BEFORE THE PUBLIC SERVICE COMMISSION OF UTAH

In the Matter of the Investigation into Qwest Wire Center Data	)	Docket No. 06-049-40

DIRECT TESTIMONY

OF

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FOR

QWEST CORPORATION

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SUMMARY OF TESTIMONY

My testimony describes the methodology that Qwest utilized to establish the number of business access lines in Utah wire centers to determine which wire centers are classified as "non-impaired" under terms of the FCC's Triennial Review Order on Remand ("*TRRO*").[1] As discussed in greater detail in the direct testimony of Qwest witness Renee Albersheim, the FCC in its *TRRO* has determined that wire centers are "non-impaired" with respect to DS1 interoffice transport if the wire centers at both ends of a transport route contain at least 38,000 business lines or have at least four fiber-based collocators, and are non-impaired with respect to DS3 interoffice transport if both wire centers at each end of the transport route contain at least 24,000 business lines or at least three fiber-based collocators. Additionally, the FCC has determined that wire centers containing at least 60,000 business lines and four or more fiber collocators are non-impaired with regard to DS1 local loops, and wire centers containing at least 38,000 business lines and at least four fiber collocators are non-impaired with respect to DS3 local loops.

As described in my testimony, in determining the number of business lines for each wire center, Qwest closely followed the FCC's definition of "business lines" outlined at paragraph 105 of the *TRRO* and in 47 CFR § 51.5:

[1] FCC 04-290; CC Docket No. 01-338, released February 4, 2005.

> "The BOC wire center data that we analyze in this Order is based on ARMIS 43-08 business lines, plus business UNE-P, plus UNE-Loops." [2]

TRRO-related proceedings have been completed in a number of other states, and commissions in Georgia, Florida, Illinois, Ohio, California and other states have approved methodologies for the identification of RBOC business line counts that are very similar to the methodology that Qwest has used in Utah and its other states. As I discuss in my testimony, these state commissions have found that these methodologies are reasonable and in compliance with the FCC's guidelines. Based on Qwest's analysis of the business line and fiber collocation data as defined in the FCC's *TRRO*, I recommend that the Commission support Qwest's conclusion that one Utah wire center (Salt Lake City Main) meets the FCC's non-impairment criteria for non-impairment for DS1 and DS3 unbundled loops and that six wire centers (Murray, Ogden Main, Provo, Salt Lake City Main, Salt Lake City South and Salt Lake City West) meet the FCC's non-impairment criteria for DS1 and DS3 interoffice transport.

[2] The FCC's rules are further defined in 47 CFR § 51.5, where the FCC clarified that each 64 kilobit per second (kbps) equivalent channel in a digital access line shall be counted as one "business line."

I. INTRODUCTION

Q. PLEASE STATE YOUR NAME, TITLE AND ADDRESS.

A. My name is David L. Teitzel. I am employed by Qwest Services Corporation ("QSC"),[3] parent company of Qwest Corporation ("Qwest"), as Staff Director-Public Policy. My business address is 1600 7th Avenue, Room 3214, Seattle, Washington 98191.

Q. PLEASE REVIEW YOUR EDUCATION, WORK EXPERIENCE, AND PRESENT RESPONSIBILITIES.

A. I received a Bachelor of Science degree from Washington State University in 1974. Since then, I have been continuously employed by Qwest and its predecessor companies. I have held a number of management positions in various departments, including Regulatory Affairs, Network and Marketing. As a Marketing product manager, I was responsible for product management of Basic Exchange, Centrex and IntraLATA Long Distance services. I have also served as a Market Manager for Qwest Dex. I was named to the Staff Director-Public Policy position in March 1998.

Q. HAVE YOU TESTIFIED IN UTAH PREVIOUSLY?

A. Yes. I filed written testimony in Docket No. 98-049-24, Qwest's application to exempt intraLATA long distance services from regulation; and in Docket

[3] QSC performs support functions, such as regulatory support, for other Qwest entities.

No. 99-049-10, Qwest's application to exempt Directory Assistance service from regulation. I have also filed written testimony and have appeared before this Commission in Docket No. 99-049-T05, Qwest's proposal for introduction of a Competitive Response program; Docket No. 99-049-17, Qwest's first petition for pricing flexibility for business services; Docket No. 00-049-08, Qwest's Section 271 application to provide interLATA long distance services; Docket No. 02-049-82, Qwest's petition for pricing flexibility for business services; Docket No. 01-2383-01, AT&T Broadband's application for a certificate of public convenience; Docket No. 03-049-49, Qwest petition for pricing flexibility for residential services in 44 Utah wire centers; and Docket No. 03-049-50, Qwest's petition for pricing flexibility for business services in 19 Utah wire centers. In addition to testifying in Utah, I have also served as an expert witness for Qwest in Arizona, Colorado, Idaho, Iowa, Minnesota, Montana, Nebraska, New Mexico, North Dakota, Oregon, South Dakota, Washington, and Wyoming.

