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August 12, 2005

Frances Nichols Anglin
Oregon Public Utility Commission
550 Capitol St., NE
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Salem, OR 97301

Re: ARB 665

Dear Ms. Nichols Anglin:

Enclosed for filing please find an original and (5) copies of Qwest Corporation's Direct Testimony of William R. Easton, Larry B. Brotherson and Philip Linse, along with a certificate of service.

If you have any question, please do not hesitate to give me a call.

Sincerely,

Carla M. Butler

CMB:
Enclosures
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CERTIFICATE OF SERVICE VIA E-MAIL

I do hereby certify that a true and correct copy of the foregoing Qwest Corporation's Direct Testimony of William Easton, Larry Brotherson and Philip Linse was served on the 12th day of August, 2005 via e-mail electronic transmission upon the following individuals:

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DATED this 12th day of August, 2005.

QWEST CORPORATION

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BEFORE THE PUBLIC UTILITY COMMISSION OF OREGON

ARB 665

In the Matter of the Petition of Level 3 Communications, LLC's Petition for Arbitration Pursuant to Section 252 (b) of the Communications Act of 1934 with Qwest Corporation

DIRECT TESTIMONY OF

WILLIAM R. EASTON

FOR

QWEST CORPORATION

August 12, 2005

(Disputed Issue Nos. 1, 2, 5, 13, 17, 18, 21 and 22)

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I. EXECUTIVE SUMMARY

Despite the long list of issues, subparts and dueling language discussed in this testimony, ultimately everything can be boiled down to just two issues: 1) Compensation for interconnection services provided by Qwest and; 2) the types of traffic that may be combined on interconnection trunks.

The law is very clear when it comes to compensation for the interconnection services Qwest provides. Under the Telecommunications Act of 1996, Qwest has a duty to provide interconnection with its local exchange network "on rates, terms and conditions that are just, reasonable, and nondiscriminatory" and in accordance with the requirements of Section 252 of the Act.[1] Section 252 of the Act in turn provides that determinations by a state commission of the just and reasonable rate for the interconnection shall be "based on the cost…of providing the interconnection," "nondiscriminatory" and "may include a reasonable profit."[2] Despite the law, and despite the fact that Level 3 is ordering interconnection services so that it can serve its customers, Level 3 boldly claims that it has no obligation to compensate Qwest for these services. This assertion is unreasonable and should be soundly rejected by this Commission.

[1] 47 U.S.C. §251(c)(2)(D).

[2] 47 U.S.C. §252(d)(1)

As to the types of traffic that can be carried on interconnection trunk groups, Qwest has attempted to be responsive to Level 3's desire to combine traffic on trunk groups. Qwest is willing to allow all traffic types, with the exception of switched access traffic, to be carried over LIS trunks. Because of billing issues, systems issues and Qwest's obligation to provide jointly provided switched access records to other ILECs, CLECs and wireless service providers ("WSPs"), Qwest requires that switched access traffic be carried over Feature Group trunks. This is entirely consistent with Section 251(g) of the Act which requires that Qwest provide interconnection for the exchange of switched access traffic in the same manner that it provided for such traffic prior to the passage of the Act. Nonetheless, Qwest has attempted to accommodate Level 3's desire for network efficiencies by agreeing to let Level 3 combine all of its traffic over Feature Group D trunks. This solution achieves the efficiencies sought by Level 3 while at the same time allowing Qwest to continue to use its existing billing systems and processes. For these reasons, Level 3's proposed combining of traffic on LIS trunks should be rejected.

II. IDENTIFICATION OF WITNESS

Q. PLEASE STATE YOUR NAME, OCCUPATION AND BUSINESS ADDRESS.

A. My name is William R. Easton. My business address is 1600 7th Avenue, Seattle Washington. I am employed as Director – Wholesale Advocacy. I am testifying on behalf of Qwest Corporation ("Qwest").

Q. PLEASE GIVE A BRIEF DESCRIPTION OF YOUR EDUCATIONAL BACKGROUND AND TELEPHONE COMPANY EXPERIENCE.

A. I graduated from Stanford University in 1975, earning a Bachelor of Arts degree. In 1980, I received a Masters of Business Administration from the University of Washington. In addition, I am a Certified Management Accountant.

I began working for Pacific Northwest Bell in 1980, and have held a series of jobs in financial management with U S WEST, and now with Qwest, including staff positions in the Treasury and Network organizations. From 1996 through 1998, I was Director – Capital Recovery. In this role I negotiated depreciation rates with state commission and FCC staffs and testified in various regulatory proceedings. From 1998 until 2001 I was a Director of Wholesale Finance, responsible for the management of Wholesale revenue streams from a financial perspective. In this capacity I worked closely with the Product Management organization on their product offerings and projections of revenue. In October of 2001 I moved from

Wholesale Finance to the Wholesale Advocacy group, where I am currently responsible for advocacy related to Wholesale products and services. In this role I work extensively with the Product Management, Network and Costing organizations.

Q. HAVE YOU TESTIFIED PREVIOUSLY IN OREGON?

A. Yes I have. I have testified previously in Docket Nos. UM 767, UT 125, ARB 10, ARB 365, ARB 445, ARB584, IC 1 and UA55 (Reopened).

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III. PURPOSE OF TESTIMONY

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. The purpose of my testimony is to explain Qwest's positions, and the regulatory policies underlying those positions, as they relate to certain disputed issues between the parties. My testimony will show that the Qwest position on these issues seeks to strike a balance between meeting the interconnection needs of Level 3, while at the same time ensuring that the services, terms and conditions in the agreement comply with the governing law and are technically feasible. Specifically, my testimony will address the following issues from the Matrix of Unresolved Issues filed by Level 3 in this arbitration:

- Issue 1: Costs of Interconnection

- Issue 2: Combining Traffic on Interconnection Trunks
- Issue 5: Should Interconnection Terms be Incorporated by Reference
- Issue 13: Local Interconnection Service Definition
- Issue 17: Trunk Forecasting
- Issue 18: Jurisdictional Allocation Factors
- Issue 21: Ordering of Interconnection Trunks
- Issue 22: Compensation for Construction

IV. DISPUTED ISSUE NO. 1: COSTS OF INTERCONNECTION

Q. PLEASE EXPLAIN DISPUTED ISSUE NO. 1.

A. Issue No. 1 is comprised of 10 subparts (1A-1J), all of which have to do with local interconnection. Although Level 3 characterizes this issue as being a question of whether Level 3 may exchange traffic at a single point of interconnection in the LATA, this issue is actually about compensation for the use of Qwest's network. In this case, Level 3 has requested interconnection at a single point in each LATA. There is presently no dispute as to where the interconnection occurs or how many points of interconnection there will be. What is in dispute is who bears the costs of the interconnection Level 3 has requested. Qwest contends that Level 3 is responsible for compensating Qwest for the interconnection costs that Qwest incurs to honor Level 3's request. Contrary to Level 3's claims, this is true even when costs are incurred on Qwest's side of the point of interconnection.

Under the Telecommunications Act of 1996, Qwest has a duty to provide interconnection with its local exchange network "on rates, terms and conditions that are just, reasonable, and nondiscriminatory" and in accordance with the requirements of Section 252 of the Act.[3] Section 252 of the Act in turn provides that determinations by a state commission of the just and reasonable rate for the interconnection shall be "based on the cost…of providing the interconnection,"

[3] 47 U.S.C. §251(c)(2)(D).

"nondiscriminatory" and "may include a reasonable profit."[4] As the FCC has recognized, these provisions make clear that CLECs must compensate incumbent LECs for the costs incumbent LECs incur to provide interconnection.[5]

Qwest has fulfilled its duty to provide interconnection by developing Local Interconnection Service (LIS) for CLECs to interconnect with Qwest. LIS has multiple intercarrier transport options. One option, the Mid-Span Meet POI option, allows the CLEC to build to a mid-way point between the CLEC's POI/switch and a Qwest tandem or end office switch. Another option is collocation, which allows a CLEC to put equipment in one of Qwest's serving wire centers and interconnect at that collocation. Both of these options put some cost of establishing the point of interconnection on the CLEC. Qwest also provides an entrance facility option for purchase for those CLECs who do not want to incur capital expense by either laying fiber for a mid-span meet POI or setting up a collocation. An entrance facility creates transport between a CLEC building and the nearest Qwest building termed a Serving Wire Center ("SWC"). Once the CLEC has interconnected with Qwest at the SWC, the CLEC may need to have Direct Trunk Transport ("DTT") and multiplexing to complete calls throughout the Qwest network. There are multiple costs associated with Qwest providing entrance facility, DTT and multiplexing. These costs have been identified and discussed in cost dockets with the

[4] 47 U.S.C. §252(d)(1)

Commission. As stated earlier, Qwest is allowed to recover costs that are just and reasonable and based on the cost of providing interconnection.

It makes sense that the cost causer compensates Qwest for interconnection and transport costs. If the cost causer (Level 3) does not pay, then Qwest end users would have to bear the cost, including customers who have no interest in surfing the internet via dial-up service. Qwest's end users should not have to bear the burden of paying for Level 3's ISP service.

With this as background, the next sections of my testimony will discuss each of the disputed sub-issues (1A-1J).

[5] See *Implementation of the Local Competition Provisions in the Telecommunications Act of 1996*, ¶209, 11 FCC Rec. 15499 (August 8, 1996), *aff'd in part and rev'd in part, Iowa Utils. Bd. v. FCC*, 525 U.S. 1133 (1999)(the "*Local Competition Order*").

Issue No. 1A

Q. PLEASE DESCRIBE ISSUE NO. 1A.

A. Issue 1A involves disputed language which Level 3 characterizes as having to do with the right to interconnect at a single point in the LATA and obligations on the respective sides of the point of interconnection. As Mr. Linse discusses in his testimony, Qwest has not required Level 3 to interconnect at each end office in the LATA. The real issue here is that Level 3 does not want to pay for the use of Qwest's network.

Q. WHAT IS THE LANGUAGE IN DISPUTE?

A. The parties disagree about the language for Section 7.1.1 of the agreement, which is found on page 64 of the interconnection agreement ("ICA") filed by Qwest with its Response to Petition for Arbitration. The ICA contains the language proposed by Qwest juxtaposed against the language proposed by Level 3. Qwest proposes the following language:

> 7.1.1 This Section describes the Interconnection of Qwest's network and CLEC's network for the purpose of exchanging Exchange Service (EAS/Local traffic), IntraLATA Toll carried solely by local exchange carriers and not by an IXC (IntraLATA LEC toll), ISP-Bound traffic, and Jointly Provided Switched Access (InterLATA and IntraLATA) traffic. Qwest will provide Interconnection at any Technically Feasible point within its network. Interconnection, which Qwest currently names "Local Interconnection Service" (LIS), is provided for the purpose of connecting End Office Switches to End Office Switches or End Office Switches to local or Access Tandem Switches for the exchange of Exchange Service (EAS/Local traffic); or End Office Switches to Access Tandem Switches for the exchange of IntraLATA LEC Toll or Jointly Provided Switched

Access traffic. Qwest Tandem Switch to CLEC Tandem Switch connections will be provided where Technically Feasible. New or continued Qwest local Tandem Switch to Qwest Access Tandem Switch and Qwest Access Tandem Switch to Qwest Access Tandem Switch connections are not required where Qwest can demonstrate that such connections present a risk of Switch exhaust and that Qwest does not make similar use of its network to transport the local calls of its own or any Affiliate's End User Customers.

Q. WHAT LANGUAGE DOES LEVEL 3 PROPOSE?

A. Level 3 proposes the following:

7.1.1 This Section describes the Interconnection of Qwest's network and CLEC's network for the purpose of exchanging Telecommunications Including Telephone Exchange Service And Exchange Access traffic. Qwest will provide Interconnection at any Technically Feasible point within its network.

7.1.1.1 **Establishment of SPOI**: Qwest agrees to provide CLEC a Single Point of Interconnection (SPOI) in each Local Access Transport Area (LATA) for the exchange of all telecommunications traffic. The SPOI may be established at any mutually agreeable location within the LATA, or, at Level 3's sole option, at any technically feasible point on Qwest's network. Technically feasible points include but are not limited to Qwest's end offices, access tandem, and local tandem offices.

7.1.1.2 **Cost Responsibility.** Each Party is responsible for constructing, maintaining, and operating all facilities on its side of the SPOI, subject only to the payment of intercarrier compensation in accordance with Applicable Law. In accordance with FCC Rule 51.703(b), neither Party may assess any charges on the other Party for the origination of any telecommunications delivered to the other Party at the SPOI, except for Telephone Toll Service traffic outbound from one Party to the other when the other Party is acting in the capacity of a provider of Telephone Toll Service, to which originating access charges properly apply.

7.1.1.3 Facilities included/transmission rates. Each SPOI to be established under the terms of this Attachment shall be deemed to include any and all facilities necessary for the exchange of traffic between Qwest's and Level 3's respective networks within a LATA. Each Party may use an Entrance Facility (EF), Expanded Interconnect Channel Termination (EICT), or Mid Span Meet Point of Interconnection (POI) and/or Direct Trunked Transport (DTT) at DS1, DS3 , OC3 or higher

transmission rates as, in that Party's reasonable judgment, is appropriate in light of the actual and anticipated volume of traffic to be exchanged. If one Party seeks to establish a higher transmission rate facility than the other Party would establish, the other Party shall nonetheless reasonably accommodate the Party's decision to use higher transmission rate facilities.

7.1.1.4 Each Party Shall Charge Reciprocal Compensation for the Termination of Traffic to be carried. All telecommunications of all types shall be exchanged between the Parties by means of from the physical facilities established at Single Point of Interconnection Per LATA onto its Network Consistent With Section 51.703 of the FCC's Rules:

7.1.1.4.1 Level 3 may interconnect with Qwest at any technically feasible point on Qwest's network for the exchange of telecommunications traffic. Such technically feasible points include but are not limited to Qwest access tandems or Qwest local tandems. When CLEC is interconnected at the SPOI. separate trunk groups for separate types of traffic may be established in accordance with the terms hereof. No separate physical interconnection facilities, as opposed to separate trunk groups within SPOI facilities, shall be established except upon express mutual agreement of the Parties.

Q. WHY IS QWEST OPPOSED TO THE LEVEL 3 LANGUAGE?

A. With regard to the SPOI, Level 3's language is not appropriate from a network standpoint. Mr. Linse's testimony discusses why the language is inappropriate and details the options available to Level 3 to interconnect with Qwest. The final two sections of Level 3's language have to do with cost responsibility and do not belong in this section. Section 7.1 addresses interconnection facility options, not compensation. Qwest's proposals for compensation, including reciprocal compensation, appear elsewhere in the interconnection agreement and will be fully discussed as disputed issues later in this testimony.

Q. LEVEL 3 ALSO OBJECTS TO QWEST'S LANGUAGE FOR SECTION

7.1.1.1 AND SECTION 7.1.1.2. ARE THESE SECTIONS RELATED TO THE ISSUES YOU HAVE JUST DISCUSSED?

A. No. These two sections have to do with VoIP traffic and are discussed in the testimony of Mr. Brotherson.

Issue No. 1B

Q. PLEASE DESCRIBE ISSUE NO. 1B.

A. Issue 1B concerns the methods by which the parties facilitate interconnection between their respective networks. This issue is addressed in the testimony of Mr. Linse.

Issue No. 1C

Q. PLEASE DESCRIBE ISSUE NO. 1C.

A. Issue 1C concerns section 7.2.2.1.1 of the agreement, found on page 69 of the ICA, which describes how Exchange Service traffic will be terminated. Both Qwest and Level 3 agree that Exchange Service (EAS/Local) traffic will be terminated as Local Interconnection Service (LIS), but Qwest disagrees with the additional language that Level 3 has added to this section.

Q. WHAT LANGUAGE IS LEVEL 3 PROPOSING TO ADD?

A. After the agreed upon description of Exchange Service traffic termination, Level 3 proposes to insert the following language:

> Notwithstanding references to LIS and to trunking and facilities used or provisioned in association with LIS, nothing in this Agreement shall be construed to require CLEC to pay Qwest for any services or facilities on Qwest's side of the POI in connection with the origination of traffic from Qwest to CLEC; and nothing herein shall be construed to require CLEC to pay for any services or facilities on Qwest's side of the POI in connection with the termination of traffic from CLEC by Qwest, other than reciprocal compensation payments as provided in Section ___ hereof.

Q. WHY DOES QWEST OBJECT TO THIS LANGUAGE?

A. Qwest objects to the inserted language because it deals with compensation, a subject which is more appropriately addressed in section 7.3 of the agreement. In fact, Level 3 attempts to insert similar language at multiple places in the interconnection agreement. Level 3's persistence does nothing to change its

obligations under the law. As I stated in my preface to Issue No. 1, the Act clearly allows for Qwest to receive compensation for providing interconnection to CLECs.

Issue No. 1D

Q. PLEASE EXPLAIN ISSUE NO. 1D.

A. Issue No. 1D has to do with transport services to deliver Exchange Service EAS/Local traffic from the POI to the terminating party's end office switch or tandem switch for call termination.

Q. WHAT LANGUAGE IS QWEST PROPOSING FOR THIS SECTION?

A. Qwest proposes the following language:

> 7.2.2.1.2.2 CLEC may purchase transport services from Qwest or from a third party, including a third party that has leased the private line transport service facility from Qwest. Such transport provides a transmission path for the LIS trunk to deliver the originating Party's Exchange Service EAS/Local traffic to the terminating Party's End Office Switch or Tandem Switch for call termination. Transport may be purchased from Qwest as Tandem Switch routed (i.e., tandem switching, tandem transmission and direct trunked transport) or direct routed (i.e., direct trunked transport). This Section is not intended to alter either Party's obligation under Section 251(a) of the Act.

Q. WHAT LANGUAGE DOES LEVEL 3 PROPOSE?

A. Level 3 proposes the following language:

> 7.2.2.1.2.2. CLEC may <u>order</u> transport services from Qwest or from a third-party, including a third party that has leased the private line transport service facility from Qwest <u>for purposes of network management and routing of traffic to/from the POI.</u> Such transport provides a transmission path for the LIS trunk to deliver the originating Party's Exchange Service EAS/Local traffic to the terminating Party's End Office Switch or Tandem Switch for call termination. This Section is not intended to alter either Party's obligation under Section 251(a) of the Act or under Section 51.703 or 51.709 of the FCC's Rules.

Q. WHAT IS THE DIFFERENCE BETWEEN THE TWO PROPOSALS?

A. Level 3 changes the word "purchase" to "order" in the first sentence and adds the words which have been underlined at the end of the sentence. Level 3 also strikes the second to last sentence in Qwest's language which begins, "Tandem transport may be purchased from Qwest…" Level 3 mistakenly believes that removing the word "purchase" somehow relieves it of the obligation to compensate Qwest for the use of its network. Level 3 acknowledges this transport is necessary, as it has not objected to the sentence which states, "Such transport provides a transmission path for the LIS trunk to deliver the originating Party's Exchange Service EAS/Local traffic to the terminating Party's End Office Switch or Tandem Switch for call termination." It has even acknowledged that it needs to order transport services. What Level 3 refuses to acknowledge is that it has an obligation to compensate Qwest for providing the services which allow Level 3 to serve its ISP end users. Compensation issues will be addressed fully later in the testimony.

Issue No. 1E

Q. PLEASE EXPLAIN ISSUE 1E.

A. Issue 1E concerns section 7.2.2.1.4 of the interconnection agreement which discusses direct trunked transport. Qwest has proposed the following language:

> 7.2.2.1.4 LIS ordered to a Tandem Switch will be provided as direct trunked transport between the Serving Wire Center of CLEC's POI and the Tandem Switch. Tandem transmission rates, as specified in Exhibit A of this Agreement, will apply to the transport provided from the Tandem Switch to Qwest's End Office Switch.

Q. WHAT POSITION IS LEVEL 3 TAKING ON THIS ISSUE?

A. Level 3 has agreed to the first sentence, but has removed the last sentence, again, apparently in the belief that removing any reference to rates relieves it of the obligation to compensate Qwest for the use of the Qwest network to provide service to Level 3's end users.

Issue No. 1F

Q. PLEASE EXPLAIN ISSUE NO. 1F.

A. Issue 1 F concerns Section 7.2.2.9.6 of the agreement, found on page 79 of the ICA, which discusses Level 3's ability to interconnect at tandem and end office switches. Qwest proposes the following language:

> 7.2.2.9.6 The Parties shall terminate Exchange Service (EAS/Local) traffic on Tandem Switches or End Office Switches. CLEC may interconnect at either the Qwest local tandem or the Qwest access tandem for the delivery of local exchange traffic. When CLEC is interconnected at the access tandem and when there is a DS1 level of traffic (512 BHCCS) over three (3) consecutive months between CLEC's Switch and a Qwest End Office Switch, Qwest may request CLEC to order a direct trunk group to the Qwest End Office Switch. CLEC shall comply with that request unless it can demonstrate that such compliance will impose upon it a material adverse economic or operations impact. Furthermore, Qwest may propose to provide Interconnection facilities to the local Tandem Switches or End Office Switches served by the Access Tandem Switch at the same cost to CLEC as Interconnection at the Access Tandem Switch. If CLEC provides a written statement of its objections to a Qwest cost-equivalency proposal, Qwest may require it only: (a) upon demonstrating that a failure to do so will have a material adverse affect on the operation of its network and (b) upon a finding that doing so will have no material adverse impact on the operation of CLEC, as compared with Interconnection at such Access Tandem Switch.

Q. WHAT LANGUAGE DOES LEVEL 3 PROPOSE?

> 7.2.2.9.6 When CLEC is interconnected at the access tandem and when there is a DS1 level of traffic (512 BHCCS) over three (3) consecutive months between CLEC's Switch and a Qwest End Office Switch, Qwest may request CLEC to order a direct trunk group to the Qwest End Office Switch. Notwithstanding references to Qwest's ability to requests that CLECs order direct trunk groups to the Qwest end office, nothing in this agreement shall e shall [sic] be construed to require CLEC to pay Qwest for any services or facilities on Qwest's side of the POI in

connection with the origination of traffic from Qwest to CLEC; and nothing herein shall be construed to require CLEC to pay for any services or facilities on Qwest's side of the POI in connection with the termination of traffic from CLEC by Qwest, other than reciprocal compensation payments as provided in this Agreement.

Q. WHY IS QWEST OPPOSED TO THE LEVEL 3 LANGUAGE?

A. Level 3 has stricken the first two sentences of Qwest's language which describes how Level 3 may interconnect at Qwest local and tandem switches. Mr. Linse describes in his testimony why this language is important from a network perspective. In addition, while agreeing that Qwest may request Level 3 to order a direct trunk group to a Qwest end office switch, Level 3 has removed the Qwest language that would have Level 3 comply with the request, thereby effectively absolving Level 3 of any responsibility for network efficiencies. Finally, Level 3 again inserts the disclaimer that it should not have to pay for the use of the Qwest network. This language not only ignores Level 3's obligations under the law, but is also clearly misplaced in a section describing the technical aspects of interconnection.

Issue No. 1G

Q. PLEASE DESCRIBE ISSUE 1G.

A. Issue 1G concerns Sections 7.3.1.1.3 and 7.3.1.1.3.1, found on pages 81-82 of the ICA, which discuss how the cost of jointly used facilities shall be shared by the parties.

Q. WHAT LANGUAGE DOES QWEST PROPOSE?

A. Qwest proposes the following language:

> 7.3.1.1.3 If the Parties elect to establish LIS two-way trunks, for reciprocal exchange of Exchange Service (EAS/Local) traffic, the cost of the LIS two-way facilities shall be shared among the Parties by reducing the LIS two-way entrance facility (EF) rate element charges as follows:
>
> 7.3.1.1.3.1 Entrance Facilities - The provider of the LIS two-way Entrance Facility (EF) will initially share the cost of the LIS two-way EF by assuming an initial relative use factor (RUF) of fifty percent (50%) for a minimum of one (1) quarter if the Parties have not exchanged LIS traffic previously. The nominal charge to the other Party for the use of the EF, as described in Exhibit A, shall be reduced by this initial relative use factor. Payments by the other Party will be according to this initial relative use factor for a minimum of one (1) quarter. The initial relative use factor will continue for both bill reduction and payments until the Parties agree to a new factor, based upon actual minutes of use data for non-ISP-bound traffic to substantiate a change in that factor. If a CLEC's End User Customers are assigned NPA-NXXs associated with a rate center different from the rate center where the Customer is physically located, traffic that does not originate and terminate within the same Qwest local calling area (as approved by the Commission), regardless of the called and calling NPA-NXXs, involving those Customers is referred to as "VNXX traffic". For purposes of determining the RUF, the terminating carrier is responsible for ISP-bound traffic and for VNXX traffic. If either Party demonstrates with non-ISP-bound traffic data that actual minutes of use during the first quarter justify a new relative use factor, that Party will send a notice to the other Party. Once the Parties finalize a new factor, the bill reductions and payments will apply going forward, from the date the original notice was sent. ISP-bound traffic or traffic delivered to

Enhanced Service providers is interstate in nature. Qwest has never agreed to exchange VNXX Traffic with CLEC.

Q. WHAT LANGUAGE DOES LEVEL 3 PROPOSE?

A. Level 3 proposes the following:

> 7.3.1.1.3 Each party is solely responsible for any and all costs arising from or related to establishing and maintaining the interconnection trunks and facilities it uses to connect to the POI. Thus, neither party shall require the other to bear any additional costs for the establishment and operation of interconnection facilities that connect its network to its side of the POI.
>
> 7.3.1.1.3.1 Intercarrier compensation. Intercarrier compensation for traffic exchanged at the SPOI shall be in accordance with FCC Rule 51.703 and associated FCC rulings. For avoidance of doubt, any traffic that constitutes "telecommunications" and that is not subject to switched access charges, including without limitation so-called "information access" traffic, shall be subject to compensation from the originating carrier to the terminating carrier at the FCC-mandated capped rate (as of the effective date hereof) of $0.0007 per minute. Any dispute about the appropriate intercarrier compensation applicable to any particular traffic shall be resolved by reference to the FCC's rule and associated orders.

Q. WHY IS QWEST OPPOSED TO THE LEVEL 3 LANGUAGE?

A. Level 3 again denies that it has an obligation to compensate Qwest for the use of its network. This assertion is contrary to the FCC's rule 51.709(b), which states:

> The rate of a carrier providing transmission facilities dedicated to the transmission of traffic between two carriers' networks shall recover only the costs of the proportion of that trunk capacity used by an interconnecting carrier to send traffic that will terminate on the providing carrier's network. Such proportions may be measured during peak periods.

Q. IN PREVIOUS ARBITRATIONS WITH QWEST DID LEVEL 3 MAKE THIS SAME ARGUMENT?

A. No. In previous arbitrations, Level 3 agreed to use a relative use factor to apportion transport cost associated with two-way trunking, but disagreed as to the type of traffic that should be included in the calculation.

Q. IS THERE A FORM OF INTERCONNECTION THAT LEVEL 3 CAN EMPLOY WHICH WOULD ALLOW IT TO AVOID PAYING FOR THE RELATIVE USE OF AN ENTRANCE FACILITY?

A. Yes. Under the agreed-to provisions of the interconnection agreement, there are a number of ways in which Level 3 can choose to interconnect with the Qwest network. One of these options, explained in 7.1.2.3 of the agreement, is a Mid-Span Meet POI. The relative use calculations which apply to an entrance facility purchased from Qwest do not apply to a Mid-Span Meet POI. As noted in Section 7.1.2.3, under this option "[e]ach Party will be responsible for its portion of the build to the Mid-Span Meet POI." Thus, to the extent that Level 3 seeks to avoid any financial responsibility for facilities on the Qwest side of the Mid-Span POI, it is free, under this agreement, to select the Mid-Span Meet POI option under which both parties are obligated to construct facilities to the agreed to POI and neither party is responsible for the charges associated with the facility on the other party's side of the Mid-Span POI. Level 3 can also choose to provide collocation, which would also not entail the purchase of an entrance facility to connect with Qwest's network.

There are, however, sound reasons for Level 3 to choose the entrance facility options, instead of the Mid-Span Meet POI. By so choosing, Level 3 is able to avoid the initial, and often substantial, investment associated with building its own facilities to the POI. By choosing the entrance facility option, Level 3 pays a nominal non-recurring charge to "turn-on" the Qwest facilities and then pays a monthly recurring charge that is subject to a credit based on Qwest's relative use of the facilities. Level 3 is clearly avoiding significant capital expenditures by ordering the LIS entrance facility, yet is unwilling to compensate Qwest for this facility.

Q. WHY IS IT APPROPRIATE TO EXCLUDE ISP-BOUND AND VNXX TRAFFIC FROM THE RELATIVE USE CALCULATION?

A. The FCC rule I just cited appears in Subpart H of the FCC's rules which is titled "Reciprocal Compensation for Transport and Termination of Telecommunications traffic". In Section 51.701(b)(1) the FCC defines "telecommunications traffic" as traffic "exchanged between a LEC and a telecommunications carrier other than a CMRS provider, *except for telecommunications traffic that is interstate or intrastate exchange access, information access, or exchange services for such access."* (Italics added). In the ISP Remand Order,[6] the FCC determined that ISP bound traffic (traffic destined for a local ISP server) is information access. As such,

[6] Order on Remand, *In the Matter of Implementation of the Local Competition Provisions in the Telecommunications Act of 1996, Intercarrier Compensation for ISP-Bound Traffic*, 16 FCCR 9151 (2001) ("*ISP Remand Order*") ¶ 42.

this traffic is expressly excluded from the traffic referred to in 51.709(b). Similarly, VNXX (or interexchange) traffic must be excluded, for, as Mr. Brotherson makes clear in his testimony, VNXX calls that do not originate and terminate in the same local calling area are not subject to the reciprocal compensation obligations of 251(b)(5).

Q. HAS THIS COMMISSION RULED PREVIOUSLY AS TO WHETHER ISP BOUND TRAFFIC SHOULD BE EXCLUDED FROM THE RELATIVE USE CALCULATION?

A. Yes. In a 2001 arbitration between Qwest and Level 3, the Commission ruled that internet related traffic should be excluded when determining relative use of entrance facilities and transport, stating:

> The overall thrust of the language of the *ISP Remand Order* is clearly directed at removing what the FCC perceives as uneconomic subsidies and false economic signals from the scheme for compensating interconnecting carriers transporting Internet-related traffic. Since the allocation of costs of transport and entrance facilities is based upon relative use of those facilities, ISP-bound traffic is properly excluded, when calculating relative use by the originating carrier. [7]

[7] *In the Matter of Petition of Level 3 Communications LLC, for Arbitration Pursuant to Section 252(b) of the Telecommunications Act of 1934, as Amended by the Telecommunications Act of 1996, With Qwest Corporation Regarding Rates, Terms, and Conditions for Interconnection.* ARB 332. (Oregon PUC, September 13, 2001).

The Commission recently reaffirmed this decision in the arbitration between AT&T and Qwest.[8]

Q. HAVE FEDERAL COURTS REVIEWED THE ISSUE OF EXCLUDING ISP BOUND TRAFFIC?

A. Yes. Qwest's language and position have been subject to federal court review in both Oregon and Colorado, and both courts upheld Qwest's language.[9]

Q. IN ITS PETITION, LEVEL 3 CITES THE FCC'S RULE 51.703(B) AND ARGUES THAT ILECS ARE PROHIBITED FROM LEVYING CHARGES FOR TRAFFIC ORIGINATING ON THEIR OWN NETWORKS. DO YOU AGREE?

A. No. 51.703(b) applies to "telecommunications traffic." As was just discussed, ISP bound traffic (traffic destined for a local ISP server) is "information access" and is specifically excluded from the definition of telecommunication traffic. Clearly, 51.703(b) does not apply in the case of such ISP bound traffic.

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[8] *In the Matter of Petition of Qwest Corporation for Arbitration of Interconnection rates, Terms, Conditions and Related Arrangements With AT&T Communications of the Pacific Northwest Inc. and TCG Oregon.* ARB 527. (Oregon PUC, April 19, 2004).

[9] Order and Memorandum of Decision, *Level 3 Communications, LLC v. Pub. Utils. Comm'n of Colorado,* 300 F. Supp. 2d 1388 (D. Colo. 2003) ("*Colorado Level 3 Order and Memorandum of Decision*"); Opinion and Order, *Level 3 Communications, LLC v. Public Utils. Comm'n of Oregon*, CV 01-1818 (D. Or. Nov. 25, 2002) (slip op.).

Issue No. 1H

Q. PLEASE EXPLAIN THE DISPUTE RELATED TO ISSUE NO. 1H.

A. Issue 1H is the same as Issue 1G, except that, where 1G concerned allocating the cost of a two-way entrance facility, 1H deals with allocating the cost of two-way direct transport facilities.

Q. WHAT LANGUAGE IS QWEST PROPOSING?

A. Qwest is proposing the following language:

> 7.3.2.2 If the Parties elect to establish LIS two-way DTT trunks, for reciprocal exchange of Exchange Service (EAS/Local) traffic the cost of the LIS two-way DTT facilities shall be shared among the Parties by reducing the LIS two-way DTT rate element charges as follows:
>
> 7.3.2.2.1 Direct Trunked Transport - The provider of the LIS two-way DTT facility will initially share the cost of the LIS two-way DTT facility by assuming an initial relative use factor of fifty percent (50%) for a minimum of one (1) quarter if the Parties have not exchanged LIS traffic previously. The nominal charge to the other Party for the use of the DTT facility, as described in Exhibit A, shall be reduced by this initial relative use factor. Payments by the other Party will be according to this initial relative use factor for a minimum of one (1) quarter. The initial relative use factor will continue for both bill reduction and payments until the Parties agree to a new factor,–based upon actual minutes of use data for non-ISP-bound traffic to substantiate a change in that factor. If a CLEC's End User Customers are assigned a NPA-NXXs associated with a rate center other than the rate center where the Customer is physically located, traffic that does not originate and terminate within the same Qwest local calling area (as approved by the Commission), regardless of the called and calling NPA-NXXs, involving those Customers is referred to as "VNXX traffic". For purposes of determining the RUF, the terminating carrier is responsible for ISP-bound traffic and for VNXX traffic. If either Party demonstrates with non-ISP-bound traffic data that actual minutes of use during the first quarter justify a new relative use factor, that Party will send a notice to the other Party. Once the Parties finalize a new factor, the bill reductions and payments will apply going forward, from the date the original notice was sent. ISP-bound traffic is interstate in nature. Qwest

has never agreed to exchange VNXX Traffic with CLEC.

Q. WHAT IS LEVEL 3'S PROPOSED LANGUAGE?

A. Level 3 proposes the following language:

> 7.3.2.2 Each party is solely responsible for any and all costs arising from or related to establishing and maintaining the interconnection trunks and facilities it uses to connect to the POI. Thus, neither party shall require the other to bear any additional costs for the establishment and operation of interconnection facilities that connect its network to its side of the POI.

Qwest is opposed to this language for all of the reasons cited in the discussion of issue 1G

Issue No. 1I

Q. PLEASE DESCRIBE ISSUE 1I

A. Issue 1I again involves compensation, in this case non-recurring charges for the installation of LIS trunks. Qwest proposes the following language:

> 7.3.3.1 Installation nonrecurring charges may be assessed by the provider for each LIS trunk ordered. Qwest rates are specified in Exhibit A.

Q. WHAT LANGUAGE DOES LEVEL 3 PROPOSE?

A. Level 3 proposes the following language:

> 7.3.3.1 Neither Party may charge (and neither Party shall have an obligation to pay) any installation nonrecurring charges or the like, for any LIS trunk ordered for purposes of exchanging ISP-Bound Traffic, 251(b)(5) Traffic, and VoIP Traffic that either Party delivers at a POI, other than the intercarrier compensation rates.

