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September 6, 2005

VIA ELECTRONIC MAIL AND US MAIL

Filing Center
Oregon Public Utility Commission
550 Capitol Street NE #215
PO Box 2148
Salem, OR 97308-2148

Re: ARB 665 – Rebuttal Testimony of Timothy Gates and Rogier Ducloo on Behalf of Level 3 Communications, LLC

Dear Sir or Madam:

Enclosed for filing in the above-referenced docket is Rebuttal Testimony of Timothy Gates and Rogier Ducloo on Behalf of Level 3 Communications, LLC. Please contact me with any questions.

Very truly yours,

Jessica A. Gorham

Enclosures

cc: ARB 665 Service List

CERTIFICATE OF SERVICE
ARB 665

I hereby certify that a true and correct copy of **TESTIMONY OF TIMOTHY GATES AND ROGIER DUCLOO ON BEHALF OF LEVEL 3 COMMUNICATIONS, LLC** was served via U.S. Mail on the following parties on September 06, 2005:

Thomas Dethlefs
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Alex M. Duarte
Qwest Corporation
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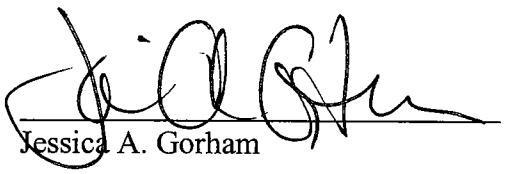
ATER WYNNE, LLP



Jessica A. Gorham

BEFORE THE PUBLIC UTILITY COMMISSION

OF OREGON

In the Matter of LEVEL 3 COMMUNICATIONS, INC's Petition for Arbitration Pursuant to Section 252(b) of the Communications Act of 1934, as amended by the Telecommunications Act of 1996, and the Applicable State Laws for Rates, Terms, and Conditions of Interconnection with Qwest Corporation	Docket No. ARB 665

REBUTTAL TESTIMONY OF TIMOTHY J GATES ON BEHALF OF LEVEL 3 COMMUNICATIONS, LLC

September 6, 2005

TABLE OF CONTENTS

I. INTRODUCTION

Q. Please state your name, occupation and business address.

A. My name is Timothy J Gates. My business address is QSI Consulting, 819 Huntington Drive, Highlands Ranch, Colorado 80126.

Q. Are you the same Timothy J. Gates who filed direct testimony on behalf of Level 3 in this proceeding?

A. Yes, I am.

Q. What is the purpose of your rebuttal testimony?

A. The purpose of my testimony is to respond to the testimony of Qwest witnesses William R. Easton, Larry B. Brotherson and Philip Linse.

Q. How is your testimony organized?

A. My testimony is organized by issue and by Qwest witness being rebutted.

II. DISPUTED ISSUE 1: COSTS OF INTERCONNECTION

Q. Please provide some context for your rebuttal testimony.

A. Level 3 and Qwest disagree on the network architecture for interconnection. The parties also disagree on who is responsible for the costs on each side of the POI. What Level 3 is requesting, however, is the same architecture that is in place in at least 36 other states. Level 3's proposed language was acceptable to SBC, Verizon and BellSouth. As such, Qwest's unwillingness to accept Level 3's contact language has nothing to do with technology or an unreasonable request from Level 3. Instead, Qwest simply refuses to agree to arrangements that the industry has put in place all around the country. Qwest's language and positions should be rejected because they have no basis in engineering, economics or public policy. Level 3's language and positions should be adopted because they are workable and fair.

III. ISSUE IA: INTERCONNECTION RESPONSIBILITIES

Q. Please address the direct testimony of Mr. William R. Easton.

A. At various points in Mr. Easton's testimony he states that "Qwest is allowed to recover costs that are just and reasonable and based on the cost of providing interconnection." (See, for example, Direct of Easton at 8) This statement is part of Qwest's position on Issue 1: Costs of Interconnection. As Mr. Easton correctly points out, "There is presently no dispute as to where the interconnection occurs or how many points of interconnection there will be." (Direct of Easton at 6) The dispute relates primarily to who pays for interconnection costs on each side of the POI.

Q. Can Qwest charge Level 3 for costs of getting Qwest originated traffic to the POI for exchange with Level 3?

A. No. The financial responsibilities for interconnection for the exchange of traffic should be borne solely by each carrier on its side of the POI. Carriers should not be allowed to shift their costs of transporting traffic originating on their networks to their competitors. In other words, sound economics dictate that each carrier should be responsible for the costs of delivering its traffic to interconnecting carriers for termination at a single point of interconnection per LATA. Several Federal Circuit Courts of Appeal have specifically affirmed this. For example, as the Fourth Circuit stated in a dispute between SBC and MCI on this very point,