II. PURPOSE

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. The purpose of my testimony is to describe the methodology that Qwest employed to develop counts of business access lines in Utah wire centers to determine which wire centers are to be classified as "non-impaired" under terms of the FCC's *TRRO*. In addition, my testimony demonstrates that Qwest's method for counting business access lines in the Utah wire centers is in full compliance with the "business line" definitions outlined in the *TRRO* and the FCC's rules.

III. FCC BUSINESS LINE DEFINITIONS

Q. IN ITS *TRRO*, DID THE FCC PROVIDE A DEFINITION OF "BUSINESS LINES" FOR PURPOSES OF DETERMINING WHETHER A PARTICULAR WIRE CENTER MEETS THE THRESHOLD TEST FOR NON-IMPAIRMENT?

A. Yes. At paragraph 105 of its *TRRO*, the FCC defined "business lines" as follows:

> The BOC wire center data that we analyze in this Order is based on ARMIS 43-08 business lines, plus business UNE-P, plus UNE-loops.

Further, the FCC's rules regarding implementation of *TRRO* requirements (47 CFR § 51.5) define "business line" as follows:

> A business line is an incumbent LEC-owned switched access line used to serve a business customer, whether by the incumbent LEC itself or by a competitive LEC that leases the line from the incumbent LEC. The number of business lines in a wire center shall equal the sum of all incumbent LEC business switched access lines, plus the sum of all UNE loops connected to that wire center, including UNE loops provisioned in combination with other unbundled elements. Among these requirements, business line tallies:
>
> > (1) Shall include only those access lines connecting end-user customers with incumbent LEC end-offices for switched services.
> >
> > (2) Shall not include non-switched special access lines.
> >
> > (3) Shall account for ISDN and other digital access lines by counting each 64KBPS-equivalent as one line. For example, a DS1 line corresponds to 24 64 kbps-equivalents, and therefore to 24 "business lines."

Q. DO THE FCC's RULES MEAN THAT <u>ALL</u> LINES THAT CAN BE IDENTIFIED AS SERVING A BUSINESS CUSTOMER SHOULD BE INCLUDED IN WIRE CENTER LINE TOTALS FOR ANALYSIS IN THE FCC's "NON-IMPAIRMENT" THRESHOLD TEST?

A. Yes. The FCC's directives are very clear: <u>all</u> lines owned by an ILEC that are used to serve business customers,[4] whether they are provided on a retail or a wholesale basis, should be included in the business line count.

Q. HAS THE FCC DETERMINED THAT <u>ALL</u> UNE LOOPS SHOULD BE INCLUDED IN THE BUSINESS LINE COUNTS?

A. Yes. The FCC's business line definition recognizes that UNE loops are generic wholesale services and that an ILEC has no means of determining whether a CLEC is utilizing a UNE loop to serve a residential or a business customer. Thus, the FCC's rules (47 CFR § 51.5) clearly state that the sum of all UNE loops should be included in an ILEC's count of business lines.

Q. DOES THE FCC's BUSINESS LINE DEFINITION MANDATE THAT MULTI-CHANNEL CIRCUITS, SUCH AS A DS1 CIRCUIT, SHOULD BE COUNTED IN TERMS OF 64-kbps CHANNEL CAPACITY OF EACH SUCH CIRCUIT?

A. Yes. Subsection (3) of the "business line" definition of 47 CFR § 51.5 clearly states that each 64 kilobit channel[5] within a high-capacity digital line, such as a DS1, should be counted as a separate business line. Since a DS1 line, for example, has a capacity of 1,544 kilobits per second, a DS1 would be counted as containing 24 separate business lines.[6]

[4] The FCC's definition in 47 CFR § 51.5 excludes any business lines that are served by loop facilities not owned by the ILEC, such as lines served via CLEC-owned fiber facilities, lines served via coaxial cable facilities owned by cable MSOs, wireless services used in lieu of Qwest's business lines, etc.

[5] A 64 kilobit per second channel is also known as a Voice-Grade Equivalent ("VGE") channel. Qwest reports access lines in its annual FCC ARMIS data in terms of VGEs in service.

[6] As noted above, 47 CFR § 51.5 specifically states that "a DS1 line corresponds to 24 64 kbps-equivalents, and therefore to 24 'business lines.'"

Q. DID THE FCC STATE IN THE *TRRO* ITS PREFERENCE FOR SIMPLICITY IN THE METHODOLOGY USED TO COUNT BUSINESS ACCESS LINES?

A. Yes. The FCC stated that "business line counts are an objective set of data that incumbent LECs have already created for other regulatory purposes," and that "by basing our definition in an ARMIS filing required of incumbent LECs, and adding UNE figures, which must also be reported, we can be confident in the accuracy of the thresholds, *and a simplified ability to obtain the necessary information."* *TRRO*, ¶ 105. (Emphasis added.) Clearly, the FCC's intent is that incumbent LECs should utilize data "already created for other regulatory purposes," and that they should follow the FCC's simple and unambiguous definition to count business lines in determining which wire centers meet the non-impairment thresholds established in the *TRRO*.