Q. ARE QWEST'S OBJECTIONS TO THIS LANGUAGE THE SAME AS FOR THE OTHER INTERCONNECTION COMPENSATION ISSUES?

A. Yes. Qwest opposes this language because it denies Qwest compensation for work performed on behalf of Level 3. In addition, Level 3 inappropriately inserts language regarding the type of traffic to be exchanged over LIS trunks, a subject more appropriately addressed elsewhere in the agreement.

Issue No. 1J

Q. PLEASE DESCRIBE ISSUE 1J.

A. Like issue 1H, issue 1J involves the assessment of non-recurring charges related to LIS trunking, in this case non-recurring charges related to trunk rearrangements. Qwest proposes the following language:

> 7.3.3.2 Nonrecurring charges for rearrangement may be assessed by the provider for each LIS trunk rearrangement ordered, at one-half (1/2) the rates specified in Exhibit A.

Q. WHAT LANGUAGE IS LEVEL 3 PROPOSING?

A. Level 3 proposes the following language:

> 7.3.3.2 Neither Party may charge (and neither Party shall have an obligation to pay) any nonrecurring charges for rearrangement assessed for any LIS trunk rearrangement ordered for purposes of exchanging ISP-Bound Traffic, 251(b)(5) Traffic, and VoIP Traffic that either Party delivers at a POI, other than the intercarrier compensation rates.

Again, Qwest opposes this language because it denies Qwest compensation for work performed on behalf of Level 3 and again adds language regarding the exchange of traffic which is more appropriately addressed elsewhere in the agreement.

V. DISPUTED ISSUE NO. 2 (A-B): COMBINING TRAFFIC ON INTERCONNECTION TRUNKS

Q. PLEASE EXPLAIN DISPUTED ISSUE NO 2.

A. Issue 2, found on pages 77-78 of the ICA, concerns what types of traffic may be combined over LIS trunks and whether Qwest is entitled to compensation for the interconnection trunks it provides to Level 3.

Q, WHAT LANGUAGE IS QWEST PROPOSING FOR SECTION 7.2.2.9.3?

A. Qwest is proposing the following language:

> 7.2.2.9.3.1 Exchange Service (EAS/Local), ISP-Bound Traffic, IntraLATA LEC Toll , VoIP traffic and Jointly Provided Switched Access (InterLATA and IntraLATA Toll involving a third party IXC) may be combined in a single LIS trunk group or transmitted on separate LIS trunk groups.
>
> 7.2.2.9.3.1.1 If CLEC utilizes trunking arrangements as described in Section 7.2.2.9.3.1, Exchange Service (EAS/Local) traffic shall not be combined with Switched Access, not including Jointly Provided Switched Access, on the same trunk group, i.e. Exchange Service (EAS/Local) traffic may not be combined with Switched Access Feature Group D traffic to a Qwest Access Tandem Switch and/or End Office Switch.
>
> 7.2.2.9.3.2 CLEC may combine originating Exchange Service (EAS/Local) traffic, ISP-Bound Traffic, IntraLATA LEC Toll, VoIP Traffic and Switched Access Feature Group D traffic including Jointly Provided Switched Access traffic, on the same Feature Group D trunk group.
>
> 7.2.2.9.3.2.1 CLEC shall provide to Qwest, each quarter, Percent Local Use (PLU) factor(s) that can be verified with individual call detail records or the Parties may use call records or mechanized jurisdictionalization using Calling Party Number (CPN) information in lieu of PLU, if CPN is available. Where CLEC utilizes an affiliate's

Interexchange Carrier (IXC) Feature Group D trunks to deliver Exchange Service (EAS/Local) traffic with interexchange Switched Access traffic to Qwest, Qwest shall establish trunk group(s) to deliver Exchange Service (EAS/Local), Transit, and IntraLATA LEC Toll to CLEC. Qwest will use or establish a POI for such trunk group in accordance with Section 7.1.

Q. WHAT LANGUAGE IS LEVEL 3 PROPOSING?

A. Level 3 proposes the following language:

7.2.2.9.3.1 Where CLEC exchanges Telephone Exchange Service, Exchange Access Service, Telephone Toll Service, and Information Services traffic with Qwest over a single interconnection network, CLEC agrees to pay Qwest, on Qwest's side of the POI, state or federally tariffed rates applicable to the facilities charges for InterLATA and/or InterLATA traffic in proportion to the total amount of traffic exchanged over such interconnection facility. Otherwise each party remains 100% responsible for the costs of its interconnection facilities on its side of the POI. Thus, by way of illustration only, where 20% of such traffic is interLATA (intrastate and interstate) and the remaining 80% is Section 251(b)(5) Traffic, CLEC would pay Qwest an amount equal to 20% of the applicable tariffed transport rate that would apply to a tariffed facility used solely for the exchange of such access traffic for such traffic exchanged on Qwest's side of the POI over a single interconnection trunk.

Except as expressly provided in Section 7.3.1.1.3, each party shall bear all costs of interconnection on its side of the network in accordance with 47 C.F.R. § 51.703. Accordingly, unless otherwise expressly authorized according to Section 7.3.1.1.3, neither Party may charge the other (and neither Party shall have an obligation to pay) any recurring and/or nonrecurring fees, charges or the like (including, without limitation, any transport charges), associated with the exchange of any telecommunications traffic including but not limited to Section 251(b)(5) Traffic on its side of the POI.

Each party is solely responsible for any and all costs arising from or related to establishing and maintaining the interconnection trunks and facilities it uses to connect to the POI. Thus, neither party shall require the other to bear any additional costs for the establishment and operation of interconnection facilities that connect its network to its side of the POI. If traffic is combined, Section 7.3.9 of this Agreement applies.

7.2.2.9.3.2 CLEC may combine Exchange Service (EAS/Local) traffic, ISP-Bound Traffic, Exchange Access (IntraLATA Toll carried solely by

Local Exchange Carriers), VoIP Traffic and Switched Access Feature Group D traffic including Jointly Provided Switched Access traffic, on the same Feature Group D trunk group or over the same interconnection trunk groups as provided in Section 7.3.9.

Q. PLEASE SUMMARIZE THE POSITIONS OF THE TWO PARTIES ON THIS ISSUE.

A. As I noted previously, there are two issues here: 1) compensation for LIS trunking on the Qwest side of the POI and; 2) what types of traffic may be combined on LIS trunks. With regard to the first issue, Level 3 takes the position that, with the exception of reciprocal compensation charges, it is not responsible for any interconnection charges on the Qwest side of the POI. Qwest believes that it is entitled to recover costs it incurs to provide interconnection to Level 3. These arguments were covered at length in the discussion of Issue No. 1 and need not be repeated here.

Q. WHAT ARE THE PARTIES' POSITIONS AS TO WHAT TRAFFIC IS ALLOWED OVER LIS TRUNKS?

A. Level 3 believes it should be allowed to combine all traffic, including switched access traffic, over LIS trunks. Qwest is willing to allow all traffic types, with the exception of switched access traffic, to be carried over LIS trunks. Qwest requires that switched access traffic be carried over Feature Group D (FGD) trunks. Qwest has required this since 1984 and nothing has changed this requirement. Qwest has agreed to allow all traffic types terminating to Qwest to be combined over FGD trunks.

Q. THE QWEST LANGUAGE IN SECTION 7.2.2.9.3.1 ALLOWS JOINTLY PROVIDED SWITCHED ACCESS TRAFFIC TO BE CARRIED OVER LIS TRUNKS. WHAT IS THE INTENT OF ALLOWING JOINTLY PROVIDED SWITCHED ACCESS TRAFFIC TO BE CARRIED OVER LIS TRUNKS?

A. Because IXCs generally connect at the Qwest access tandem rather than directly to the CLEC, this language, which appears in all of Qwest's SGATs, is needed to allow traffic to and from a CLEC end user's Presubscribed Interexchange Carrier ("PIC") to be carried over LIS trunks. Thus, CLEC end users are able to reach their Presubscribed Interexchange Carriers and the IXCs are able to get calls to CLEC end users. This traffic is referred to as Jointly Provided Switched Access because both Qwest and the CLEC are involved in providing access to the IXC.

Q. IS QWEST REQUIRED TO COMBINE SWITCHED ACCESS ON LIS TRUNKS?

A. No. Qwest has no obligation to permit Level 3 to commingle switched access traffic with other types of traffic on the interconnection trunks created under the Agreement. In fact, Qwest is required to provide interconnection for the exchange of switched access traffic in the same manner that it provided interconnection for such traffic prior to passage of the Act. Section 251(g) of the Act specifically provides:

> On and after February 8, 1996, each local exchange carrier, to the extent that it provides wireline services, shall provide exchange access, information access, and exchange services for such access to interexchange carriers and information service providers in accordance with the same equal access and nondiscriminatory *interconnection*

> *restrictions and obligations* (including receipt of compensation) that apply to such carrier on the date immediately preceding February 8, 1996, under any court order, consent decree, or regulation or policy of the Commission, until such restrictions and obligations are explicitly superseded by regulations prescribed by the Commission after February 8, 1996.

(Emphasis added). As the FCC has stated, "[p]ursuant to section 251(g), LECs must continue to offer tariffed interstate access services just as they did prior to the enactment of the 1996 Act."[10]

Nothing in the Act or the FCC's regulations give Level 3 the right to mix switched access traffic with local traffic over the local interconnection trunks between its network and Qwest's established pursuant to section 251(c)(2) of the Act. The Act and the FCC's regulations interpreting the Act speak to, "interconnection at any technically feasible point within the incumbent LEC's network,"[11] but this instruction clearly does not apply to traffic carried by Level 3 between LATAs or between local calling areas. Any other interpretation would undermine Qwest's switched access tariffs.

Q. DOES LEVEL 3'S OFFER TO PAY QWEST STATE AND FEDERAL TARIFF RATES FOR INTERLATA TRAFFIC IN PROPORTION TO THE TOTAL AMOUNT OF TRAFFIC GOING OVER THE LIS TRUNK SATISFY THE REQUIREMENTS OF 251(g)?

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[10] *Local Competition Order*, ¶1034.

[11] 47 C.F.R. § 51.305(a)(2).

A. No. Level 3's proposal would only allow Qwest to assess a per minute of use charge on switched access traffic. Qwest would still be denied the non-recurring charges and recurring non-traffic sensitive charges that are a part of FGD charges. These are charges that are contained in Qwest's access tariffs and are charges that all IXCs are required to pay.

Q. ARE THERE OTHER PROBLEMS WITH THE LEVEL 3 PROPOSAL?

A. Yes. The Level 3 proposal creates serious recording and billing issues as well as issues related to the intercarrier exchange of jointly provided switched access records.

Q. WHAT ARE THE BILLING ISSUES THE LEVEL 3 PROPOSAL PRESENTS?

A. Today, IXCs are required to route all interLATA switched access traffic and intraLATA switched access traffic over FGD. Qwest's mechanized billing systems are able to use the actual traffic information recorded by its end office switch from the FGD trunks, allowing Qwest to accurately and efficiently produce switched access bills. The Level 3 proposal, on the other hand, would rely on factors, not recordings of actual traffic information, and would not allow Qwest to use its existing mechanized billing processes. In fact, implementing the Level 3 proposal would require investment and significant reworking of Qwest systems and processes, forcing Qwest to expend significant resources to meet the special needs of one carrier.

Q. WHAT ARE THE PROBLEMS RELATED TO THE EXCHANGE OF SWITCHED ACCESS RECORDS YOU MENTIONED EARLIER?

A. The undisputed language in Section 7.2.2.4 of the agreement requires the parties to use industry standards developed to handle the provisioning and billing of Jointly Provided Switched Access. Under these standards, Qwest is required to provide industry standard jointly provided switched access records to LECs, WSPs and CLECs when Qwest transports and switches jointly provided switched access traffic. Today these records are produced mechanically, using the information recorded on the FGD trunks. Level 3's use of billing factors would not allow Qwest to provide the industry standard records to the terminating LEC, WSPs or CLEC carriers. If Qwest does not record this traffic as FGD, neither Qwest nor the collaborating LEC, CLEC or WSP can bill the IXC who originated the call. In addition, if one of these IXC calls that Level 3 is requesting to route over LIS were routed on to another CLEC, ILEC or WSP, Qwest could potentially get billed for switched access or reciprocal compensation for a call that really originated with an IXC, as Qwest would be unable to provide the appropriate JPSA record to the CLEC, ILEC or WSP.

Q. IS QWEST IN A POSITION TO AGREE TO A PROPOSAL THAT WILL IMPACT OTHER LECS AND CLECS?

A. No. Even if Qwest were willing to agree to use factors for the traffic it terminates, Qwest cannot agree to a proposal that will impact all ILECs and CLECs that today rely on Qwest to provide them with a jointly provided switched access record.

Without the switched access records they are receiving today, these companies, too, would have to change their systems and processes for billing their portion of switched access to the IXC.

Q. HOW DO YOU RESPOND TO LEVEL 3'S ARGUMENTS THAT COMBINING ALL TRAFFIC OVER A SINGLE TRUNK GROUP IS MORE EFFICIENT?

A. Qwest has offered Level 3 an approach which will allow the network efficiencies that Level 3 is seeking. Qwest's proposed language for Section 7.2.2.9.3.2 offers Level 3 the capability to combine all traffic over a FGD trunk group. Combining all of the traffic over FGD not only allows for the efficiencies Level 3 claims to need, it also allows for mechanized billing of the appropriate tariffed rates and the ability to produce the necessary jointly provided switched access records. There is simply no reason to grapple with the difficulties inherent in Level 3's proposal when a workable solution to combining all traffic on a single trunk group already exists.

Q. HAS QWEST ALLOWED OTHER CARRIERS TO USE LIS TRUNKS IN THE MANNER THAT LEVEL 3 IS PROPOSING HERE?

A. No. All CLECs interconnected with Qwest have interconnection agreements that either provide for the segregation of traffic onto separate trunk groups or the combining of terminating traffic onto a FGD trunk group. There is simply no valid

reason to give Level 3 special treatment that would cause great expense and disruption for Qwest and other carriers.

VI. DISPUTED ISSUE NO. 5: SHOULD INTERCONNECTION TERMS BE INCORPORATED BY REFERENCE

Q. PLEASE EXPLAIN THE NATURE OF THE DISPUTE AROUND THIS ISSUE.

A. Level 3 alleges that Qwest's proposed interconnection agreement attempts to incorporate, by reference, certain state Statement of Generally Available Terms (SGAT) terms and conditions.

Q. DOES QWEST'S PROPOSED AGREEMENT ATTEMPT TO INCORPORATE SGAT TERMS AND CONDITIONS?

A. No. Level 3 has misinterpreted the cross-references that Qwest included in its template interconnection agreement which was used as a basis for negotiations. The SGAT references in the template agreement signify that a commission has approved state-specific language that is different than the generic language used in the fourteen state template. Thus, for example, the state commissions in Colorado, Minnesota and South Dakota have each prescribed language for Section 5.8.1 in the fourteen state template. Qwest's intent in referencing the state SGATs in the template was to signify that the state specific language was to be substituted for the template language in those cases. The interconnection agreement that was submitted with Qwest's response in this docket contains the state specific language that Qwest proposes and contains no cross-references to the SGAT. Hopefully, Qwest's clarification and the proposed state specific interconnection agreement will allow the parties to close this issue.

VII. DISPUTED ISSUE NO. 13: LOCAL INTERCONNECTION SERVICE DEFINITION

Q. PLEASE DESCRIBE ISSUE NO. 13.

A. Issue No. 13 relates to the definition of local interconnection service.

Q. WHAT IS QWEST'S PROPOSED DEFINITION FOR LOCAL INTERCONNECTION SERVICE?

A. Qwest proposes the following definition on page 23 of the ICA:

> "Local Interconnection Service or "LIS" Entrance Facility" is a DS1 or DS3 facility that extends from CLEC's Switch location or Point of Interconnection (POI) to the Qwest Serving Wire Center. An Entrance Facility may not extend beyond the area served by the Qwest Serving Wire Center.

Q. WHAT IS LEVEL 3'S DEFINITION

A. Level 3 objects to Qwest's definition but fails to provide a definition of its own.

Q. WHAT IS THE BASIS OF LEVEL 3'S OBJECTION?

A. Level 3 claims that the Qwest definition shifts the cost of Qwest's network to Level 3.

Q. DO YOU AGREE?

A. No. The definition of "Local Interconnection Service or 'LIS' Entrance Facility" is nothing more than a definition of the facility that connects Qwest's network to Level 3's network. The definition does not contain any language that determines

who bears the cost of this facility. Level 3 provides no legitimate reason for rejecting this definition. Level 3's concern about the allocation of the costs of interconnection is addressed in Issue No. 1G. As I explained in the discussion of issue 1G, Level 3 has the option of using a Mid-Span Meet POI or collocation for interconnection rather than an entrance facility, options that would allow it to avoid compensating Qwest for an entrance facility on the Qwest side of the POI.

VIII. DISPUTED ISSUE NO. 17: TRUNK FORECASTING

Q. PLEASE EXPLAIN ISSUE NO 17.

A. Issue 17 has to do with Section 7.2.2.8 of the agreement which discusses LIS forecasting. Level 3 and Qwest have been unable to reach agreement on the LIS forecasting language. In an attempt to settle this issue, Qwest is now proposing different language from what was filed by Qwest with its Response to Petition for Arbitration.

Q. WHAT LANGUAGE IS QWEST NOW PROPOSING?

A. Qwest is proposing the following language:

> 7.2.2.8.4 The Parties agree that trunk forecasts are non-binding and are based on the information available to each respective Party at the time the forecasts are prepared. Unforecasted trunk demands, if any, by one Party will be accommodated by the other Party as soon as practicable based on facility availability. Switch capacity growth requiring the addition of new switching modules may require six (6) months to order and install.

> 7.2.2.8.5 In the event of a dispute regarding forecast quantities, where in each of the preceding eighteen (18) months, trunks required is less than fifty percent (50%) of forecast, Qwest will make capacity available in accordance with the lower forecast.

This language replaces the language contained in sections 7.2.2.8.4, 7.2.2.8.5, 7.2.2.8.6, 7.2.2.8.6.1 and 7.2.2.8.6.2 in Qwest's previously filed interconnection agreement.

Q. WHY HAS QWEST CHANGED ITS PROPOSED LANGUAGE FROM WHAT WAS PROPOSED PREVIOUSLY?

A. One of Level 3's concerns with Qwest's original language was the requirement of a deposit to construct trunks to forecasted levels when previous forecasts did not match subsequent requirements. Qwest has now removed the deposit requirement.

Q. DOES LEVEL 3 OBJECT TO THE NEW QWEST LANGUAGE?

A. Although Qwest has offered Level 3 the new language, Level 3 has not yet informed Qwest if the revisions are acceptable or proposed new language.

Q. WHY DOES QWEST FEEL THAT THE NEWLY PROPOSED LANGUAGE IS NECESSARY?

A. LIS forecasting serves the interest of both parties by helping to ensure that adequate capacity is made available to allow for the exchange of traffic between the parties. As a result, it is important that the interconnection agreement detail how the forecasts are developed and utilized.

Q. WHY IS QWEST PROPOSING TO BUILD TO A LOWER FORECAST WHERE REQUIRED LEVELS HAVE BEEN LESS THAN FORECAST IN PREVIOUS MONTHS?

A. In many instances, making capacity available at forecasted levels will require Qwest to construct new facilities and thereby incur substantial expense. Once a CLEC submits its forecast, however, it has no obligation to order interconnection

trunks consistent with its forecast. This could leave Qwest in the unacceptable position of having incurred cost to build new facilities, which then lay underutilized, or worse, dormant or dark. To avoid this situation, Qwest reserves the right to adjust the forecast downward based on the relationship between ordered trunks and forecasted trunks in previous months. This provides the appropriate incentive to the forecasting party and allows Qwest to avoid making needless investments.

IX. DISPUTED ISSUE NO. 18: JURISDICTIONAL ALLOCATION FACTORS

Q. PLEASE EXPLAIN ISSUE NO. 18.

A. Issue 18 concerns jurisdictional allocation factors for billing purposes. Level 3's proposed language introduces several new jurisdictional allocation factors which Qwest opposes.

Q. WHAT LANGUAGE IS QWEST PROPOSING FOR SECTION 7.3.9?

A. Qwest is proposing the following language on pages 87-89:

> 7.3.9 To the extent a Party combines Exchange Service (EAS/Local), IntraLATA LEC Toll, and Jointly Provided Switched Access (InterLATA and IntraLATA calls exchanged with a third party IXC) traffic on a single LIS trunk group, the originating Party, at the terminating Party's request will declare quarterly PLU(s). Such PLUs will be verifiable with either call summary records utilizing Calling Party Number information for jurisdictionalization or call detail samples. The terminating Party should apportion per minute of use (MOU) charges appropriately.

Q. UNDER THE QWEST PROPOSED LANGUAGE, HOW IS THE PERCENT LOCAL USAGE (PLU) FACTOR USED?

A. Traffic that does not contain a calling party number cannot be jurisdictionalized based on a comparison of the calling and called parties' numbers. In these situations, the PLU is applied to the bucket of these "unidentified" calls to determine what percent should be billed at the local rate.

Q. WHAT LANGUAGE IS LEVEL 3 PROPOSING?

A. Level 3 proposes the following:

7.3.9 To the extent a Party combines Section 251(b)(5) Traffic and Jointly Provided Switched Access (InterLATA and IntraLATA calls exchanged with a third party IXC) traffic on a single trunk group, the originating Party, at the terminating Party's request will declare monthly PLU(s) PIU(s), and PIPU(s), collectively "Jurisdictional Factors." Such Jurisdictional Factors will be verifiable with either call summary records utilizing Call Record information for jurisdictionalization or call detail samples. The terminating Party should apportion per minute of use (MOU) charges appropriately.

7.3.9.1 The Jurisdictional Factors - PLU, PIU and PIPU - are defined as follows:

7.3.9.1.1 PIPU – Percent IP Usage: This factor represents the traffic that is IP Enabled as a percentage of ALL traffic. CLEC has introduced this factor to identify IP-Enabled Services traffic for billing purposes to Qwest on an interim basis until an industry standard is implemented. IP-Enabled traffic includes all IP-TDM and TDM to IP traffic that is exchanged directly between the parties.

7.3.9.1.2 PIU – Percent Interstate Usage: This factor represents the end-to-end circuit switched traffic (*i.e.* TDM-IP-TDM) that is interstate for services that are billed at tariffed rates on a per Minute Of Use (MOU) basis as a percentage of all end-to-end circuit switched traffic, *i.e.* all interstate traffic after IP-Enabled traffic has been excluded. This factor does not include IP-Enabled Services Traffic.

7.3.9.1.3 PLU – Percent 251(b)(5) Usage: This factor represents the end-to-end circuit switched 251(b)(5) traffic as a percentage of all end-to-end circuit switched intrastate traffic. This factor distinguishes traffic that is rated as "local" (i.e. "Section 251(b)(5) traffic") from Intrastate toll traffic. This factor does not include IP-Enabled Services traffic.

7.3.9.2 Unless otherwise agreed to by the parties: (1) factors will be calculated and exchanged on a monthly basis. Percentages will be calculated to two decimal places (for example 22.34%); (2) each party will calculate factors for all traffic that they originate and exchanged directly with the other Party; and (3) the party responsible for collecting data will collect all traffic data, including but not limited to Call Detail Records (this includes CPN), from each trunk group in the state over which the parties exchange traffic during each study period. The parties will calculate the factors defined in Section 7.9.1, above, as follows:

7.3.9.2.1 PIPU: The PIPU is calculated by dividing the total IP-Enabled Services MOU by the total MOU. The PIPU is calculated on a statewide basis.

7.3.9.2.1.1 Upon ILEC request, CLEC will provide a PIPU factor for all minutes of usage exchanged directly between the Parties over the Interconnection Trunk Groups in each state. CLEC will provide separate PIPU factors for CLEC Terminating IP-enabled Traffic and CLEC Originating IP-enabled Traffic, which terms are defined in sections 7.8.4.3.1.1 and 7.8.4.3.1.2, respectively, below. Accordingly, the PIPU factor is based upon CLEC's actual and verifiable Call Detail Records of IP-originated traffic

7.3.9.3 Exchange of Data:

7.3.9.3.1 The party responsible for billing will provide the PIPU, PLU and PIU factors to the non-collecting party on or before the 15th of each month, via email (or other method as mutually agreed between the parties), to designated points of contact within each company.

7.3.9.4 Maintenance of Records

7.3.9.4.1 Each company will maintain traffic data on a readily available basis for a minimum period of one year (or however long as required by state and federal regulations) after the end of the month for which such date was collected for audit purposes.

7.3.9.5 Audits

7.3.9.5.1 Each company will have the ability to audit the other company's traffic factors up to a maximum of twice per year. A party seeking audit must provide notice of their intent to audit and include specific dates, amounts and other detail necessary for the party receiving the request to process the audit. Notice must be provided in writing and postmarked as mailed to the audited party within one year after the end of each month(s) for which they seek audit.

7.3.9.5.2 The audited party must provide in a mutually agreeable electronic format traffic data for the months requested according to Section 7.3.9.5.1 above.

7.3.9.6 True-Up

In addition to rights of audit, the Parties agree that where a factor is found to be in error by more than 2%, they will automatically true up the factors and pay or remit the resulting amounts to correct such errors.

Q. WHY IS QWEST OPPOSED TO LEVEL 3'S PROPOSED FACTORS?

A. The only reason for introducing these factors is to allow for billing when switched access traffic is commingled with all other traffic on a LIS trunk group. As was noted in the discussion of Issue No. 2, these factors would not be necessary if switched access traffic were carried over a FGD trunk group, as opposed to a LIS trunk group. There is simply no reason to go to a system of factors, with the difficulties they present, when a workable solution to combining all traffic on a single trunk group already exists. In addition, the existing FGD solution is superior to Level 3's proposal in that it relies on actual traffic information to determine accurate jurisdiction of recorded calls, not estimates which may or may not be accurate and at the very least will require continual updating. Further, as there is no industry standard method of determining IP-enabled services at this time, the PIPU factor proposed by Level 3 is unverifiable by Qwest, and includes traffic that does not conform to the definition of VoIP proposed by Qwest and discussed in Mr. Brotherson's testimony. Finally, as discussed previously, the system of factors proposed by Level 3 does not allow for the creation of jointly provided access records which are relied upon by CLECs and LECs who terminate jointly provided switched access traffic.

X. DISPUTED ISSUE NO. 21: ORDERING OF INTERCONNECTION TRUNKS

Q. PLEASE EXPLAIN THE NATURE OF THE DISPUTE ON THIS ISSUE.

A. Issue No. 21 concerns language that Level 3 is attempting to insert in section 7.4 of the agreement which discusses the ordering of local interconnection service.

Q. WHAT LANGUAGE IS LEVEL 3 PROPOSING?

A. Level 3 is proposing to insert the following language into Section 7.4, page 89 of the ICA:

> 7.4.1.1 Nothing in this section 7.4 shall be construed to in any way affect the Parties' respective obligations to pay each other for any activities or functions under this Agreement. All references in this section 7.4 to 'ordering' shall be construed to refer only to the administrative processes needed to establish interconnection and trunking arrangements and shall have no effect on either Party's financial obligations to the other.

Q. WHY IS QWEST OPPOSED TO THE INSERTION OF THIS LANGUAGE?

A. In addition to the fact that Qwest disagrees with Level 3's contention that it has no financial obligation on Qwest's side of the POI, Level 3's language is misplaced. Section 7.4 of the agreement has to do with the ordering of local interconnection service and does not address allocation of responsibility for the cost of interconnection.

Level 3's proposed Section 7.4.1.1 only underscores why its position on allocation of the costs of interconnection is wrong. The fact that Level 3 requests (or orders)

facilities on Qwest's side of the network demonstrates that the interconnection is done for Level 3's benefit. Level 3 makes requests for Qwest facilities on Qwest's side of the point of interconnection so that Level 3 can serve its own ISP customers.

Section 7.4.1.1 is simply unnecessary. The Commission will determine who pays the costs of interconnection in the Sections of the Agreement that are related to Issue No. 1. Accordingly, since nothing in Section 7.4 requires Level 3 to pay interconnection costs, Level 3's proposed Section 7.4.1.1 should be rejected.

XI. DISPUTED ISSUE NO. 22: COMPENSATION FOR SPECIAL CONSTRUCTION

Q. PLEASE EXPLAIN ISSUE NO. 22.

A. Issue 22 has to do with construction charges and whether Level 3 is responsible for charges related to special construction that it requests on the Qwest side of the POI. Level 3 proposes to insert language stating that it has no obligation for construction on the Qwest side of the POI.

Q. WHAT IS THE LANGUAGE THAT LEVEL 3 PROPOSES TO INSERT?

A. Level 3 proposes to insert the following language on page 297 of the ICA:

> 19.1.1. Nothing in this section 19 shall be construed to in any way affect the Parties' respective obligations to pay each other for any activities or functions under this Agreement. All references in this section 19 to construction charges be construed to refer only to those Level 3 requests for construction that are outside the scope of what is needed to establish interconnection and trunking arrangements and shall have no effect on either Party's financial obligations to the other.

Q. WHY IS QWEST OPPOSED TO THIS LANGUAGE?

A. Level 3's proposed language again underscores the unreasonableness of Level 3's position that it should not have to pay any of the interconnection costs Qwest incurs on its side of the point of interconnection. When Level 3 requests that Qwest build additional facilities for network interconnection, these costs are incurred to benefit Level 3 and Level 3's ISP end users. If Level 3 and its ISP end users are benefiting by the additional cost for building facilities, Level 3, not Qwest, should bear that

cost. Under the Act, Qwest is entitled to just and reasonable compensation for the costs it incurs.

XII. CONCLUSION

Q. DOES THIS CONCLUDE YOUR TESTIMONY.

A. Yes.

Qwest/2
Brotherson/i

BEFORE THE PUBLIC UTILITY COMMISSION OF OREGON

ARB 665

In the Matter of the Petition of Level 3 Communications, LLC's Petition for Arbitration Pursuant to Section 252 (b) of the Communications Act of 1934 with Qwest Corporation	**LEVEL 3 COMMUNICATIONS, LLC'S PETITION FOR ARBITRATION**

DIRECT TESTIMONY OF

LARRY B. BROTHERSON

FOR

QWEST CORPORATION

August 12, 2005

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I. IDENTIFICATION OF WITNESS

Q. PLEASE STATE YOUR NAME, BUSINESS ADDRESS AND POSITION WITH QWEST.

A. My name is Larry B. Brotherson. I am employed by Qwest Corporation ("Qwest") as a Director-Wholesale Advocacy in the Wholesale Markets organization. My business address is 1801 California Street, Room 2350, Denver, Colorado, 80202.

Q. PLEASE DESCRIBE YOUR EMPLOYMENT BACKGROUND.

A. Since joining Northwestern Bell Telephone Company in 1979, I have held several positions within Northwestern Bell, U S WEST Communications, and Qwest. Most of my responsibilities and assignments have been within the Law Department. Over the past 20 years, I have been a state regulatory attorney in Iowa, a general litigation attorney, and a commercial attorney supporting several organizations within Qwest. My responsibilities have included advising the company on legal issues, drafting contracts, and addressing legal issues that arise in connection with specific products. With the passage of the Telecommunications Act of 1996 (the "Telcom Act"), I took on responsibility for providing legal advice and support for Qwest's Interconnection Group. In that role, I was directly involved in working with competitive local exchange carriers ("CLECs"). I negotiated interconnection agreements with CLECs that implemented various sections of the Act, including the Act's reciprocal compensation provisions. In 1999, I assumed my current duties as Director of Wholesale Advocacy. My current responsibilities include coordinating the witnesses for all interconnection arbitrations and for hearings involving disputes over interconnection issues. Additionally, I work with various groups within the

Wholesale Markets organization of Qwest to develop testimony addressing issues associated with interconnection services.

Q. WHAT IS YOUR EDUCATIONAL BACKGROUND?

A. I received a Bachelor of Arts degree from Creighton University in 1970 and a Juris Doctor degree from Creighton in 1973.

Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE THE OREGON PUBLIC UTILITY COMMISSION?

A. Yes. In August of 2000, I provided testimony setting forth Qwest's position regarding reciprocal compensation in ARB 238. I also participated in the Oregon 271 workshops in Docket UM 823 and in the Investigation of the use of Virtual NPA/NXX Calling Patterns in Docket UM 1058.

II. PURPOSE OF TESTIMONY

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. This arbitration docket will address numerous disputed paragraphs to be incorporated into the interconnection agreement ("ICA") between the parties. The purpose of my testimony is to support the adoption of Qwest's proposed language relating to several of the specific issues that Qwest and Level 3 have not been able to reach agreement on. Specifically, I will explain Qwest's positions, and the policies underlying these positions.

Although there are many sub-issues, there are three major areas of dispute between Level 3 and Qwest.

First, Level 3 and Qwest disagree on a variety of issues related to VoIP (Voice over Internet Protocol), including the definition of VoIP; whether (assuming traffic is properly categorized as VoIP traffic) an interexchange call between local calling areas ("LCAs") is exempt from access charges if the call is ultimately from a VoIP provider; how and under what circumstances access charges or reciprocal compensation apply to VoIP traffic; the proper routing of VoIP traffic, and other issues.

Second, Level 3 and Qwest disagree on the treatment of and compensation for VNXX traffic (traffic that does not originate and terminate in the same LCA, even though the telephone numbers of the called and calling parties would lead the calling party to believe the call was a local call).

Finally, Level 3 and Qwest disagree on the proper type of and responsibility for the trunks carrying toll traffic and how Qwest should be compensated for the use of its network.

My testimony will address the first two issues relating to VoIP and VNXX. Mr. Easton will address Level 3's reluctance to place toll traffic on Feature Group D ("FGD") trunks and pay Qwest for the use of its network. Mr. Linse will address network issues related to all three areas.

Q. HOW HAVE YOU ORGANIZED YOUR TESTIMONY?

A. During the negotiation period, Qwest provided Level 3 with a matrix similar in format to others it has used in many other arbitrations with CLECs, including ones before the Oregon Public Utility Commission ("Commission"). The matrix showed Qwest's proposed language, and then incorporated Level 3's proposed additions in a strikethrough format. Because the Qwest proposed matrix also followed the contract numbering order, issues dealing with paragraph 5.2 would be addressed before issues dealing with paragraph 6.4 or 7.1. Level 3 objected to this format and proposed its own matrix and format. In an effort to advance the negotiations, Qwest agreed to the use of Level 3's matrix format. Unfortunately, the structure that Level 3 uses in its matrix format is difficult to follow.

Level 3 groups contract paragraphs into what it has characterized as "Tier 1" issues and "Tier 2" issues. In Level 3's words, Tier 2 issues are "derived" from Tier 1 issues. Therefore, the language sections in Level 3's matrix do not flow in the order of the disputed issues in the contract; instead they follow the order in the tier

structure. Level 3 is, of course, free to use the format it prefers; however, in order for me to respond to Level 3's issues in an orderly sequence, it is necessary to address the competing language in a different order so that necessary pre-requisite issues are dealt with first. For example, the Level 3 matrix shows the first issue dealing with VoIP as language in contract sections 7.1.1.1 and 7.1.1.2, which deal with operational audits and certification. Before discussing audits of VoIP, it is obviously necessary to understand what VoIP is, how the FCC describes VoIP, and what disagreements exist between the parties as to the requirements for a call to qualify as VoIP. Therefore, my testimony will start by addressing Issue 16: the definition of VoIP. Only after the Commission understands what each party claims are the proper elements of VoIP, will other VoIP issues be meaningful, such as the issue of the necessity of certification that VoIP traffic complies with the FCC definition of VoIP. My testimony will address each disputed paragraph in the ICA related to VoIP and VNXX even though I address them in a different order from Level 3's matrix. My testimony will describe the parties' positions for each disputed paragraph and demonstrate why Qwest's language is the appropriate language and should be adopted by the Commission.