> In sum, we are left with an unambiguous rule, the legality of which is unchallenged, that prohibits the charge that SBC seeks to impose. Rule 703(b) is unequivocal in prohibiting LECs from levying charges for traffic originating on their own networks, and, by its own terms, admits of no exceptions. Although we find some surface appeal in SBC's suggestion that the charge here is not reciprocal compensation, but rather the permissible shifting of costs attending interconnection, the FCC, as noted above, has endorsed cost-shifting related to interconnection only as it relates to the one-time costs of physical linkage, and in doing so, expressly

> declined the invitation to extend the definition of "interconnection" to include the transport and termination of traffic.[1]

In other words, the cost of getting the Qwest originated traffic to the POI, specifically, the cost of transport and termination, are to be borne by Qwest pursuant to Rule 703(b). These decisions flow from the simple technical reality that interconnection simply means linking up networks. It is also consistent with the accepted economic expedient of cost-causation. Cost shifting is unnecessary, uneconomic and anti-competitive. This point is recognized by the FCC and by the federal circuit courts of appeal that have addressed the issue in the context of interconnection agreements, to wit: each carrier pays its own costs of exchanging traffic.

Q. At page eight of Mr. Easton's direct, he states, "it makes sense that the cost causer compensate 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." Please comment.

A. First of all, Mr. Easton is completely wrong to suggest that Level 3 is the cost causer. Never in the history of telecommunications regulation has a regulator determined that the terminating party is the cost causer. If Mr. Easton's upside down view of regulatory law and economics were accepted, Qwest would never pay a thing for calls its customers make to customers connected to other networks. Mr. Easton's suggestion that Level 3 is the cost causer because Level 3 seeks interconnection, and as such must pay for Qwest's costs on its side of the POI, is completely wrong.

Q. The calls that Qwest routes to Level 3's POI are originated by Qwest customers, correct?

A. Yes. These are calls originated by Qwest's local subscribers. Again, since it is the Qwest subscriber who originates the call, that subscriber is the cost causer, not Level 3.

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[1] *MCImetro Access Transmission Services, Inc. v. SBC Telecommunications, Inc.*, No. 03-1238 2003 US App. LEXIS 25782, *24-5 (4th Cir. Dec 18, 2003).

This is also consistent with the "calling party pays" convention that has been in place since the inception of the PSTN.

The Qwest customer pays Qwest for local service and that customer has the ability to dial an unlimited amount of local calls. One such call might be to an ISP who purchases local service from Level 3. Qwest is compensated by its customers for originating and terminating the call. In a co-carrier situation, Qwest is responsible for getting the call to the POI. On the other side of the POI, Level 3 is responsible for terminating that call for Qwest to wherever Level 3's customer may be. Naturally, Qwest should compensate Level 3 for terminating the call.

Q. Mr. Easton states at page eight of his direct testimony that "Qwest's end users should not have to bear the burden of paying for Level 3's ISP service." Do you agree?

A. Yes. Qwest end users do not pay for "Level 3's ISP service" and would not pay for any aspect of Level 3 service under the Level 3 proposal. First of all, Level 3 is not providing ISP service; it is providing local telecommunications connectivity for an ISP so that Qwest's customers can dial-up the ISP on a local basis. Second, Qwest's proposal would deny Level 3 any compensation for terminating calls originated by Qwest customers. As such, Qwest would get a free ride on Level 3's network for terminating these calls. Finally, in a complete reversal of sound principles of economics, FCC Rules and common carrier regulation generally, Qwest wants to impose access charges on the terminating carrier for calls originated by Qwest's customers.

Unlike traditional "interexchange services" Qwest's customers are not Level 3's customers for purposes of providing an interexchange telecommunications service. In other words, Level 3 is not an IXC and is not acting as an IXC when it terminates Qwest's traffic. To the extent a Qwest customer places a locally dialed call that Qwest is statutorily required to hand off to Level 3 at the POI, Level 3 imposes no additional per

minute of use charges for these calls. Accordingly, under no regulatory authority – save Qwest's self-serving attempt to create access charges where none could logically exist – may one carrier charge an interconnecting carrier switched access charges for calls that are not made to an IXC, and do not involve additional per minute of use charges. There is no economic relationship between the Qwest customer and Level 3 for the provision of an interexchange service, and the call is locally dialed and handed off between the parties at the POI. Moreover, it is interesting to note that prior to the FCC's *ISP-Remand Order* the vast majority of state commissions examining ISP-bound traffic determined that it was local. Thus Qwest's cost shifting is an entirely transparent grab at intercarrier compensation; it is anticompetitive and certainly not consistent with the principle of cost causation.

Q. So Qwest's proposal would not compensate Level 3 for terminating the calls originated by Qwest customers and also charge Level 3 originating access for those calls?

A. Yes. Qwest would be compensated by its own customers for the local service, but would charge Level 3 originating switched access charges for the same locally dialed calls. As such, Qwest would double recover its costs of providing local service.