Q. HAVE OTHER STATE COMMISSIONS EXAMINED THE FCC's BUSINESS ACCESS LINE DEFINITIONS, AND RBOCs' RELATED SUBMISSIONS OF BUSINESS ACCESS LINE COUNTS, IN DETERMINING WHETHER THE FCC's GUIDELINES HAVE BEEN CORRECTLY INTERPRETED?

A. Yes. This issue has already been adjudicated and resolved before a number of state commissions. For example, in its *TRRO* arbitration decision, the Indiana Utility Regulatory Commission found:

> The FCC's rule, 47 C.F.R. 51.5, defines "business lines" to include all UNE loops connected to a wire center at issue, regardless of the type of customer served. Moreover, when the FCC conducted a sample run of how to compute "business lines" in a wire center in paragraph 105 of the *TRRO*, it used all UNE loops in the wire center, with no exclusions. One reason for this was that the FCC wanted to establish a simple, objective test that relied on data the ILECs already have and which could be easily verified. SBC Indiana's proposal for computing "business lines" uses the exact same data and categories that the FCC relied on in the *TRRO*. We will not ignore the FCC's use of all UNE loops in its dry run nor will we redefine "business lines" in a manner that conflicts with the FCC's approach. Finally, we agree with SBC Indiana that the CLECs' proposal to exclude certain UNE loops is inconsistent with the FCC's impairment analysis, which used the same type of data that SBC Indiana proposes to continue to use here. We also note that the Illinois and Ohio commissions both held for SBC on this issue in their *TRO/TRO Remand Order* implementation dockets. [Citations omitted][7]

Similarly, in its *TRRO* arbitration decision regarding disputes between SBC and CLECs with respect to the methodology for counting business lines, the Illinois Commerce Commission found:

> The FCC's definition of business lines specifically includes "…the sum of all incumbent LEC business switched access lines, plus the *sum of all UNE loops* connected to that wire center, including UNE loops provisioned in combination with other unbundled elements." (47 C.F.R. §51.5) (emphasis added). The phrase "all UNE loops" encompasses residential customers and non-switched services. CLECs' contention that the FCC intentionally limited its count to business lines because transport deployment has been driven largely by high bandwidth and the service demands of business making business lines a more accurate predictor of impairment than total lines, is likewise inconsistent with the FCC's definition. CLECs' contention that SBC "seeks" to include "the sum of all UNE loops connected to the wire center" including UNE loops that serve residences is obviously incorrect, since the FCC's definition already includes the quoted language. SBC's position on this issue is fully

[7] *In the Matter of the Indiana Utility Regulatory Commission's investigation of Issues Related to the Implementation of the Federal Communications Commission's Triennial Review Remand Order and the Remaining Portions of the Triennial Review Order*, Ind. URC, Cause No. 42857 (approved January 11, 2006), Issue 3, p. 16.

> consistent with the data the FCC relied upon to set the impairment thresholds and this is why we find SBC's proposed language more preferable.[8]

Likewise, in its *TRRO* arbitration decision, the Public Utilities Commission of Ohio found:

> Moreover, the FCC explicitly required adding the sum of all UNE-loops connected to that wire center knowing that some of those loops would include residential customers. Incumbents are unable to determine if the end user is a business or residential customer since the incumbents terminate the UNE loop to a collocation arrangement and thus do not know the class of customer beyond that point.[9]

Finally, the Florida Public Service Commission, in the order in its docket examining amendments to BellSouth's interconnection agreements resulting from the *TRRO*, agreed with these findings and stated:

> We note that the CFR specifies that "the number of business lines in a wire center shall equal the sum of all incumbent LEC business switched access lines, plus the sum of all UNE loops connected to the wire center, including UNE loops provisioned in combination with other unbundled elements." (47 CFR § 51.5) We note that the rule refers to ILEC "business" switched access lines, but does not specify any particular UNE loops; rather, it says "all" UNE loops connected to the wire center, including UNE loops provisioned in combination with other unbundled elements. This is consistent with the language from the text of the TRRO, cited above. We find that this distinction is significant and indicates that ILEC switched business access lines and UNE loops should be treated differently. Accordingly, we disagree with CompSouth witness Gillan's adjustment to UNE-L, which is based upon his assumption that UNE-L should include only those lines used to provision business service, rather

[8] Arbitration Decision, *Petition for Arbitration pursuant to Section 252(b) of the Telecommunications Act of 1996 with Illinois Bell Telephone Company to Amend Existing Interconnection Agreements to Incorporate the Triennial Review Order and the Triennial Review Remand Order*, ICC, Docket No. 05-0442 (Nov. 2, 2005) ("*Illinois TRO/TRRO Order*"), at p. 30.

[9] Arbitration Award, *In re Establishment of Terms and Conditions of an Interconnection Agreement Amendment*, PUCO, Case No. 05-887-TP-UNC (Nov. 9, 2005) ("*Ohio TRO/TRRO Order"*), at 16.