III. EXECUTIVE OVERVIEW

Q. PLEASE PROVIDE A GENERAL SUMMARY OF THE ISSUES YOU ADDRESS IN YOUR TESTIMONY.

A. Although I address a variety of sub-issues, my testimony addresses two major issues that are critical to the ICA: (1) Voice over Internet Protocol ("VoIP") issues and (2) Virtual NXX ("VNXX") issues.

VoIP Issues:

- The first issue I address is the proper definition of VoIP. True VoIP calls are calls initiated through the use of IP-compatible equipment over a broadband connection. Calls initiated over typical customer premises equipment ("CPE") on the public switched telephone network ("PSTN") are not VoIP calls. Through my exhibits, I illustrate valid VoIP calls and describe other calls that Level 3 improperly claims are VoIP.

- I point out that VoIP is treated as an information service under FCC rules, which means that the "ESP ("enhanced service provider") exemption" applies to VoIP calls under certain circumstances. Under the exemption, the location of the ESP Point of Presence ("POP") (also referred to as the "VoIP provider POP"), rather than the VoIP customer, is treated as the end user customer for purposes of determining whether a call is local or interexchange. Level 3's position is based on an erroneously broad reading of the "ESP exemption." Contrary to Level 3's position, there is no FCC rule or policy that "exempts" information service providers or calls from the normal rules governing classification of calls as local or interexchange—the rule simply allows the ESP to purchase end user services, and thus moves the customer premises for analysis purposes from the actual VoIP customer's premises to the location of the ESP POP.

- I comment on a variety of specific language submitted by Qwest and Level 3 related to VoIP issues and demonstrate that Level 3's proposed language would treat all VoIP calls as though they were local. I demonstrate that this is merely a convenient fiction to avoid appropriate intercarrier compensation. When a Qwest end user customer originates a call destined for a remote VoIP POP (that is, a POP located outside of the local calling area ("LCA") of the originating caller), that call must be treated as an interexchange call for all purposes. Likewise, when Qwest receives a call from a remote VoIP POP for termination

in a different LCA that call should also be treated as an interexchange call for all purposes.

- By essentially pretending that VoIP calls from one LCA to another LCA are local calls, Level 3 seeks special treatment for calls that, from the perspective of the PSTN, are no different than other interexchange calls. Level 3's proposals, if adopted, would dramatically undermine existing intercarrier compensation and subject carriers to disparate treatment and create a windfall for Level 3 at the expense of Qwest and its customers.

- Qwest's proposed language treats VoIP calls consistently with current intercarrier compensation plans. Local VoIP calls should be treated like other local calls, including making them subject to reciprocal compensation, while VoIP calls that are interexchange in nature should be subject to appropriate state and federal access tariffs.

VNXX Issues

- I first define VNXX, which is the inappropriate use by CLECs of local telephone numbers that CLECs are able to obtain for calls that are actually terminated to customers (usually ISPs) located in different LCAs than the party making the call.

- I demonstrate that the proper means of determining whether a call is local or interexchange is based on the physical locations of the parties to the call and not, as Level 3 proposes, based on the telephone numbers. Level 3's proposal would result in calls that are interexchange in nature being treated as though they were local calls.

- Level 3's language acknowledges that with VNXX traffic the called and calling parties are in different LCAs. Nevertheless, Level 3 would require treating the call as local and the payment of reciprocal compensation on all VNXX traffic. By, in effect, treating such traffic as local in nature, Level 3 creates a convenient fiction that dramatically changes the distinction between local and interexchange calls. Thus, Qwest would be required to transport large amounts of interexchange traffic from distant towns to Level 3 for free, and then be required to pay intercarrier compensation to terminate the traffic.

- I describe that Qwest's foreign exchange ("FX") services was grandfathered in 1983 by the Commission. I also describe other Qwest services that bear some resemblance to FX service and point out the critical distinctions between those

services and VNXX traffic: a Qwest customer (1) actually buys a local connection in the LCA it wants local access to at the appropriate local exchange rates and (2) bears the full financial responsibility to transport that traffic back to the LCA where the call is answered. Under VNXX, the CLEC does neither.

Other Issues

- I address numerous other issues, most of them definitional in nature, that relate to the VNXX and VoIP issues. In most cases, the Level 3 language is designed to provide special treatment to its VoIP and VNXX traffic, while Qwest's language, which has been adopted in many other interconnection agreements and is consistent with SGAT language in effect in Oregon, is designed to treat Level 3's traffic in a manner consistent with how the Commission has determined that local and interexchange traffic should be handled with other carriers.

IV. DISPUTED ISSUE 16: DEFINITION OF VOIP

Q. BEFORE DEALING WITH THE DEFINITIONAL DISPUTES RELATING TO VOIP, PLEASE PROVIDE A BRIEF GENERIC DISCRIPTION OF VOIP.

A. I will begin by describing the manner in which voice communications have taken place on the public switched telephone network (PSTN) for decades. The PSTN is a circuit based, switched network that employs an analog protocol called Time-Division Multiplexing ("TDM") to transmit voice messages. When one customer calls another customer under these circumstances, an actual circuit must be established between the two callers and that circuit remains in place for the duration of the call. Thus, when such a call is made, each party's loop is used for the duration of the call, as are the portions of switches and other facilities through which the call is routed. Such calls, because of the physical circuit that must be connected from end to end, are often referred to as "circuit-switched."

Both physically and conceptually, VoIP is different. Rather than being based on an actual physical circuit, VoIP is based on digital packets that are created in a digital format known as Internet Protocol or "IP." Thus, a VoIP call must be initiated by an end user in IP through the use of IP compatible equipment,[1] which converts the

[1] The FCC, in its recent VoIP 911 order, described IP Compatible equipment:

> "The term "IP-compatible CPE" refers to end-user equipment that processes, receives, or transmits IP packets. Users may in some cases attach conventional analog telephones to certain IP-compatible CPE in order to use an interconnected VoIP service. For example, IP-compatible CPE includes, but is not limited to, (1) terminal adapters, which contain an IP digital signal processing unit that performs digital-to-audio and audio-to-digital conversion and have a standard telephone jack connection for connecting to a conventional analog telephone; (2) a native IP telephone; or (3) a personal computer with a microphone and speakers, and software to perform the conversion (softphone).

conversation into multiple digital IP packets of information (each of which represents a small digitized portion of the voice call between the parties). Instead of passing over a single circuit, each packet is capable of independently traveling a different route than other packets. Once the packets are created by the IP-compatible CPE, they are individually forwarded onto the Internet by routers. As noted, because no specific circuit must be established, a traditional circuit switch is not necessary to establish a circuit and the packets do not necessarily follow the same path (this is one of the reasons the Internet is often depicted as a cloud rather than a physical connection from one point to another).

Thus, the first distinguishing characteristic of VoIP is that it must be initiated at the end user premise in IP using IP-compatible CPE. The second characteristic is that the VoIP call must be initiated over a broadband connection such as cable modem or DSL that does not pass through the PSTN local switch.

There are two types of VoIP calls that meet these two defining characteristics. One of the types is irrelevant to this case, while the other type of VoIP call is at the very center of the VoIP issues before the Commission in this docket.

The first type of VoIP call takes place between two VoIP customers, both served by a broadband connection. The call is, of course, initiated in IP over a broadband connection. When the called party is also a VoIP customer on a broadband connection, the call is never converted into TDM (the language of the circuit-

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First Report and Order and Notice of Proposed Rulemaking, *In the Matters of IP-Enabled Services E911 Requirements for IP-Enabled Service Providers*, FCC 05-116, ¶ 24, n. 77 (June 3, 2005) (citations omitted).("*FCC VoIP 911 Order*").

switched PSTN). Instead, the packets are transported over the Internet directly to the called party, where the called party's IP compatible equipment reassembles the packets in the proper order so they become a voice conversation again. The breakdown into IP packets, the transmission of the individual packets, and the reassembly of the IP packets into voice sounds all take place on the Internet or a private IP network. If, as in the foregoing example, a call goes from one IP capable piece of equipment to another IP capable piece of equipment, over broadband connections through transmission IP packets, the call is completed without ever touching the circuit switched PSTN. Thus, this type of call is a VoIP call, but it does not interconnect with the PSTN in any manner. Because such calls originate and terminate in IP format, they are often referred to as "IP-IP calls." They occur entirely over the Internet, are not exchanged between carriers, and there are therefore no intercarrier compensation or other interconnection issues that result from IP-IP traffic. Such calls are therefore completely irrelevant to the issues in this case.

The second type of VoIP is central to the VoIP issues in this docket. This is a call that is initiated through IP-compatible CPE over a broadband connection, but the called party is not a VoIP customer. Instead, the called party is a typical customer served on the PSTN by a loop attached to a circuit switch and whose CPE is not IP-compatible. In this situation, the exchange of traffic is completely different than in the first type of call. In order to complete the call, the IP packets created by the equipment of the calling party must, at some point (a function of the VoIP provider's equipment, either leased or owned) be converted into a TDM voice format, transferred to the PSTN on a connection that will route through circuit

switches to the end office serving the customer, and finally sent over the loop to the called customer. This type of call, which is often referred to as an "IP-TDM" call because it was originated in IP format and terminated to the PSTN in TDM format, is an Interconnected VoIP call (hereafter VoIP) because it meets the criteria of originating in IP format using IP-compatible CPE over a broadband connection. It is terminated, however, using TDM-based transport, local switching, and loops. This type of call creates intercarrier compensation and other issues that must be dealt with in this docket.

There is a third type of call that, while it is not a VoIP call, is an issue here because of the manner in which Level 3 has defined VoIP traffic. In this type of call, the call is originated in TDM format, but the carrier (most likely for network efficiency reasons) decides to transport the call from two points in IP before reconverting it into TDM for delivery. Although this call was in IP format for part of the transmission, it both originates and terminates in TDM. Such calls are often referred to as "TDM-IP-TDM calls" or as "IP in the middle" calls. Because such calls do not meet the criteria for VoIP described above, they are not VoIP and are subject to typical intercarrier compensation rules.

Q. PLEASE DESCRIBE THE PARTIES' DISPUTE RELATING TO ISSUE 16.

A. Issue 16 focuses on the appropriate definition of VoIP in the context of the second type of call described above, traffic originating from a VoIP customer in IP that is terminated over the PSTN in TDM. It is this type of traffic that raises issues in this docket. The first type (IP-IP), because it never enters the PSTN, is not addressed by the ICA. As previously discussed, the third type of call (TDM-IP-TDM), does

not meet the criteria for VoIP.

Q. WHAT IS QWEST'S LANGUAGE PROPOSAL FOR THE DEFINITION OF VOIP?

A. Qwest's proposal for the definition of VoIP is as follows:

> "VoIP" (Voice over Internet Protocol) traffic is traffic that originates in Internet Protocol at the premises of the party making the call using IP-Telephone handsets, end user premises Internet Protocol (IP) adapters, CPE-based Internet Protocol Telephone (IPT) Management "plug and play" hardware, IPT application management and monitoring hardware or such similar equipment and is transmitted over a broadband connection to the VoIP provider. VoIP is treated as an Information Service, and is subject to interconnection and compensation rules and treatment accordingly under this Agreement based on treating the VoIP Provider Point of Presence ("POP") is an end user premise for purposes of determining the end point for a specific call. Thus, CLEC is permitted to utilize LIS trunks to terminate VoIP traffic under this Agreement only pursuant to the same rules that apply to traffic from all other end users, including the requirement that the VoIP Provider POP must be in the same Local Calling Area as the called party."

Q. WHAT IS THE DIFFERENCE BETWEEN QWEST'S AND LEVEL 3'S PROPOSED DEFINITIONS OF VOIP?

A. It is easy to see the distinction between the two companies' positions by looking at the language in dispute. Qwest's proposed definition of VoIP traffic is shown in the paragraph below; all of Level 3's proposed changes are in bold face type and the language Level 3 proposes to be deleted is shown as a strikethrough. Where Level 3 seeks to add additional language to the paragraph, the proposal is shown in a bold underlined format.

> "VoIP" (Voice over Internet Protocol) traffic is traffic that originates in Internet Protocol **~~at the premises of the party making the call~~** using IP-Telephone handsets, **~~end user premises~~** Internet Protocol (IP) adapters, CPE-based Internet Protocol Telephone (IPT) Management "plug and play"

hardware, IPT application management and monitoring hardware or such similar equipment and is transmitted over a broadband connection to **or from** the VoIP provider. ~~**VoIP is treated as an Information Service, and is subject to interconnection and compensation rules and treatment accordingly under this Agreement based on treating the VoIP Provider Point of Presence ("POP") as an end user premise for purposes of determining the end point for a specific call. Thus, CLEC is permitted to utilize LIS trunks to terminate VoIP traffic under this Agreement only pursuant to the same rules that apply to traffic from all other end users, including the requirement that the VoIP Provider POP must be in the same Local Calling Area as the called party**~~

Qwest's definition is pictorially illustrated in Exhibit Qwest/3 attached to this testimony.

Q. WITH THAT BACKGROUND, PLEASE DESCRIBE THE ISSUES THAT ARE RAISED BY THE COMPETING VOIP DEFINITIONS.

A. The ultimate issues relate to intercarrier compensation. Qwest's definition centers on two basic issues related to VoIP:

1) What requirements must be met to permit a VoIP provider to terminate calls using a local exchange product for its connection rather than a Switched Access (Feature Group D) connection?

2) Assuming a VoIP provider is eligible to purchase a local exchange service connection, how are calls handled that terminate within and outside the LCA in which the VoIP provider is physically located?

Q. WHY DOES THE QWEST DEFINITION REQUIRE THAT A VOIP CALL ORIGINATE IN IP OVER A BROADBAND FACILITY USING IP EQUIPMENT IN ORDER TO BE ENTITLED TO TERMINATION THROUGH A LOCAL NETWORK CONNECTION?

A. The first reason is simply that this definition appears to be consistent with the way the FCC has thus far defined VoIP.

The second reason is far more complicated. It relates to a historic category of providers known as "Enhanced Service Providers" or "ESPs." Under current FCC rules (all of which are subject to being changed when the FCC makes its final decisions on these issues) providers of VoIP are considered to be ESPs. ESPs are entitled to terminate calls through a local service connection to the PSTN purchased from a local tariff or local catalog under certain circumstances. But a VoIP provider is considered an ESP only if the call meets the fundamental requirements to qualify as VoIP: the call must originate in IP through the use of IP-compatible CPE over a broadband facility. This is the only type of call that meets the definition of VoIP proposed by Qwest.

If a call originates as a voice call on the PSTN and is then terminated as a voice call on the PSTN, this is a TDM-IP-TDM or "IP in the middle" call, which is subject to typical intercarrier compensation rules: if it is a local call, it is subject to reciprocal compensation; if it is an interexchange (toll) call it is subject to access charges such as Feature Group D. The FCC ruled in the *AT&T Declaratory Ruling* that this type of call is not a VoIP call even if at some point during the call it was converted to IP because, before delivery, it was reconverted to TDM and delivered over the PSTN.[2] Since, in this proceeding, we are only addressing the calls that Qwest is being asked

[2] Order, *In the Matter of Petition for Declaratory Ruling that AT&T's Phone-to-Phone IP Telephony Services are Exempt from Access Charges*, WC Docket No. 02-361, FCC 04-97, 19 FCC Rcd 7457, ¶¶ 12-13 (April 14, 2004) (ruling that AT&T's service was a telecommunications service and is subject to access charges) ("*AT&T Declaratory Ruling*").

to terminate on the PSTN, the termination of each call is in TDM over the PSTN. Thus, if the call is not originated in IP over a broadband facility, it will originate and terminate in traditional PSTN format, thus losing its current status as an enhanced or information service call, and access charges will apply if it is an interexchange call.

Q. YOU MENTIONED THE ESP EXEMPTION. PLEASE DESCRIBE IT FOR US?

A. First, the ESP exemption is relevant to this docket because, under current rules that are the subject of ongoing FCC consideration, true VoIP service qualifies as an "information service." Thus, VoIP providers served by Level 3 are entitled to receive service pursuant to the ESP exemption, but only in very specific circumstances. All of this ultimately becomes relevant to how VoIP is defined and to the intercarrier compensation regime that applies under certain circumstances. Thus, it is important for the Commission to understand the fundamentals of the ESP exemption.

The ESP exemption has a long history with the FCC. It was originally established at the time access charges were established following the Modified Final Judgment (MFJ) that governed the divestiture of the old Bell System. While establishing the access charge regime in use today for all interexchange carriers ("IXCs"), the FCC permitted ESPs to connect their POP to the local network via local exchange service as opposed to Feature Group services that IXCs were (and still are) required to purchase, even though the ESPs used the local exchange facilities for interstate

access. The ESP exemption was never really an exemption at all—it was simply a regulatory decision that, for a variety of policy reasons, interstate access by ESPs located within a LCA would be treated as local for purposes of assessing the correct access charge. Thus, under the exemption, the ESP can order a local service connection to its POP in the same manner as the service can be ordered by other end users located within a particular LCA. In other words, under the ESP exemption, the ESP is treated like an end user as opposed to an IXC for purposes of obtaining access to a LCA. In that LCA, the ESP can obtain the same business services that any other end user business can obtain on a retail basis. The effect of the exemption, then, is that unlimited calls may be terminated by the ESP within such LCAs and it will be charged typical retail business rates instead of access charges to do so. But that is the extent of the exemption. For example, to the extent the ESP seeks to terminate calls to customers within the LATA but outside that LCA, the exemption does not apply and the calls will be handed off to the end user's (ESP's) Primary Interexchange Carrier ("PIC") choice for delivery to the other LCA. Exhibit Qwest/4 depicts the two examples. In Qwest/4, I depict the termination of VoIP calls from the Internet through valid routing. When the VoIP provider and the end user are in the same LCA, the ESP (Level 3 in the exhibit) obtains a local connection to the network by purchasing Local Interconnection Service ("LIS") in Portland. In this example, the call is handed off by the ESP within the Portland LCA for termination to a Qwest end user also in the Portland LCA via the LIS trunk. The exhibit further shows a call where the ESP is within the Portland LCA and the Qwest end user is located in the Salem LCA. The call is routed through use of the PICed IXC using FGD trunks for termination to the end

user. This is explained in more detail in the following section.

Q. PLEASE DESCRIBE THE REQUIREMENT THAT CALLS WITHIN THE LCA WHERE THE VOIP PROVIDER PURCHASES A LOCAL CONNECTION ARE LOCAL AND CALLS BOUND FOR LOCATIONS OUTSIDE THE LCA ARE TOLL?

A. Under current rules, a voice call between separate LCAs is a toll call and must be treated as such. This rule applies equally to VoIP. Thus, when a call is originated in IP format on IP-compatible equipment and is handed off to Qwest within a LCA where the ESP is located, but the call is being sent for termination to another LCA, the provider is not entitled to free transport to the terminating LCA under the ESP exemption or on any other basis, nor is it allowed to connect to the terminating LCA as an end user under the ESP exemption if it does not have a physical presence in that LCA. Calls of this sort are properly classified as interexchange traffic and must be handed off to an IXC, which must connect to Qwest via a Feature Group connection. Assuming a call is VoIP, and has been converted from IP protocol to PSTN protocol, the call can be delivered to Qwest over LIS trunks if, and only if, the hand off to Qwest is for termination of the call within the same LCA as the VoIP provider's POP. Because the VoIP provider (as an ESP) purchases its connection to the local network as an end user, the call will be treated as a local call and no access charges would apply if the call is sent to a party physically located in the same LCA as the VoIP provider's POP. It would also be treated as a local call for purposes of 251(b)(5) reciprocal compensation purposes. If the hand off is for termination at a distant local exchange outside of the LCA where the VoIP POP is located, the call (assuming the called party is a Qwest

customer) must be delivered to Qwest on FGD for termination to that LCA. The second call example on Exhibit Qwest/4 shows a call from a VoIP provider's POP (end user) in Portland that seeks to complete a call to Salem. In that example the call is handed off to the IXC PICed by the end user (or by the VoIP Provider), and the IXC delivers the call to Salem over FGD. If the VoIP Provider purchases a local connection from its POP to the Qwest local switch in Portland, then Qwest's switch will recognize the call to Salem as a toll call and route the call to the appropriate IXC. If the VoIP Provider purchases a local connection from its POP to the Level 3 switch in Portland then Level 3's switch is required to route the call to an IXC.

Because the ESP is entitled to purchase a local connection in the Portland LCA rather than a FGD connection to terminate VoIP traffic in the Portland LCA, the calls from the Portland VoIP POP to parties located in the Portland LCA are treated as local calls. This is true whether the VoIP provider purchases that local connection from Qwest or Level 3. But the ESP exemption does not extend beyond the LCA in which the ESP has a presence. Thus, calls from a VoIP POP in Portland to Qwest end users in Salem, or, for that matter, to end users in New York or Hong Kong, are required to be routed to an IXC for completion. In those cases, the IXC, not the VoIP provider, will pay access charges associated with transporting and terminating the call. The foregoing examples demonstrate the status of the proper application of the FCC ESP exemption and the proper routing and intercarrier compensation for interexchange calls under current rules.

Q. THE FCC HAS DISTINGUISHED VOIP TRAFFIC THAT CONNECTS TO

THE PSTN FROM VOIP TRAFFIC THAT IS TRANSPORTED SOLELY OVER THE INTERNET OR A PRIVATE IP NETWORK. IS THE DISTINCTION RELEVANT TO THE DISCUSSION OF VOIP IN AN INTERCONNECTION AGREEMENT?

A. Absolutely. The FCC has been careful to distinguish VoIP traffic that connects to the PSTN from VoIP traffic that is handled entirely by the Internet, specifically using the term "interconnected VoIP services" to describe "those VoIP services that can be used to receive telephone calls that originate on the PSTN and can be used to terminate calls to the PSTN."[3] The FCC singled out Interconnected VoIP services because "consumers expect that VoIP services that are interconnected with the PSTN will function in some ways like a "regular telephone" service."[4] Interconnected VoIP service was defined "as bearing the following characteristics: (1) the service enables real-time, two-way voice communications; (2) the service requires a broadband connection from the user's location; (3) the service requires IP-compatible CPE; and (4) the service offering permits users generally to receive calls that originate on the PSTN and to terminate calls to the PSTN."[5] The issues between Qwest and Level 3 with regard to VoIP relate specifically to Interconnected VoIP traffic that is terminated or transmitted to the Qwest network (i.e., to the PSTN).

Q. WHAT IS THE EFFECT OF LEVEL 3'S DELETIONS FROM QWEST'S

[3] *FCC VoIP 911 Order* ¶ 23.

[4] *Id*.

[5] *Id*. ¶ 24.

PROPOSED LANGUAGE?

A. By making these deletions, Level 3 is asking the Commission to dramatically modify the FCC prescribed method of treating ESPs. The FCC made its position very clear in the ESP Exemption order:

> "Under our present rules, enhanced service providers are treated as end users for purposes of applying access charges. See 47 C.F.R. § 69.2(m); *Northwestern Bell Telephone Company Petition for a Declaratory Ruling, Memorandum Opinion and Order, 2 FCC Rcd 5986, 5988 at para. 20 (1987)*, appeal docketed, No. 87-1745 (D.C.Cir. Dec. 4, 1987). Therefore, enhanced service providers generally pay local business rates and interstate subscriber line charges for their switched access connections to local exchange company central offices."[6]

The FCC was clear on how an ESP would be treated. Level 3's language is a direct attempt to avoid the FCC's ruling. Level 3 seeks to delete Qwest's language in an explicit attempt to avoid access charges when a call is between two LCAs (i.e., avoid access charges on calls that are clearly interexchange in nature). The Qwest language that states that the VoIP Provider's POP will be treated as an end user customer must be incorporated into the ICA because that is precisely the manner in which the ESP exemption operates (under the exemption, the ESP is treated as an

[6] Order, *In the Matter of Amendments of Part 69 of the Commission's Rules Relating to Enhanced Service Providers*, 3 FCC Rcd 2631, ¶ 2, n.8 (1988) ("*ESP Exemption Order*"). *See also id*. ¶ 20, n. 53 ("Thus, the current treatment of enhanced service providers for access charge purposes will continue. At present, enhanced service providers are treated as end users and thus may use local business lines for access for which they pay local business rates and subscriber lines charges. To the extent that they purchase special access lines, they also pay the special access surcharge under the same conditions as those applicable to end users.").

end user customer). Thus, Qwest's language that the VoIP Provider's POP will be considered as an end user customer for purposes of determining the end points of the call is essential in order to resolve any doubt that if the call is transported to another LCA in the LATA, to another LATA, to another state, or to another country, the call must be delivered to an IXC and the IXC that transports the call will be responsible for access charges. Otherwise, the ICA will enable Level 3 to provide a service to ESPs (or to itself acting as an ESP) that gives it access to Qwest's entire network essentially free of charge to terminate IXC traffic.

As Qwest understands Level 3's proposal, (which treats *all* VoIP traffic as though it were local traffic), Qwest would receive reciprocal compensation for terminating such traffic. The reciprocal compensation rate, of course, is dramatically less than FGD rates and was never designed for the termination of interexchange traffic (reciprocal compensation traditionally applies to the termination of local traffic only). Thus, Level 3's proposal would result in a fundamental restructure of intercarrier compensation on traffic that, other than the manner in which it originates, looks precisely the same to the PSTN as any other interexchange traffic. As the Commission reviews this matter, Qwest suggests that it refuse to consider such an elemental change in intercarrier compensation. Such a dramatic industry affecting change should not occur in the course of an arbitration proceeding because of the impact such a ruling would have on other parties not involved in the arbitration. To the PSTN, there is no difference between a typical interexchange

call that terminates on the PSTN (and is therefore subject to appropriate access charges) and a VoIP originated call that, once it is converted into TDM, is placed on the PSTN for termination. Qwest is unaware of any good reason, let alone a compelling reason, to treat these calls in a completely different manner for intercarrier compensation purposes. Level 3's proposal should, therefore, be rejected.

For traffic to meet Qwest's VoIP definition it must originate in IP; otherwise it is simply another call originated in TDM that terminates in TDM. Consistent with the FCC's ruling discussed above and in more detail below, Qwest's definition requires that the call originate in IP using IP CPE and be transmitted over a broadband connection to the VoIP Provider. Unless it meets these requirements it will fail to meet the criteria of the FCC in the AT&T case discussed above, where the FCC rejected AT&T's effort to avoid access charges on calls that originate and terminate in TDM.

Qwest's definition also identifies VoIP as an "information service," a contention that Level 3 does not appear to challenge. Designating VoIP as an information service in Qwest's definition makes the PSTN portion of the service subject to interconnection and compensation based on treating the VoIP Provider's POP as an end user premise. Therefore, LIS trunks may be used to terminate VoIP traffic based on rules that apply to other end users, including the requirement that the VoIP Provider's POP (served by Level 3) where the VoIP traffic is delivered to the public network be physically located in the same LCA as the called party. Other

types of VoIP calls can also be delivered to Qwest for termination, of course, but since they do not qualify for the ESP exemption, such traffic should be carried and classified as toll traffic and all existing access rules are applicable to it.

Q. WHAT IS THE EFFECT OF LEVEL 3'S FIRST TWO CHANGES?

A. Level 3 attempts to remove the requirement that the call *originate* at the end user premises and to strike the words "end user premises" when referring to "end user premises IP adapters." Origination *at the end user premises* in IP is a critical requirement that must remain in the agreement. The rationale for Level 3's effort to delete this requirement from the definition is far from clear (it certainly did not make it clear in its Petition), but it is an essential piece of the definition of VoIP. First, under the ICA, these calls will terminate on the Qwest local network (the PSTN). As mentioned above, when an end user call is originated on the PSTN, routed over PSTN loops to a PSTN switch, and Level 3 terminates the same call on the PSTN, that call does not qualify as an enhanced or information service. It is irrelevant that a VoIP provider may have converted it to IP protocol in the middle for some distance. A call not originating over broadband in IP does not meet the requirements for the ESP exemption. The FCC made this perfectly clear in 2004 in its Phone-to-Phone IP exemption decision (the "*AT&T Declaratory Order*"), where the FCC determined that a service that begins on the PSTN and ends on the PSTN, even though it may use the Internet for a portion of the transport of that service, offers no net protocol conversion, and is therefore a telecommunications service (as opposed to an information service):

> "The service at issue in AT&T's petition consists of an interexchange call that

> is initiated in the same manner as traditional interexchange calls—by and end user who dials 1+ the called number from a regular telephone. When the call reaches AT&T's network, AT&T converts it from its existing format into an IP format and transports it over AT&T's Internet backbone. AT&T then converts the call back from the IP format and delivers it to the called party local exchange carrier (LEC) local business lines. We clarify that, under the current rules, the service that AT&T describes is a telecommunications service upon which interstate access charges may be assessed. We emphasize that our decision is limited to the type of service described by AT&T in this proceeding, i.e. an interexchange service that: (1) uses ordinary customer premises equipment (CPE) with no enhanced functionality; (2) originates and terminates over the public switched telephone network (PSTN); and (3) undergoes no net protocol conversion and provides no enhanced functionality to end users due to the providers use of IP technology."[7]

Thus, if Level 3 delivers an IP long distance call to Qwest for termination on Qwest's PSTN and the call did not originate in IP over a broadband connection, the FCC has ruled that such a call is not exempt from access charges. If, however, the call originates in IP (using the appropriate IP equipment) over a broadband connection, and is then converted into traditional TDM protocol for termination on the PSTN to a local telephone number, there has been a *net protocol conversion* and the call qualifies as an enhanced or information service. Because the call delivered to Qwest for termination is always in TDM protocol, it *must* originate in IP at the originating end user premises in order to be exempt. Originating in IP can only occur over a broadband connection. If it both originates and terminates in the PSTN protocol it is not an enhanced or information service under the FCC's rules. Qwest's definitional language makes it clear that VoIP:

> "originates in Internet Protocol **at the premises of the party making the call**

[7] *AT&T Declaratory Order*, ¶ 1.

> using IP-Telephone handsets, **end user premises** Internet Protocol (IP) adapters, CPE-based Internet Protocol Telephone (IPT) Management "plug and play" hardware, IPT application management and monitoring hardware or such similar equipment and is transmitted over a broadband connection to the VoIP provider."

Qwest's language requiring that the call originate at the end user's premises in broadband is also an absolute necessity if the call is to be treated as an enhanced or information service and thus entitled to the ESP exemption. Any attempt by Level 3 to remove this requirement from the agreement will, in effect, modify the ESP exemption and authorize it to do what the FCC said AT&T could not do: take simple calls that originate on the PSTN, deliver them to Qwest in another LCA, terminate the call on the PSTN, and claim the call is exempt from access charges. Thus Level 3's first two strikethrough proposals must be rejected. The call must originate over broadband in IP to be an enhanced or information services VoIP call.

Next, Level 3 proposes some perplexing language to the VoIP definition regarding traffic direction, wanting it to read that VoIP may be "transmitted over a broadband connection to **or from** the VoIP provider." What these additional terms mean is not clear. For example, calls delivered to Qwest from a VoIP provider for termination will go through a Qwest switch and over a loop connected to that switch for termination on the PSTN to a traditional telephone. However, a call **from** the VoIP provider that transits directly to a VoIP end user customer over broadband will not go through a public network switch and thus, the PSTN is not used to complete the call.[8] As such, Qwest would not be involved in switching the call on the PSTN and

[8] The call may use Qwest facilities, but not for termination; for example, if the end user leases a direct broadband connection to the VoIP provider.

Level 3's proposed language is inappropriate. I am unaware of any other situation or scenario in which a call would come *from* the VoIP provider in broadband that would involve Qwest or the PSTN. A call not originating over broadband in IP does not meet the requirements for the ESP exemption. Qwest's language is critical to the definition and accurately limits the ESP exemption to only qualified situations. It should be adopted.

Q. WHAT IS THE THIRD CHANGE THAT LEVEL 3 PROPOSES TO THE QWEST DEFINITION OF VOIP?

A. Level 3 proposes to strike the entire remaining language from the definition. This language describes how VoIP traffic will be treated under the interconnection agreement as well as establishing the interconnection compensation rules that apply to VoIP traffic. However, while Qwest believes this language is critical and must be incorporated into the interconnection agreement, Qwest is amenable to placing the language in the main section of the agreement. Regardless of where it is placed, Qwest strongly believes language defining the treatment of VoIP traffic is necessary to avoid future disputes.

Q. HOW DO YOU PROPOSE TO INCLUDE THIS LANGUAGE IN THE AGREEMENT?

A. Section 7.2 of the ICA addresses exchange of traffic. A subset of that section, 7.2.2, discusses the terms and conditions for the exchange of traffic. The terms and conditions describing the exchange of VoIP traffic should be located in the next available subsection, 7.2.2.12. I propose the remaining language from the definition of VoIP above be inserted under section 7.2 as follows: NOTE: 7.2.2.12

is not in the ICA agreement filed by either Qwest or Level 3 in Oregon

> 7.2.2.12 VoIP Traffic. VoIP traffic as defined in this agreement shall be treated as an Information Service, and is subject to interconnection and compensation rules and treatment accordingly under this Agreement based on treating the VoIP Provider Point of Presence ("POP") is an end user premise for purposes of determining the end points for a specific call.
>
> > 7.2.2.12.1 CLEC is permitted to utilize LIS trunks to terminate VoIP traffic under this Agreement only pursuant to the same rules that apply to traffic from all other end users, including the requirement that the VoIP Provider POP must be in the same Local Calling Area as the called party.

Q. LEVEL 3 OBJECTS TO THE REQUIREMENT THAT THE VOIP PROVIDER POINT OF PRESENCE (POP) BE CONSIDERED AN END USER FOR PURPOSES OF DETERMINING THE END POINTS OF A CALL. PLEASE COMMENT?

A. The language requiring that the VoIP POP be treated as an end user customer is critically important due to the ESP exemption, and must be included somewhere in the agreement. Since both Level 3 and Qwest agree that the traffic that is handed off to the PSTN from the VoIP POP arrived over the Internet and is an alternative to traditional IXC traffic, the only real question is whether or not the VoIP provider must purchase FGD to terminate its calls. In answer to that question, the FCC has said no. *If* the VoIP provider is acting as an ESP, it is entitled to purchase its connection as a local exchange service and obtain local service *within the LCA where it is physically located.* In this respect, the ESP is treated as any other end user.

Q. BASED UPON THESE FACTS WHAT SHOULD THE COMMISSION DO

WITH RESPECT TO ISSUE 16, DEFINITION OF VOIP?

A. For all the reasons stated above, the Commission should adopt Qwest's proposed definition of VoIP that includes the requirement that the call must originate at the premises of the party making the call, through the use of IP-compatible CPE, over a broadband circuit in IP to avoid the scenario of calls that both originate and terminate as PSTN calls. Further, consistent with the proper criteria for VoIP and with the FCC's ESP exemption, PSTN to PSTN calls are not VoIP and are not entitled to the ESP exemption under FCC decisions. Qwest's proposed language for sections 7.2.2.12 and 7.2.2.12.1 make clear that VoIP traffic ***as defined in this agreement*** will be treated as an information service, will be entitled to the enhanced services exemption, and the VoIP providers POP will be treated as an end user premise for purpose of determining the end points of a call. This will ensure that the intrastate access regime as currently adopted and approved by this Commission is not changed at this time. The Commission, therefore, should adopt Qwest's proposed language.

Q. PLEASE SUMMARIZE QWEST'S BASIC POSITIONS ON VOIP.

A. The first issue is the proper definition of VoIP. Consistent with FCC decisions, there are two key essential features that must be present for a VoIP call: (1) the call must originate on IP-compatible CPE (both Qwest's and Level 3's language provides greater detail on the proper description of such CPE) and (2) it must also originate on a broadband connection, such as DSL, cable modem, or other equivalent high-speed connection to the Internet. If these two criteria are not met, then the call cannot be deemed to be VoIP.