Q. Does Qwest at least agree to pay Level 3 for terminating calls originated by its customers?

A. No. Under Qwest's proposal, Level 3 would pay Qwest for calls originated by Qwest customers and receive no compensation for terminating Qwest originated traffic. This is completely unfair.

Q. Do local rates cover the cost of carrying this traffic to the POI or designated transit point?

A. Yes, but to be clear, when I refer to local rates I am referring to all revenues derived from the local service. Local rates and revenues include not only the basic local rate, but other

revenues from subscriber line charges, vertical services (*i.e.,* call waiting, call forwarding, anonymous call rejection and other star code features), universal service surcharges, extended area service charges and the subsidies remaining in Qwest's access charges for intraLATA and interLATA toll. Average local revenues tend to be $40 to $50 per line per month.

Q. What is the basis of your assertion that average local revenues tend to be $40 to $50 per line per month?

A. Recall that the TRO Order (FCC 03-36; Released: August 21, 2003) specifically relied upon information on the cost of entry and also revenues to be gained in doing the impairment analysis. (See, for instance, paragraph 100 of the TRO Order) At paragraph 157 of the TRO Order it states:

> The existence of "below cost" residential local exchange service rates does not mean that such customers are "unprofitable" to serve. Determining whether a customer class is desirable to serve requires a comparison of costs and all potential revenues for the class, which will substantially exceed the local exchange service rate.

Footnote 513 of the TRO Order identifies the different services to be included in the average revenue per line calculation – basic local rate, vertical features, federal and state access charges, etc. At paragraph 519 the TRO Order it describes the potential revenues that state commissions must consider in their findings of impairment.

> 519. *Potential Revenues.* In determining the likely revenues available to a competing carrier in a given market, the state commission must consider *all* revenues that will derive from service to the mass market, based on the most efficient business model for entry. These potential revenues include those associated with providing voice services, including (but not restricted to) the basic retail price charged to the customer, the sale of vertical features, universal service payments, access charges, subscriber line charges, and, if any, toll revenues. The state must also consider the revenues a competitor is likely to obtain from using its facilities for providing data and long distance services and from serving business customers. Moreover, state commissions must consider the impact of implicit support flows and universal service subsidies on the revenue opportunities available to competitors. Consideration of potential revenues is consistent with our standard, as described in Part V above, and with the guidance of the *USTA* decision.

I participated in many, if not all, of the TRO state proceedings in the Qwest region. The state commissions sought revenue per line information from both CLECs and ILECs in those proceedings. My opinion on the average revenues per line per month is based on the review information submitted in those proceedings.

Q. If Level 3 paid Qwest to transport Qwest's originated traffic to the statutorily required single POI, would Qwest be double-recovering its costs?

A. Yes. Qwest would be paid twice for the local traffic – once by its local subscribers and again through access charges paid by Level 3. Another benefit to Qwest would be that Level 3 would be denied compensation for terminating the calls handed off at the POI. Any reasonable person would recognize Qwest's proposal as being fundamentally unfair.

Q. Are there other orders that support your position on which provider is responsible for getting ILEC originated traffic to the POI?

A. Yes. I am sure there are many, but I will provide an example. In the FCC's Order in the Kansas/Oklahoma 271 proceeding, the FCC again referred to its rules for the proposition that an ILEC may not charge CLECs for traffic that originates on the ILEC network. Specifically, that order states:

> 235. Finally, we caution SWBT from taking what appears to be an expansive and out of context interpretation of findings we made in our *SWBT Texas Order* concerning its obligation to deliver traffic to a competitive LEC's point of interconnection. (Note 695) In our *SWBT Texas Order*, we cited to SWBT's interconnection agreement with MCI-WorldCom to support the proposition that SWBT provided carriers the option of a single point of interconnection. (Note 696) We did not, however, consider the issue of how that choice of interconnection would affect inter-carrier compensation arrangements. Nor did our decision to allow a single point of interconnection change an incumbent LEC's reciprocal compensation obligations under our current rules. (Note 697) For example, these rules preclude an incumbent LEC from charging carriers for local traffic that originates on the incumbent LEC's network. (Note 698) These rules also require that an incumbent LEC compensate the other carrier for transport (Note 699) and termination (Note 700) for local traffic that originates on the network facilities of such other carrier. (Note 701)[2]

[2] *In the Matter of Joint Application by SBC Communications Inc., Southwestern Bell Telephone Company, and Southwestern Bell Communications Services, Inc. d/b/a Southwestern Bell* Long *Distance for Provision of In-*

Note 698 in the above quote is a specific reference to Rule 51.703(b). It is clear, from this and other rulings, that the originating carrier may not charge a terminating carrier for the cost of transport, or for the facilities used to transport that traffic to the POI. By extension, it is clear that simply because a POI might be outside a local calling area, Qwest has no right to charge Level 3 for the cost of transport, or for the facilities used to transport the traffic from the local calling area to the POI.