> than being counted at full capacity as done by BellSouth. We also agree with BellSouth that unused capacity on channelized high capacity loops should be counted in the business lines. As noted by BellSouth witness Tipton, the FCC rules specifically state that "the business line tallies . . . shall account for ISDN and other digital access lines by counting each 64 kbps-equivalent as one line." (47 CFR § 51.5) The FCC rule further explains by way of example that a DS1 line should be counted as 24 business lines because it corresponds to 24 64 kbps-equivalents.[10]

These findings from various state commissions are in alignment with the methodology that Qwest used to count business access lines in Utah in determining which Utah wire centers met the *TRRO*'s criteria for non-impairment.

Q. HAS THERE BEEN UNANIMOUS AGREEMENT AMONG STATE COMMISSIONS IN REGARD TO THE DEFINITION OF "BUSINESS LINES" IN EXAMINING IN-SERVICE LINE COUNTS AS THE FCC's RULES REQUIRE?

A. No. One commission, the North Carolina Utilities Commission, issued an order on March 1, 2006 in which it found, in part, that BellSouth should not include UNE loops used by CLECs to serve residential customers, nor the full system capacity of digital access lines in the total number of BellSouth business access lines as defined in 47 CFR § 51.5.[11] However, the North Carolina Commission's treatment of the circuit count associated with business lines is inconsistent with

[10] *Petition to Establish Generic Docket to Consider Amendments to Interconnection Agreements Resulting from Changes in Law, by BellSouth Telecommunications, Inc.*, Fla. PUC, Docket No. 041269-TP, Order No. PSC-06-0172-FOF-TP (March 2, 2006) ("*Florida TRO/TRRO Order*"), at p. 37.

[11] *In the Matter of Proceeding to Consider Amendments to Interconnection Agreements Between BellSouth Telecommunications, Inc. and Competing Local Providers Due to Changes of Law, Order Concerning Changes of Law,* NC PUC, Docket No. P-55, Sub. 1549 (March 1, 2006), at page 5.

the requirements of the *TRRO* and is plainly contrary to the majority of previous decisions issued by other state commissions.

IV. NON-IMPAIRED WIRE CENTERS IN UTAH

Q. PLEASE BRIEFLY REVIEW THE FCC's NON-IMPAIRMENT STANDARDS FOR DS1 AND DS3 UNBUNDLED LOOPS.

A. As Ms. Albersheim describes in her testimony, the FCC determined that CLECs are not competitively impaired without access to DS1 unbundled loops in wire centers with more than 60,000 business lines (and four or more fiber-based collocators), and are not competitively impaired without access to DS3 unbundled loops in wire centers with more than 38,000 business lines (and four or more fiber-based collocators).

Q. PLEASE BRIEFLY REVIEW THE FCC's NON-IMPAIRMENT STANDARDS FOR DS1 AND DS3 UNBUNDLED INTEROFFICE TRANSPORT.

A. As Ms. Albersheim describes, the FCC determined that CLECs are not competitively impaired without DS1 interoffice transport for routes connecting wire centers with at least 38,000 business lines or at least four fiber-based collocators ("Tier 1" wire centers). The FCC also determined that CLECs are not impaired without DS3 interoffice transport for routes connecting wire centers with

at least 24,000 business lines or at least three fiber-based collocators ("Tier 2" wire centers).

Q. BASED ON BUSINESS LINE AND FIBER COLLOCATION DATA AS OF DECEMBER 2003, WHICH QWEST WIRE CENTERS IN UTAH ARE CLASSIFIED AS NON-IMPAIRED FOR DS-1 AND DS3 UNBUNDLED LOOPS?

A. Based on Qwest's analysis of the data that the *TRRO* requires, the only wire center in Utah meeting the non-impairment standard for DS1 and DS3 unbundled loops is the Salt Lake City Main wire center. The business access line data that Qwest relied on in its analysis, developed in accordance with the FCC's definitions, is shown in Highly Confidential Exhibit DLT-1 attached to my testimony. In addition to the business line data for the Salt Lake City Main wire center, I have also provided business line data for five additional Utah wire centers which were classified as non-impaired with respect to interoffice transport. Fiber collocation data, as well as business line data, were examined in making the interoffice transport non-impairment determinations for those wire centers.

Q. BASED ON THE BUSINESS LINE AND FIBER COLLOCATION DATA AS OF DECEMBER 2003, WHICH UTAH WIRE CENTERS ARE CLASSIFIED AS NON-IMPAIRED FOR UNBUNDLED INTEROFFICE TRANSPORT?

A. Based on Qwest's analysis of both business line counts and fiber collocation data, six Utah wire centers meet the FCC's interoffice transport threshold for "Tier 1"[12] non-impairment status. These six wire centers are: Murray, Ogden Main, Provo, Salt Lake City Main, Salt Lake City South and Salt Lake City West. There were no Utah wire centers in the "Tier 2" interoffice transport non-impairment designation.

[12] Please see Ms. Albersheim's direct testimony for a full description of the FCC's "tier" structure for "non-impairment" designation of wire centers.

V. QWEST'S BUSINESS LINE COUNT METHODOLOGY

a. Qwest Retail Business Lines

Q. IN DEVELOPING WIRE CENTER-SPECIFIC COUNTS OF QWEST RETAIL SWITCHED BUSINESS LINES IN SERVICE, DID QWEST FOLLOW THE FCC's DIRECTIVE OF UTILIZING ARMIS REPORT 43-08 DATA?