In the context of that definition, three types of calls must be considered: (1) calls that meet the criteria for VoIP traffic that are terminated to another VoIP customer who likewise has IP-compatible CPE and served over a broadband connection (commonly referred to as IP-IP traffic); (2) calls that meet the criteria for VoIP traffic, but which are terminated to a customer served on the PSTN on a telephone line to a customer that uses traditional telephone CPE (commonly known as IP-TDM traffic); and (3) traffic that originates in TDM but which is converted to IP at some point and then converted back to TDM for delivery to the called party (commonly known as "TDM-IP-TDM" or "IP in the middle" traffic).

Q. PLEASE ADDRESS EACH TYPE OF TRAFFIC AND DESCRIBE QWEST'S POSITION AS TO THE PROPER TREATMENT OF EACH UNDER THE INTERCONNECTION AGREEMENT.

A. I will first address IP-IP traffic. This type of traffic clearly meets the criteria for VoIP. However, because both the calling and called parties are VoIP customers served by broadband connections, the call remains in IP, is transported entirely over the Internet, and never enters the PSTN. Thus, it is not relevant to the interconnection agreement at issue in this docket.

Q. PLEASE DISCUSS IP-TDM TRAFFIC.

A. From Qwest's perspective, this is the only VoIP traffic at issue in this docket. IP-TDM traffic meets the criteria for VoIP traffic because it is originated with IP-compatible CPE over a broadband connection.

There is really only one specific implication of the status of IP-TDM traffic as VoIP traffic that distinguishes it from the rules that apply to other traffic. That is the application of the so-called ESP exemption. Both parties agree that, until the FCC definitively rules on the issue, VoIP will be treated as an "information service" under the Act. Thus, under certain circumstances, the provider of true VoIP service is classified as an ESP and, where applicable, qualifies for the exemption. While it is unclear from the Level 3 Petition, Level 3 appears to believe the exemption applies much more broadly than Qwest believes it does. Under the proper application of the exemption, a VoIP provider is treated as an end user customer for purposes of access to a LCA in which the VoIP provider maintains a POP. Level 3 however, appears to believe that, either through the application of the ESP exemption or for some other undisclosed reason, VoIP providers are entitled to LATA-wide exemption from access charges. Qwest adamantly opposes that position on both legal and policy grounds. Thus, for purposes of termination of IP-TDM traffic in the LCA in which the VoIP provider POP is located, the VoIP provider is allowed to terminate that traffic with Qwest through the same types of retail services available to other business end users as opposed to being required to originate and terminate traffic through access charges. But that is the full extent of application of the exemption.

Thus, for all other applications of intercarrier compensation, the same rules that

apply to all other traffic apply to IP-TDM traffic. Rather than determining the application of these rules from the physical location of the VoIP end user customer that actually originates the call, the VoIP provider POP is treated as the end user location. Thus, as explained in the next section, if the VoIP provider POP is physically located in the same LCA as the called party, the call is treated as local, and reciprocal compensation would apply. Likewise, if the VoIP provider POP is in a different LCA from the called party, the call is an interexchange call that should be handed off to the IXC selected by the end user customer, which transports the call to the LCA of the called party, where Qwest terminates it to its end user customer. The IXC would pay the appropriate access charges to terminate the traffic.

In summary, under Qwest's proposed language, other than for the application of the ESP exemption, IP-TDM traffic should be treated in the same manner as other similar traffic. Level 3 appears to propose that these traditional means of intercarrier compensation be completely scrapped in favor of treating all VoIP as though it were local traffic. Level 3 has not offered any compelling legal reason why VoIP should be given special treatment. There is certainly no good policy reason. It is easy to see why Level 3 wants to change the compensation scheme in such a radical manner: it would allow Level 3 or its VoIP provider customers to avoid charges that other identically-situated carriers must pay. Qwest strongly opposes such an approach.

Q. PLEASE DISCUSS TDM-IP-TDM (IP IN THE MIDDLE) TRAFFIC.

A. While Level 3 also appears to seek special treatment for this traffic, it should not be treated in any special manner. Because this traffic originates in TDM, it does not meet the criteria for VoIP traffic. Therefore, as the FCC clearly ruled in the AT&T decision, this traffic is not VoIP, is not an information service (and thus does not qualify for the ESP exemption), and therefore is not exempt from access charges that apply to other carriers in identical circumstances. Thus, Qwest's language treats this type of traffic no different than any other TDM originated traffic for intercarrier compensation purposes. The Commission should reject Level 3's efforts to remove this traffic from existing intercarrier compensation rules and should adopt Qwest's language.

V. DISPUTED ISSUE 1A: SECTION 7.1.1.1 OPERATION AUDITS

Q. PLEASE DESCRIBE THE PARTIES' DISPUTE RELATING TO ISSUE 1A ?

A. This dispute first highlights the reason that I am addressing the issues in a different order than that presented by Level 3. In its petition and matrix, Level 3 lists issue 1A as the first of its Tier 1 issues. This single issue number, 1A, has three Qwest proposed paragraphs, and six Level 3 proposed paragraphs, even though in some instances they have the same number; for example in 7.1.1.1, the two paragraphs are totally unrelated and deal with totally different issues. My testimony in this section will deal with two of the Qwest proposed paragraphs, 7.1.1.1 (Verification audits), and 7.1.1.2 (VoIP certification). Although this is listed as the first issue on Level 3's matrix, an understanding of the parties disagreement over what VoIP is, which I discussed above in issue 16, is necessary to understand the dispute about the language of 7.1.1.1. The third Qwest proposed paragraph in issue 1A is 7.1.1, which deals with points of interconnection. Mr. Easton and Mr. Linse will address that in their testimony along with the six Level 3 proposed paragraphs in issue 1A.

Q. WHAT IS QWEST'S PROPOSED LANGUAGE FOR 7.1.1.1?

A. Qwest's proposal for section 7.1.1.1 states:

> 7.1.1.1. CLEC agrees to allow Qwest to conduct operational verification audits of those network elements controlled by CLEC and to work cooperatively with Qwest to conduct an operational verification audit of any other provider that CLEC used to originate, route and transport VoIP traffic that is delivered to Qwest, as well as to make available any supporting documentation and records in order to ensure CLEC's compliance with the obligations set forth in the VoIP definition and elsewhere in this Agreement. Qwest shall have the right to redefine this traffic as Switched Access in the event of an "operational verification audit failure". An "operational verification audit failure" is defined as: (a) Qwest's inability to conduct a

post-provisioning operational verification audit due to insufficient cooperation by CLEC or CLEC's other providers, or (b) a determination by Qwest in a post-provisioning operational verification audit that the CLEC or CLEC's end users are not originating in a manner consistent with the obligations set forth in the VoIP definition and elsewhere in this Agreement.

Q. WHAT IS LEVEL 3'S LANGUAGE PROPOSAL FOR SECTION 7.1.1.1?

A. Level 3's language is somewhat confusing. Apparently because Level 3 does not believe there should be any provision in the contract for audits to assure the traffic is VoIP, Level 3 offers no changes to Qwest's proposed language and simply wants it stricken. Because Level 3 presumably believes the Qwest language will be stricken, Level 3 went ahead and used the 'available' number 7.1.1.1 to introduce an unrelated issue dealing with single point of interconnection (SPOI). My testimony will address the Qwest proposed 7.1.1.1 dealing with verification audits of VoIP traffic and which will require Commission resolution and a decision on the situations in which Qwest's 7.1.1.1 is acceptable. Mr. Easton's testimony will address the SPOI issue. In addressing the dispute with Level 3 over the SPOI, he will address the second proposed paragraph numbered 7.1.1.1 (Level 3's SPOI language).

Q. WHAT IS THE DISPUTE WITH REGARD TO QWEST'S PROPOSED PARAGRAPH 7.1.1.1?

A. Level 3 seeks to strike Qwest language which is necessary so that Qwest can verify that the traffic that Level 3 identifies as VoIP traffic is valid VoIP traffic entitled to the ESP exemption. Determining whether the traffic is proper VoIP traffic has implications for a determination of whether it is local or interexchange for the application of the appropriate intercarrier compensation regime. Thus, the proper

classification of traffic impacts the compensation obligations of both Qwest and Level 3. Only traffic that qualifies as an Enhanced or Information Service is entitled to the ESP exemption. Only VoIP traffic that originates on broadband in IP can be terminated on the PSTN in TDM protocol under the ESP exemption. Thus, verification is critical.

First, the Qwest proposed language gives Qwest the right to do a verification audit to assure that the VoIP traffic being delivered to Qwest for termination complies with the definition and obligations of VoIP in this agreement. As discussed above, the definition of VoIP is strongly disputed. Second, the contract makes clear that when traffic does not qualify for the ESP exemption, an exemption that alleviates the requirement to purchase switched access connections to the local network, that Qwest has the right to redefine the non-qualifying traffic as Switched Access. If the traffic does not qualify for the ESP exemption, then the only other connection to the PSTN available is a Feature Group connection such as FGD.

Q. WHAT IS THE FUNDAMETAL DISPUTE RELATED TO THIS LANGUAGE?

A. Qwest and Level 3 are not in agreement regarding intercarrier compensation for VoIP traffic that does not originate and terminate at physical locations within the same LCAs. The VoIP compensation issue will be discussed in more detail in Issue 3B of my testimony regarding compensation for ISP Traffic. Level 3 apparently does not agree that Qwest has the right to recognize VoIP traffic as Switched Access in the event of an "operational verification audit failure," because Level 3 takes the position that Switched Access rates should never apply to VoIP traffic, no

matter where calls originate or terminate.

Q. DOES QWEST BELIEVE THAT OPERATIONAL AUDITS ARE NECESSARY?

A. Absolutely. Qwest believes that audits are necessary to verify the jurisdiction of a call by ensuring that a VoIP call is properly classified for billing purposes according to the location of the originating and terminating points of the PSTN portions of the call. Qwest also believes that audits are necessary to ensure that calls that are classified as VoIP are properly identified as VoIP calls in compliance with the FCC's definition of VoIP, which is the basis of Qwest's proposed definition of VoIP. Again, as discussed above, Level 3's definition of VoIP does not conform to the definition provided by the FCC.

Q. DOES LEVEL 3 OFFER ANY OTHER SOLUTION THAT WOULD ENABLE QWEST TO IDENTIFY VOIP TRAFFIC?

A. No. While Level 3 does not address audits for VoIP traffic, it does state in its Petition that approval of Level 3's proposed definition of "call record" would allow the Parties to identify and account for the exchange of such traffic in a relatively easy process. I can only assume that Level 3 believes such call records are sufficient verification. As Mr. Linse addresses in his testimony, there is no technical way to identify VoIP today, and reliance on an optional parameter input by Level 3 is not a solution. Qwest has also found with CLECs in the past, through sampling, that even though some call records indicate a local call, the call in fact has been a toll call, and the records did not indicate that access charges were applicable.

Q. HAVE THE PARTIES AGREED TO AUDIT PROVISIONS ELSEWHERE IN THIS CONTRACT?

A. Yes. As a matter of fact, an entire section, section 18, of the agreement is devoted to the procedures for auditing "books, records, and other documents used in providing services under this Agreement."[9] In addition to the provisions of section 18, the parties have agreed to audit provisions for safety audits,[10] service eligibility audits for high capacity combination or commingled facilities,[11] Qwest's loop information,[12] and a comprehensive audit of Qwest's use of CLEC's Directory Assistance Listings.[13]

Q. HAS LEVEL 3 PROPOSED OTHER AUDIT PROVISIONS?

A. Yes. In Level 3's proposed section 7.3.9, which is covered under Disputed Issue 18, Level 3 includes proposed paragraph 7.3.9.5.1 for auditing of company factors. As a matter of principle, and as evidenced by the provisions the parties have agreed to, Qwest does not oppose the inclusion of audit provisions, and the audit provision included in disputed issue 18 is not the reason that Qwest opposes Level 3's proposed language, as Mr. Easton will explain. It is apparent from Level 3's proposal and from the agreed upon language elsewhere in this agreement Level 3

[9] See Section 18.1.1 of the agreed to language in the proposed contract.

[10] See Section 8.2.3.10 of the agreed to language in the proposed contract.

[11] See Section 9.1.1.10.5 et seq. of the agreed to language in the proposed contract.

[12] See Section 9.2.2.8 of the agreed to language in the proposed contract.

[13] See Section 10.5.2.10.1 of the agreed to language in the proposed contract.

does not oppose audits in general. But for reasons yet to be explained, Level 3 opposes the audit provision proposed by Qwest in section 7.1.1.1 dealing with the origination and routing of VoIP calls.

Q. SHOULD THE COMMISSION ADOPT QWEST'S LANGUAGE FOR SECTION 7.1.1.1?

A. Yes. To ensure fair and accurate billing for VoIP traffic, the Commission should approve Qwest's proposed language for section 7.1.1.1.

VI. DISPUTED ISSUE 1A: SECTION 7.1.1.2 CERTIFICATION

Q. PLEASE DESCRIBE THE PARTIES' DISPUTE RELATING TO 7.1.1.2 VOIP CERTIFICATION.

A. The disagreement identified in section 7.1.1.2 is similar to 7.1.1.1. Level 3's Petition is silent on Level 3's opposition to proposed section 7.1.1.2. Qwest's proposed 7.1.1.2 addresses VoIP certification consistent with the VoIP configurations as defined in the agreement. Instead of addressing Qwest's proposed language, Level 3 remains silent on the VoIP certification process and proposes an entirely new section 7.1.1.2 relating to SPOI.

Q. WHAT IS QWEST'S LANGUAGE PROPOSAL THAT RELATES TO THIS ISSUE?

A. Qwest's proposal for section 7.1.1.2 of the ICA states:

> 7.1.1.2 Prior to using Local Interconnection Service trunks to terminate VoIP traffic, CLEC certifies that the (a) types of equipment VoIP end users will use are consistent with the origination of VoIP as defined in this Agreement; and (b) types of configurations that VoIP end users will use to originate calls using IP technology are consistent with the VoIP configuration as defined in this Agreement

Q. WHAT IS LEVEL 3'S LANGUAGE PROPOSAL FOR SECTION 7.1.1.2?

A. As was the case with section 7.1.1.1, this gets a bit confusing. Apparently Level 3 opposes any provision in the contract for certification of VoIP traffic. Therefore, Level 3 offers no changes to Qwest's proposed language and instead seeks to eliminate it completely. Because Level 3 presumably assumes the Qwest language will be stricken, Level 3 has used the 'available' number 7.1.1.2 to introduce

additional language dealing with single point of interconnection (SPOI). My testimony will address the Qwest proposed 7.1.1.2 dealing with certification of VoIP traffic and which will require Commission resolution one way or the other. Mr. Easton will address the SPOI issue in his testimony.

Q. DOES QWEST BELIEVE THAT CERTIFICATION IS NECESSARY?

A. Yes. As discussed above, Qwest and Level 3 have a fundamental disagreement regarding what qualifies as a VoIP call. Level 3 should be willing (and the Commission should require Level 3) to certify that VoIP traffic that it sends to Qwest meets the definition established by the FCC.

Q. HAVE THE PARTIES AGREED TO CERTIFICATION LANGUAGE ELSEWHERE IN THIS CONTRACT?

A. Yes. There are many certification provisions included in the agreed upon language in this contract. For example, numerous provisions are included in section 12 requiring Level 3 to certify that its operation support systems ("OSS") can properly communicate with and submit orders to Qwest's OSS. In addition, Level 3 must certify that it is entitled to certain high capacity loops or transport UNEs per the Triennial Review Remand Order;[14] Level 3 must certify that it meets service eligibility criteria for high capacity EELs;[15] both parties must certify their service management systems;[16] and Qwest must certify Right of Way ("ROW") agreements

[14] See Section 9.1.1.4 of the agreed to language in the proposed contract.

[15] See Section 9.1.1.10 et. seq. of the agreed to language in the proposed contract.

[16] See Section 10.2.3 et. seq. of the agreed to language in the proposed contract.

to Level 3.[17] Clearly, both parties have agreed to certification obligations elsewhere in this agreement.

Q. SHOULD THE COMMISSION ADOPT QWEST'S PROPOSED LANGUAGE FOR SECTION 7.1.1.2?

A. Yes. The Commission should adopt Qwest's proposed language for section 7.1.1.2.

[17] See Section 10.8.2.26 et. seq. of the agreed to language in the proposed contract.

VII. DISPUTED ISSUE 3: VNXX TRAFFIC

Q. PLEASE DESCRIBE THE PARTIES' DISPUTE RELATING TO ISSUE 3.

A. Level 3 listed three separate issues under Issue 3 denominated as Issues 3a, 3b, and 3c. Issue 3a concerns section 7.3.6.3 of the agreement, and involves intercarrier compensation for calls not physically originating and terminating within the same LCA. Issue 3b relates to section IV of the agreement's definition of Virtual NXX or "VNXX" traffic. Finally, Issue 3c addresses whether intercarrier compensation is required on VNXX traffic in section 7.3.6.1.

Q. WHAT IS THE DISPUTE REGARDING ISSUE 3B AND THE DEFINITION OF VNXX?

A. Issue 3b involves the definition of VNXX traffic. Although not in the order presented in the Level 3 Petition and matrix, a discussion of the definition of VNXX traffic is necessary in order to understand the core principles of the disputed issues. Understanding the VNXX concept and the types of traffic that should be classified as VNXX is crucial to an understanding of the parties' differences over VNXX issues. An understanding of the definitional differences between the parties is a necessary prerequisite to the later discussion of compensation for local traffic.

Q. WHAT IS VNXX TRAFFIC?

A. In short, VNXX is an arrangement that provides the functionality of toll or toll-free 8XX service, but at no extra charge to the subscribers who call numbers that appear to be located in their local calling areas. In contrast to VNXX, an actual NXX code, commonly referred to as a prefix, is the second set of three digits of a ten-

digit telephone number (NPA-**NXX**-XXXX). These three digits (NXX) are assigned to and indicate a specific rate center from which a particular customer is physically served. In other words, in the number (503) 281-XXXX, the "281" prefix is assigned to a specific rate center in the (503) area code and thus identifies the general geographic area in which the customer is located. By contrast, a "virtual" NXX, or VNXX undercuts that concept because it results in a carrier-assigned NXX associated with a particular rate center, but where the carrier has no customers physically located. Instead, these telephone numbers are assigned to a customer physically located outside the LCA associated with the particular NXX. With VNXX, the physical location of the CLEC customer is in most cases in a LCA that would require a toll call from the LCA with which the telephone number is associated. This scheme requires the assignment of a "virtual" NXX. The NXX is labeled "virtual" because it is an assigned number that tells callers that it is in the *calling party's* LCA, rather than the *called* party's LCA. In other words, a call to the "virtual" NXX does not result in a local call within the LCA that the VNXX number appears to be assigned, but in reality the call is terminated in a different LCA, and perhaps even in a different state. Exhibit LBB3 attached hereto demonstrates visually how VNXX circumvents the proper numbering plan.

VNXX has become an issue because CLECs, like Level 3 in some states, obtain local numbers from the North American Numbering Plan Administrator ("NANPA") in various parts of a state that are actually assigned to its customers (*i.e.*, ISPs) with no physical presence whatsoever in the LCA with which the local numbers are associated; thus, the traffic directed to those numbers is, instead of being routed to a customer in the same LCA as the calling party is actually routed

to one of the points of interconnection ("POIs") of the CLEC and is then terminated with the CLEC's ISP customer at a physical location in another LCA or even in another state.

Q. HAS THE COMMISSION HAD OCCASION TO DEFINE VNXX?

A. In Docket UM 1058, the Commission defined VNXX:

> "'NXX' is a designation used throughout the telephone industry to indicate the second three digits in a party's telephone number following the area code. NXX codes are assigned to particular central offices within the state. The NXX codes are associated with specific geographic areas, typically an exchange or 'rate center.' An exchange is a geographic area defined for the purpose of providing local exchange service. A rate center is a geographic point within an exchange, or group of contiguous exchanges. (The rate center's geographic coordinates are used to measure distance for rating long distance toll calls). Competitive local exchange carriers wishing to provide local service in multiple exchanges from a single central office need to have a separate NXX code for each rate center. Customers with the same NXX have their calls rated the same way. Calls from a customer within a particular NXX to another customer with that same NXX would thus have a geographic distance of zero, so no long distance charges would apply.
>
> The incumbent local exchange telephone company does not have the exclusive right to assign specific phone numbers to specific customers. Competitive local exchange carriers (CLECs) are , by law, entitled to be assigned blocks of numbers in sequence, including entire NXXs. A 'Virtual NXX' (VNXX) occurs when a CLEC assigns a 'local' rate center code to a customer physically located in a 'foreign' rate center. For example, a customer physically located in Portland might order a phone number from a CLEC with a Salem NXX code. Calls between that Portland customer's phone and other Salem are customers would be treated as if they were local calls, even though the calls between Salem and the customer's physical

> location in Portland, is a distance of some fifty miles. Thus, under a CLEC's VNXX arrangement, all Salem customers would be paying a flat, monthly, local rate even though they were calling the CLEC's Portland customer. When those same customers call the ILEC's Portland customers, served out of the same central office as the as the CLEC's Portland customer, they are charged time and distance-sensitive intraLATA toll charges." a situation where the CLEC has obtained an assigned block of local telephone numbers for a local exchange, but the CLEC does not actually have local customers or a local physical presence in the exchange. Rather, the CLEC uses its block of numbers to allow a calling party to make what appears to be a local call. The CLEC relays the 'local' call over leased private line circuits to a CLEC customer who is located in a distant exchange outside the calling party's local calling area. Absent the VNXX arrangement, the calling party would have had to pay long distance charges."[18]

The Commission repeated the same definition with approval in the *Wantel/Pac-West Order*[19] issued by the Commission on July 26, 2005.

Q. DO YOU AGREE WITH THE COMMISSION'S DEFINITION OF VNXX?

A. Yes. The Commission's definition is consistent with accepted definitions of VNXX. As I will discuss below, Qwest's definition is consistent with the Commission's definition.

Q. ARE YOU FAMILIAR WITH THE FEDERAL COURT LITIGATION BETWEEN QWEST AND UNIVERSAL TELECOM ("UNIVERSAL")

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[18] Order, *In the Matter of Oregon Telecommunications Association Petition for Declaratory Ruling on the Use of Virtual NPA/NXX Calling Patterns*, Docket UM 1058, Order No. 03-329, at 2 (OPUC May 27, 2003).

[19] Order, *In the Matter of Wantel Communications, dba ComspanUSA vs. Qwest Corporation (Complaint for Enforcement of Interconnection Agreement); In the Matter of Pac-West Telecomm, Inc. vs. Qwest Corporation (Complaint for Enforcement of Interconnection Agreement)*, Docket Nos. IC8 and IC9, Order No. 05-874, at 34-35 (OPUC July 26, 2005).

THAT RESULTED IN A DECISION ON LIABILITY ISSUE IN DECEMBER 2004?

A. Yes. I filed an affidavit in support of Qwest's motion for summary judgment on several issues in the case, including VNXX issues. On December 15, 2004, the Court issued its decision on several liability issues.[20] For purposes of this case, the most notable of those decisions was the determination that VNXX traffic (in that case, all of it was ISP traffic) was not subject to reciprocal compensation. In reaching its decision, the Court also articulated a definition of VNXX traffic:

> "VNXX traffic involves a call that is originated in one local calling area ('LCA') and is terminated in a different LCA without incurring the toll charges which would normally apply. The essence of VNXX traffic is that a LEC who does not have a physical presence in a particular calling area may appear to be local. The LREC gains this local appearance by holding a block of local numbers which the end user, who is located in the LCA, may call. Upon making what appears to be a local call, the call is relayed over the lines of the local LEC, passed off to the distant LEC and terminated by that distant LEC. For example, and ISP located in Portland, Oregon would request a local Bend, Oregon telephone number held by the CLEC. A person in Bend would call that number to connect to the internet. The call would be relayed by the ILEC serving the Bend area, handed off by the CLEC to the POI in Portland and terminated by delivery to the ISP in Portland. Thus, the person making the call would be billed at the local rate for a call that was really long distance.[21]

The Court's description of VNXX in the *Universal* case is consistent with the Commission's definition and with the definition proposed by Qwest.

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[20] *Qwest Corp. v. Universal Telecom*, 2004 WL 2958421 (D. Ore. 2004).

[21] *Id.* at *9.

Q. IS THE VNXX ISSUE CONNECTED TO THE SINGLE POINT OF INTERCONNECTION ("SPOI") ISSUE?

A. Yes. In the early 2000s CLECs argued that they should be entitled to serve a LATA from a single switch rather than placing switches in numerous LCAs in order to offer local service. Qwest agreed and has offered such a form of interconnection for several years. If a CLEC provides local service from a single switch within a LATA, it is entitled to be assigned NXXs for LCAs both near and far from the switch. The manner in which those NXXs are used is a critical matter. If a CLEC is assigned an NXX and it has constructed or leased loops to retail subscribers located within the LCA of the NXX, that is consistent with the intended use of the assigned NXX (i.e., to allow the CLEC to provide local exchange service to customers located within that LCA). But if a CLEC is assigned an NXX from a distant LCA and it creates a primary line of business that creates a deliberate misimpression that, from a carrier-to-carrier perspective, toll free calling is really conventional local calling, then that is an unintended and inappropriate use of the assigned NXX. The important fact to keep in mind with a SPOI is that CLEC calls are always supposed to originate and terminate within the same LCA, regardless of where the SPOI is located.

Q. WHAT IS QWEST'S PROPOSAL FOR ISSUE 3B, DEFINITION FOR VNXX TRAFFIC?

A. Qwest proposes the following definition of VNXX Traffic:

> "VNXX Traffic" is all traffic originated by the Qwest End User Customer that is not terminated to CLEC's End User Customer physically located within the

same Qwest Local Calling Area (as approved by the state Commission) as the originating caller, regardless of the NPA-NXX dialed and, specifically, regardless of whether CLEC's End User Customer is assigned an NPA-NXX associated with a rate center in which the Qwest End User Customer is physically located.

Q. WHAT IS LEVEL 3'S PROPOSAL FOR ISSUE 3B, DEFINITION FOR VNXX TRAFFIC?

A. Level 3's proposes 3 paragraphs for the definition of VNXX traffic:

VNXX Traffic shall include the following:

ISP-bound VNXX traffic is telecommunications over which the FCC has exercised exclusive jurisdiction under Section 201 of the Act and to which traffic a compensation rate of $0.0007 / MOU applies. ISP-bound VNXX traffic uses geographically independent telephone numbers ("GITN"), and thus the telephone numbers associated with the calling and called parties may or may not bear NPA-NXX codes associated with the physical location of either party. This traffic typically originates on the PSTN and terminates to the Internet via an Internet Service Provider ("ISP").

VoIP VNXX traffic is telecommunications over which the FCC has exercised exclusive jurisdiction under Section 201 of the Act and to which traffic a compensation rate of $0.0007 / MOU applies. VoIP VNXX traffic uses geographically independent telephone numbers ("GITN"), and thus the telephone numbers associated with the calling and called parties may or may not bear NPA-NXX codes associated with the physical location of either party. Because VoIP VNXX traffic originates on the Internet, the physical location of the calling and called parties can change at any time. For example, VoIP VNXX traffic presents billing situations where the (i) caller and called parties are physically located in the same ILEC retail (for purposes of offering circuit switched "local telephone service") local calling area and the NPA-NXX codes associated with each party are associated with different ILEC LCAs; (ii) caller and called parties are physically located in the same ILEC retail (for purposes of offering circuit switched "local telephone service") local calling area and the NPA-NXX codes associated with each party are associated with the same ILEC LCAs; (iii) caller and called parties are physically located in the different ILEC retail (for purposes of offering circuit switched "local telephone service") local calling area and the NPA-NXX

codes associated with each party are associated with same LEC LCAs; and (iv) caller and called parties are physically located in the different ILEC retail (for purposes of offering circuit switched "local telephone service") local calling area and the NPA-NXX codes associated with each party are associated with different ILEC LCAs. Examples of VoIP VNXX traffic include the Qwest "One Flex" service and Level 3's (3)VoIP Enhanced Local service.

Circuit Switched VNXX traffic is traditional "telecommunications services" associated with legacy circuit switched telecommunications providers, most of which built their networks under monopoly regulatory structures that evolved around the turn of the last century. Under this scenario, costs are apportioned according to the belief that bandwidth is scarce and transport expensive. The ILEC offers to a customer the ability to obtain a "local" service (as defined in the ILEC's retail tariff) by paying for dedicated transport between the physical location of the customer and the physical location of the NPA-NXX. Thus, this term entirely describes a service offered by ILECs, but which cannot be offered by IP-based competitors as such networks do not dedicate facilities on an end-to-end basis.

Q. WHAT IS THE BASIC DIFFERENCE BETWEEN THE TWO COMPANIES' DEFINITIONS OF VNXX?

A. Both sides agree with the Commission that a VNXX call originates in one LCA and terminates in another. In addition, both Level 3 and Qwest agree that, with VNXX, the physical location of the end-user customer who is being called bears no relationship to the local number that is assigned to the call. For example, Qwest's definition defines VNXX traffic as "traffic…that is not terminated to CLEC's End User Customer physically located within the same Qwest LCA …. as the originating caller, regardless of the NPA-NXX dialed." Level 3's definition states that "VNXX traffic uses geographically independent telephone numbers ("GITN"), and thus the telephone numbers associated with the calling and called parties may or may not bear NPA-NXX codes associated with the physical location of either

party."

What the parties do not agree on is the means of compensation or appropriate trunking for VNXX traffic. For instance, Level 3 adds "compensation" language into the definition to VNXX traffic on the assumption that reciprocal compensation applies to VNXX traffic, attempting to set the compensation rate[22] for a call originating in one LCA and terminating in a different one. Thus, as noted above, under Level 3's proposal, instead of Qwest recovering the cost of delivering the traffic, Qwest would pay Level 3 a compensation rate to terminate the traffic. In other words, Level 3 proposes a fundamental change in intercarrier compensation for VNXX traffic. Such a significant departure from current practice, particularly given the broad industry impacts it would engender, should most certainly not occur in an arbitration proceeding involving only two carriers.

Level 3's language is improper for several reasons. First, because this section is for defining *what* VNXX traffic is and not its rates, and second, and of critical importance, Level 3's proposed definition of VNXX would convert toll calls to local calls, and change the Commission's defined LCAs. For example, Level 3's language would enable a customer physically located in the Portland LCA to have a Salem telephone number, so that calls to and from that person by local subscribers in Salem would be treated as local calls even though they are routed over the PSTN to Portland just like other toll calls. This is improper because, among other reasons, Level 3 wants to shift all of the costs of this arrangement to Qwest.

[22] If the Commission were to adopt Level 3's proposed definition, it would then mandate reciprocal compensation payments at the local ISP rate of $.0007 and would completely eliminate the concept of a toll call with regard to this traffic.

Q. LEVEL 3'S DEFINITION CONTAINS THREE CATEGORIES OF VNXX TRAFFIC. DO YOU AGREE WITH "CATEGORIES" IN REGARD TO VNXX CALLS?

A. No. The ISP and VoIP paragraphs of Level 3's definition are essentially the same for both categories. For example, both sections state that "VNXX traffic uses geographically independent telephone numbers…not associated with the physical location of either party…" In the VoIP section above, I stated that it appears that Level 3 wants to treat all VoIP traffic as if it were local, and it is through this definition that it attempts to do so. Both the ISP and VoIP sections attempt to impose "the compensation rate of $0.0007/MOU" on this interexchange traffic. The only actual difference between the paragraphs is the claim that an ISP VNXX call originates on the PSTN and terminates to an ISP, while VoIP VNXX calls originate on the Internet and terminate to an end user on the PSTN. These comments, however, do not change the actual definition of what constitutes VNXX traffic. The categories (ISP or VoIP) are irrelevant to establishing the VNXX definition which deals with the geographic location of customers and NXX numbers.

Level 3's third category is both unnecessary and out of place in this section. Labeled "Circuit Switched VNXX traffic," the alleged definition contains only Level 3's biased legal opinion regarding "traditional 'telecommunications services.'" The language does not add any substance to the definition of VNXX traffic and is obviously extraneous to this section of the agreement.

On the whole, Level 3 is attempting to create distinctions where none exist in order to avoid the existing intercarrier compensation mechanisms—in effect to avoid costs that other carriers pay and replace them with revenues. All three proposed categories of VNXX are based on the termination of a call being physically located in a different LCA. The labeled distinctions are irrelevant to the definition of VNXX and only confuse the language and the underlying issues.

In the end, a definition should be clear and straightforward. Level 3's "definition" suffers from all of the problems described above, and also suffers from the problems of trying to place substantive contract provisions and legal analysis into a definition. Totally aside from the other problems that flow from the result of Level 3's language, it is simply bad drafting to turn a definition into the sort of results-based and meaningless distinctions that Level 3 attempts to create in its so-called definition. The definition should be clear and consistent with the Commission's and the *Universal* Court's definitions of VNXX. Qwest's language is completely consistent with those rulings, while Level 3's is unnecessarily complicated and results-oriented and should be rejected.

Q. IN ADDITION TO DEFINING VNXX, HAS THE COMMISSION OR THE COURT ADDRESSED THE SUBJECT OF THE PROPER TREATMENT OF VNXX TRAFFIC PREVIOUSLY?

A. Yes, both the Commission and Court have addressed VNXX issues.. The Commission has addressed VNXX in the generic VNXX docket, the Qwest/AT&T arbitration, and in a GTE/ELI arbitration decision. The Court, of course, addressed

the issue in the *Universal* decision.

Q. PLEASE ADDRESS THE GENERIC CASE (UM 1058).

A. Without getting into too much detail, the docket was initiated in 2002 to address VNXX issues on a generic basis for the industry. In the end, the Commission concluded that it was preempted by the Ninth Circuit's *Pac-West* decision,[23] which had ruled an effort by the California commission to adopt industry-wide rules invalid on the ground that, as the *Universal* Court stated, "state commissions lacked the authority to conduct general docket investigations."[24] Nonetheless, in UM 1058, in the order closing the docket ("*VNXX Closing Order*"), the Commission noted that it had prohibited FX two decades previously.[25] The Commission also noted that two provisions of all Oregon CLEC certificates require adherence to local calling areas and the appropriate use of NXX codes.[26] The Commission

[23] *Pacific Bell v. Pac-West Telecomm,* 325 F.3d 1114 (9th Cir. 2003).

[24] *Universal* at *11, n. 4.

[25] Order. *In the Matter of the Investigation into the Use of Virtual NPA/NXX Calling Patterns*, Docket UM 1058, Order No. 04-504, at 2 (OPUC September 7, 2004) ("*VNXX Closing Order*").

[26] Those two conditions are:

> "7. For purposes of distinguishing between local and toll calling, applicant shall adhere to local exchange boundaries and Extended Area Service (EAS) routes established by the Commission. Further, applicant shall not establish an EAS route from a given local exchange beyond the EAS area for that exchange."
>
> "8. When applicant is assigned one or more NXX codes, applicant shall limit each of its NXX codes to a single local exchange and shall establish a toll rate center in each exchange

concluded: "A plain reading of these conditions leads to the conclusion that any carrier engaging in the conduct described by OTA in its Petition [i.e., VNXX] would clearly be in violation of its certificate. Therefore, rather than requesting a declaratory or generic investigation, the most appropriate means for dealing with allegations relating to such activity would be in the context of complaint or *request for arbitration*."[27]

Two conclusions can be drawn from this language: (1) the Commission has never sanctioned VNXX and, in fact, views it as a violation of a CLEC's certificate and (2) the Commission has concluded that it can deal with VNXX issues in arbitration proceedings.