Q. If the traffic were all ISP-bound, would that change Qwest's interconnection obligations?

A. No. Regardless of the type of traffic Qwest's customers originate, the rates that Qwest charges those customers compensate Qwest for delivering the traffic to the POI.

IV. SINGLE POI

Q. Thus far you have discussed the proposals of Qwest and Level 3 for cost responsibility associated with getting the traffic to the POI. How many POIs must Level 3 establish in each LATA?

A. CLECs are only required to have a single POI in each LATA where they offer service. I discussed this at some length in my direct testimony. An example of the rulings on this important issue is found In SBC's Texas 271 proceeding, wherein the FCC stated in pertinent part,

> Section 251, and our implementing rules, require an incumbent LEC to allow a competitive LEC to interconnect at any technically feasible point. ***This means that a competitive LEC has the option to interconnect at***

Region, InterLATA Services in Kansas and Oklahoma, CC Docket No. 00-217, FEDERAL COMMUNICATIONS COMMISSION, 16 FCC Rcd 6237; 2001 FCC LEXIS 1202; 23 Comm. Reg. (P & F) 299, **RELEASE-NUMBER:** FCC 01-29, January 22, 2001 Released; * Adopted January 19, 2001. (footnotes omitted)

> ***only one technically feasible point in each LATA."***[3] (emphasis added)

A similar finding was made in the Virginia WorldCom proceeding wherein that order reads in pertinent part,

> Under the Commission's rules, competitive LECs may request interconnection at any technically feasible point. ***This includes the right to request a single point of interconnection in a LATA.***[4] (emphasis added)

There is nothing in the Act or in the FCC orders that support Qwest's position that it may charge CLECs more for interconnection (through additional transport or facilities charges) if they choose to have only one POI per LATA. Indeed, the Act and FCC orders (such as the one cited above) conclude just the opposite.

Q. Does Qwest agree that only a single POI is required?

A. Not really. While Qwest claims to support the idea, their contract language belies their true intent because it entirely subverts the economic benefit of a single POI. Qwest would have Level 3 pay access from every Qwest "local" calling area. Viewed in the light of the law, policy and economics behind this very simple rule, Qwest's language must be rejected.

Q. What is Level 3's proposal with respect to single POI language in the agreement?

A. Level 3's proposed language is as follows:

> 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.

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[3] Texas SBC 271 Proceeding; CC Docket No. 00-65; Released June 30, 2000; at ¶ 78.

[4] FCC Memorandum Opinion and Order, CC Docket Nos. 00-218, 00-249, 00-251; Released: July 17, 2002; at ¶52.

> 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.

As you can see from the language above, Level 3 clearly addresses the single POI entitlement and the associated cost responsibility on each side of the POI. Qwest's language, however, completely ignores the single POI issue, and instead discussed trunking on its side of the POI.

Q. What is Qwest's proposed language for this section of the agreement?

A. The Qwest proposal is as follows:

> 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.

By requiring Level 3 to pay for facilities on the Qwest side of the POI, Qwest completely eliminates the purpose and benefits of the single POI entitlement. The single POI allows CLECs to enter the market without having to duplicate the ILEC legacy network technology or structure. Of course, this does not preclude the parties from voluntarily agreeing to establish whatever additional POIs they may choose in particular situations.

Q. Does the single POI entitlement provide any indication of what the FCC considers a CLEC local calling area to be?

A. Yes. By only requiring a single POI per LATA, the FCC has effectively defined the local calling area – for interconnection purposes -- to be a LATA. From a competitive perspective this makes sense because it ensures that the incumbent cannot force upon the competitor costs that would make retail competition impossible. For CMRS providers, the local calling area is an MTA (major trading area) which in some cases is larger than a state. For instance, in Oregon we have two LATAs (LATA 670 and LATA 672) and parts of three MTAs (MTA 30, MTA 42 and MTA 36).

Q. Are you suggesting that the single POI entitlement has changed the Commission-approved local calling areas?

A. No.

V. ISSUE 1D TRANSPORT FACILITIES

Q. At page 17 of his direct testimony, Mr. Easton states that Level 3 "…has an obligation to compensate Qwest for providing services which allow Level 3 to serve its ISP end users." Please comment.

A. Mr. Easton is wrong to suggest that Level 3 is responsible for Qwest's network on the Qwest side of the POI. This seems to be a recurring theme throughout Qwest's testimony. It is true that carriers share the cost of interconnection by bringing their originated traffic to the POI. It is not Level 3's responsibility, however, to pay Qwest for getting Qwest originated traffic from Qwest end users to the POI. That is Qwest's responsibility. As the FCC has repeatedly stated, and as affirmed by federal courts nationwide, Rule 51.703(b) requires that each carrier bear its costs on its side of the POI:

> (b) A LEC may not assess charges on any other telecommunications carrier for telecommunications traffic that originates on the LEC's network.