A. Yes. Qwest utilized the data in its FCC ARMIS 43-08 report, Table 3, for the December 2003 timeframe as a basis for its business line count, which was the most current data available at the time that Qwest conducted its analysis.[13] Consistent with ARMIS business access line definitions, Qwest's impairment analysis was based on the retail switched business line counts at each wire center from its December 2003 ARMIS 43-08 report, and included all Qwest retail switched business lines in Utah wire centers from this report, which included "single line business switched access lines" from column C, "multi-line business switched access lines" from column D, and "payphone lines" from column E of the ARMIS report.

[13] Qwest filed December 2003 ARMIS data with the FCC in April 2004. This was the same data that was available on February 4, 2005 when the FCC directed Qwest and other RBOCs to submit their lists of wire centers that met the FCC's non-impairment criteria. Qwest did not file ARMIS data for 2004 until April 2005. Accordingly, use of Qwest's December 2003 ARMIS data is not only appropriate, but it is also fully consistent with the FCC's intent, as expressed at paragraph 105 of its *TRRO*, to base determinations on "an objective set of data that incumbent LECs already have created for other regulatory purposes." Further,

Q. IN ORDER TO SATISFY THE FCC's DIRECTIVES, WAS IT NECESSARY TO ADJUST THE ARMIS 43-08 DATA FOR HIGH-CAPACITY LOOPS?

A. Yes. As I discussed in the previous section of my testimony, the FCC mandated in its *TRRO* that all 64 kilobit per second channels in a high-capacity digital line should be included in the business line counts when determining which wire centers satisfy the FCC's non-impairment threshold test. Therefore, Qwest multiplied all actual high-capacity digital business lines shown in its December 2003 ARMIS report by the appropriate Voice-Grade Equivalent factor to comply with the FCC's rules. For example, Qwest multiplied by 24 each digital PBX business trunk that utilizes DS1 circuits for inclusion in its Utah business line count for each wire center (since there are 24 VGE channels in each high-capacity DS1 circuit). This is the same approach that commissions in other states have examined and previously found to be in compliance with *TRRO* requirements, as I have discussed earlier in my testimony.

Qwest will file its 2005 ARMIS data with the FCC in April 2006, and thus that data is not available at this time.

b. Unbundled Loops

Q. HAS QWEST INCLUDED ALL UNBUNDLED LOOPS IN ITS BUSINESS LINE WIRE CENTER IMPAIRMENT ANALYSIS?

A. Yes. Qwest included all UNE loops in a wire center in its business line counts, as the FCC directed in paragraph 105 of the *TRRO* and associated FCC rules. Consistent with the FCC's "business line" definition, Qwest did not attempt to "remove" UNE loops that may be used to serve residential customers. In fact, and as I discussed earlier in my testimony in regard to previous findings in other states, the clear language in the *TRRO* and associated rules specifies that there is no basis to distinguish between "business" UNE loops and "residential" UNE loops in counting all UNE loops for determining the total number of business lines in a wire center In particular, 47 CFR § 51.5 defines what constitutes "business lines" as follows:

> The number of business lines in a wire center shall equal the sum of all incumbent LEC business switched access lines, **plus the sum of all UNE loops connected to that wire center, including UNE loops provisioned in combination with other unbundled elements**. (Emphasis added.)

The FCC clearly specified that "LEC business switched access lines" must be included in an RBOC's line count, but excluded the "business" qualifier in its mandate regarding treatment of UNE loops in the count. In other words, the FCC's rules require all UNE loops to be included in an RBOC's business line count in assessing whether the FCC's non-impairment criteria have been met.

Q. IN FOLLOWING THE FCC's DIRECTIVES, DID QWEST INCLUDE ALL 64 KILOBIT VOICE-GRADE EQUIVALENT ("VGE") CHANNELS ASSOCIATED WITH DIGITAL UNBUNBLED LOOPS?

A. Yes. For example, Qwest multiplied all DS1 unbundled loops in Qwest's December 2003 wholesale database -- the same vintage of data upon which Qwest's retail business line count for its ARMIS 43-08 report was based -- by a VGE factor of 24, consistent with the FCC's guideline (47 CFR § 51.5) that all 64 kilobit per second channels in a digital circuit should be counted as separate business lines. This is also fully consistent with how business lines, and voice-grade business line equivalents, were counted and accepted in previously-concluded state proceedings in various BellSouth and SBC service territories. For example, in the Florida state proceeding discussed above, the Florida Commission found:

We also agree with BellSouth that unused capacity on channelized high capacity loops should be counted in the business lines. As noted by BellSouth witness Tipton, the FCC rules specifically state that "the business line tallies…shall account for ISDN and other digital access lines by counting each 64 kbps-equivalent as one line." (47 CFR § 51.5). The FCC rule further explains by way of example that a DS1 line should be counted as 24 business lines because it corresponds to 24 64 kbps-equivalents.[14]

Q. IN ADDITION TO STAND-ALONE UNBUNDLED LOOPS, DID QWEST INCLUDE ENHANCED EXTENDED LOOPS ("EELs") IN ITS UNBUNDLED LOOP COUNT?