Q. PLEASE ADDRESS THE COMMISSION'S DECISION IN THE AT&T ARBITRATION.

A. The Commission issued its order in this docket (ARB 527) in April 2004. The Commission's decision in that case supports the conclusion that, in order for traffic to be characterized as local traffic in Oregon, it must originate and terminate at physical locations within the same LCA. In that case, Qwest proposed to define

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> that is proximate to the toll rate center established by the telecommunications utility serving the exchange."

VNXX Closing Order at 5.

[27] *Id.* (material in brackets added by the witness).

"exchange service" as "traffic that is originated and terminated within the same Local Calling Area as determined for Qwest by the Commission." AT&T proposed to add that the definition "shall not affect compensation for the exchange of VNXX traffic" and that the issue of compensation for VNXX traffic would be resolved in a generic docket in Oregon (apparently referring to UM 1058).

In the April 19, 2004 ALJ decision, Qwest's language was accepted. Judge Smith noted that although Qwest's statement of generally available terms ("SGAT") is not dispositive, the language proposed in the arbitration by Qwest mirrors the language in the SGAT, which "is persuasive because in the SGAT process, the Commission, with the aid of numerous intervening parties, thoroughly reviewed Qwest's language for meeting its burden of proof [for] compliance with FCC rules."[28] She noted that the VNXX traffic issue is being considered in a generic docket, but stated that "[a]ny changes in the treatment of VNXX after a final order is issued in UM 1058 can be integrated into this interconnection agreement using the change of law provisions in Section 2.2. *Therefore, I adopt Qwest's definition of 'Exchange Service.'*"[29] AT&T did not appeal this issue to the Commission, and the Commission affirmed the arbitrator's decision.[30] The Commission thus rejected

[28] Arbitrator's Decision, *In the Matter of Qwest Corporation's Petition for Arbitration of Interconnection Rates, Terms, Conditions and Related Arrangements with AT&T Communications of the Pacific Northwest, Inc. and TCG Oregon*, No. ARB 527, at 6 (Apr. 19, 2004) (emphasis added).

[29] *Id* at 7.

[30] Commission Decision, *In the Matter of Qwest Corporation's Petition for Arbitration of*

AT&T's effort to treat VNXX traffic as local traffic. Moreover, the Commission adopted a definition of "local exchange traffic" that makes it clear that such traffic must originate and terminate within the same LCA; in other words, the OPUC reaffirmed a definition of "local traffic" that is consistent with Qwest's arguments and proposed contract language in this case.

Q. PLEASE DESCRIBE THE COMMISSION'S DECISION IN THE GTE/ELI ARBITRATION.

A. The Commission's 1999 ruling in the GTE/ELI arbitration ("*GTE/ELI Decision*")[31] did not address VNXX by name (the term VNXX was not in vogue prior to about 2000 or 2001), but it ruled directly on the issue nonetheless. The Commission's ruling in that case goes to the heart of the VNXX issue in the context of ISP traffic. In that decision, the Commission made two relevant rulings: (1) that ISP traffic is only subject to reciprocal compensation if it originates and terminates in the same LCA and (2) the termination point for ISP-bound traffic is the ISP's modems. The Arbitrator ruled that it is the "ISP modems" that constitute the termination point for reciprocal compensation purposes, but also ruled (consistent with the *Universal* decision) that GTE was liable for reciprocal compensation on traffic *only* when the ISP modems were

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Interconnection Rates, Terms, Conditions and Related Arrangements with AT&T Communications of the Pacific Northwest, Inc. and TCG Oregon, No. ARB 527, Order No. 04-262, at (OPUC May 17, 2004).

[31] Commission Decision, *In the Matter of the Petition of Electric Lightwave, Inc. for Arbitration of Interconnection Rates, Terms, and Conditions with GTE Northwest Inc., Pursuant to the Telecommunications Act of 1996,* ARB 91 (March 17, 1999) ("*GTE/ELI Decision*").

within the same LCA as the calling party:[32]

> GTE raises concerns that some calls from end users to ISPs are actually routed to ISP modems located outside the local calling area. GTE contends that traffic that does not attach to local call scope *ISP modems* should not be eligible for reciprocal compensation because these services are properly interstate or intrastate intraLATA toll calls. Because the record in this case does not discuss the methods used to distinguish local calls from toll calls, there is no way to know whether there are problems identifying this type of traffic. Assuming the traffic can be identified, it should be possible to ascertain whether calls from end users are directed to ISP modems located within the local exchange calling area. *To the extent that calls to ISP providers are not directed to an ISP modem within the local calling area, they are not local calls and should not be eligible for reciprocal compensation.*[33]

The Commission agreed with the Arbitrator's findings and affirmed that portion of the Arbitrator's order. Thus, the Commission rejected an ELI argument that reciprocal compensation should be paid for what has now become known as ISP VNXX traffic. In so doing, the Commission reaffirmed the principle that the physical end points of a call are the relevant criterion for determining whether traffic is local or interexchange in nature.

Q. PLEASE COMMENT ON THE VNXX HOLDING IN THE *UNIVERSAL* CASE.

A. In that case, the Court was interpreting a typical interconnection agreement that provided that reciprocal compensation was owed only for "local/EAS traffic, as

[32] The arbitrator's decision was approved by the OPUC on March 17, 1999 in the GTE/ELI case.

[33] *Id.* at 9 (emphasis added).

defined in Qwest tariffs in effect when the agreement was entered. The Court ruled:

> "Qwest's Oregon tariff defines 'local service' as '[t]elephone service furnished between customer's premises located within the same local service area.' . . . The tariff further defines 'local service area' as '[t]he area within which telephone service is furnished under a specific schedule of rates. The area may include one or more exchanges without the application of toll charges.' . . . A 'local service area' is the equivalent of a LCA. . . .Finally, 'premises' is defined as '[a] tract of land' or buildings on such land.
>
> . . . .
>
> Thus, for a call to be local and subject to reciprocal compensation, it must originate and terminate at some physical point with a LCA or EAS and terminated at a physical location within the same LCA or EAS. Specifically here, for an ISP bound call to be subject to reciprocal compensation it must originate in a LCA or EAS and terminate in the same LCA or EAS by delivery of the call to the ISP. VNXX traffic does not meet the definition of local traffic because it does not originate and terminate in the same LCA or EAS. Therefore, VNXX traffic, whether ISP bound or not, is not subject to reciprocal compensation."[34]

It is my understanding that the Oregon Qwest tariffs quoted by the Court in the *Universal* decision are the same tariffs that are in effect today. Thus, the *Universal* decision stands for the proposition that under Oregon law and consistent with Qwest's definitions, it is the relative location of the called and calling parties that determines whether a call is local or interexchange, and not the telephone numbers assigned to the parties. The *Universal* decision directly supports Qwest's language in this docket.

[34] *Universal* at *10 (citations to record omitted).

Q. IF A VNXX CALL IS PLACED TO AN ISP OR TO A PSTN END USER AS A VOIP TERMINATION, DOES THE CALL CLASSIFICATION CHANGE TO A LOCAL CALL?

A. No, it does not. The type of business of an end user customer does not affect whether a call is local or not. Consistent with the decisions discussed above, if an end-user who is located in Salem (whose ISP's modems and routers are physically located in Portland, but whose number is a Salem NPA NXX) logs onto the Internet, the call to the ISP telephone number is not a local call because it originates in Salem and terminates in Portland.[35] It makes no difference if the call is to an ISP, a hardware store, or a restaurant in Portland because it is a call that originates in Salem and terminates in Portland. The location of the calling and called parties determines the nature of the call, not the business type. A toll call is a toll call. Level 3's avoidance of that fact is demonstrated by its creation of VNXX categories. ISP, VoIP or circuit based VNXX calls do not transform a toll call into a local call. This language does not belong in the agreement anywhere, including in the definition of VNXX.

Q. IF ISP TRAFFIC AND VOICE TRAFFIC ARE TREATED THE SAME FOR THE VNXX DEFINITION, HOW IS A CALL DETERMINED TO BE LOCAL OR TOLL?

A. In regard to defining VNXX traffic, consistent with the *Universal* and *GTE/ELI* cases, ISP traffic should be treated no differently than voice traffic. In determining

[35] Salem is in a different LCA than Portland.

if a call is local or toll, the location of the origination and termination is the decisive factor: calls that physically originate and terminate within the same LCA are rated as local calls. The ESP POP is the point of termination (for an ISP) and origination (for terminating VoIP). Calls routed to a point of interface for termination **outside** of the originating LCA are interexchange calls. VNXX services that terminate traffic to an ISP whose Internet equipment (e.g., modems, servers) is not located within the same LCA as the originating LCA are interexchange toll calls and must remain subject to the access charge provisions that govern interexchange toll traffic. In the case of VoIP calls, where a VoIP Provider's POP is in one LCA, say Portland, and the VoIP Provider's CLEC, for example Level 3, wants to deliver a call on behalf of its end user (the VoIP Provider) to an end user in Salem, Level 3 should hand that call to an "intraLATA" IXC for termination. Level 3's definitional language attempts to say this is or is not a toll call depending on to whom the call is placed. Again, a toll call is a toll call. Qwest's definition of VNXX traffic is clear, concise, and accurate while Level 3's definition unnecessarily complicates the issue. Qwest's language should be adopted.

Q. IN ITS PETITION LEVEL 3 REFERS TO ITS VNXX PRODUCT AS AN "FX LIKE" PRODUCT. DOES QWEST OFFER FX OR FX-LIKE SERVICES IN OREGON?

A. Historically, if a Qwest end-user customer in one rate center wanted to obtain a telephone number in a different Qwest rate center, usually for the purpose of providing a toll-free service, services such as FX service were available to the customer[36]. In Oregon, however, the Commission ordered the discontinuance of

[36] While 800-type services provide similar functionality, the 800 number does not present the

FX service to new customers. The service to existing customers grandfathered in 1983. (See Order No. 83-839).

Qwest's Integrated Services Digital Network ("ISDN") Primary Rate Service ("PRS") operates in a manner similar to FX service, but it is not similar to VNXX, in that the telephone numbers associated with the service are assigned within the local geographic rate center where the service is provided and are not assigned out of a distant end rate center. With PRS, the customer can receive dial tone from a switch that is not in the customer's local exchange. If the switch is in a different exchange, the customer would pay Intrastate DS1 mileage between the wire centers. The transport mileage rate element comes from the state tariff, price list, catalog, or ICB contract, whichever is applicable for the DS1 Service in the state. The customer will continue to pay standard charges on the PRS (with the added cost of the DS1) Intrastate fixed and per mile rates for transport mileage.

Another service similar to FX service, but not comparable to VNXX, is the Market Expansion Line ("MEL") offered in Oregon (PUC Oregon No. 29, 5.4.4). MELs are forwarded automatically from the central office to another telephone number of the customer's choice. This is no different than any residence customer call forwarding their line to another location. Calls can be forwarded to either another number in the LCA or to a number in another LCA. The MEL customer

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same appearance of a local presence; therefore Qwest is not including a discussion of 800 type services in this testimony.

utilizing the remote call forwarding feature of his or her service pays any applicable toll charges from the MEL central office to the terminating telephone. In other words, MEL operates no differently than any other retail customer that call forwards their telephone number to a different location in another LCA.

Q. IS LEVEL 3'S VNXX SERVICE THE SAME AS THESE SERVICES?

A. No. For the reasons stated above, Level 3's VNXX product is not similar to these services. Level 3's VNXX product uses the PSTN to route and terminate calls to end users connected to the public switched network in another LCA. In all respects, except the number assignment, the call is routed and terminated as any other toll call. Qwest's PRS and MEL services, on the other hand, deliver the calls within the LCA where the number is actually associated. In other words, a Qwest customer actually purchases a local service connection in the LCA associated with the telephone number. That local service connection is purchased by the customer in the same manner as all other local exchange services that apply to that LCA. The calls are then transported on what is, in effect, the end user's private network (private line) to another location. In other words, after purchasing the local connection in the LCA, the customer bears full financial responsibility to transport the call to the location where the call is actually answered. It does this at the appropriate local and private line rates. Qwest, and other local telephone companies, have been selling such private line services to PBX owners and other customers for decades. In the case of a PBX, calls are delivered to the customer's PBX and any call delivery behind the PBX is, for purposes of transport to the customer's actual location, carried on the owner's private network or on transport

purchased from another carrier. Qwest and other local telephone companies deliver the call to the PBX location. Private transport beyond that is the business of and financial responsibility of the PBX owner.

Level 3's approach is fundamentally distinct from these services. Under PRS and MEL, the customer who desires a presence in another LCA bears full financial responsibility to transport the traffic to the location where it wants the call answered. Under level 3's proposal, however, Level 3 wants the call routed over the PSTN, but wants no responsibility for providing or for paying Qwest to provide the transport to the distant location. In referring to VNXX service as an "FX-like" service, Level 3 attempts to confuse this critical distinction. Calls over the PSTN between communities that use the toll network are toll calls no matter how the numbers are assigned. Calls delivered to end users within a LCA and transported over private switched networks are more than a mere technical distinction. It is consistent with the way this Commission and other state Commissions have been distinguishing between toll and local calls since access charges were established in 1984.

ISSUE 3A: COMPENSATION FOR VNXX

Q. PLEASE DESCRIBE ISSUE 3A AND WHAT THE PARTIES' DISPUTE IS IN THIS ISSUE.

A. Now that the distinction between a local call and VNXX has been established, Issue 3a can be addressed. Qwest's position is clear. Consistent with the Oregon cases described above, VNXX calls (whether ISP calls or typical voice calls) are not local calls subject to reciprocal compensation payments under section 251(b)(5). Qwest's proposed language makes clear that Qwest will not treat VNXX calls as local and will not pay local reciprocal compensation on such VNXX traffic. Level 3 attempts to cast this issue as whether Qwest may exclude ISP traffic from compensation due under the FCC's *ISP Remand Order* through contract terms that identify geographic designations based on LCAs. A call from a customer in Portland to a customer located in Miami, Florida is a toll call, regardless of the telephone number dialed. The fact that the customer at the other end of that toll call is an ISP does not magically transform the call into a local call. And a VNXX call to an ISP physically located in Portland, but with a Salem NPA NXX, placed by an end user in Salem is not a local call either. Qwest makes clear that Qwest *will* pay reciprocal compensation, a charge for terminating *local* traffic, on traffic that actually originates and terminates at physical locations within the same LCA, as established by the Commission. Qwest also makes clear that calls that originate and terminate at locations in different LCAs are not local calls and are not subject to reciprocal compensation. The "VNXX" number is not and should not be determinative. And, of course, as stated earlier, if the VNXX call is an ISP call, no

reciprocal compensation is due, just as it would not be due on a typical voice call. The fact that the call is to an ISP grants it no special status, legal or otherwise.

Q. WHAT IS QWEST'S LANGUAGE PROPOSAL FOR ISSUE 3A, SECTION 7.3.6.3?

A. Qwest's proposal for Section 7.3.6.3 of the ICA states:

> 7.3.6.3 Qwest will not pay reciprocal compensation on VNXX traffic.

Q. WHAT IS LEVEL 3'S LANGUAGE PROPOSAL FOR SECTION 7.3.6.3?

A. Level 3's counter-proposal for Section 7.3.6.3 is set forth:

> 7.3.6.3 If CLEC designates different rating and routing points such that traffic that originates in one rate center terminates to a routing point designated by CLEC in a rate center that is not local to the calling party even though the called NXX is local to the calling party, such traffic ("Virtual Foreign Exchange" traffic) shall be rated in reference to the rate centers associated with the NXX prefixes of the calling and called parties' numbers, and treated as 251(b)(5) traffic for purposes of compensation.

Q. LEVEL 3 STATES THAT QWEST IS PROPOSING TO EXCLUDE ISP TRAFFIC FROM COMPENSATION DUE IT UNDER THE FCC'S ISP REMAND ORDER. DO YOU AGREE?

A. No. First, Qwest agrees that, under the *ISP Remand Order* and the Commission's rulings and until addressed more definitively by the FCC, compensation is due on ISP calls that originate and terminate to locations within a LCA. However, the FCC has not ruled that all ISP traffic is subject to intercarrier compensation. Level 3's fundamental argument is that the *ISP Remand Order*, read in combination with the *Core Forbearance Order*,[37] requires that the same amount and type of

[37] Order, *Petition of Core Communications for Forbearance Under 47 USC § 160(c) from the Application of the ISP Remand Order*, Order FCC 04-241 WC Docket No. 03-171 (rel. October 18, 2004) ("*Core Forbearance Order*").

intercarrier compensation must be paid on *all* ISP traffic, including VNXX ISP traffic.[38] Level 3 argues that traffic bound for an ISP located in Portland is subject to intercarrier compensation, regardless of whether it originated across town in the LCA, from the other end of the state, or from across the country. However, there is nothing in the *ISP Remand Order* or *Core Forbearance Order* that requires that state commissions adopt ICA language that allows intercarrier compensation for VNXX ISP traffic. These orders relate only to local ISP traffic, where the ISP is physically located in the same LCA as the customer placing the call. Qwest addressed its legal position on this issue in its Response to Level 3's Petition and will provide more detail in its briefs in this case.

Q. DOES LEVEL 3 ALSO CONFUSE THE ISSUE OF ISP TRAFFIC WITH VNXX ISSUES?

A. Yes. As the Court in *Universal* recognized, VNXX is not just a phenomenon associated with ISP calls, although it is in that context that VNXX issues often arise. A VNXX call can be to an ISP such as AOL located in another LCA or to a voice customer such as the local hardware store in that other LCA. VNXX arrangements can exist for both ISP and voice traffic. The issue of VNXX traffic (whether ISP or other types of traffic) has been addressed to some degree by the FCC and has been extensively litigated before many state commissions, including the Oregon Commission. The majority of state commissions have, consistent with the Oregon rulings, concluded that traffic, whether voice traffic or ISP that does not physically originate and terminate in the same LCA is not subject to reciprocal compensation under existing interconnection agreements. Here, however, the issue

[38] Level 3 Petition ¶¶ 56-66.

is not the interpretation of an existing interconnection agreement, but what the language of a new agreement should provide. In this case, Level 3 is asking the Commission to require a different compensation rate for non-local calls, deviating from the policy that reciprocal compensation is recoverable only for the termination of "local" traffic (as defined by state commission tariffs). In that regard, language from the *ISP Remand Order* is instructive:

> Congress preserved the pre-Act regulatory treatment of all the access services enumerated under Section 251(g). These services thus remain subject to Commission jurisdiction under Section 201 (or, to the extent they are *intra*state services, they remain subject to the jurisdiction of state commissions), whether those obligations implicate pricing policies as in *Comptel* or reciprocal compensation. *This analysis properly applies to the access services that incumbent LECs provide (either individually or jointly with other local carriers) to connect subscribers with ISPs for Internet-bound traffic.*[39]

The FCC was focused upon problems unique to the compensation mechanism that applied to traffic where the ISP was located in the same LCA. Level 3 attempts to inject language that "ISP-bound" VNXX traffic is subject to ISP compensation, and argues that the FCC changed the access charge structure and issued an exemption for "all" calls sent to the Internet, regardless of where the call originates and terminates. While the FCC has opened a docket to scrutinize these issues as part of an overall examination of intercarrier compensation,[40] the applicable law has not changed. Until the FCC takes further action in its intercarrier compensation docket, removing switched access compensation for calls from across the state or country

[39] *ISP Remand Order* ¶ 39 (emphasis added, footnote omitted).

[40] *In the Matter of Developing a Unified Intercarrier Compensation Regime*, 16 FCC Rcd 9610 (2001) ("*Intercarrier Compensation NPRM*").

should not be permitted.

Q. LEVEL 3 ARGUES THAT THERE IS NOT A COST DIFFERENCE IN TERMINATING ISP AND NON-ISP CALLS. PLEASE RESPOND.

A. Level 3 argues that its cost to terminate an ISP call is not different than the cost to terminate a non ISP call. Qwest has never suggested that there is a cost difference to Level 3 and, whether there is or is not a difference, the question is completely irrelevant. The question before the Commission is not the cost of termination, but whether a CLEC, by serving ISPs, may gather traffic from multiple LCAs at no cost to itself (remember that Level 3 also claims it should pay no costs on Qwest's side of the POI) and then be able to charge Qwest for terminating *all* of that traffic, whether it is local or not. As many other state commissions that have addressed the issue have concluded and as the FCC clearly concluded in the *ISP Remand Order*, requiring reciprocal compensation on ISP traffic leads to uneconomic arbitrage and windfall revenues.

Q. WHY SHOULD QWEST'S LANGUAGE BE ADOPTED?

A. Reciprocal compensation as used in the Act is the charge to terminate "local" traffic. Under Qwest's definition, VNXX traffic (the issue discussed in 3b above) is traffic that originates and terminates at physical locations that *are not* within the same LCA. Even Level 3's definition of VNXX recognized that the call would originate in one LCA and terminate in another LCA. While acknowledging the true nature of VNXX calls, Level 3's proposal attempts to produce a major change in compensation policy by requesting that the Commission nevertheless eliminate access charges on such traffic and require the payment of reciprocal compensation for terminating the traffic. Such a dramatic change in policy should not be

approved by the Commission. Carriers seeking to treat VNXX services as local calls are attempting to collect reciprocal compensation and redefine existing access services and Commission established LCAs and categorize them in a unique way in an attempt to avoid access charges. These VNXX numbers, and the facilities that would be used to connect to locations where such calls would be terminated, are interexchange in nature and are therefore subject to access compensation. By attempting to fool the systems with a "local number," the call detail itself would not indicate that any compensation associated with this interexchange or toll call should be made. The assignment of telephone numbers in the VNXX manner should not result in interexchange calls between two communities not in the same LCA to masquerade as local calls.

Q. WHAT IS THE APPROPRIATE COMPENSATION MECHANISM FOR THESE TYPES OF CALLS?

A. The VNXX service providers, and the ultimate cost-causer, the ISP whose customers generate the traffic via dial-up Internet connections, should bear the financial responsibility for such traffic. After all, it is the CLEC and its ISP customers who generate the traffic. The telecommunications carrier who wishes to deliver this interexchange traffic elsewhere must bear the financial responsibility of the interexchange transport to the ISP. The appropriate compensation mechanism for VNXX services is that the VNXX service provider that is transporting traffic between LCAs should pay the appropriate charges to transport calls between the LCAs. Such calls should not be considered local calls.

ISSUE 3C: COMPENSATION FOR ISP TRAFFIC

Q. WHAT IS THE DISPUTE BETWEEN THE PARTIES IN ISSUE 3C?

A. In Issue 3b the definition of VNXX traffic was discussed. Issue 3a dealt with Level 3's claim that VNXX traffic should be subject to reciprocal compensation. There was no distinction made by Level 3 between a voice call and an ISP call; Level 3's language tries to include VNXX in the category of calls entitled to local compensation rules. Qwest's proposed language made clear that VNXX traffic was not local traffic subject to reciprocal compensation. Now in Issue 3c the language addresses the payment of compensation for ISP traffic generally.

Q. WHAT IS QWEST'S LANGUAGE PROPOSAL FOR ISSUE 3C, SECTION 7.3.6.1, INTERCARRIER COMPENSATION FOR ISP BOUND TRAFFIC?

A. Qwest proposal for the definition of Section 7.3.6.1 is as follows:

> 7.3.6.1 Subject to the terms of this Section, intercarrier compensation for ISP bound traffic exchanged between Qwest and CLEC (where the end users are physically located within the same Local Calling Area) will be billed as follows, without limitation as to the number of MOU ("minutes of use") or whether the MOU are generated in "new markets" as that term has been defined by the FCC: $.0007 per MOU or the state ordered rate, whichever is lower.

Q. WHAT IS LEVEL 3'S LANGUAGE PROPOSAL FOR ISSUE 3C, SECTION 7.3.6.1, INTERCARRIER COMPENSATION FOR ISP TRAFFIC?

A. Level 3's counter-proposal for the definition of Section 7.3.6.1 is as follows:

> 7.3.6.1 Intercarrier compensation for ISP-bound traffic Section 251(b)(5) traffic, and VoIP traffic exchanged between Qwest and CLEC will be billed and paid without limitation as to the number of MOU ("minutes of use") or

whether the MOU are generated in "new markets" as that term has been defined by the FCC in the ISP Remand Order at a rate of $.0007 per MOU.

Q WHY DOES QUEST OBJECT TO LEVEL 3'S PROPOSED LANGUAGE IN 7.3.6.1?

A. Qwest's major objection to Level 3's language stems from the fact that Level 3 has inserted additional types of traffic into the paragraph for which it wants to receive reciprocal compensation at the rate of $.0007. The two additional types of traffic are the imprecise reference to "section 251(b)(5) traffic" as well as "VoIP traffic." As I explain below, by proposing this definition, Level 3 is attempting, in effect, to obtain a decision from the Commission that access rates do not apply to any Level 3 traffic in Oregon.

Q. HOW IS LEVEL 3 ATTEMPTING TO ELIMINATE ACCESS CHARGES IN OREGON?

A. Yes, in a very roundabout, but very clever way. Level 3 proposes language saying the rate of $.0007 shall apply to "251(b)(5) traffic." To find out what this means, one must go to the definitions section of Level 3's proposed agreement to see how it defines "251(b)(5) traffic." It does this in its definition of the term "telecommunications," which, under Level 3's definition, "*includes*, but is not limited to *Section 251(b)(5) Traffic, which is defined as* Telephone Exchange Service, Exchange Access Service, Information Service, *and Telephone Toll Service (including but not limited to IntraLATA and InterLATA Toll) traffic and is also defined to include ISP-Bound traffic, VoIP traffic."* Thus, while including "ISP-bound traffic and VoIP," Level 3 also includes toll traffic in section 251(b)(5)

traffic. As far as I know, it is unprecedented for a CLEC to claim that toll traffic is subject to reciprocal compensation. The effect of all of this is that, under Level 3's language, toll would be subject to reciprocal compensation and no longer subject to terminating access charges. I address this in more detail in "Issue X - Definition of Interconnection." Level 3 apparently believes that access charges should not apply to its traffic, even for calls outside the LCA. Thus, it has attempted in several places to insert language into the agreement that would completely exempt Level 3 from those charges. These are not just minor tweaks to contract language that are of little consequence; rather, it represents a dramatic change in intercarrier compensation from the mechanisms that govern the relationships between carriers.

Q. WHY SHOULD THE COMMISSION REJECT LEVEL 3'S LANGUAGE FOR SECTION 7.3.6.1?

A. Level 3 is asking the Commission to deviate from its general policy and require that toll would be subject to reciprocal compensation and no longer subject to terminating access charges.

VIII. DISPUTED ISSUE 4: COMPENSATION FOR VOICE AND VOIP TRAFFIC

Q. PLEASE DESCRIBE THE PARTIES' DISPUTE RELATING TO ISSUE 4.

A. At its core, this is also a dispute over VNXX calls. Qwest agrees that reciprocal compensation applies on local VoIP calls where the end user customers are physically located in the same LCA, but not when they are located in different LCAs. While the disputed language in section 7.3.6 dealt with ISP traffic, the language in dispute in this issue, section 7.3.4, deals with the exchange of local voice and VoIP traffic. Again, VNXX is the central issue because Level 3 proposes in its language that the compensation for local voice and VoIP calls apply as long as the NXX codes are associated with the same LCA, with no requirement that the end users actually be physically located within the same LCA. The Level 3 language simply attempts to have the Commission amend its access rules and impose reciprocal compensation for VNXX calls that are from outside the LCA.

Q. WHAT IS QWEST'S LANGUAGE PROPOSAL FOR SECTION 7.3.4.1?

A. Qwest's proposal for Section 7.3.4.1 and 7.3.4.2 is set forth below:

> 7.3.4.1 Intercarrier compensation for Exchange Service (EAS/Local) and VoIP traffic exchanged between CLEC and Qwest (where the end users are physically located within the same Local Calling Area) will be billed at $.0013301 per MOU"
>
> 7.3.4.2 The Parties will not pay reciprocal compensation on traffic, including traffic that a Party may claim is ISP-Bound Traffic**,** when the traffic does not originate and terminate within the same Qwest local calling area (as approved by the state Commission), regardless of the calling and called NPA-NXXs and, specifically regardless of whether an End User Customer is assigned an NPA-NXX associated with a rate center different from the rate center where the customer is physically located (a/k/a "VNXX Traffic").

Qwest's agreement to the terms in this paragraph is without waiver or prejudice to Qwest's position that it has never agreed to exchange VNXX Traffic with CLEC.

Q. WHAT IS LEVEL 3'S LANGUAGE PROPOSAL FOR SECTION 7.3.4.1?

A. Level 3's proposal for Section 7.3.4.1 is set forth:

> 7.3.4.1 Subject to the terms of this Section, intercarrier compensation for Section 251(b)(5) Traffic where originating and terminating NPA-NXX codes correspond to rate centers located within Qwest defined local calling areas (including ISP-bound and VoIP Traffic) exchanged between Qwest and CLEC will be billed as follows, without limitation as to the number of MOU ("minutes of use") or whether the MOU are generated in "new markets" as that term has been defined by the FCC: $.0007 per MOU.

Q. IS THERE ALSO A DISPUTE ABOUT THE RATE THAT IS PAID?

A. Yes. The Qwest proposed rate in my testimony reflects the rate of $.0013301 established by the Commission for voice traffic. The FCC did nothing to take away the power of state commissions to set the voice rate for reciprocal compensation. Level 3 thinks a different rate, $.0007, should apply and not the rate established by the Oregon Commission. In addition, Level 3 again tries to insert 251(b)(5) language, which, based on the discussion above, includes toll. Level 3 also attempts to include any VNXX calls by tying the traffic to the NPA-NXX, and not to the towns where the customers reside.

Q. WHY SHOULD THE COMMISSION ADOPT THE QWEST LANGUAGE OVER THE LEVEL 3 LANGUAGE?

A. I will not repeat the arguments on this issue. I addressed them in the VNXX definition section, as well as in the compensation for ISP issue. In both instances, Level 3 seeks to expand the definition of 251(b)(5) traffic to include calls from

outside the LCA if the terminating party had an assigned NXX associated with the local exchange of the calling party. Level 3 is attempting through its language in 7.3.4.1 to do the same thing for voice and VoIP calls. Qwest's language makes clear that VNXX traffic, including voice and VoIP VNXX traffic, is not local and is not subject to reciprocal compensation rules for local traffic. Not only is VNXX traffic not subject to reciprocal compensation, Level 3's proposal would further compound the improper non-payment of access charges by also having Qwest *pay* Level 3 a $0.0007 charge per minute of use. Level 3's language attempts to change the FCC's orders and redefine 251(b)(5) to include toll is addressed in Issues 10 and 19.

IX. DISPUTED ISSUE 19: ISP BOUND 3:1 RATIO, SECTION 7.3.6.2

Q. WHAT IS QWEST'S PROPOSED LANGUAGE FOR 7.3.6.2?

A. Qwest's proposed language for 7.3.6.2 is set forth below:

> 7.3.6.2 Identification of ISP-Bound Traffic – unless the Commission has previously ruled that Qwest's method for tracking ISP-bound Traffic is sufficient, Qwest will presume traffic delivered to CLEC that exceeds a 3:1 ratio of terminating (Qwest to CLEC) to originating (CLEC to Qwest) traffic is ISP-Bound traffic. Either Party may rebut this presumption by demonstrating the factual ratio to the state Commission.

Q. WHAT IS LEVEL 3'S PROPOSED LANGUAGE?

A. Level 3's proposed language is:

> 7.3.6.2 Identification of ISP-Bound Traffic -- Qwest will presume traffic delivered to CLEC that exceeds a 3:1 ratio of terminating (Qwest to CLEC) to originating (CLEC to Qwest) traffic is ISP-Bound traffic. Either Party may rebut this presumption by demonstrating the factual ratio to the state Commission. Traffic exchanged that is not ISP-Bound traffic will be considered to be section 251(b)(5) traffic

Q. PLEASE DESCRIBE THE PARTIES' DISPUTE RELATING TO THE LANGUAGE IN SECTION 7.3.6.2.

A. There are two issues in regard to Section 7.3.6.2. In the first instance, Level 3 seeks to strike language dealing with the situation where a state commission has ruled on what is an appropriate method of tracking ISP traffic. The second issue deals with Level 3's attempt to insert additional language in the section dealing with 3:1 that will presume all traffic exchanged between Qwest and Level 3 that is not ISP-bound traffic is 251(b)(5) traffic. I will address each of these issues separately.

Q. WHY DID QWEST INCLUDE THE LANGUAGE IN THE FIRST PART OF SECTION 7.3.6.2 THAT LEVEL 3 WANTS STRIKEN?

A. The language at issue, "*unless the Commission has previously ruled that Qwest's method for tracking ISP-Bound Traffic is sufficient"* is language proposed by Qwest for all states. Qwest's proposed language simply provides that *if* a Commission has previously ruled that Qwest's method of identifying actual ISP-bound traffic is sufficient, then that method of identifying actual local and ISP minutes should be employed instead of the presumption formula. The FCC gave this right to both parties as part of the decision in the *ISP Remand Order* establishing the 3:1 ratio.

> "A carrier may rebut the presumption, for example, by demonstrating to the appropriate state commission that traffic above the 3:1 ratio is in fact local traffic delivered to non-ISP customers. In that case, the state commission will order payment of the state-approved or state-arbitrated reciprocal compensation rates for that traffic. Conversely, if a carrier can demonstrate to the state commission that traffic it delivers to another carrier is ISP-bound traffic, even though it does not exceed the 3:1 ratio, the state commission will relieve the originating carrier of reciprocal compensation payments for that traffic, which is subject instead to the compensation regime set forth in this Order".[41]

Qwest has brought this issue up elsewhere and has successfully rebutted the 3:1 presumption. In Oregon, Qwest has not brought this matter before the Commission so the Commission has not ruled on Qwest's method of identifying ISP traffic. Because Level 3 does not object to the language that "[e]ither party may rebut this presumption by demonstrating the factual ratio to the state Commission," and so

[41] *ISP Remand Order*, ¶ 79.

long as the matter can be addressed later if needed, Qwest has no objection to the language "unless the Commission has previously ruled that Qwest's method for tracking ISP-Bound Traffic is sufficient**"** being struck.

Q. WHY DOES QWEST OBJECT TO LEVEL 3'S INSERTION OF LANGUAGE AT THE END OF SECTION 7.3.6.2?

A By making what at first blush is a seemingly harmless insertion of the language, Level 3 is in fact attempting to classify *all* traffic exchanged between the two companies as local traffic. This sentence must be read side by side with Level 3's definition of 251(b)(5) traffic, in which Level 3 attempts to even include toll traffic in the definition. I have addressed this issue previously and the provision Level 3 seeks to insert is not consistent with the law. Level 3's language would have the effect of eliminating the interstate and intrastate access structures established by the FCC and Oregon Commission and should be rejected. The FCC made clear that all traffic is not subject to 251(b)(5):

> "We conclude that a reasonable reading of the statute is that Congress intended to exclude the traffic listed in subsection (g) from the reciprocal compensation requirements of subsection (b)(5). Thus, the statute does not mandate reciprocal compensation for "exchange access, information access, and exchange services for such access" provided to IXCs and information service providers."[42]

Q. HOW SHOULD THE COMMISSION RULE ON ISSUE 19?

A. The Commission should rule that Level 3's attempt to change existing law on what

[42] *ISP Remand Order* ¶ 34.

is included in Section 251(b)(5) traffic should be denied. Thus, the Level 3 proposed language for Section 7.3.6.2 should be rejected.

X. DISPUTED ISSUE 10: DEFINITION OF INTERCONNECTION

Q. WHAT IS QWEST'S LANGUAGE PROPOSAL FOR THE DEFINITION OF INTERCONNECTION?

A. Qwest's definition for "Interconnection" is as follows:

> "Interconnection" is as described in the Act and refers to the connection between networks for the purpose of transmission and routing of telephone Exchange Service traffic, IntraLATA Toll carried solely by local exchange carriers, ISP-Bound traffic and Jointly Provided Switched Access traffic.