This language is very straight forward. We are talking about traffic that originates on Qwest's network. Qwest may not charge Level 3 for getting this traffic to the POI.

Q. Does Level 3's proposed language refer to rules 703(b) and 709?

A. Yes. Level 3's proposed language is as follows:

> 7.2.2.1.2.2. CLEC may order transport services from Qwest or from a third-party, including a third party that has leased the private line transport service facility from Qwest for purposes of network management and routing of traffic to/from the POI. 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.

As noted above, Mr. Easton suggests that this language indicates that "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." Mr. Easton further complains about Level 3 language because "Compensation issues do not belong in this section …." but Qwest's language specifically refers to the CLEC "purchasing" transport services from Qwest. (*Id.*) Qwest's attempts to misconstrue economic principles and sound public policy simply belie its pecuniary motives.

Each of Qwest's propositions regarding single POI simply amount to requesting that the Commission protect Qwest from competition by forcing Qwest's competitors to mimic Qwest's network designs and costs. Qwest's positions are especially ironic when considered in light of the fact that the FCC relieved Qwest (and other ILECs) of the obligation to unbundle local switching because of the availability and use of newer more efficient technologies, such as that deployed by Level 3. To wit:

> As the Commission found in the Triennial Review Order, there has been a significant increase in competitive LEC circuit switch deployment over time, growing approximately 71 percent from 700 switches in 1999 to approximately 1,200 switches in 2003. Incumbent LEC data indicate that competitive carriers are serving over 3 million mass market lines with those switches. Further, pursuant to our "reasonably efficient competitor" standard, we consider competitive LECs' deployment of newer, more efficient switching technologies, such as packet switches. Incumbent LECs cite evidence that, in the time following the Triennial Review Order, ***competitive LECs have focused on deploying softswitch technology and packet switches. These switches are less expensive than traditional circuit switches and are more scalable.*** This evidence indicates that competitive LECs are not impaired in the deployment of competitive switches. As discussed below, we also find that competitive LECs are able to use switches, once deployed, to serve the mass market. (206)
>
> In addition, pursuant to the "reasonably efficient competitor" standard discussed above, we evaluate impairment based on the technology a reasonably efficient competitive LEC would deploy. ***Competitive LECs can rely on newer, more efficient technology than incumbent LECs (whose networks have been deployed over decades), such as packet switches. Further, the ability of competitive circuit switches to serve wider geographic regions reduces the direct, fixed cost of purchasing circuit switching capability and allows competitive carriers to create their own switching efficiencies. (207)***

> 224.We also conclude that an absence of sufficient collocation space does not hinder competitive LECs' ability to deploy competitive switches to a degree that gives rise to operational impairment. With respect to packet switches, the Commission found in the Triennial Review Order "that any collocation costs and delays incurred by requesting carriers to provide packet switched services do not rise to a level" of demonstrating impairment because such disadvantages "***are likely outweighed by [competitive LECs'] advantage in relying solely on newer, more efficient technology***." Similarly, we note that a reasonably efficient competitor does not have to be collocated in every incumbent LEC central office in order to serve customers in that wire center, ***reducing*** the likelihood that lack of collocation space will truly result in impairment in the absence of unbundled switching.[5] (emphasis added).

To think that the FCC relieved ILECs of significant unbundling requirements based upon those competitors' abilities to deploy newer, more efficient technology, only to turn around and require those very same competitors to mimic as an architectural or monetary matter the network architecture of their incumbent competitors strains credulity. There can be no intermodal competition of any sort if the Commission allows this sort of ILEC protectionism.

Q. Is rule 51.703(b) consistent with economic theory?

A. Yes. This rule is the embodiment of the "cost causer" economic principle – cost causers should pay the cost they impose on society. In this case, when a Qwest subscriber makes a call to a Level 3 customer, Qwest is responsible for the cost of getting that traffic to the POI. As such, the language to "order" transport facilities is correct since there is no requirement to "purchase" facilities for the transport of Qwest originated traffic on the Qwest side of the POI.

[5] In the Matter of Unbundled Access to Network Elements Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers), WC Docket No. 04-313, CC Docket No. 01-338; *Order On Remand;* ¶¶206, 207, and 224 (Released: February. 4, 2005).

VI. LEVEL 3 IS NOT THE COST CAUSER

Q. Why does Qwest raise the issue of "cost causer" when the rules require each party to bear its costs of originating and transporting traffic on its network to the POI?

A. It appears that Qwest's approach is largely characterized by imposing upon Level 3 classifications that have more to do with their retail classifications than with the exchange of traffic between interconnecting LECs. In this sense, Qwest uses the term "VNXX" to create a false distinction between the traditional FX terminated by ILECs and similar services provided by other carriers.

