. Qwest believes that the various intervals for unbundled loops are comparable to those of other ILECs that have received FCC 271 approval. Qwest Loop installation intervals compare very favorably to Verizon's, an ILEC that has received FCC 271 approval in 2 states. Exhibit JML-35 compares the Qwest intervals to Verizon. Some of the highlights include:

- The Qwest intervals start at the same interval length, 5 days, for analog loops but are shorter for all other loops types. Both companies measure installation interval in business days.
- The Qwest intervals are shorter than Verizon's as the number of loops per LSR increase.
- The Qwest threshold to an Individual Case Basis (ICB) interval is at a higher number of loops per LSR than Verizon.
- Qwest has established a standard 15 business day interval for conditioning. Verizon performs all conditioning on an ICB and requires the CLECs to work through the account manager to obtain conditioning. Additionally conditioning must be completed prior to the standard installation interval for the particular loop type.

Based on these facts Qwest believes that the existing installation intervals provide the CLECs with a meaningful opportunity to compete. They are based on a collaborative process that involved all parties. And finally, they

are more favorable than the intervals offered by another ILEC that has received Section 271 approval.

## XV. CONCLUSION OF TESTIMONY

**Q. WHAT DO YOU CONCLUDE FROM THESE DISCUSSIONS?**

A. Qwest has satisfied the requirements of the Act for access to unbundled loops, Checklist Item 4. Qwest has a legal obligation to provide these items through both existing interconnection agreements and the SGAT. Qwest is currently providing access to the UNEs in Washington. There are 21 CLECs throughout Washington who are successfully accessing over 34,290 unbundled loops to create telecommunications services for end-users. These loops have been installed through the use of existing interconnection agreements and for ease of review, I have attached JML-39 as a matrix identifying those sections of various interconnection agreements dealing with unbundled loops. CLECs have access to loops of all types. These CLECs are obtaining these loops in a similar time and manner and are having these loops repaired in substantially the same time and manner as Qwest's retail customers.

**Q. WHAT IS YOUR FINAL CONCLUSION?**

A. Based on the evidence presented, Qwest is currently provisioning and maintaining over 34,290 unbundled loops in Washington of which approximately 64% are analog. The analog unbundled loops have increased by over 300% since the beginning of 2000. Qwest is providing loops in a non-discriminatory manner and providing the CLECs with a meaningful opportunity to compete. Qwest has responded to the specific questions asked of it by the Washington Commission and the cross-references can be found in Exhibit JML-40. Qwest is complying with the UNE Remand in providing CLECs with conditioned unbundled loops, access to loops served by IDLC, and access to loop make-up information. Therefore, the Commission should find that Qwest has satisfied the requirements for Checklist Item 4 (when combined with CGEY OSS test results) - unbundled loops as listed in Section 271 of the Telecommunications Act of 1996 and expanded in the UNE Remand.

**Q. DOES THIS CONCLUDE YOUR TESTIMONY?**

A. Yes, it does.