Q. WHAT IS LEVEL 3'S LANGUAGE PROPOSAL FOR THE DEFINITION OF INTERCONNECTION?

A. Level 3's proposal for the definition of "Interconnection" is set forth:

> "Interconnection" is the linking of two networks for the mutual exchange of Telecommunications Including Telephone Exchange Service and Exchange Access traffic. Telecommunications includes, but is not limited to Section 251(b)(5) Traffic, which is defined as Telephone Exchange Service, Exchange Access Service, Information Service, and Telephone Toll Service (including but not limited to IntraLATA and InterLATA Toll) traffic and is also defined to include ISP-Bound traffic, VoIP traffic. Interconnection also includes the exchange of Jointly Provided Switched Access (InterLATA and IntraLATA) traffic. Section 251(b)(5) traffic does not include Jointly Provided Switched Access traffic.

Q. PLEASE DESCRIBE THE PARTIES' DISPUTE RELATING TO ISSUE 10.

A. Level 3 mischaracterizes this issue as Qwest's attempt to exclude traffic from being exchanged. That is not the issue at all. Level 3 purports to be offering a definition of interconnection, but a reading of Level 3's definition shows that it has inserted into the body of the language the following: "***Telecommunications includes, but is not limited to Section 251(b)(5) Traffic, which is defined as Telephone Exchange***

Service, Exchange Access Service, Information Service, and Telephone Toll Service (including but not limited to IntraLATA and InterLATA Toll) traffic and is also defined to include ISP-Bound traffic, VoIP traffic." This language is a clear misstatement of the FCC's position. Level 3 is seeking to expand the definition of 251(b)(5) traffic to include, among other things, intraLATA and interLATA toll calls. Level 3 is simply attempting, through a definitional sleight of hand, to convince the Commission to overturn this portion of the FCC's decision in the *ISP Remand Order*. The Commission should reject Level 3's definition of "interconnection" and its attempts to obtain an interconnection definition that would include toll, access, and information services in section 251(b)(5) traffic. The Commission should, therefore, adopt the Qwest definition.

XI. DISPUTED ISSUE 11: DEFINITION OF INTEREXCHANGE CARRIER

Q. PLEASE DESCRIBE THE PARTIES' DISPUTE RELATING TO ISSUE 11.

A. This issue relates to whether the ICA should contain the definition of "Interexchange Carrier" as proposed by Qwest or use Level 3's definition.

Q. WHAT IS QWEST'S LANGUAGE PROPOSAL FOR THIS DEFINITION?

A. Qwest's definition for "Interexchange Carrier" is as follows:

> "Interexchange Carrier" or "IXC" means a Carrier that provides ***InterLATA or IntraLATA Toll services.***

Q. WHAT IS LEVEL 3'S LANGUAGE PROPOSAL FOR THE DEFINITION OF AN INTEREXCHANGE CARRIER?

A. Level 3's proposal for the definition of "Interexchange Carrier" is set forth:

> "Interexchange Carrier" or "IXC" means a Carrier that provides ***Telephone Toll Service.***

Q. WHY DOES QWEST BELIEVE THAT ITS DEFINITION IS MORE ACCURATE?

A. I will state first that this is not an area of disagreement that is significant or will have a profound effect on the implementation of the ICA, except as discussed below. Qwest's proposed definition of "Interexchange Carrier" is the current, standard language included in interconnection agreements with CLECs and has been approved by every Commission in Qwest's region, including this Commission. An interexchange carrier is an access customer that typically purchases Feature Group D access trunks from Qwest to originate and terminate

"interLATA and intraLATA" toll calls. The terms "interLATA" and "intraLATA" have been widely used and understood within the telecommunications industry. The Communications Act of 1934 (as amended) contains a definition for "'interLATA service"[43] and references the term "interLATA" throughout the Act. State commissions also reference intraLATA and interLATA services and refer to "toll" services ordered by an IXC.

Q. WHY WOULD LEVEL 3 OBJECT TO THE USE OF "INTERLATA" AND "INTRALATA" IN RELATIONSHIP TO AN IXC?

A. During negotiations, Level 3 implied that in order for a toll call to be a toll call, a discrete charge must be imposed. Thus, under this logic, if Level 3 did not charge its customers for VNXX calls, the VNXX calls could not be categorized as toll calls, could not be subject to access charges, and should be subject to reciprocal compensation. Level 3's effort to inject the "Telephone Toll Service" definition appears to be a back door attempt to inject this issue into the agreement. Although Qwest has little dispute between the two definitions, Qwest takes strong issue with a Level 3 assertion that the "telephone toll service" definition means that VNXX is not toll and has been validated by the agreement, with all of its attendant implications for access charges and reciprocal compensation. Under what appears to be Level 3's theory, a carrier that offers toll but does not charge its customers would thereby exempt itself from FCC or state prescribed access charges.

[43] 47 U.S.C. § 153(21). (InterLATA service "means telecommunications between a point located in a local access and transport area and a point located outside such area").

Furthermore, Level 3's ability as a CLEC to obtain local numbers carries with it the assumption (apparently false in its case) that these numbers can be used to originate and/or terminate local calls. Thus, Qwest has no way to determine in advance whether any particular call is really a toll call and that it should be billed as such. Thus, a CLEC, like Level 3, that wants to rely on a definition that a toll call can only be a toll call if there is a charge to the end user, is enabled to create its own self-fulfilling prophecy. The reference to charges is addressed to the end user. Toll is a retail product sold to end users. Access is a product that is sold to IXCs. Whether or not there is a charge to a retail end user for the toll call will not impact the tariffed obligation to pay access charges.

XII. DISPUTED ISSUE 12: DEFINITION OF "INTRALATA TOLL TRAFFIC"

Q. PLEASE DESCRIBE THE PARTIES' DISPUTE RELATING TO ISSUE 12.

A. This issue relates to whether the ICA should contain the definition of "IntraLATA Toll" as proposed by Qwest or use Level 3's definition.

Q. WHAT IS QWEST'S PROPOSAL FOR "INTRALATA TOLL"?

A. Qwest's proposal for "IntraLATA toll" is as follows:

> "IntraLATA Toll Traffic describes IntraLATA Traffic outside the Local Calling Area."

Q. WHAT IS LEVEL 3'S LANGUAGE PROPOSAL?

A. Level 3's proposal for "IntraLATA toll" is as follows:

> "IntraLATA Toll Traffic describes IntraLATA Traffic that constitutes Telephone Toll Service."

Q. WHY SHOULD QWEST'S LANGUAGE BE ADOPTED?

A. Again, the Commission will note that there is little in the way of a substantive difference here. Both definitions accurately describe a type of IntraLATA toll call in different ways. Neither definition will change the impact of the Agreement. However, Level 3's injection of the "Telephone Toll Service" definition again raises the issue of whether Level 3 believes that the inclusion of that definition means that traffic between two exchanges (i.e., interexchange traffic) is exempt from access charges. If so, the companies have a major dispute. The dispute can be avoided by simply adopting Qwest's language, which is clear and has been widely accepted in SGATs and interconnection agreements.

XIII. DISPUTED ISSUE 9 AND 14: DEFINITION OF EXCHANGE ACCESS AND EXCHANGE SERVICE

Q. WHAT IS QWEST'S PROPOSAL FOR THE DEFINITION OF EXCHANGE ACCESS AND EXCHANGE SERVICE?

A. Qwest's definition for "Exchange Access" and "Exchange Service" is as follows:

> "Exchange Access as used in the Agreement shall have the meaning set forth in the Act."

> "Exchange Service or Extended Area Service (EAS)/Local Traffic means traffic that is originated and terminated within the Local Calling Area as determined by the Commission."

Q. WHAT IS LEVEL 3'S LANGUAGE PROPOSAL FOR THE DEFINITIONS OF EXCHANGE ACCESS AND EXCHANGE SERVICE?

A. Level 3's proposes replacing the language for both "Exchange Access" and "Exchange Service" with the following language:

> "Telephone exchange service - The term "telephone exchange service" means (A) service within a telephone exchange, or within a connected system of telephone exchanges within the same exchange area operated to furnish to subscribers intercommunicating service of the character ordinarily furnished by a single exchange, and which is covered by the exchange service charge, or (B) comparable service provided through a system of switches, transmission equipment, or other facilities (or combination thereof) by which a subscriber can originate and terminate a telecommunications service."

Q. PLEASE DESCRIBE THE PARTIES' DISPUTE RELATING TO ISSUE 14.

A. This dispute relates to Level 3's deletion of the terms "Exchange Access" and "Exchange Service" from the agreement and instead include the definition for "Telephone Exchange Service". Qwest's proposed definition in the agreement for

"Exchange Access" is in accordance with the meaning set forth in the Act, and Qwest's proposed definition for "Exchange Service" or "Extended Area Service (EAS)/Local Traffic" means traffic that is originated and terminated within a LCA as determined by the Commission. Qwest cannot nor should the Commission agree to strike "Exchange Access" and "Exchange Service" from the definitions. Exchange Access and Exchange Service are used in hundreds of paragraphs throughout the agreement (most of which Level 3 has not disputed). Furthermore, even in competing language, Level 3 uses Exchange Access in its own proposed language (see Level 3's proposed sections 7.2.2.1.1, 7.2.2.9.3.2, and 7.3.8). The term is used in almost every section of the agreement, including sections such as 9, 10, and 12 that are not even disputed in this arbitration. Qwest objects to the removal of Qwest's definitions for "Exchange Access" and "Exchange Service" as they are used repeatedly throughout the agreement and are therefore necessary.

XIV. DISPUTED ISSUE 15: DEFINITION OF "TELEPHONE TOLL SERVICE"

Q. PLEASE DESCRIBE THE PARTIES' DISPUTE RELATING TO ISSUE 15.

A. This issue relates to Level 3's inclusion of a definition for "telephone toll service" and Qwest's position that it is not necessary to include a separate definition for "telephone toll service."

Q. WHAT IS LEVEL 3'S LANGUAGE PROPOSAL FOR THE DEFINITION OF TELEPHONE TOLL SERVICE?

A. Level 3's proposal on is as follows:

> Telephone toll service - the term "telephone toll service" means telephone service between stations in different exchange areas for which there is made a separate charge not included in contracts with subscribers for exchange service.

Q. WHAT IS THE EXISTING DEFINITION FOR SWITCHED ACCESS SERVICE THAT INCLUDES TELEPHONE TOLL SERVICE?

A. The definition that has been agreed upon by both parties for "Switched Access Service" states that Switched Access is the service that an IXC orders for originating and terminating 'telephone toll service.' Switched Access enables access customers (IXCs) to complete end-user requests for intrastate or interstate long-distance calls. The terms and conditions for access services are in compliance with the rules and regulations for telephone toll service. The definition reads as follows:

> "Switched Access Service" means the offering of transmission and switching services to Interexchange Carriers for the purpose of the origination or

termination of ***telephone toll service***. Switched Access Services include: Feature Group A, Feature Group B, Feature Group D, 8XX access, and 900 access and their successors or similar Switched Access Services.

Q. DOES QWEST HAVE A PROBLEM WITH THE DEFINITION OF TOLL SERVICE ITSELF?

A. No. The definition is from the FCC and is not controversial. What is controversial is Level 3's attempt to avoid access charges on telephone toll elsewhere in the agreement. The real issue regarding this definition is Level 3's attempt to exempt "telephone toll service" from access charges and instead treat this traffic as local. Level 3 proposes that telephone toll service be included in section 251(b)(5) traffic, traffic that is treated as local that is not subject to access charges. As an example, in the definition for "Interconnection" Level 3's language states: "Section 251(b)(5) traffic, which is defined as Telephone Exchange Service, Exchange Access Service, Information Service, and ***Telephone Toll Service (including but not limited to intraLATA and interLATA Toll***)." While this is one of the few places where Level 3 spells out that it is making a definitional attempt to include toll with section 251(b)(5), Level 3 then uses the term 251(b)(5) traffic throughout the agreement without mentioning the fact that they have defined it to include toll. This is an inappropriate attempt to redefine categories of traffic in ways that will dramatically change methods of compensation. It should not be accepted by the Commission.

Q. DOES QWEST HAVE A PROBLEM WITH THE DEFINITION ITSELF?

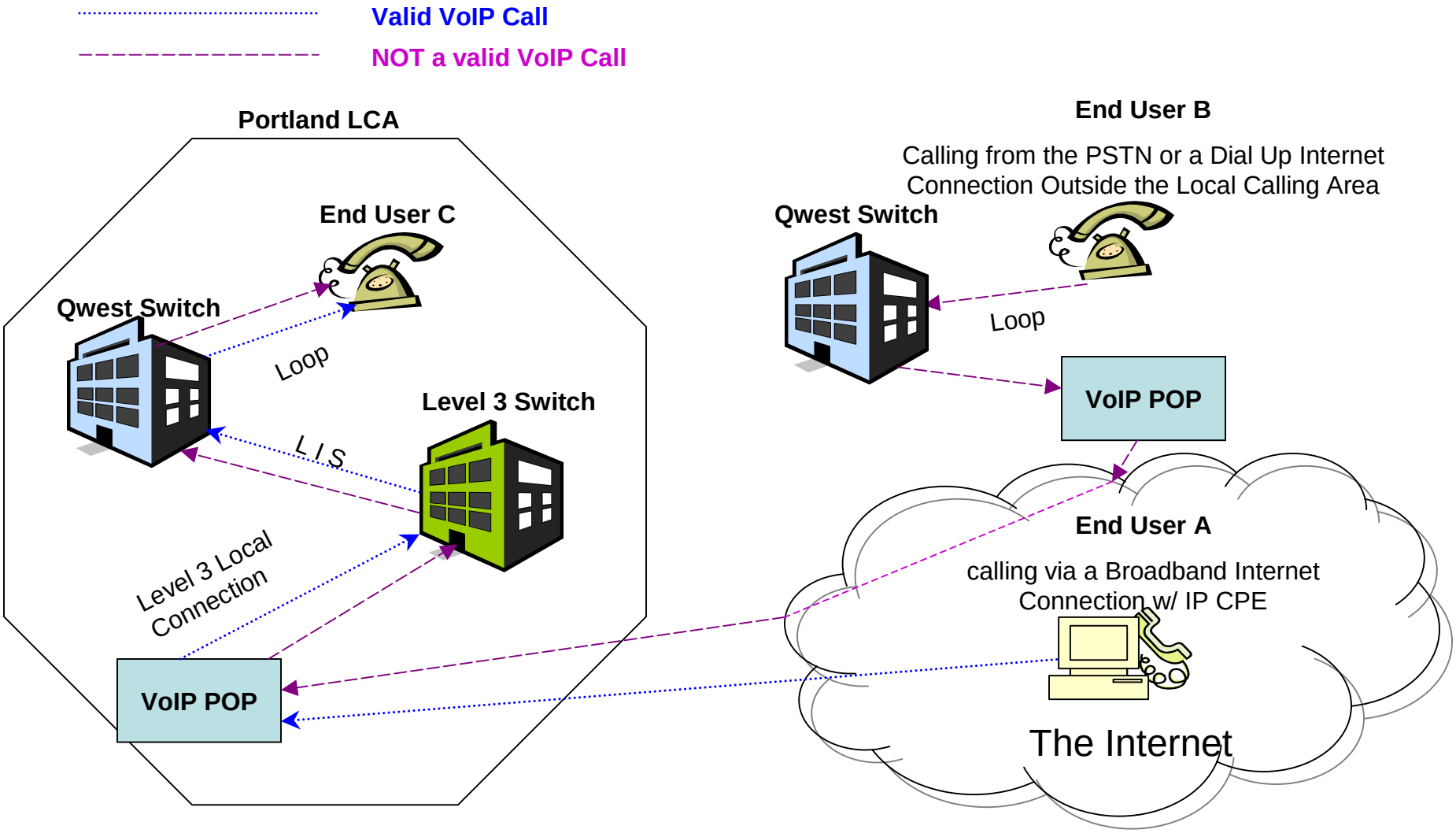
A. No. As long as the Commission remains mindful of Level 3's improper use of the term in other paragraphs involved in this arbitration.

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes, it does.

INDEX TO EXHIBITS

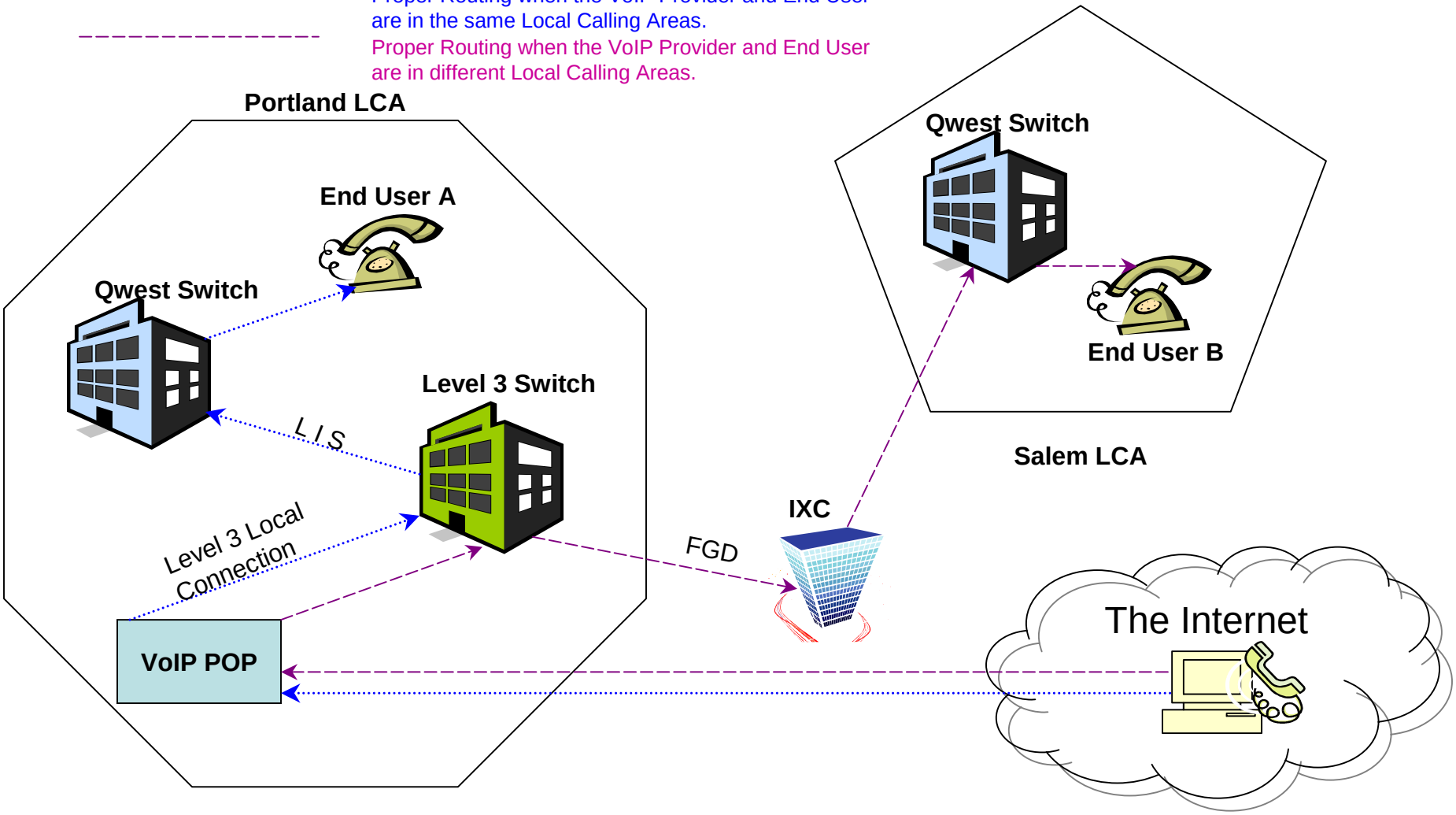
Examples of VoIP Calls



Proper Routing of Valid VoIP Calls

Proper Routing when the VoIP Provider and End User are in the same Local Calling Areas.

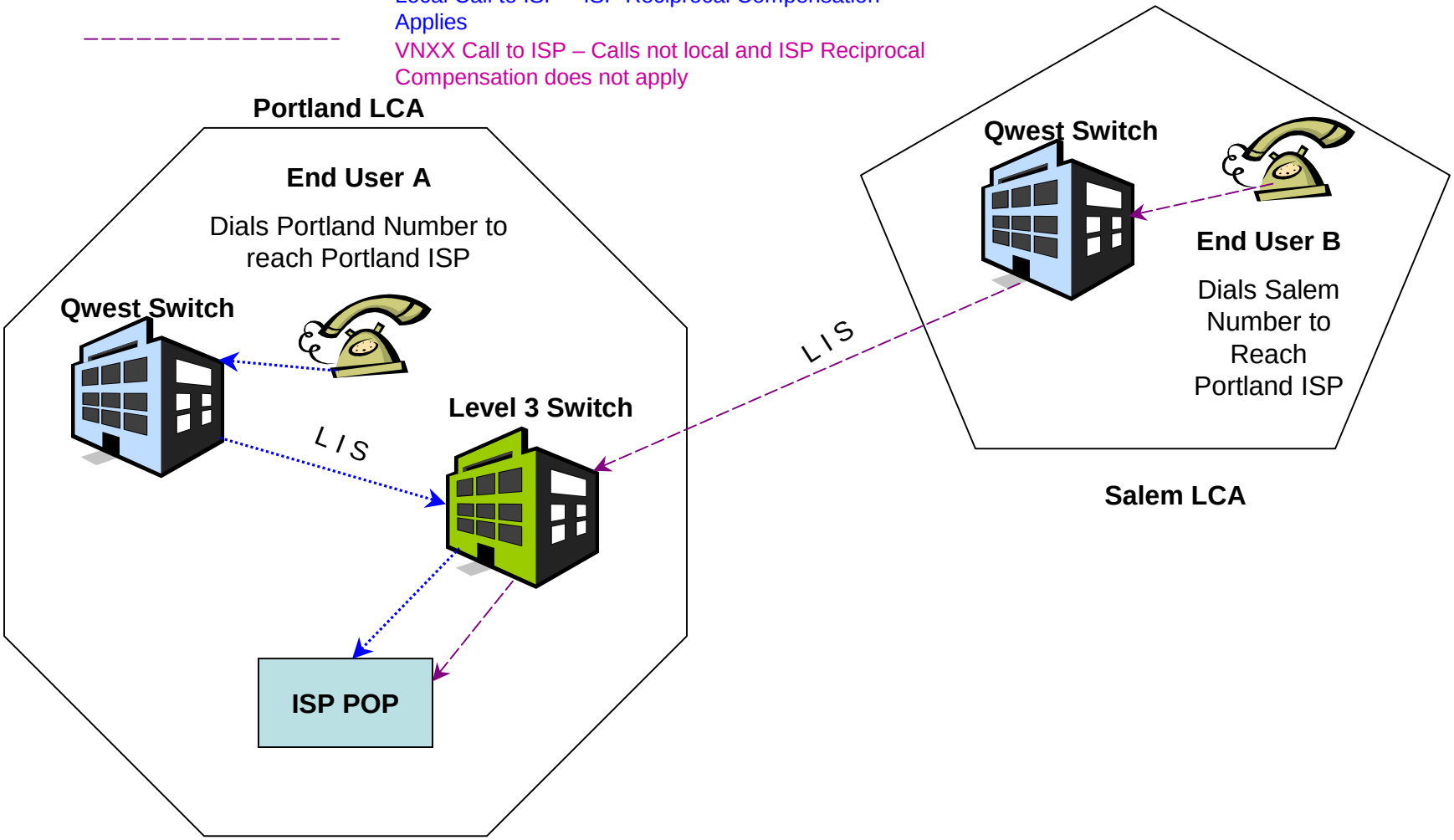
Proper Routing when the VoIP Provider and End User are in different Local Calling Areas.



VNXX Routing

Local Call to ISP – ISP Reciprocal Compensation Applies

VNXX Call to ISP – Calls not local and ISP Reciprocal Compensation does not apply



Qwest/6
Linse/i

BEFORE THE PUBLIC UTILITY COMMISSION OF OREGON

ARB 665

In the Matter of the Petition of Level 3 Communications, LLC's Petition for Arbitration Pursuant to Section 252 (b) of the Communications Act of 1934 with Qwest Corporation	**LEVEL 3 COMMUNICATIONS, LLC'S PETITION FOR ARBITRATION**

DIRECT TESTIMONY OF

PHILIP LINSE

FOR

QWEST CORPORATION

August 12, 2005

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I. IDENTIFICATION OF WITNESS

Q. PLEASE STATE YOUR NAME, BUSINESS ADDRESS AND POSITION WITH THE QWEST CORPORATION.

A. My name is Philip Linse. My business address is 700 West Mineral Avenue, Littleton Colorado. I am employed as Director – Technical Regulatory in the Network Policy Organization. I am testifying on behalf of Qwest Corporation ("Qwest").

Q. PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND AND EMPLOYMENT EXPERIENCE.

A. I received a Bachelors degree from the University of Northern Iowa in 1994. I began my career in the telephone communications industry in 1995 when I joined the engineering department of CDI Telecommunications in Missoula, Montana. In 1998, I accepted a position with Pacific Bell as a Technology Planner with responsibility for analyzing network capacity. In 2000, I accepted a position with U S WEST as a Manager, Tactical Planning. In 2001, I was promoted to a staff position in Technical Regulatory Interconnection Planning for Qwest. In this position, I developed network strategies for interconnection of unbundled Switching, Signaling System 7 ("SS7") and other switching-related products. My responsibilities also included the development of network strategies based on the evaluation of new technologies. I was one of the network organization's subject matter experts. In 2003, I was promoted to my current position as Director of Technical Regulatory in the Network organization. Since my promotion in 2003, the Technical Regulatory group has been realigned and is now part of the Policy organization. In addition to my oversight responsibilities of Qwest's network regulatory interconnection and switching requirements for sections 251 and 252 of

the Telecommunications Act of 1996, I also develop and direct the implementation of network policies. In addition to these internal functions, I also represent Qwest in industry technical standards setting groups such as the FCC's Network Reliability and Interoperability Council ("NRIC") and the Network Interconnection Interoperability Forum ("NIIF").

II. PURPOSE OF TESTIMONY

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. The purpose of my testimony is to detail Qwest's positions, from a technical perspective, as they relate to certain disputed issues between the parties. My testimony will show that the Qwest position on these issues is reasonable, appropriate and more than adequately provides for the interconnection needs of Level 3. Specifically, my testimony will address the following issues from the Matrix of Unresolved Issues filed by Level 3 in this arbitration:

- Issue 1: Costs of Interconnection
- Issue 2: Combining Traffic on Interconnection Trunks
- Issue 6: AMA and Switch Technology
- Issue 8: Definition of Call Record
- Issue 20: Signaling Parameters

In portions of my testimony that follow, where the disputed language is similar but contain modifications to Qwest's language, I have underlined the language that Level 3 wishes to delete or add.

III. EXECUTIVE SUMMARY

Q. PLEASE PROVIDE A SUMMARY OF YOUR TESTIMONY.

A. The following is a summary of my testimony addressing the issues that are critical to the ICA: (1) Cost of Interconnection, (2) Combining traffic on a single trunk group, (3) Definition of Call Record, and (4) Signaling Parameters.

Cost of Interconnection:

The first issue I address is single point of interconnection ("POI"). I will explain that Level 3 has the capability to establish a single POI in each LATA and that the physical point where two networks interconnects is not always the point where the financial responsibility is divided between Qwest and Level 3. In addition, I also explain the methods which Level 3 may establish interconnection with Qwest. My testimony further explains that there are circumstances under which Level 3 may find it beneficial and necessary to establish additional interconnection trunking with Qwest's network.

I comment on Level 3's language and demonstrate that Level 3's language goes beyond establishing a single POI to require integration of Qwest's network with Level 3s' network. I demonstrate that Level 3's language does not correctly represent interconnection because it describes POI locations as methods of interconnection. In addition, I explain that Level 3's language omits language that benefits all carriers interconnected with Qwest.

Combining Traffic on Interconnection Trunks

The second issue I address is the combining of traffic on interconnection trunks. I demonstrate that Qwest provides Level 3 with the capability to accomplish the network trunking efficiencies that it seeks. I explain that Level 3 wishes to route both its switched access traffic and local traffic over a single Local Interconnection Service ("LIS") trunk group. I also explain how the same access traffic is routed to Qwest by other carriers and will demonstrate that Qwest's proposed language gives Level 3 the capability to route both its switched access traffic and local traffic over access trunks. I will explain the technical difficulties associated with recording of switched access traffic that is routed over local trunk groups and further explain that Level 3 obtains the same efficiencies by routing traffic over access trunks under Qwest's proposed language.

Definition of Call Record

The definition of call record is an issue where Qwest and Level 3 are disputing the information that should be contained within a call record. My testimony will explain the technical problems with Level 3's proposed definition of call records. I will also demonstrate that Qwest's language more accurately represents what is contained in a call record so that call records is consistent and can used for billing purposes.

Signaling Parameters

The final issue I address is signaling parameters. I will explain technical problems with Level 3's proposed language. I will demonstrate that Level 3's language will create circumstances where otherwise legitimate and appropriately identified traffic becomes inappropriately identified. Level 3 also attempts to create a signaling parameter that is not defined by industry standards.

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IV. DISPUTED ISSUE NO. 1: COSTS OF INTERCONNECTION

Issue No. 1A

Q. PLEASE EXPLAIN DISPUTED ISSUE NO. 1A.

A. Issue 1A involves disputed language regarding points of interconnection. Level 3 mischaracterizes the issue as having to do with its right to interconnect at a single point in the LATA and Qwest's obligation on its side of the POI. However, Qwest believes that the POI is not the real issue here. The real issue is whether Qwest should be required to provide interconnection where it is not technically feasible or to provision/build transport facilities to Level 3 without compensation for the provisioning/building of such transport facilities. As such, the real issue here is one of Level 3 not wanting to compensate Qwest for the use of its network. Whereas my testimony addresses Issue 1A from a technical perspective, the testimony of Bill Easton will more fully address compensation issues and why Level 3 is required to compensate Qwest for interconnection facilities provided by Qwest.

Q. WHAT LANGUAGE DOES QWEST PROPOSE?

A. Qwest proposes the following language, which is also found on page 64 of the interconnection agreement ("ICA") filed by Qwest with its Supplement to Initial Response to Petition for Arbitration on June 28, 2005. The ICA contains the language proposed by Qwest juxtaposed against the language proposed by Level 3:

> 7.1.1 This Section describes the Interconnection of Qwest's network and CLEC's network for the purpose of exchanging Exchange Service (EAS/Local traffic), Exchange Access (IntraLATA Toll carried solely by local exchange carriers), ISP-Bound traffic, and Jointly Provided Switched Access (InterLATA and IntraLATA) traffic. Qwest will provide Interconnection at any Technically Feasible point within its network. Interconnection, which Qwest currently names "Local Interconnection Service" (LIS), is provided for the purpose of connecting

End Office Switches to End Office Switches or End Office Switches to local or Access Tandem Switches for the exchange of Exchange Service (EAS/Local traffic); or End Office Switches to Access Tandem Switches for the exchange of Exchange Access (IntraLATA Toll carried solely by local exchange carriers) or Jointly Provided Switched Access traffic. Qwest Tandem Switch to CLEC Tandem Switch connections will be provided where Technically Feasible. New or continued Qwest local Tandem Switch to Qwest Access Tandem Switch and Qwest Access Tandem Switch to Qwest Access Tandem Switch connections are not required where Qwest can demonstrate that such connections present a risk of Switch exhaust and that Qwest does not make similar use of its network to transport the local calls of its own or any Affiliate's End User Customers.

7.1.1.1 CLEC agrees to allow Qwest to conduct operational verification audits of those network elements controlled by CLEC and to work cooperatively with Qwest to conduct an operational verification audit of any other provider that CLEC used to originate, route and transport VoIP traffic that is delivered to Qwest, as well as to make available any supporting documentation and records in order to ensure CLEC's compliance with the obligations set forth in the VoIP definition and elsewhere in this Agreement. Qwest shall have the right to redefine this traffic as Switched Access in the event of an "operational verification audit failure". An "operational verification audit failure" is defined as: (a) Qwest's inability to conduct a post-provisioning operational verification audit due to insufficient cooperation by CLEC or CLEC's other providers, or (b) a determination by Qwest in a post-provisioning operational verification audit that the CLEC or CLEC's end users are not originating in a manner consistent with the obligations set forth in the VoIP definition and elsewhere in this Agreement.

7.1.1.2 Prior to using Local Interconnection Service trunks to terminate VoIP traffic, CLEC certifies that the (a) types of equipment VoIP end users will use are consistent with the origination of VoIP as defined in this Agreement; and (b) types of configurations that VoIP end users will use to originate calls using IP technology are consistent with the VoIP configuration as defined in this Agreement.

Q. WHAT LANGUAGE DOES LEVEL 3 PROPOSE?

A. Level 3 proposes the following:

7.1.1 This Section describes the Interconnection of Qwest's network and CLEC's network for the purpose of exchanging Telecommunications Including Telephone Exchange Service And Exchange Access traffic. Qwest will provide Interconnection at any Technically Feasible point within its network.

7.1.1.1 **Establishment of SPOI**: Qwest agrees to provide CLEC a Single Point of Interconnection (SPOI) in each Local Access Transport Area (LATA) for the exchange of all telecommunications traffic. The SPOI may be established at

any mutually agreeable location within the LATA, or, at Level 3's sole option, at any technically feasible point on Qwest's network. Technically feasible points include but are not limited to Qwest's end offices, access tandem, and local tandem offices.

7.1.1.2 **Cost Responsibility.** Each Party is responsible for constructing, maintaining, and operating all facilities on its side of the SPOI, subject only to the payment of intercarrier compensation in accordance with Applicable Law. In accordance with FCC Rule 51.703(b), neither Party may assess any charges on the other Party for the origination of any telecommunications delivered to the other Party at the SPOI, except for Telephone Toll Service traffic outbound from one Party to the other when the other Party is acting in the capacity of a provider of Telephone Toll Service, to which originating access charges properly apply.

7.1.1.3 Facilities included/transmission rates. Each SPOI to be established under the terms of this Attachment shall be deemed to include any and all facilities necessary for the exchange of traffic between Qwest's and Level 3's respective networks within a LATA. Each Party may use an Entrance Facility (EF), Expanded Interconnect Channel Termination (EICT), or Mid Span Meet Point of Interconnection (POI) and/or Direct Trunked Transport (DTT) at DS1, DS3 , OC3 or higher transmission rates as, in that Party's reasonable judgment, is appropriate in light of the actual and anticipated volume of traffic to be exchanged. If one Party seeks to establish a higher transmission rate facility than the other Party would establish, the other Party shall nonetheless reasonably accommodate the Party's decision to use higher transmission rate facilities.

7.1.1.4 Each Party Shall Charge Reciprocal Compensation for the Termination of Traffic to be carried. All telecommunications of all types shall be exchanged between the Parties by means of from the physical facilities established at Single Point of Interconnection Per LATA onto its Network Consistent With Section 51.703 of the FCC's Rules:

7.1.1.4.1 Level 3 may interconnect with Qwest at any technically feasible point on Qwest's network for the exchange of telecommunications traffic. Such technically feasible points include but are not limited to Qwest access tandems or Qwest local tandems. When CLEC is interconnected at the SPOI. separate trunk groups for separate types of traffic may be established in accordance with the terms hereof. No separate physical interconnection facilities, as opposed to separate trunk groups within SPOI facilities, shall be established except upon express mutual agreement of the Parties.