Q. So you disagree with Mr. Easton's suggestion that Level 3 is the cost causer for all ISP-bound and VNXX traffic?

A. Absolutely. As I stated earlier, Qwest's customers – who are subscribers to Qwest's local service plans – are originating these calls to Level 3 customers. It is their choice to employ the Qwest service to contact a Level 3 customer. Qwest customers are paying Qwest to complete those calls and to get that traffic to Level 3. Level 3 is not the cost causer, and should not have to pay the cost of getting this traffic to the POI.

Q. Do you agree with Qwest's position on FX/VNXX traffic?

A. No. Simply because a call may terminate in a different or adjacent exchange does not mean that it should be treated differently than other locally dialed calls. As I noted in my direct testimony, Qwest's responsibilities and costs are absolutely identical regardless of the location of the Level 3 customer. Qwest has admitted this in discovery. In each case, a locally dialed call is routed to the POI for termination. All that Qwest does is determine that the dialed telephone number is a Level 3 number and route the call to Level 3 on an appropriate trunk group. What Level 3 does is the same in both cases: it recognizes the incoming traffic as bound for one of its customers and sends the traffic on to that customer. The only difference is whether the ISP's gear receiving the call is at the end of a short circuit (close to Level 3's switch, and thus often not in the calling party's retail

local calling area) or a long circuit (far away from Level 3's switch, and thus, possibly, in the calling party's retail local calling area). Regardless of the distance, it is Level 3's responsibility to complete the call. It makes no economic sense whatsoever to make any distinction in Qwest's financial or operational obligations depending on whether Level 3 uses a long or short circuit to connect its customers to its switch.

VNXX traffic is simply a competitive response to traditional foreign exchange service which Qwest stated in discovery it has been providing in its region since 1954. While it is true that FX in Oregon was grandfathered about 20 years ago, that does not mean that the functionality – especially today for the ISP industry – is not in demand by consumers. That functionality is now being used by ISPs to efficiently provision service throughout the United States. Qwest's grandfathered foreign exchange, Wholesale Dial and OneFlex™ services provide a similar functionality.

Q. Are there circumstances under which Level 3 has agreed to pay for facilities on the Qwest side of the POI?

A. Yes. As Mr. Ducloo explains, Level 3 typically adds direct trunks when traffic volumes reach 512 BHCCS. There may, however, be circumstances when traffic should be allowed to increase beyond this point for a period of time. This is consistent with Level 3's practices with Qwest as well as with every other major ILEC. In fact, Mr. Linse noted in his testimony that "Level 3 has historically been very cooperative when working with Qwest's trunk administration group." (Direct of Linse at 26) Level 3 has historically been very proactive in its relationships with Qwest and other ILECs to ensure that traffic is properly engineered to avoid tandem exhaust and blocking that might impact service quality. Parenthetically, as Mr. Ducloo has noted, Qwest's insistence upon a duplicative FGD architecture is somewhat confusing as this requirement would accelerate tandem exhaust throughout Qwest's network.

VII. ISSUE 1G DISPUTE OVER TRAFFIC TYPES

Q. At page 21 of his testimony, Mr. Easton discusses language for section 7.3.1.1.1 (entrance facilities). Qwest proposes language that would have the "terminating" carrier responsible for the ISP-bound and VNXX traffic. Is this consistent with cost causation?

A. Absolutely not. As discussed above, the originating carrier is responsible for getting traffic to the POI for termination by the interconnected provider. Qwest turns this economic principle on its head by suggesting that the "terminating" carrier is responsible for ISP-bound traffic and for VNXX traffic.

Q. What language has Qwest proposed?

A. Qwest's proposed language for Section 7.3.1.1.3 is as follows:

> 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. (emphasis added)

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.

Level 3's language is simple and consistent with the FCC rules regarding who bears responsibility on each side of the POI. Qwest's language, on the other hand, creates an artificial and unconventional distinction for traffic based on the physical location of customers.

Q. Are the VNXX and ISP-bound calls originated by Qwest customers, and dialed on a local basis?

A. Yes.

Q. Qwest refers to rule 51.709(b) to support its position on the RUF calculation. Specifically, Mr. Easton suggests that Level 3 must be responsible for the ISP-bound and VNXX traffic. (Direct of Easton at 22) is that a correct interpretation of rule 51.709(b)?

A. No. Rule 51.709(b) states:

> (b) 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 proportion may be measured during peak periods.

This rule is again consistent with the economic principle of cost-causation in that it calculates the proportion to be paid based on the originating traffic as a proportion of total traffic. That proportion is then used to allocate the cost of the facilities between the two providers. The ISP-bound and VNXX traffic is originated by Qwest subscribers and assuming a relative use factor is appropriate for calculating costs, then the ISP-bound and VNXX traffic must be included in Qwest's proportion of the cost, and not in Level 3's proportion of the cost.