A. Yes. An EEL essentially consists of an unbundled loop plus interoffice transport, and is utilized by a CLEC to provide service to a customer located in a particular wire center when the CLEC's switching equipment is located in a different wire center. Thus, EEL loops are appropriately included in the count of unbundled loops of the wire center in which the unbundled loop terminates.

Q. HAVE OTHER STATE COMMISSIONS DETERMINED THAT SERVICES OTHER THAN THOSE INCLUDED IN QWEST'S ANALYSIS IN UTAH SHOULD BE INCLUDED IN THE RBOC's BUSINESS ACCESS LINE COUNTS?

A. Yes. For example, the Georgia Public Service Commission found that BellSouth's inclusion of High-Speed Digital Service Lines ("HDSL") was consistent with the guidelines of subsection (3) of the "business line" definition of

[14] *Florida TRO/TRRO Order*, at p. 37.

47 CFR § 51.5 regarding treatment of each 64 kilobit channel within a digital circuit as a separate business line.[15] For example, a 1.5 megabit HDSL line is equivalent to 24 (64 kbps) VGE channels, as is a DS1 loop. Although BellSouth's counting of HDSL lines as 24 separate business lines makes sense, Qwest conservatively did not include HDSL lines in its *TRRO* business line counts in Utah.

Q. IN ITS *TRRO*, DID THE FCC REQUIRE RBOCs TO EXCLUDE UNE LOOPS FROM THEIR BUSINESS LINE COUNTS IF THOSE LOOPS WERE USED TO PROVIDE A SERVICE OTHER THAN BUSINESS VOICE-GRADE SERVICE?

A. No. The FCC's *TRRO* is very clear. As discussed earlier in my testimony, paragraph 105 of the *TRRO* states that the wire center-level access line counts used to determine whether the non-impairment thresholds are satisfied must be "based on ARMIS 43-08 business lines, plus business UNE-P, *plus UNE-Loops*." (Emphasis added.) The FCC did not include the adjective "business," or any other qualifier, for UNE loops in its definition of "business lines" either in paragraph 105 of the *TRRO* or in 47 CFR § 51.5.

[15] In its order, the Georgia Public Service Commission stated: "The Commission adopts BellSouth's position and determines that HDSL-capable copper loops are the equivalent of DS1 loops for the purpose of evaluating impairment." *Generic Proceeding to Examine Issues Related to BellSouth Telecommunications, Inc's. Obligations to Provide Unbundled Network Elements*, Ga. PSC, Docket No. 19341-U (February 7, 2006) ("*Georgia TRRO Order*"), at p. 4.

Accordingly, and not surprisingly, the California Public Utilities Commission examined this very issue, and in its January 27, 2006 order in its decision adopting amendments to SBC California's interconnection agreements, the Commission found:

> The CLECs would have us believe that the term UNE loops should be considered those "used to serve a business customer." However, the FCC's rule Section 51.5 mirrors the language in ¶ 105 which states in part: "The BOC wire center data that we analyze in this Order is based on ARMIS 43-08 business lines, plus business UNE-P, plus UNE-loops." Since the FCC uses the phrase "UNE loops" in both the discussion and in its rule, we must assume that that is exactly what the FCC meant.
>
> SBC points out that paragraph 114, footnote 322 explains how the FCC compiled the data it used regarding the relationship between business access line counts and fiber-based collocations in the Bell Operating Companies' (BOCs) wire centers for purposes of establishing the tiers. Because the initial record evidence on this point varied from one BOC to another and did not show evidence of wire centers below 5,000 business lines, the BOCs each filed revised data sets, all based on the same definition of business line, and including all wire centers.
>
> SBC states that the FCC stressed that it wanted a rule that would be easy to administer, using data readily available to ILECs. According to SBC, they do not have the information necessary to determine how a CLEC is using its UNE loops. When SBC provides a UNE loop to a CLEC, the loop is terminated at a collocation arrangement. SBC does not know the service that the CLEC actually provides to the end user over the loop. Similarly, SBC does not possess the information necessary to distinguish between the UNE loops the CLECs are using to provide business service and the UNE loops the CLECs are using to provide residential service to an end user.
>
> We agree with SBC that they do not have the information necessary to distinguish UNE loops used by CLECs to serve residential customers versus business customers. Also, the FCC's language is clear that all UNE

> loops are to be included in the count. SBC's proposed language relating to Issue 3 is adopted in Section 0.1.10.[16]

Additionally, the Georgia Commission examined this specific issue in its generic proceeding to examine BellSouth's obligations to provide unbundled network elements, and concluded:

> For the counting of business lines, the FCC rule appears to contemplate the inclusion of all UNE loops, and not just those that are business UNE loops. It is not necessary to read the first sentence out of the definition in order to reach this conclusion. The first sentence includes in the definition of "business line" that it serve a "business customer." However, the next sentence of the line instructs on the manner in which such lines shall be calculated. In setting forth what shall be included in the calculation, the rule modifies the sum of all incumbent LEC switched access lines with the word "business." There is no confusion that this part of the addition is limited to business lines. Yet, in the same sentence, when discussing the sum of all UNE loops connected to that wire center, the rule does not similarly use the modifier "business." If, because of the prior sentence, it would have been duplicative to state that these were business UNE loops, as CompSouth suggests, then the switched access lines need not have been identified as business in the first part of the sentence. That the switched access lines were expressly limited to business lines, and the UNE loops were not so limited, indicates that the limitation does not apply to the UNE loops. In the discussion of business line counts in the *TRRO,* the FCC again refers to "business UNE-P, plus UNE-loops." (¶ 105). This conclusion is consistent with the policy goals expressed by the FCC. That the FCC states it intended to measure business "opportunities" in a wire center provides support for why its method to calculate business lines would potentially include non-business lines.[17]

Clearly, Qwest's reading of the *TRRO*'s requirement to include all UNE loops in its wire center line count is consistent with paragraph 105 of the *TRRO* and the

[16] *Application of Pacific Bell Telephone Company, d/b/a SBC California for Generic Proceeding to Implement Changes in Federal Unbundling Rules Under Sections 251 and 252 of the Telecommunications Act of 1996,* California Public Utilities Commission, Decision 06-01-043 (January 26, 2006), at p. 10-11.

[17] *Georgia TRRO Order*, pp. 19-20.

FCC's rules in 47 CFR § 51.5, as well as with the approaches that other RBOCs have taken and which other state commissions have found to be reasonable and consistent with the *TRRO* and the FCC's rules.

c. UNE-P

Q. AS THE *TRRO* REQUIRES, DID QWEST INCLUDE BUSINESS UNE-PLATFORM ("UNE-P") LINES IN ITS WIRE CENTER BUSINESS LINE COUNTS?

A. Yes. As the FCC's guidelines in paragraph 105 of its *TRRO* require, Qwest included business UNE-P lines in its wire center line counts, utilizing the same December 2003 data that it used for its ARMIS retail business line and UNE loop data.

Q. WAS QWEST'S DECEMBER 2003 UNE-P TRACKING DATA SEPARATED BETWEEN RESIDENTIAL AND BUSINESS UNE-P LINES?

A. No. UNE-P pricing, like pricing for stand-alone UNE loops, was not sensitive to any particular class of service, and there was no business reason to separately track residential or business UNE-P lines. Thus, Qwest's wholesale tracking systems recognized UNE-P strictly as a generic wholesale service.

Q. SINCE QWEST'S WHOLESALE UNE-P TRACKING SYSTEMS WERE UNABLE TO DISTINGUISH BETWEEN RESIDENTIAL AND BUSINESS UNE-P, HOW DID QWEST DETERMINE THE NUMBER OF "BUSINESS UNE-P" LINES IN EACH WIRE CENTER?

A. Each UNE-P line has a specific telephone number associated with it, and thus Qwest can calculate a reasonable estimate of residential and business UNE-P lines by determining whether each UNE-P telephone number appears in the residential section of Qwest's white pages directory listings database. Virtually all residential telephone lines are listed in Qwest's white pages directory listings database,[18] while a much lower proportion of business lines are listed in the white pages directory listings database. Thus, relying strictly on individual business UNE-P directory listings would have significantly undercounted actual business

[18] The white pages directory listings database includes all types of listings (e.g., listed, non-listed and non-published) associated with a telephone number for a physical access line.

UNE-P lines in service. Therefore, to arrive at a more accurate estimate of UNE-P business lines, Qwest simply subtracted the UNE-P residential telephone number listings from total UNE-P lines in service in each wire center.[19]

Q. WHY DOES A SMALLER PROPORTION OF BUSINESS TELEPHONE NUMBERS APPEAR IN THE WHITE PAGES DIRECTORY LISTINGS DATABASE THAN RESIDENTIAL TELEPHONE NUMBERS?

A. In the residential access line category, the vast majority of physical telephone lines have single assigned telephone numbers, and residential customers proactively indicate when service is established whether they want their telephone number to be treated as fully listed (in which case the telephone number would be published in the residential section of the printed telephone directory), non-published (in which case the telephone number would not be published in the printed directory, but would be available through directory assistance), or non-listed (in which case the telephone number would neither be published in the printed directory or be available in directory assistance).

[19] In some applications, such as with a product called Qwest Custom Ringing, a single residential line can have more than one directory listing. That is, a customer can have two telephone numbers assigned to the same physical telephone line, and thus have unique ring patterns to enable the residential customer to distinguish which telephone number is being called. To the extent that CLECs utilize Custom Ringing with residential UNE-P lines sold to their end-user customers, each UNE-P Custom Ringing telephone number would be captured in the white pages directory listings database. The subtraction of all UNE-P residential white pages directory listings from the total of UNE-P lines in service would actually tend to understate the estimate of UNE-P business lines.