Q. WHY DOES QWEST OBJECT TO LEVEL 3'S PROPOSED LANGUAGE?

A. As Mr. Easton's testimony explains, the POI is not necessarily the financial demarcation point between Level 3 and Qwest. Level 3 also incorrectly defines its

POI as a point that is physically located on Qwest's network. In addition, Level 3's proposed language is inconsistent and attempts to extend Qwest's interconnection responsibility until it stretches from any point on the Qwest network to points not even within Qwest's serving territory. Level 3's proposed language would impose a requirement on Qwest to accept traffic where there are technical limitations and requires higher transmission rates than may be necessary or justified. Qwest also disputes the portions of Level 3's proposed language in Issue No. 1A as they apply or support other issues in dispute. The testimony of Larry Brotherson addresses the portions of Issue No.1A that concern Voice over Internet Protocol ("VoIP").

Q. DOES QWEST'S LANGUAGE PROHIBIT SINGLE POINT OF INTERCONNECTION?

A. No. Qwest's proposed language does not prohibit Single Point of Interconnection ("SPOI"); in fact it allows for SPOI under conditions that have been found acceptable by other similarly situated carriers and commissions throughout Qwest's 14 state territory, including Oregon. As I will explain later in my testimony when addressing issue 1B, Level 3 has multiple methods available to it to establish interconnection to its POI under Qwest's proposed language. Qwest's position is that it is entitled to compensation for the facilities Qwest provides to enable Level 3's selection of a SPOI.

Q. WHAT IS SINGLE POINT OF INTERCONNECTION?

A. A SPOI is a physical demarcation point where Level 3 and Qwest can exchange traffic originating from or destined for multiple Qwest end offices within a LATA using Qwest provided transport facilities between Level 3's network and Qwest's network. This allows Level 3 to serve customers that are located in different Qwest exchanges without having to build its own interconnection facilities to each

exchange where Level 3 wishes to provide local service. As my testimony will explain when addressing issue 1B, there are multiple methods of interconnection that would allow Level 3 to establish these transport facilities between Qwest and Level 3's SPOI.

Q. IS LEVEL 3 CORRECT TO SUGGEST THAT IT MAY ESTABLISH ITS POI ON QWEST'S NETWORK?

A. No. While a POI may be located within a Qwest office, interconnection is accomplished by means of cross-connections between components of Qwest's network and components of the interconnecting CLEC's network. These cross-connections are the physical demarcation point between the networks and facilitate the exchange of traffic between two separate networks. Level 3's language incorrectly and inappropriately suggests that it has the right to establish a POI that is directly connected to Qwest's equipment. What Level 3 is requesting, in actuality, is integration into Qwest's network, and not interconnection with Qwest's network. Level 3's proposal prevents Qwest from retaining sole responsibility for the management, control, and performance of its own network and is contrary to the intent of the Act[1]. It is Qwest's position that interconnection is appropriately obtained by establishing a demarcation point (or POI) between Qwest's network and Level 3's network.

Q. WHAT IS A DEMARCATION POINT?

A. A demarcation point is a point where the facilities of two networks meet. This allows each network operator to maintain and control the performance of its respective network without potential adverse impacts that may be created by the other network operator. Such demarcation points can include such locations as a

[1] FCC 96-325, First Report And Order ¶ 203 Aug, 8th 1996.

main distribution frame.[2] The demarcation point between Qwest and CLECs including Level 3 is its POI. Without a demarcation point where the two networks can meet, neither Qwest nor Level 3 may be assured the ability to maintain or control the performance of its network.

Q. ARE THERE OPTIONS AVAILABLE TO LEVEL 3 FOR ESTABLISHING A DEMARCATION POINT/POI?

A. Yes. For Level 3 to establish interconnection with Qwest, Level 3 must create its POI for demarcation at a point in each LATA within Qwest's serving territory. Level 3 would then choose a method of interconnection that best fits its needs. The methods for establishing interconnection are explained in my testimony for Issue 1B.

Q. HOW IS LEVEL 3'S PROPOSED LANGUAGE INCONSISTENT?

A. Level 3's language is inconsistent because it describes interconnection "within" Qwest's network in section 7.1.1 and then "on" Qwest's network in section 7.1.1.4 and 7.1.1.4.1. While Qwest agrees that the word "within" represents interconnection within Qwest's serving territory, the use of "on" in Level 3's proposed language increases the potential for future disputes.

Q. HOW MIGHT LEVEL 3'S PROPOSED LANGUAGE OBLIGATE QWEST TO EXCHANGE TRAFFIC WHERE IT IS NOT TECHNICALLY FEASIBLE?

A. Level 3's proposed language obligates Qwest to accept telecommunications traffic of all types through Level 3's SPOI at any technically feasible point. All types of telecommunications traffic includes toll traffic. Level 3 then defines the technically

[2] FCC 96-325, First Report And Order, ¶ 210 Aug. 8th 1996.

feasible points to include Qwest's access tandems and local tandems. Qwest's network currently consists of a combination of access tandems for the routing of toll traffic, and local tandems for the routing of local traffic. Qwest's local tandem architecture, however, does not have the capability of routing toll traffic. Qwest's local tandems do not have the connections to end offices and to other carriers that would allow for the appropriate routing of traffic that is not local to the end offices that subtend each local tandem. To achieve that capability would require a substantial modification of Qwest's current network, which is not an obligation under the Act. Level 3 proposes language which would permit it to insist on interconnecting at points where it is not technically feasible.

Q. WOULD THE ESTABLISHMENT OF A SINGLE POI IN A LATA REQUIRE LEVEL 3'S USE OF QWEST'S NETWORK?

A. Yes. To facilitate the connection between Level 3's network and Qwest's network Level 3 must establish a POI for its network. Then transport facilities would be typically provisioned or built by Qwest to Level 3's POI to connect the two networks. This transport is typically used for the sole purpose of Level 3's interconnection with Qwest. Level 3's decision to interconnect with Qwest is a decision made solely by Level 3.

Q. IS IT APPROPRIATE TO REQUIRE HIGHER TRANSMISSION RATES WHEN TRAFFIC VOLUME DOES NOT JUSTIFY IT?

A. No. Level 3's language proposes that each party provide higher transmission rates upon the request of the other party. This would force the placement or the augmentation of facilities to Qwest's existing network. Again, this is a redefinition of Qwest's obligation and a modification of its existing architectures and network capabilities. The argument for adequate facilities to deliver higher transmission

rates as proposed by Level 3 would promote inefficient use of the network. It is inappropriate and unreasonable to expect the upgrading of facilities or the adding of unnecessary capacity to the network when the network demand for such capacity is possibly not justified.

Q. WHAT PORTIONS OF ISSUE NO. 1A ARE ADDRESSED ELSEWHERE IN THIS ARBITRATION?

A. Level 3's language at 7.1.1.1, 7.1.1.2 and 7.1.1.4.1 suggests that Level 3 be allowed to route switched access traffic over interconnection trunks. This language implicates Issue No. 2 and will be dealt with in the discussion of Issue No. 2.

Issue No. 1B

Q. PLEASE EXPLAIN DISPUTED ISSUE NO. 1B.

A. Issue 1B, on page 66 of the ICA, involves disputed language in which Level 3 incorrectly proposes methods of establishing its POI that are actually methods of interconnection.

Q. WHAT LANGUAGE DOES QWEST PROPOSE?

A. Qwest proposes the following:

> **7.1.2 Methods of Interconnection**
>
> The Parties will negotiate the facilities arrangement used to interconnect their respective networks. CLEC shall establish at least one (1) physical Point of Interconnection in Qwest territory in each LATA CLEC has local Customers. The Parties shall establish, through negotiations, at least one (1) of the following Interconnection arrangements, at any Technically Feasible point: (1) a DS1 or DS3 Qwest provided facility; (2) Collocation; (3) negotiated Mid-Span Meet POI facilities; or (4) other Technically Feasible methods of Interconnection, such as an OCn Qwest provided facility, via the Bona Fide Request (BFR) process unless a particular arrangement has been previously provided to a third party, or is offered by Qwest as a product. OCn Qwest provided facilities may be ordered through FCC Tariff No. 1.

Q. WHAT LANGUAGE DOES LEVEL 3 PROPOSE?

A. Level 3 proposes the following:

> **7.1.2 Methods of Interconnection**
>
> CLEC may establish a POI through: (1) a collocation site established by CLEC at a Qwest wire center, (2) a collocation site established by a third party at Qwest wire center, or (3) transport (and entrance facilities where applicable).
>
> CLEC shall establish one POI at any technically feasible point on Qwest's network within each LATA in which CLEC desires to exchange traffic directly with Qwest by any of the following methods:
>
> 1. a collocation site established by CLEC at a Qwest Wire Center,

2. a collocation site established by a third party at Qwest Wire Center, or;

3. transport (and entrance facilities where applicable) ordered and purchased by CLEC from Qwest; or,

4. Fiber meet point.

CLEC shall establish one POI on Qwest's network in each LATA. POIs may be established by CLEC through:

1. a collocation site established by CLEC at a Qwest Wire Center,

2. a collocation site established by a third party at Qwest Wire Center,

3. transport (and entrance facilities where applicable) ordered and purchased by CLEC from Qwest at the applicable Qwest intrastate access rates and charges; or,

4. Fiber meet point.

Q. WHAT CONCERNS DOES QWEST HAVE WITH LEVEL 3'S LANGUAGE?

A. Level 3's proposed language confuses the methods of obtaining interconnection with establishment of its POI "within" Qwest's network. Level 3's language sets a requirement to interconnect "on" Qwest's network and then lists facility arrangements or methods used to interconnect with Qwest.

Q. WHAT IS THE DIFFERENCE BETWEEN A POINT OF INTERCONNECTION AND INTERCONNECTION?

A. As I have explained above, a POI is the physical demarcation point to which Level 3 may have Qwest provision/build transport facilities between Level 3's network and Qwest's network. This demarcation point/POI allows separation of responsibility for the respective network operators to maintain and control the performance of each network. Interconnection, on the other hand, includes the

actual establishment of the transport connection between Level 3's POI and Qwest's network.

Q. WHAT FACILITY ARRANGEMENTS DOES QWEST PROVIDE FOR INTERCONNECTION WITH LEVEL 3?

A. There are four facility arrangements or methods of establishing interconnection with Qwest: (1) DS1 or DS3 Qwest provided facility; (2) Collocation; (3) negotiated Mid-Span Meet POI facilities; and (4) other Technically Feasible methods of Interconnection. Level 3 may use any or all of these options to establish interconnection with Qwest.

The "DS1 or DS3 Qwest provided facility" is an option for establishing interconnection where Qwest provisions/builds a transport facility to the Level 3 POI either at the DS1 level of transmission or at a DS3 level of transmission. DS1s and DS3s are merely different bandwidths or capacities of transport facilities that Qwest provisions/builds to Level 3's POI that are located within the same Qwest wire center. The Qwest provided facility described here is also known as an entrance facility.

Collocation is an option by which Level 3 may extend its facilities into a Qwest central office and terminate them to collocate within that central office to establish a POI. Qwest would then provision/build interconnection facilities to the Level 3 Collocation. This Collocation may also be a third party Collocation.

"Negotiated Mid-Span Meet POI facilities" is an option where Level 3 extends its own facilities to a negotiated point approximately half way between the Level 3 SPOI and Qwest's wire center building. With this arrangement, Level 3 builds its

portion of the transport facilities while Qwest builds its portion of its transport facilities to an agreeable location for interconnection at the midpoint between Level 3's POI and Qwest's network. This allows Level 3 and Qwest to equally share in the cost of building the transport required for Level 3 to interconnect with Qwest.

"Other Technically Feasible methods of Interconnection" is an option when there is an alternate method of interconnection. This is done through a Bona Fide Request ("BFR"). The BFR enables Qwest to validate the technical feasibility of the alternate method to facilitate interconnection. Interconnection is not the only use of the BFR. A BFR can be used for other requests such as those associated with access to Unbundled Network Elements that may not be available.

Q. PLEASE SUMMARIZE WHAT THESE OPTIONS PROVIDE?

A. These options provide Level 3 the flexibility to have Qwest build facilities to Level 3, or have Level 3 build to Qwest's wire center (Collocation), or meet somewhere in the middle. Qwest also provides the flexibility to use an alternate technical feasible method not covered by the previous three options.

Q. ARE THERE ANY OTHER FACILITIES THAT MAY BE REQUIRED FOR INTERCONNECTION?

A. On occasion, yes. For example, if Level 3 has established its POI in a particular Qwest wire center and then wishes to interconnect with switches located in other Qwest wire centers, then Direct Trunked Transport could be supplied by Qwest to connect Level 3's POI to these other Qwest switches.

Q. IS LEVEL 3'S PROPOSED LANGUAGE CONSISTENT WITH THESE METHODS OF INTERCONNECTION?

A. No. Level 3's proposed language mischaracterizes these methods as a way to establish its POI rather than the methods by which to connect its POI to the Qwest network. However, among these methods, only one involves establishing a POI and the others provide the underlying transport for interconnection to Level 3's POI. Although Collocation does not provide interconnection, it does provide the basis of the facility arrangements needed to establish interconnection. For example, if Level 3 were to collocate in a Qwest central office, the Collocation only provides Level 3 with space within the Qwest central office to establish Level 3's POI. Interconnection facilities would then have to be provisioned to Level 3's Collocation POI. Such a facility could be as simple as a wire jumper that connects existing Qwest transport facilities with Level 3's facilities.

In short, interconnection is provided after a POI is established. Each of the methods my testimony describes above are methods for establishing the transport for interconnection or in the case of Collocation for establishing the basis of the facility arrangement to obtain interconnection.

Q. WHAT SERVICE DOES QWEST PROVIDE THAT USES THESE FACILITY ARRANGEMENTS FOR THE EXCHANGE OF TRAFFIC?

A. Qwest provides LIS using these facility arrangements. Qwest will and does provision LIS to Level 3 using the facility arrangement that Level 3 has found best fits its needs.

Q. WHAT IS LIS?

A. LIS is a bundled trunk-side service that provides switching and transport for the mutual exchange of traffic that originates and terminates within a Qwest Local Calling Area (LCA) or an Extended Area Service (EAS) exchange. LIS provides

the logical connections that are necessary for the exchange of traffic and are established over the physical facility arrangement that is chosen by Level 3 to connect Level 3's POI with Qwest's network.

Q. HOW IS LIS PROVISIONED TO INTERCONNECT LEVEL 3 AND QWEST?

A. LIS is provisioned by using transport facilities and logical trunk connections that are programmed into Qwest's switches. Switches are also equipped with interfaces so that they may be connected to one another with transport facilities. The facility options my testimony describes above are the transport options Level 3 may use to connect its switches with Qwest's switches. Logical trunk connections then must be created to allow calls to be routed onto and off of these facilities in order for telecommunications traffic to flow between the switches. Both Qwest and Level 3 must coordinate the creation of these trunks during the provisioning of LIS. Each trunk that is created between switches allows a voice conversation to take place between the switches. Each switch must have a trunk connection for a call to route to the other switch. Based on the coordinated provisioning of LIS, each switch is programmed to know which trunk to route the call across using the subscriber's dialed digits as directions. The switch would then route the call to the predetermined trunk that connects the two switches for completion of the call.

Q. WHAT TRUNKING OPTIONS ARE THERE FOR LIS?

A. There are essentially four local trunking options available to Level 3: (1) LIS to Qwest's End Office; (2) LIS to Qwest's local tandem; (3) LIS to Qwest's access tandem; and (4) Single Point of Presence ("SPOP").

LIS to Qwest's End Office allows for Level 3 to send and receive its end users' local traffic to and from each end office that Level 3 has established LIS.

LIS to Qwest's local tandem allows for Level 3 to send and receive its end users' local traffic to and from a local tandem for delivery of that traffic to and from all end offices that subtend that local tandem. This traffic may also consist of transit traffic to a third local carrier.

LIS to Qwest's access tandem allows for Level 3 to send and receive its end users' traffic to and from IXCs that are connected to that access tandem. This traffic may also consist of IntraLATA transit traffic to a third local carrier. In addition, Level 3 may send intraLATA toll that its end users originate.

SPOP allows for Level 3 to send and receive its end users' local traffic to and from all end offices that subtend Qwest's access tandem. SPOP also allows for Level 3 to send and receive its end users' traffic to and from IXCs that are connected to that access tandem. In addition, Level 3 may send intraLATA toll that its end users originate. This traffic may also include both IntraLATA and Local transit traffic to a third local carrier.

Q. WHAT ARE THE BENEFITS OF SPOP?

A. Where volumes of local traffic are low, Level 3 only has to establish trunks to the access tandem. This avoids trunking between Level 3's POI and each Qwest end office and local tandem.

Q. ARE THERE LIMITATIONS TO SPOP?

A. Yes. Not all local carriers, Interexchange Carriers ("IXCs") or Qwest end offices have trunking with each Qwest access tandem. Therefore, separate trunking to each

access tandem may be required to the extent there is more than one access tandem in a LATA. In addition, and as I explain in issue 1F, it may be necessary for Level 3 to establish trunking, where traffic volumes justify, directly to local tandem switches or end office switches. Although additional trunking may be required within a LATA, it will not require more than a single POI per LATA.

Q. IS LEVEL 3 REQUIRED TO INTERCONNECT AT EVERY ACCESS TANDEM IN THE LATA?

A. No. Level 3 must only interconnect its POI to an access tandem where Level 3's traffic is destined for a local carrier, IXC or Qwest end office that subtends that access tandem. For example, the Eugene LATA has two access tandems, one in Eugene and one in Ashland. If Level 3 has traffic destined only to a local carriers, IXCs or Qwest end offices in Ashland then only interconnection to the Ashland access tandem is required.

Q. WHY SHOULD QWEST'S LANGUAGE BE ADOPTED?

A. Qwest language more appropriately reflects the interconnection between Qwest's network and Level 3's network. Unlike Level 3's language, Qwest's language does not confuse what is required to create a POI with what is realistically required to interconnect two networks.

Issue No. 1F

Q. PLEASE EXPLAIN DISPUTED ISSUE NO. 1F.

A. Level 3 removes the language describing how Level 3 may interconnect at Qwest's local and access tandem switches. Level 3 also removes the requirement for Level 3 to establish trunking as requested by Qwest where traffic volumes justify alternate trunking. My testimony will explain why this language is important from a technical perspective. In addition, Level 3 again inappropriately inserts the disclaimer that it should not have to pay for the use of the Qwest network. The testimony of Mr. Easton explains that Level 3's language not only ignores Level 3's obligations under the law, but is also clearly misplaced in a section describing the technical aspects of interconnection.

Q. WHAT LANGUAGE IS QWEST PROPOSING?

A. Qwest proposes the following, which is found on page 80 of the ICA:

> 7.2.2.9.6 The Parties shall terminate Exchange Service (EAS/Local) traffic on Tandem Switches or End Office Switches. CLEC may interconnect at either the Qwest local tandem or the Qwest access tandem for the delivery of local exchange traffic. When CLEC is interconnected at the access tandem and when there is a DS1 level of traffic (512 BHCCS) over three (3) consecutive months between CLEC's Switch and a Qwest End Office Switch, Qwest may request CLEC to order a direct trunk group to the Qwest End Office Switch. CLEC shall comply with that request unless it can demonstrate that such compliance will impose upon it a material adverse economic or operations impact. Furthermore, Qwest may propose to provide Interconnection facilities to the local Tandem Switches or End Office Switches served by the Access Tandem Switch at the same cost to CLEC as Interconnection at the Access Tandem Switch. If CLEC provides a written statement of its objections to a Qwest cost-equivalency proposal, Qwest may require it only: (a) upon demonstrating that a failure to do so will have a material adverse affect on the operation of its network and (b) upon a finding that doing so will have no material adverse impact on the operation of CLEC, as compared with Interconnection at such Access Tandem Switch.

Q. WHAT LANGUAGE IS LEVEL 3 PROPOSING?

A. Level 3 proposes the following:

> 7.2.2.9.6 When CLEC is interconnected at the access tandem and when there is a DS1 level of traffic (512 BHCCS) over three (3) consecutive months between CLEC's Switch and a Qwest End Office Switch, Qwest may request CLEC to order a direct trunk group to the Qwest End Office Switch. Notwithstanding references to Qwest's ability to requests that CLECs order direct trunk groups to the Qwest end office, nothing in this agreement shall be construed to require CLEC to pay Qwest for any services or facilities on Qwest's side of the POI in connection with the origination of traffic from Qwest to CLEC; and nothing herein shall be construed to require CLEC to pay for any services or facilities on Qwest's side of the POI in connection with the termination of traffic from CLEC by Qwest, other than reciprocal compensation payments as provided in this Agreement.

Q. WHY IS QWEST OPPOSED TO THE LEVEL 3 LANGUAGE?

A. Level 3 has removed the language that specifies tandems and end offices as points where traffic terminates. Level 3's proposed language ignores Qwest's existing network architecture, creating ambiguity and non-specificity that may lead to later disputes. (There are no other locations on Qwest's network where traffic may be delivered.) More disturbingly, Level 3 removes the requirement to establish trunking to subtending network switches when increases in traffic volumes justify the alternate trunking. This is critical in maintaining a robust and reliable network for not only all interconnecting carriers (including Level 3), but also for Qwest customers as well, by insuring that network capacity may be managed and maintained efficiently.

Q. ARE THERE ANY OTHER METHODS BY WHICH LEVEL 3 MAY EXCHANGE TRAFFIC?

A. No. By removing the language that allows for the exchange of Local/EAS traffic to Qwest tandems, Level 3 implies that there are other locations that Level 3 may

exchange traffic with Qwest's network. There are no other methods for Level 3 to exchange Local/EAS traffic directly with Qwest than through Qwest's tandems and end offices.

Q. ARE THERE OTHER TERMINATION POINTS IN THE PUBLIC SWITCHED TELEPHONE NETWORK ("PSTN") THAT OPERATE DIFFERENTLY THAN AN END OFFICE OR A TANDEM?

A. No. Switches perform essentially two functions in the telecommunications network. They either operate with a tandem function or an end office function.

Q. WHAT IS THE DIFFERENCE BETWEEN AN END OFFICE AND A TANDEM?

A. An end office serves end user customers. It is typically the last point of switching before traffic reaches the end user customers and is the point from which an end user customer draws dial tone and which performs the initial processing of a call from an end user served by that end office. A tandem switch on the other hand serves other switches. In other words tandem switches route traffic to other switches. This network architecture is not unique to Qwest, and Level 3's refusal to acknowledge its existence is illogical, considering that it wants to interconnect with such a network.

Q. WHY IS IT IMPORTANT TO ESTABLISH THE FUNCTION OF THE SWITCHES WHERE LOCAL TRAFFIC SHOULD TERMINATE?

A. It is important to identify the function of switches so that there is no confusion as to the network switching functions to which the Interconnection Agreement ("ICA") applies. Without this language, Level 3 may seek interconnection utilizing a function that the Qwest network is not capable of providing. It is important that the

agreement identify the type of traffic and the function of the switches where that traffic will be accepted so that this is clear to both parties. Qwest's language provides this clarity. Level 3's language does not.

Q. WHY DOES QWEST OPPOSE THE REMOVAL OF LANGUAGE THAT REQUIRES LEVEL 3 TO ESTABLISH TRUNKING TO SUBTENDING NETWORK SWITCHES WHEN VOLUMES JUSTIFY ALTERNATE TRUNKING?

A. Level 3's proposed language removes any responsibility for Level 3 to establish alternate trunking to maintain efficient use of network resources that are shared by all interconnecting carriers. By removing language that requires efficient use of the network Level 3 has the potential to negatively impact Qwest's switching resources, their reliability and their availability to all other interconnecting carriers. Level 3 attempts to avoid its responsibility to maintain network robustness and efficiency which other carriers interconnected with Qwest have previously acknowledged and assumed.

Q. DOES THE REQUIREMENT TO ESTABLISH ALTERNATE TRUNKING CREATE A FINANCIAL BURDEN ON LEVEL 3?

A. No. Direct trunking will typically save Level 3 money because with it Level 3 would avoid tandem switching charges. However, if the result of establishing alternate trunking is an economic burden, then Qwest's language provides a mechanism for Level 3 to avoid that burden. Under Qwest's proposed language, if Level 3 demonstrates that an economic burden exists, the requirement to establish alternate trunking is waived.

Q. DOES QWEST PROVIDE ANY ASSISTANCE IN IDENTIFYING TRUNKING THAT HAS BECOME INEFFICIENT?

A. Yes, Qwest monitors the volumes of traffic exchanged with Qwest that are destined to and from Qwest end offices. Qwest then generates reports that identify inefficient trunking. These reports are then shared with Level 3 along with a request to establish direct trunking and instructions as to which end office(s) direct trunking should be established.

Q. HAS LEVEL 3 BEEN COOPERATIVE WHEN WORKING WITH QWEST ON TRUNKING ISSUES?

A. Yes. Level 3 has historically been very cooperative when working with Qwest's trunk administration group. Level 3's proposed language which refuses to maintain network efficiencies is surprising given the cooperative history that has in the past existed between Qwest and Level 3.

Q. WHAT IS THE 512 BHCCS?

A. 512 BHCCS or 512 Busy Hour Centum Call Seconds is the measure of usage capacity of a DS1 trunk during the busiest hour of the day. Usage is measured in Centum Call Seconds ("CCS") or one hundred call seconds. A line or trunk that is in use for one hour, or sixty minutes, is being used for 3600 seconds, or 36 hundred call seconds, or 36 CCS. As stated in Newton's Telecom Dictionary CCS is: "One hundred call seconds or one hundred seconds of telephone conversation. One hour of telephone traffic is equal to 36 ccs (60*60=3600/100=36) which is equal to one erlang." Newton's Telecom Dictionary, Volume 17 at 131 (February 2001). 512 BHCCs is essentially equivalent to a DS1 worth of usage. Telecommunications switch ports typically are provisioned in increments of DS1 capacity. It is generally recognized by the industry as the traffic threshold that indicates a sufficiently high

volume of traffic that would warrant the provisioning of alternative, direct trunking arrangements.

Q. WHAT IS THE 512 BHCCS RULE?

A. The 512 BHCCS rule establishes the threshold of usage which when reached means that direct trunking between end offices is typically more efficient than trunking that usage through a tandem switch.

Q. HOW DOES QWEST LANGUAGE CREATE EFFICIENT USE OF THE NETWORK?

A. Qwest's language establishes a threshold that facilitates efficient interconnection between Qwest and all CLEC switches. The threshold allows Qwest to manage traffic through tandem switches when traffic volumes justify a direct connection with a specific end office. As can be seen in Exhibits Qwest/7 and Qwest/8, as CLEC traffic that is destined for a Qwest end office reaches or exceeds 512 BHCCS, or a DS1's capacity it becomes logical to direct trunk to that end office. Exhibit PL-1 shows that the traffic volume spread across all end offices is less than the capacity of a single switch port, whereas, PL-2 demonstrates that end office A is at the capacity of a single switch port and has a direct trunk with the CLEC switch. This creates network efficiencies by eliminating the need to provide additional switching through the tandem.

Q. DOES QWEST USE THE SAME THRESHOLD TO EVALUATE ITS OWN NETWORK TRUNKING EFFICIENCIES?

A. Yes. Qwest applies the same network threshold in its own trunking analysis so that it may better utilize the trunking capacity between its end offices and tandems.

Q. WHAT WOULD BE THE RESULT IF NO INTERCONNECTING CARRIERS FOLLOWED THE 512 BHCCS RULE?

A. All switches have limits for trunking capacity. As carriers add more and more trunking to each tandem, the tandems would begin to reach capacity. Once a tandem reaches its maximum trunking capacity, an additional tandem would have to be installed.

V. DISPUTED ISSUES NO. 2A AND 2B: ALL TRAFFIC ON INTERCONNECTION TRUNKS

Q. PLEASE EXPLAIN DISPUTED ISSUES NO. 2A AND 2 B.

A. Issues 2A and 2B concern the types of traffic that may be combined over LIS trunks and whether Qwest is entitled to compensation for the interconnection trunks it provides to Level 3. The testimony of Mr. Easton addresses the compensation issue while my testimony addresses the network and technical issues.

Q. WHAT LANGUAGE IS QWEST PROPOSING?

A. Qwest is proposing the following language, found on pages 77 and 78 of the ICA:

> 7.2.2.9.3.1 Exchange Service (EAS/Local), ISP-Bound Traffic, IntraLATA LEC Toll, VoIP traffic and Jointly Provided Switched Access (InterLATA and IntraLATA Toll involving a third party IXC) may be combined in a single LIS trunk group or transmitted on separate LIS trunk groups.
>
> 7.2.2.9.3.1.1 If CLEC utilizes trunking arrangements as described in Section 7.2.2.9.3.1, Exchange Service (EAS/Local) traffic shall not be combined with Switched Access, not including Jointly Provided Switched Access, on the same trunk group, i.e. Exchange Service (EAS/Local) traffic may not be combined with Switched Access Feature Group D traffic to a Qwest Access Tandem Switch and/or End Office Switch.
>
> 7.2.2.9.3.2 CLEC may combine originating Exchange Service (EAS/Local) traffic, ISP-Bound Traffic, IntraLATA LEC Toll, VoIP Traffic and Switched Access Feature Group D traffic including Jointly Provided Switched Access traffic, on the same Feature Group D trunk group.
>
> 7.2.2.9.3.2.1 CLEC shall provide to Qwest, each quarter, Percent Local Use (PLU) factor(s) that can be verified with individual call detail records or the Parties may use call records or mechanized jurisdictionalization using Calling Party Number (CPN) information in lieu of PLU, if CPN is available. Where CLEC utilizes an affiliate's Interexchange Carrier (IXC) Feature Group D trunks to deliver Exchange Service (EAS/Local) traffic with interexchange Switched Access traffic to Qwest, Qwest shall establish trunk group(s) to deliver Exchange Service (EAS/Local), Transit, and IntraLATA LEC Toll to CLEC. Qwest will use or establish a POI for such trunk group in accordance with Section 7.1.

Q. WHAT LANGUAGE IS LEVEL 3 PROPOSING?

A. Level 3 proposes the following language:

> 7.2.2.9.3.1 Where CLEC exchanges Telephone Exchange Service, Exchange Access Service, Telephone Toll Service, and Information Services traffic with Qwest over a single interconnection network, CLEC agrees to pay Qwest, on Qwest's side of the POI, state or federally tariffed rates applicable to the facilities charges for InterLATA and/or InterLATA traffic in proportion to the total amount of traffic exchanged over such interconnection facility. Otherwise each party remains 100% responsible for the costs of its interconnection facilities on its side of the POI. Thus, by way of illustration only, where 20% of such traffic is interLATA (intrastate and interstate) and the remaining 80% is Section 251(b)(5) Traffic, CLEC would pay Qwest an amount equal to 20% of the applicable tariffed transport rate that would apply to a tariffed facility used solely for the exchange of such access traffic for such traffic exchanged on Qwest's side of the POI over a single interconnection trunk.
>
> Except as expressly provided in Section 7.3.1.1.3, each party shall bear all costs of interconnection on its side of the network in accordance with 47 C.F.R. §51.703. Accordingly, unless otherwise expressly authorized according to Section 7.3.1.1.3, neither Party may charge the other (and neither Party shall have an obligation to pay) any recurring and/or nonrecurring fees, charges or the like (including, without limitation, any transport charges), associated with the exchange of any telecommunications traffic including but not limited to Section 251(b)(5) Traffic on its side of the POI.
>
> Each party is solely responsible for any and all costs arising from or related to establishing and maintaining the interconnection trunks and facilities it uses to connect to the POI. Thus, neither party shall require the other to bear any additional costs for the establishment and operation of interconnection facilities that connect its network to its side of the POI. If traffic is combined, Section 7.3.9 of this Agreement applies.
>
> 7.2.2.9.3.2 CLEC may combine Exchange Service (EAS/Local) traffic, ISP-Bound Traffic, Exchange Access (IntraLATA Toll carried solely by Local Exchange Carriers), VoIP Traffic and Switched Access Feature Group D traffic including Jointly Provided Switched Access traffic, on the same Feature Group D trunk group <u>or over the same interconnection trunk groups as provided in Section 7.3.9.</u>

Q. WHAT CONCERNS DOES QWEST HAVE WITH LEVEL 3'S PROPOSED LANGUAGE?

A. Level 3 is proposing to route switched access traffic over local trunks. This creates several technical problems that have various impacts to Qwest, CLECs and independent companies. These technical problems are mainly associated with the recording of the switched access traffic. Switched access traffic is typically routed over access service trunks such as Feature Group D ("FGD") trunks. Level 3's proposed language creates technical difficulties that would otherwise be avoided by using the access service trunks which all other Interexchange service providers establish with Qwest. Qwest has also provided Level 3 with language that would allow Level 3 to route all its traffic over FGD. The routing of Level 3's traffic over FGD trunking provides Level 3 with the same efficiencies that it will argue that it would obtain if it were allowed to route traffic over local interconnection trunking. Furthermore, Qwest's proposed language is in keeping with industry practice.

Q. WHAT IS SWITCHED ACCESS TRAFFIC?

A. Switched access traffic is InterLATA and IntraLATA traffic that routes to and from IXCs. This traffic typically routes between IXCs and Local Exchange Carriers ("LECs"). IXCs purchase switched access services from LECs so that they may receive and deliver InterLATA toll and IntraLATA toll traffic to and from LECs networks. This switched access service typically utilizes Feature Group trunking. Feature Group trunking is a software feature of a telecommunications switch that allows IntraLATA toll and InterLATA toll traffic to be routed to IXC networks. FGD is the most common software feature used to route traffic to IXCs on an equal access basis. This traffic is specific to IXCs.

Q. IS YOUR DESCRIPTION OF SWITCHED ACCESS CONSISTENT WITH THE DEFINITION AGREED TO IN THE PROPOSED ICA?

A. Yes.

Q. WHAT TYPES OF TRAFFIC DOES LEVEL 3 INTEND TO ROUTE OVER LIS TRUNKING?

A. Level 3 intends to route switched access traffic that Level 3 carries on behalf of other IXCs over LIS trunks established by Level 3 with Qwest. This is traffic that other IXCs agree to send to Level 3 to facilitate the termination of switched access traffic on the IXC's behalf.

Q. WHAT OPTIONS DOES LEVEL 3 HAVE TO ROUTE AND TRANSPORT SWITCHED ACCESS TRAFFIC?

A. Level 3 has several options that it may use to transport and route switched access traffic on behalf of other IXCs. Level 3 may route the traffic directly to the corresponding Level 3 end user customer, the appropriate location designated by the terminating LEC network, or to yet another IXC.

Q. IS THE ROUTING OF SWITCHED ACCESS TRAFFIC THAT YOUR TESTIMONY DESCRIBED ABOVE DIFFERENT FROM THE WAY OTHER IXCS MAY ROUTE SWITCHED ACCESS TRAFFIC?

A. No. Other IXCs typically route traffic in the same manner as I have just described in my testimony.

Q. WHAT SPECIFIC TECHNICAL PROBLEMS WOULD BE CREATED IF LEVEL 3 ROUTES SWITCHED ACCESS TRAFFIC OVER LIS TRUNKS?

A. The most significant problem with routing switched access traffic over LIS trunks is Qwest's inability to generate a record for billing. Specifically, Qwest's recording of LIS trunks is not designed or engineered to record switched access traffic for the purposes of billing switched access charges for that traffic.

Q. WHAT METHODS DOES QWEST USE TO RECORD TRAFFIC?

A. There are two methods that Qwest uses to record traffic for intercarrier compensation. The first is through a switch-based recording and the second is through a link monitoring recording based on SS7 signaling. The switch-based recording uses memory in the switch to record and format the information that is received by the switch. The SS7 based recording tool records traffic using information provided in the SS7 signaling stream.