Q. Is there any cost basis for treating the ISP-bound and VNXX traffic any differently than other local traffic?

A. No. In Level 3 Request No. 023I, Level 3 asked the following question:

> Does Qwest contend that the costs it incurs in originating a call to a Level 3 customer differ in any respect whatsoever based upon the physical location of the Level 3 customer? If Qwest responds to the above question with anything other than an unequivocal "no," please provide a detailed explanation of how the location of Level 3's customer on Level 3's side of the POI could affect Qwest's costs. Include in that explanation all cost studies and any other documentation in your possession that you believe provides support for your position.

Qwest's response in pertinent part was, "The costs Qwest incurs do not vary based upon the physical location of the Level 3 customer." (Level 3/401, Gates/Page 1 of 1).

Q. At page 26 of his testimony, Mr. Easton argues that rule 51.703(b) refers to telecommunications traffic and not ISP-bound traffic. Please comment.

A. Subpart H of the FCC Rules does refer to telecommunications traffic and Section 51.703(b) refers to reciprocal compensation obligations. The FCC – in its *ISP Remand Order* – carved out federal authority to set intercarrier compensation rates for ISP-bound traffic, under one particular subsection of Section 251. But the FCC was crystal clear in stating that it was *not* changing the scope of how ISP-bound traffic is exchanged between carriers under the other subsections of Section 251, or to limit the state commissions' jurisdiction beyond the issue of setting intercarrier compensation rates. Specifically, the

FCC emphasized in footnote 149 of its *ISP Remand Order* that its establishment of the interim regime "affects only the intercarrier *compensation* (*i.e.*, the rates) applicable to the delivery of ISP-bound traffic. It does not alter carriers' other obligations under our Part 51 rules, 47 C.F.R. Part 51, or existing interconnection agreements, such as obligations to transport traffic to points of interconnection." (emphasis in original) Thus, the *ISP Remand Order* does not relieve Qwest of its interconnection obligations under rule 51.703(b). Finally, no matter what the Commission rules on compensation for ISP-bound traffic, such traffic will be going over the interconnection trunks and facilities and therefore should be included in determining relative use of the trunks and facilities to originate traffic.

Q. Are the calls originated by Qwest customers that are ultimately determined to be ISP-bound or VNXX, imposing any additional costs on Qwest?

A. No. As noted above, Qwest has admitted that these calls do not increase its costs. The calls are dialed and routed like any other local call and Qwest cannot distinguish the ISP-bound or VNXX calls from other local calls. As such, Qwest's responsibilities and costs for delivering this traffic to the POI are the same as for any other local call. Contrary to Mr. Easton's suggestion, Rule 51.703(b) does apply to the exchange of ISP-bound and VNXX traffic. The only difference is that Level 3 will receive the lower FCC mandated rate of $0.0007 per minute instead of the standard reciprocal compensation rate -- which is about four times higher -- for terminating the traffic.

Q. What is the cost of direct trunked transport in Oregon?

A. Once the facility is in place, the cost is miniscule. Let me provide an example. Qwest's Oregon SGAT lists DS3 Direct Trunked Transport for 50 miles or more to be $21.11 per month per mile. (Qwest Oregon SGAT; Exhibit A; Section 7.3.3.5) So even if we assume a very conservative fill factor of 50 percent (14,500,000 minutes of use on a DS3), the cost per mile is only $.000001456, or about 15 one-hundred thousandths of a

cent. So not only does the location of the Level 3 customer not impact Qwest's costs, but even if Qwest were allowed to charge for transport from LCAs to a single POI, there are no costs to justify the rate.

Q. Are there any federal orders that address the cost of ISP-bound traffic as opposed to other locally dialed traffic?

A. Yes. Paragraph 90 of the *ISP Remand Order* addresses the cost of ISP-bound and voice traffic:

> This is the correct policy result because we see no reason to impose different rates for ISP-bound and voice traffic. The record developed in response to the *Intercarrier Compensation NPRM* and the *Public Notice* fails to establish any inherent differences between the costs of any one network of delivering a voice call to a local end-user and a data call to an ISP. Assuming the two calls have otherwise identical characteristics (e.g., duration and time of day), a LEC generally will incur the same costs when delivering a call to a local end-user as it does delivering a call to an ISP. We therefore are unwilling to take any action that results in the establishment of separate intercarrier compensation rates, terms and conditions for local voice and ISP-bound traffic. To the extent that the record indicates that per minute reciprocal compensation rate levels and rate structures produce inefficient results, we conclude that the problems lie with this recovery mechanism in general and are not limited to any particular type of traffic. (emphasis in original)

It is clear from Qwest's admissions and the FCC's findings that there is no difference in cost for delivering a local voice call or an ISP-bound call to the POI. Since these calls are dialed in the same manner, handled in the same manner from a network perspective, and – not surprisingly – have the same cost, there is no justification for treating these calls differently from all other locally dialed calls. Indeed, this is precisely what the FCC found in paragraph 92 of the *ISP Remand Order*, "Nor does the record demonstrate that CLECs and ILECs incur different costs in delivering traffic that would justify disparate treatment of ISP-bound traffic and local voice traffic under section 251(b)(5)."