This is not the case in the business market, however. Indeed, in many instances, multi-line businesses choose to publish only the main telephone number in the white pages, and thus choose not to have any of their remaining lines retained in the white pages database. For example, an insurance agency may have multiple agents with direct telephone numbers, but have only one telephone number listed for the agency in the white pages directory for customers to call. In other instances, a single PBX trunk might have multiple telephone numbers assigned to it, but only one telephone number listed in the directory. Large Centrex systems also commonly have a large number of access lines but few telephone numbers that are retained in the white pages database. Accordingly, in view of the high degree of complexity in associating business telephone numbers with physical access lines, a much more reliable estimate of UNE-P business lines in service can be achieved by simply subtracting residential UNE-P telephone number listings (which are associated very closely with the number of actual residential lines in service) from total UNE-P lines in service.

Q. HAS QWEST PREVIOUSLY USED THE WHITE PAGES DIRECTORY LISTINGS DATABASE TO DISTINGUISH BETWEEN RESIDENTIAL AND BUSINESS UNE-P LINES?

A. Yes. In the Section 271 proceedings at both the state and federal levels, Qwest was required to identify the number of CLEC residential lines in service in Utah. As part of this process, Qwest utilized the white pages directory listings database

to determine the number of UNE-P telephone numbers that were retained in the residential section of the database as a proxy for the number of residential UNE-P lines in service at that time.

Q. HOW HAVE OTHER RBOCs ADDRESSED THE ISSUE OF DISTINGUISHING BETWEEN RESIDENTIAL AND BUSINESS UNE-P LINES?

A. Some time ago, other RBOCs developed wholesale service tracking systems that identified the specific types of services for which CLECs use UNE-P lines, and these carriers therefore have been able to distinguish between residential and business UNE-P lines. Qwest's wholesale service tracking systems were not designed with this capability, however, especially since Qwest's UNE-P service pricing was not based on whether the service was used for residential or business customers.

Q. IN ITS UNE-P BUSINESS LINE COUNTS, DID QWEST INCLUDE LINE COUNTS FOR HIGH-CAPACITY CIRCUITS, SUCH AS DS1 CIRCUITS, ON A VOICE-GRADE EQUIVALENT BASIS?

A. Yes. Qwest used the same approach for high-capacity UNE-P circuits as was used for high-capacity retail and UNE loop circuits that I described earlier in my

testimony. For example, services such as "UNE-P DSS"[20] and "UNE-P ISDN PRI"[21] are served via a DS1 loop. Thus, Qwest multiplied the quantity of UNE-P circuits by a "VGE-equivalence" factor of 24 to reflect the number of 64 kilobit channels associated with these UNE-P DS1 lines.

[20] UNE-P DSS is UNE-P service provided in a "Digital Switched Service" digital PBX trunk configuration and includes a DS1 loop.

[21] UNE-P ISDN-PRI is UNE-P service provided in an "ISDN-Primary Rate" configuration and includes a DS1 loop.

VI. CONCLUSION AND RECOMMENDATION

Q. PLEASE SUMMARIZE YOUR TESTIMONY.

A. In my testimony, I describe the methodology that Qwest utilized to establish the number of business access lines in Utah wire centers to determine which wire centers are classified as "non-impaired" under the terms of the FCC's *TRRO*. As specified in paragraph 105 of the *TRRO* and the FCC's associated implementation rules, Qwest combined (1) switched business lines from ARMIS Report 43-08, (2) business UNE-P lines and (3) UNE loops in service as of December 2003 to determine the relevant number of "business lines" in each Qwest Utah wire center. I also discuss that a number of state commissions have already examined RBOCs' methodologies for counting business lines pursuant to the *TRRO's* definitions. These methodologies are very similar to the methodology that Qwest employed in Utah (and its other states), and such commissions have concluded that the wire center-level data based on these methodologies comport with the FCC's requirements. Based on Qwest's analysis of the data that the FCC's definitions require, one Utah wire center qualifies for DS1 and DS3 UNE loop non-impairment status, while six wire centers meet the FCC's criteria with respect to unbundled interoffice transport.

Q. WHAT IS YOUR RECOMMENDATION?

A. I recommend that the Commission find that Qwest's business access line data, coupled with the fiber collocation data that Ms. Torrence discusses, supports the non-impairment classification of DS1 and DS3 unbundled loops in the Salt Lake City Main wire center, and the non-impairment classification of unbundled interoffice transport between the six Utah wire centers (Murray, Ogden Main, Provo, Salt Lake City Main, Salt Lake City South and Salt Lake City West), that Qwest identified in its *TRRO* filing with the FCC and that I discuss earlier in my testimony.

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes, it does.

BEFORE THE PUBLIC SERVICE COMMISSION OF UTAH

In the Matter of the Investigation into Qwest Wire Center Data	:	Docket No. 06-049-40

EXHIBITS TO DIRECT TESTIMONY

OF

DAVID L. TEITZEL

FOR

QWEST CORPORATION

MARCH 24, 2006

INDEX OF EXHIBITS

DESCRIPTION	EXHIBIT
"Business Lines" In Service in Utah Wire Centers: 12/2003	Highly Confidential Exhibit DLT-1