Q. HOW ARE THESE TWO METHODS OF RECORDING TRAFFIC USED FOR INTERCARRIER COMPENSATION?

A. Switch-based recordings are used for Access Service billing of IXCs and billing of Wireless carriers. The use of these recordings is based on the Access Service or Interconnection Service that is requested by a carrier. As I explained above, IXCs obtain connections to Qwest's network using access services such as FGD. Wireless Service providers typically request interconnection using Type 2 interconnection trunking.

CroSS7 recordings on the other hand are used for billing CLECs and some independent companies. The CroSS7 recording capability has been set up associated with LIS trunks so that local traffic may be recorded.

Q. IS A SWITCH-BASED RECORD CREATED ON LOCAL CALLS?

A. No. Prior to 1996 and the Telecom Act there was no need to record local traffic for the purposes of intercarrier compensation. Before the 1996 Act local service was provided exclusively by Incumbent Local Exchange Carriers ("ILEC") and was typically provided at a flat rate. However, after the 1996 Act and the introduction of CLECs, reciprocal compensation for local traffic became an issue. As a result,

CroSS7 was developed to record traffic that was exchanged between Qwest and CLECs over LIS trunks.

Q. DOES CROSS7 RECORD SWITCHED ACCESS FOR BILLING PURPOSES?

A. No. There was no need to enable CroSS7 to record switched access traffic or to incur the expense of monitoring additional services, because access service recording was done by a switch based recording associated with access service trunking. CroSS7 was developed solely to record local traffic that was exchanged with CLECs.

Q. IF LEVEL 3 WERE TO ROUTE SWITCHED ACCESS TRAFFIC OVER LIS TRUNKS, WOULD QWEST HAVE THE ABILITY TO CREATE A SWITCHED ACCESS RECORD?

A. No. Because CroSS7 was not engineered to record switched access traffic, Qwest would not have the ability to create a switched access record for billing purposes.

Q. WHAT OTHER PROBLEMS WOULD OCCUR IF LEVEL 3 WERE ALLOWED TO ROUTE SWITCHED ACCESS TRAFFIC OVER LIS TRUNKS?

A. If Level 3 were to route switched access traffic over its local LIS with Qwest, other carriers such as independent companies and other CLECs would not receive a jointly provided switched access record. In other words, CLECs and independent companies that terminate Level 3's switched access traffic routed over LIS trunks would not have the ability to bill terminating access charges to Level 3.

Q. WILL QWEST PROVIDE LEVEL 3 THE CAPABILITY TO ROUTE BOTH SWITCHED ACCESS TRAFFIC AND LOCAL TRAFFIC OVER A SINGLE TRUNK GROUP?

A. Yes.

Q. WHAT IS QWEST OFFERING TO LEVEL 3 THAT PROVIDES LEVEL 3 THE CAPABILITY IT IS SEEKING?

A. Qwest's proposed language gives Level 3 the capability it is seeking. Qwest's language allows Level 3 to route both its local and toll traffic over FGD trunking. As I described above, these trunks are typically used for routing switched access traffic. Qwest has developed a methodology for Level 3 to route its local traffic over these same trunks. Furthermore, Qwest has also developed the ability to record this traffic so that local traffic and access traffic are billed appropriately. AT&T has similar routing provisions in its agreement with Qwest.

Q. ARE THE NETWORK EFFICIENCIES DIFFERENT IF LEVEL 3 WERE TO ROUTE SWITCHED ACCESS TRAFFIC AND LOCAL TRAFFIC OVER FEATURE GROUP D VERSUS OVER LIS TRUNKS?

A. No. Network efficiency is not an argument against using an established method for routing Level 3's switched access traffic and local traffic over FGD trunking. Once again, Level 3's argument can be distilled down to the charges it might pay and not network efficiencies or technical feasibility. Level 3 does not want to pay the same rates as all other IXCs to provision its ability to route switched access traffic to Qwest.

Q. WHY SHOULD QWEST'S LANGUAGE BE ADOPTED?

A. Qwest's language more appropriately provides Level 3 with the capability to combine traffic on a single trunk group. At the same time, Qwest's language provides for routing and recording of switched access and local traffic that is consistent with the way other IXCs and CLECs route traffic. It is consistent with industry practice and does not require a "one-off" solution developed solely for Level 3.

VI. DISPUTED ISSUE NO. 6: AMA SWITCH TECHNOLOGY

Q. PLEASE EXPLAIN DISPUTED ISSUE NO. 6.

A. This issue was never a point of contention during the negotiation of the ICA and only became an issue upon Level 3's filing of its petition for arbitration. The issue in dispute here is the use of the term "inherent in Switch technology" within the definition of Automated Message Accounting ("AMA"). Level 3 disputes the use of the language "inherent in Switch technology."

Q. WHAT LANGUAGE IS QWEST PROPOSING?

A. Qwest proposes the following, on page 12 of the ICA:

> "Automated Message Accounting" or "AMA" is the structure <u>inherent in Switch technology</u> that initially records telecommunication message information. AMA format is contained in the AMA document, published by Telcordia Technologies, or its successors, as GR-1100-CORE which defines the industry standard for message recording.

Q. WHAT LANGUAGE IS LEVEL 3 PROPOSING?

A. Level 3 proposes the following

> "Automated Message Accounting" or "AMA" is the structure that initially records telecommunication message information. AMA format is contained in the AMA document, published by Telcordia Technologies, or its successors, as GR-1100-CORE which defines the industry standard for message recording.

Q. IS QWEST WILLING TO REMOVE THE LANGUAGE THAT LEVEL 3 PROPOSES TO REMOVE IN THE DEFINITION FOR AUTOMATED MESSAGE ACCOUNTING?

A. Yes. The phrase "inherent in Switch technology" has no significant impact on the definition of AMA and can be removed.

VII. DISPUTED ISSUE NO. 8: DEFINITION OF CALL RECORD

Q. PLEASE EXPLAIN DISPUTED ISSUE NO. 8.

A. The disputed issue No. 8 concerns what information should be included in the record of a call. Specifically, what call information must be provided in a call record so that the record may be used for intercarrier billing purposes? Although there are some technical limitations in some cases that prohibit the identification of the origination of a call, a call record must include certain fundamental information to create a record for billing purposes. Qwest objects to Level 3's redefining of longstanding industry practice. Level 3's proposed language would require call information that is not necessary for the creation of a call record but omit other information that that is required for the creation of a call record.

Q. WHAT LANGUAGE IS QWEST PROPOSING?

A. Qwest proposes the following, on page 13 of the ICA:

> "Call Record" means a record that provides key data about individual telephone calls. It includes originating telephone number, terminating telephone number, billing telephone number (if different from originating or terminating number) time and date of call, duration of call, long distance carrier (if applicable), and other data necessary to properly rate and bill the call.

Q. WHAT LANGUAGE IS LEVEL 3 PROPOSING?

A. Level 3 proposes the following:

> "Call Record" shall include identification of the following: charge number, Calling Party Number ("CPN"), Other Carrier Number ("OCN"), or Automatic Number Identifier ("ANI"), Originating Line Indicator ("OLI"). In the alternative, a "Call Record" may include any other information agreed upon by both Parties to be used for identifying the jurisdictional nature of the calling party or for assessing applicable intercarrier compensation charges.

Q. WHY IS QWEST OPPOSED TO LEVEL 3'S PROPOSED DEFINITION OF A CALL RECORD?

A. Level 3's definition of a call record obligates both parties to provide certain types of information about a call that may not be available on every call and requires information about a call that has never been required by industry standards. Level 3 also omits information that is essential for a complete call record. In addition, Level 3 uses terms that are unclear and undefined by the telecommunications industry.

Q. WHAT DOES LEVEL 3'S LANGUAGE REQUIRE THAT MAY NOT BE AVAILABLE FOR ALL VALID CALL RECORDS AND WHY DOES QWEST OPPOSE THE OBLIGATION TO PROVIDE THIS INFORMATION?

A. Qwest opposes Level 3's language because it obligates both parties to provide call information that is not necessary to generate a valid call record. There are two examples of call information specified by Level 3 that are not necessary to create a valid call record.

Level 3's language requires a "charge number" or "Originating Line Indicator" ("OLI"). The Charge Number parameter and the Originating Line Information ("OLI") parameter are optional SS7 parameters that identify the billing telephone number and class of service of a call respectively. Local signaling does not require either Charge Number or OLI.[3] As a result, valid call records would not be created under Level 3's definition for local calls. In addition, because IXCs typically strip Charge Number and OLI when terminating a call through Qwest to other local

[3] GR-246-CORE, Telcordia Technologies Specification of Signaling System Number 7, Issue 6 December 2001.

service providers via Jointly Provided Switched Access, terminating access records would also become invalid call records under Level 3's definition.

Level 3 obligates both parties to provide specific call information by incorporating the word "shall" in its proposed definition of a call record.

Q. WHAT IS SS7 AND HOW IS IT USED AS REFERENCED ABOVE?

A. Signaling System 7 or SS7 is an out of band Common Channel Signaling ("CCS") protocol that enables the set up and release of calls between switches throughout the PSTN. SS7 CCS also enables and initiates the recording of traffic for billing purposes. SS7 CCS uses a separate network than the one that carries the voice conversations between switches, thus the term out of band signaling. Unlike its Multifrequency signaling predecessor, SS7 CCS also uses digital transmission that enables more call associated information in less amount of time to be transmitted between switches that serve the end points of a call. A portion of the SS7 protocol is made up of parameters which are used to provide specific information about a call. These signaling parameters are defined by industry standards and populated under specific defined circumstances. Some parameters are mandatory with any call. For example, the called party number parameter must always be populated in the signaling stream for a call to complete. However, some parameters are mandatory with only specific types of calls. For example, the OLI parameter is needed for call completion only when the call is signaled to an IXC.

Q. DOES QWEST HAVE A WAY OTHER THAN SIGNALING TO PROVIDE CHARGE NUMBER OR ORIGINATING LINE INFORMATION?

A. No. Signaling is the only way that Qwest is capable of providing real time Charge Number and OLI that would enable Level 3 to create a call record as defined by

Level 3's proposed definition. I am not aware of any proposal from Level 3 that would provide Qwest with the same Charge Number or OLI on all calls, both local and non-local, without the use of signaling.

Q. WHAT CALL INFORMATION ELEMENT DOES LEVEL 3 OMIT WITH ITS PROPOSED DEFINITION OF CALL RECORD AND WHY IS IT IMPORTANT?

A. Level 3 has omitted call duration in its proposed definition of call record. It is important to include call duration in a call record because intercarrier compensation is based on network usage which is determined by the fundamental information provided by the call duration. Because today's intercarrier compensation is usage sensitive, the lack of call duration on a call record used for billing would void any record that does not have call duration information. In addition to call duration, Level 3 has also omitted the time and date call information. Time and date are also important so that the call information can be associated specific to each particular call that is made throughout each day. This type of information is essential when trouble shooting discrepancies in billing information.

Q. WHAT TERMS DOES LEVEL 3 USE THAT APPEAR TO BE UNCLEAR AND UNDEFINED?

A. "Charge number", "Other Carrier Number" ("OCN"), "Automatic Line Identifier" ("ANI"), and "OLI" are four terms that are unclear, undefined, or inconsistent with the other uses of the terms that are defined in the proposed ICA.

"Charge number" The term "charge number" as Level 3 references in the definition of Call Record is used with a different meaning than the undisputed definition in the ICA. Level 3's use of "charge number" creates the potential for

differing interpretations of what constitutes a charge number. It is important that the definition be specific when using terms that are otherwise defined in other parts of the proposed ICA.

"OCN" This acronym is undefined in the proposed ICA and its equivalent acronym has an alternate meaning in the telecommunications industry. The industry uses the abbreviation "OCN" to represent "Operating Company Number." Without a definition of OCN in the proposed ICA that either confirms the same definition for both terms or specifically defines OCN to mean something different from its use in the telecommunication industry there will be disputes about its meaning.

"ANI" and "OLI" These terms are defined differently in the proposed ICA from the way Level 3 has defined these terms in their proposed definition of Call Record. The undisputed proposed ICA definitions of these terms are "ANI" and OLI where the "I" in ANI is not Identifier and the "I" in OLI is not "Indicator" as is otherwise defined in the Qwest proposed ICA and in the telecommunications industry. These terms are specifically defined in this ICA to correspond with the Industries' definition of the SS7 parameters that correspond to these terms.

Q. WHAT OTHER PROBLEMS WOULD ARISE IF CALL RECORD WERE DEFINED BY LEVEL 3'S PROPOSED LANGUAGE?

A. Qwest would then be required to provide a call record specifically for Level 3 and then a second call record for all other carriers with which Qwest exchanges records. This would then require Qwest to implement two different processes and potentially enhance its billing systems to accommodate the different call record requirements. All CLECs that follow industry standard would follow one type of call record requirement and Level 3 would then use an entirely new process that may require

potential systems enhancements. This could take a number of years to develop. Regardless of whether Qwest were to develop this new call record and enhance the current systems to handle the changes or develop a separate manual process, it will require additional capital expense based solely on Level 3's request to change the existing call record requirements that to this point all other carriers in the industry follow.

Q. WHY SHOULD QWEST'S DEFINITION OF CALL RECORD BE USED IN THE ICA BETWEEN LEVEL 3 AND QWEST?

A. Qwest's definition of call record should be used because it includes the fundamental information that is required to create a valid call record and the flexibility to include other data that may be used to rate and bill calls for intercarrier compensation purposes. In addition, Qwest uses terms that are specific enough to identify what is required while at the same time remaining flexible enough to encompass all of the optional parameters that Level 3 wishes to require should they eventually become industry requirements. Unlike Level 3's language, Qwest's language does not include call information that could create disputes over the interpretation of the terms used in the definition. Likewise, Qwest's language eliminates any potential dispute as to whether the existence of call duration and the time and date a call occurred are required in a valid call record. Simply put, Qwest's language addresses all of Level 3's concerns, more clearly establishes the expectations of both companies for the creation of a valid call record, and has the flexibility to include additional call information that may be required to generate a valid call record in the future.

VIII. DISPUTED ISSUE NO. 20: SIGNALING PARAMETERS

PLEASE EXPLAIN DISPUTED ISSUE NO. 20.

A. The issue at dispute here is what SS7 signaling information should be required for the exchange of traffic between Qwest and Level 3.

Q. WHAT LANGUAGE IS QWEST PROPOSING?

A. Qwest proposes the following, on page 87 of the ICA:

> 7.3.8 Signaling Parameters: Qwest and CLEC are required to provide each other the proper signaling information (e.g., originating Calling Party Number and destination called party number, etc.) per 47 CFR 64.1601 to enable each Party to issue bills in a complete and timely fashion. All CCS signaling parameters will be provided including Calling Party Number (CPN), Originating Line Information Parameter (OLIP) on calls to 8XX telephone numbers, calling party category, Charge Number, etc. All privacy indicators will be honored. If either Party fails to provide CPN (valid originating information), and cannot substantiate technical restrictions (i.e., MF signaling) such traffic will be billed as Switched Access. Traffic sent to the other Party without CPN (valid originating information) will be handled in the following manner. The transit provider will be responsible for only its portion of this traffic, which will not exceed more than five percent (5%) of the total Exchange Service (EAS/Local) and Exchange Access (IntraLATA Toll) traffic delivered to the other Party. The Switch owner will provide to the other Party, upon request, information to demonstrate that Party's portion of no-CPN traffic does not exceed five percent (5%) of the total traffic delivered. The Parties will coordinate and exchange data as necessary to determine the cause of the CPN failure and to assist its correction. All Exchange Service (EAS/Local) and IntraLATA LEC Toll calls exchanged without CPN information will be billed as either Exchange Service (EAS/Local) Traffic or IntraLATA LEC Toll Traffic in direct proportion to the minutes of use (MOU) of calls exchanged with CPN information for the preceding quarter, utilizing a PLU factor determined in accordance with Section 7.2.2.9.3.2 of this Agreement.

Q. DOES QWEST HAVE ANY MODIFICATIONS TO ITS PROPOSED LANGUAGE?

A. Yes. To clarify 7.3.8 Qwest wishes to replace the following sentence:

All CCS signaling parameters will be provided including Calling Party Number (CPN), Originating Line Information Parameter (OLIP) on calls to 8XX telephone numbers, calling party category, Charge Number, etc.

With the following sentence:

All CCS signaling parameters will be provided including Calling Party Number (CPN), Originating Line Information Parameter (OLIP), calling party category, Charge Number, etc. on calls to 8XX telephone numbers.

The preceding changes are only intended to correct a clerical error in the original sentence structure.

Q. WHAT LANGUAGE IS LEVEL 3 PROPOSING?

A. Level 3 proposes the following:

7.3.8 Signaling Parameters: Qwest and CLEC are required to provide each other proper signaling information (e.g., originating Calling Record Information and destination called party number, etc.) to enable each Party to issue bills in a complete and timely fashion. All CCS signaling parameters will be provided including Call Record Information (CRI), Originating Line Information Parameter (OLIP) on calls to 8XX telephone numbers, calling party category, Charge Number, etc. All privacy indicators will be honored. If either Party fails to provide CRI (valid originating information), and cannot substantiate technical restrictions (e.g., MF signaling, IP origination, etc.) such traffic will be billed as interstate Switched Access. Transit Traffic sent to the other Party without CRI (valid originating information) will be handled in the following manner. The transit provider will be responsible for only its portion of this traffic, which will not exceed more than five percent (5%) of the total Exchange Service (EAS/Local) and Exchange Access (IntraLATA Toll) traffic delivered to the other Party. The Switch owner will provide to the other Party, upon request, information to demonstrate that Party's portion of no-CRI traffic does not exceed five percent (5%) of the total traffic delivered. The Parties will coordinate and exchange data as necessary to determine the cause of the CRI failure and to assist its correction. All Exchange Service (EAS/Local) and Exchange Access calls exchanged without CRI information will be billed as either Exchange Service (EAS/Local) Traffic or Exchange Access Traffic in direct proportion to the minutes of use (MOU) of calls exchanged with CRI information for the preceding quarter, utilizing a PLU factor determined in accordance with Section 7.2.2.9.3.2 of this Agreement.

Q. WHY DOES QWEST OBJECT TO LEVEL 3'S PROPOSED LANGUAGE?

A. Qwest objects to Level 3's language because it mischaracterizes *IP origination* (emphasis added) as a technical limitation to providing signaling parameters. Level 3's proposed language also creates an obligation to populate a signaling parameter, specifically Call Record Information ("CRI"), which does not exist within the SS7 protocol. In addition, Level 3 does not define CRI. To the extent Level 3's definition of CRI would use similar terms as are used in Level 3's definition of Call Record, it is not at all clear that the requirement to provide the CRI can be met. Level 3's proposed language also fails to acknowledge that the FCC has recognized certain limitations exist that prohibit or limit the delivery of specific types of signaling information. Qwest further objects to Level 3's language because it inappropriately applies interstate switched access rates onto traffic that is intrastate.

Q. WHY IS IT NOT NECESSARY TO ADDRESS VOIP ORIGINATED TRAFFIC AS LEVEL 3 PROPOSES?

A. Voice over Internet Protocol ("VoIP") uses a different protocol than is used by the operators of the PSTN. Because of the different protocols, a conversion from the Internet Protocol ("IP") to the Time Division Multiplex ("TDM") protocol of the PSTN is required to enable a voice call to be established between an IP network and the PSTN. However, the PSTN does not currently have the ability to determine if traffic was originated in IP, at what point the conversion from IP to TDM takes place, or if the traffic was originated with TDM protocol. As the testimony of Mr. Brotherson explains, the ESP exemption allows an ESP, such as VoIP service providers to establish a POP within a local calling area and receive service that is treated as local service. It is the FCC's ESP exemption and the existence of a standard signaling protocol that eliminates the need to identify VoIP traffic as a

signaling requirement. Thus, industry standards have not been established that specify signaling as the method to identify VoIP traffic.

Q. IS IT TRUE THAT VOIP IS A TECHNICAL RESTRICTION FOR PROVIDING CPN?

A. Absolutely not. Contrary to Level 3's petition and their proposed language, there is no technical limitation that would prevent Level 3 from populating CPN for VoIP originated traffic. In fact, VoIP traffic is subject to all of the same limitations as any PSTN originated call after the IP to TDM conversion takes place and the traffic enters the PSTN. All limitations that are identified by Qwest's language apply once the traffic enters the PSTN. Level 3 is attempting to make VoIP traffic more than it really is. It is just a voice call that is routed and transported with a different protocol until the protocol changes at which point it is like any other TDM call.

Q. HAS THERE BEEN AN INDUSTRY STANDARD DEVELOPED TO ADDRESS VOIP ORIGINATED CALLS?

A. No. Level 3 wishes to address the signaling of VoIP traffic even though there has been no industry standard established to address the identification of VoIP originated traffic. Until such time as an industry standard is developed, the industry must use the existing standards for signaling traffic through the PSTN and the well established FCC ESP exemption rules that determine how the traffic from VoIP service providers is treated. Level 3 is attempting to jump the gun with regard to the identification of VoIP originated traffic by putting into place a signaling solution for the identification of VoIP originated traffic that benefits only itself and not the needs of the industry as a whole. It has yet to be determined by industry standards whether signaling is the most appropriate solution for identifying VoIP originating traffic.

Q. HOW DOES LEVEL 3'S PROPOSED LANGUAGE CREATE A SIGNALING PARAMETER THAT DOES NOT EXIST?

A. Section 7.3.8 addresses signaling parameters. Level 3 seems to be attempting to create a new signaling parameter called CRI by including the reference to CRI in the list of SS7 signaling parameters. There is no such signaling parameter as CRI that exists in the SS7 protocol. Level 3's proposed language, however, attempts to prematurely redefine signaling that occurs between two networks and changes the meaning and intent of the language to encompass all call record information that might exist within signaling protocols.

Q. WHAT WOULD BE INVOLVED IN THE CREATION OF A NEW SIGNALING PARAMETER?

A. The creation of a new signaling parameter would be a colossal undertaking. The industry would first have to come to agreement on the definition of the parameter. Once the parameter was defined by the industry then all vendors and carriers that use the SS7 protocol in their equipment and network would have to incorporate the new protocol parameter. This would have to occur for all existing and new signaling equipment. This would include modification to practically every switch in the United States and would also impact other countries to the extent that SS7 is used outside of the United States. This could take years to implement and cost tens of millions of dollars. In addition, some carriers may not use the parameter and others may expect to be compensated for transporting the additional data.

Q. DOES LEVEL 3 DEFINE CRI?

A. No. One of the problems Qwest has with CRI is that Level 3 does not define the term in its proposed contract language. Since Level 3 does not define CRI, its meaning in the ICA would then be left open for dispute.

Q. WHAT PROBLEMS WOULD ARISE IF CRI WERE TO BE DEFINED BY THE SAME INFORMATION THAT IS USED BY LEVEL 3 TO DEFINE CALL RECORD?

A. The same problems that arise in issue No. 8 would arise here. In addition, call records and signaling serve different functions. Call signaling is real time data that is used to set up and release calls across the PSTN. Call records are generated using post call processing and are used for the purposes of billing. Although call records may include some signaling related information, call records include information that is not provided within the signaling stream such as date, time, and call duration that are captured outside the signaling stream. Level 3 has made section 7.3.8 more confusing and more cumbersome to manage by inserting call record information that may not exist in the signaling protocol.

Q. WHAT PROBLEMS DOES QWEST SEE IF LEVEL 3 WERE TO DEFINE ONLY THE SIGNALING PARAMETERS AS ARE USED IN LEVEL 3'S DEFINITION OF CALL RECORD?

A. While Level 3 identifies several signaling parameters in its definition, there is only one call parameter that could always have a substantial impact on the creation of a call record. This is the Calling Party Number ("CPN") parameter. The CPN parameter is the number of the party that places a call *i.e.* the "from" number. Level 3's language inserts signaling parameters that may or may not be present, thus making a call record that would otherwise be valid for billing purposes invalid. Based on Level 3's definition of call record, a call that contains enough information to create a call record for Qwest and other carriers would be classified as a no-CRI by Level 3. For example, if a local call is routed to Level 3 that lacks either a Charge Number or the Originating Line Indicator, under Level 3's language, this local call would be defined as a no-CRI call even if the called party number and

calling party number were present in the signaling stream. Typically, local calls are not signaled with Charge Number or OLI. It is for these reasons that Level 3's language will lead to disputes over what signaling information is necessary for billing.

Q. IS RATING NO-CPN TRAFFIC BASED ON "INTERSTATE SWITCHED ACCESS RATES" APPROPRIATE AS PROPOSED BY LEVEL 3?

A. No. Qwest opposes Level 3's proposal to route interstate switched access over LIS trunks as my testimony explains for Issue 2. Therefore, interstate switched access charges would not be appropriately applied to No-CPN traffic.

Q. WHY IS QWEST'S LANGUAGE MORE APPROPRIATE?

A. Qwest's language uses terms that are clearly defined by the contract and the industry. Qwest language provides clear expectations for the signaling of traffic between the parties' networks.

IX. SUMMARY/CONCLUSION

Q. PLEASE SUMMARIZE YOUR TESTIMONY.

A. Although complex at times, the issues of my testimony revolve around three issues: 1) Level 3's ability to establish a SPOI in a LATA; and 2) the types of traffic that may be combined on interconnection trunks; and 3) the call information that should be required in a call record.

Although, Level 3's ability to establish a SPOI is more about compensation for providing interconnection facilities, the FCC contemplated the logistics for interconnecting two networks when it required LECs to provide interconnection. It recognized that each carrier must be able to retain responsibility for the management, control, and performance of its network. The FCC also acknowledges that networks had interconnected prior to the Telecommunications Act of 1996. In support of its recognition of maintaining network reliability and interoperability, and the existence of network interconnections, the FCC acknowledged certain logical methods to interconnect networks such as cross connect points and main distribution frames as technically feasible points of interconnection. Qwest provides such technical feasible points for the purpose of interconnection with Qwest's network. However, Level 3's proposed language attempts to forgo these well established arrangements not for technical reasons, but in an attempt to avoid the cost of interconnection.

As to the types of traffic that can be carried on interconnection trunk groups, Qwest has attempted to be responsive to Level 3's desire to combine traffic on trunk groups. Qwest is willing to allow all traffic types, with the exception of switched access traffic, to be carried over LIS trunks. The law is also clear about

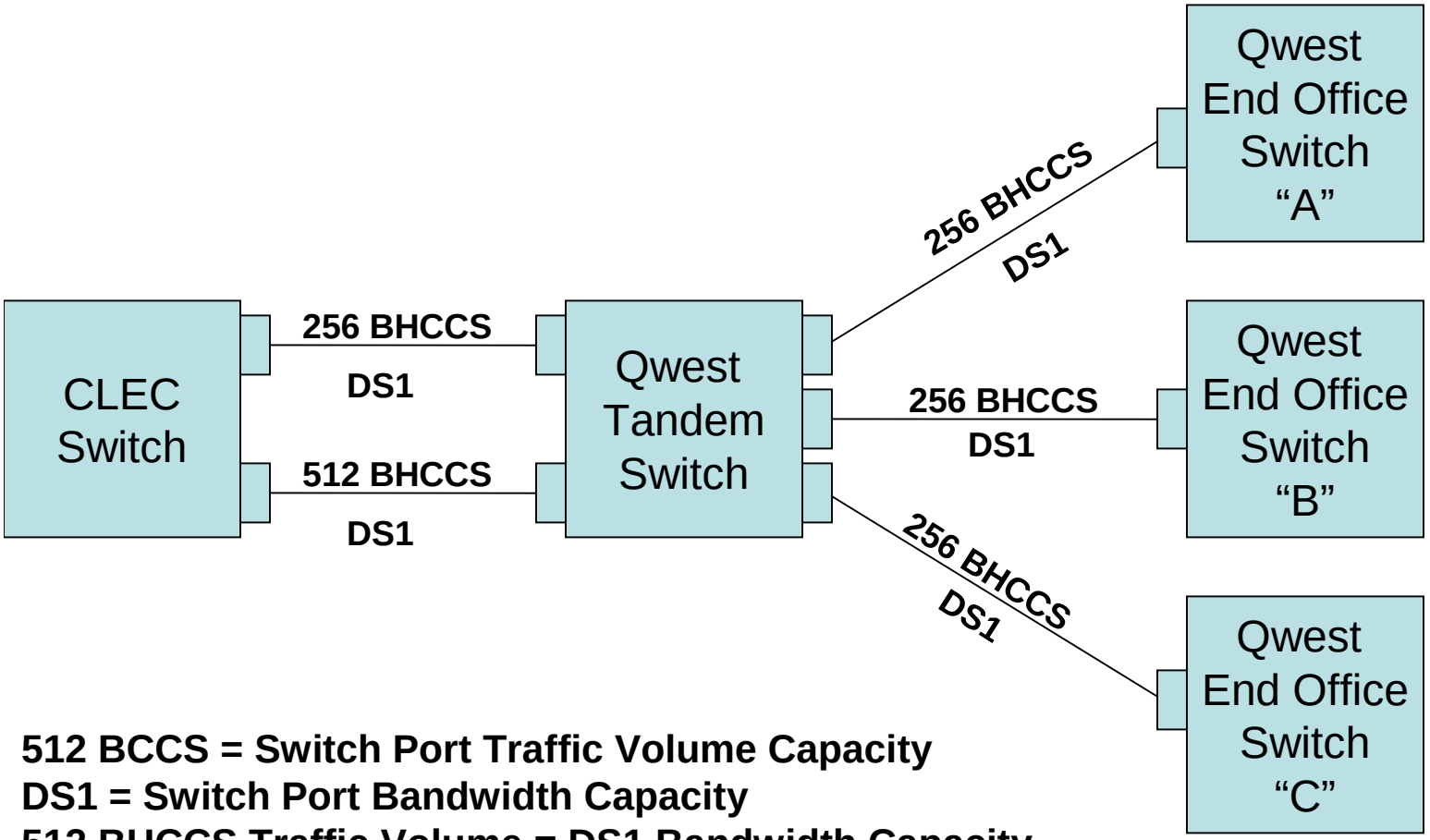
interexchange traffic and the requirement for Qwest to provide switched access services to IXCs for such interexchange traffic. Because of billing issues, systems issues and Qwest's obligation to provide jointly provided switched access records to other ILECs and CLECs, Qwest requires that switched access traffic be carried over Feature Group trunks. This is entirely consistent with Section 251(g) of the Act which requires that Qwest provide interconnection for the exchange of switched access traffic in the same manner that it provided for such traffic prior to the passage of the Act. Nonetheless, Qwest has attempted to accommodate Level 3's desire for network efficiencies by agreeing to let Level 3 combine all of its traffic over Feature Group D trunks. This solution achieves the efficiencies sought by Level 3 while at the same time allowing Qwest to continue to use its existing billing systems and processes. For these reasons, Level 3's proposed combining of traffic on LIS trunks should be rejected.

Finally, a call record must include certain fundamental information to create a record for billing purposes. Although there are some technical limitations in some cases that prohibit the identification of the origination of a call, Level 3 attempts to go beyond the fundamental information and create requirements for a call record that may not legitimately be provided. Qwest's definition provides for all of the fundamental information needed in a call record and at the same time provides the flexibility to accept additional information to create a call record which may be used for billing. Level 3 goes beyond what is recognized by the industry and then inappropriately places financial penalties for non-compliance.

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

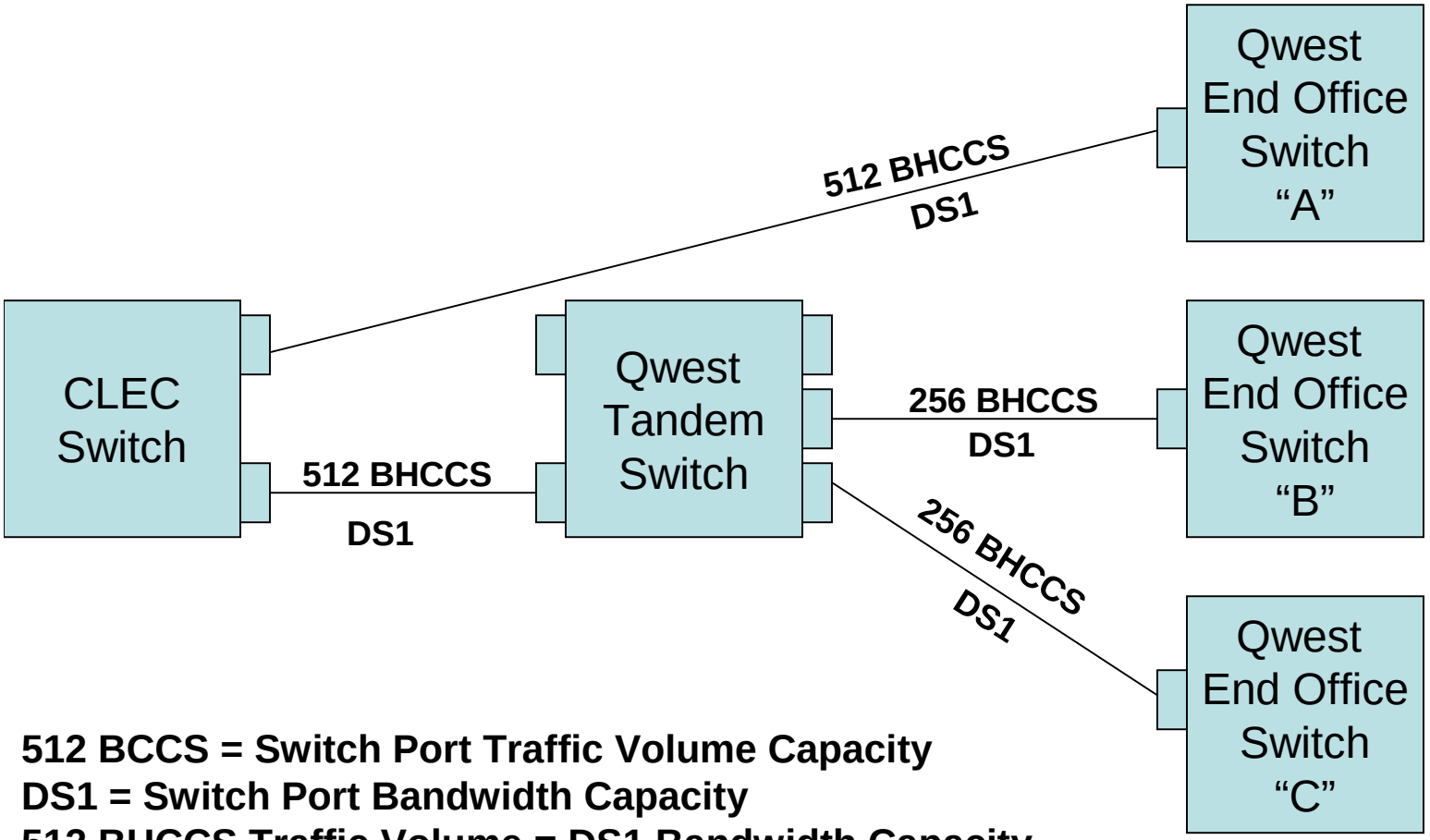
A. Yes it does.

SPOP Traffic Volume Spread Across All End Offices Is Less Than The Capacity Of A Single Switch Port



512 BCCS = Switch Port Traffic Volume Capacity
DS1 = Switch Port Bandwidth Capacity
512 BHCCS Traffic Volume = DS1 Bandwidth Capacity

SPOP Traffic Volume To End Office "A" Is At Or Exceeds The Capacity Of A Single Switch Port (512 BHCCS Rule)



512 BCCS = Switch Port Traffic Volume Capacity
DS1 = Switch Port Bandwidth Capacity
512 BHCCS Traffic Volume = DS1 Bandwidth Capacity