Q. Does the *ISP Remand Order* also address the location of the ISP for purposes of intercarrier compensation?

A. Yes. At paragraph 92 of the ISP Remand Order it also states, "The proximity of the ISP or other end-user to the delivering carrier's switch, however, is irrelevant to reciprocal compensation rates." In other words, it makes no difference if Level 3's customer is collocated in Level 3's switching center or is located far away from that switching center.

VIII. ISSUE 1H: RELATIVE USE FORMULA

Q. At page 27 of Mr. Easton's testimony, he discusses the proposed language of the two parties with respect to direct trunked transport. Qwest again defines VNXX traffic and states that "for purposes of determining the RUF, the terminating carrier is responsible for ISP-bound traffic and for VNXX traffic." Please comment.

A. For all the economic reasons stated above, ISP-bound and VNXX traffic must be included in the RUF calculation. These locally dialed calls are originated by Qwest local service subscribers who pay Qwest to complete the calls.

Q. In that same section regarding Issue No. 1H, Qwest states, "ISP-bound traffic is interstate in nature. Qwest has never agreed to exchange VNXX traffic with CLEC." Is that consistent with its other positions?

A. No. In this instance Qwest again attempts to apply its retail calling area distinctions to locally dialed traffic exchanged between interconnected LECs. In testimony and other statements, Qwest misconstrues the ESP exemption to apply only when the calling and called parties are in the same local calling area. This is completely inconsistent with the FCC's treatment of this traffic. The FCC has pre-empted the Commission on intercarrier compensation for this traffic, but Qwest is still required to route this traffic to the POI per the state approved interconnection agreement.

IX. ISSUE 1J NRCS FOR LIS TRUNKING

Q. At page 29 of his testimony, Mr. Easton states that Level 3's language for section 7.3.3.1 denies Qwest compensation for work performed on behalf of Level 3. Do you agree?

A. No. Level 3's language is consistent with economic principles in that "neither" party may charge for trunking on its side of the POI. This is consistent with the FCC mandate that each party pays for the facilities on its side of the POI. Qwest's language would have Level 3 pay for facilities on both sides of the POI. Qwest's proposal is anticompetitive, unreasonable, internally contradictory when viewed in light of unbundling relief granted to them, and against sound public policy. Qwest is trying to change the rules and that is unfair.

X. DISPUTED ISSUE 2: ALL TRAFFIC ON INTERCONNECTION TRUNKS

Q. Please introduce this issue.

A. This issue is a dispute as to whether Level 3 should be allowed to combine all types of traffic on a single interconnection trunk group. Qwest wants Level 3 to use different trunk groups for different types of traffic ostensibly for billing purposes.

Q. From an economic perspective, what is the ideal solution to this dispute?

A. The correct solution would be to route all traffic over a single interconnection trunk group. This solution is the most efficient solution from an engineering perspective as discussed by Mr. Ducloo, but it is also the most efficient solution from an economic perspective. By not allowing Level 3 to route all traffic on its interconnection trunks it is denying Level 3 the efficiencies that it could obtain otherwise. In other words, Qwest is forcing Level 3 to purchase additional trunks and facilities that are not necessary given the level of traffic. Artificially increasing the cost of an incumbent's competitors is a common tactic, but is not in the public interest.

Q. Mr. Easton states at page 34 that "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." Do you agree?

A. No. Qwest should allow Level 3 to interconnect in the most efficient manner possible so long as it is technically feasible. As Qwest has noted in response to Level 3 Request No. 138 in Iowa, "From a network perspective, there is no technical reason that would prohibit Qwest from combining all types of traffic on interconnection trunks." (See Level 3/402, Gates/Page 1 of 1).

Q. Does Qwest combine all traffic types on FGD trunk groups for other CLECs?

A. Yes. Qwest allows CLECs, who have a preponderance of FGD traffic, to combine all other types of traffic on those trunks as well. Level 3 has a preponderance of local traffic, and should be allowed to combine what little FGD traffic it might have on its interconnection trunks. This solution is workable and fair.

Q. What then is Qwest's objection to combining all traffic on a single interconnection trunk group?

A. Qwest is willing to combine all traffic on a single trunk group, as long as it is a FGD trunk group. Indeed, Qwest will allow all traffic types, with the exception of switched access traffic, to be carrier over interconnection trunks. (Easton Direct at 33) The impact of Qwest's proposals is to increase Level 3's costs. For instance, Qwest says that it is willing to allow the exchange of differently rated traffic over FGD trunk groups, but Qwest's proposal again is nothing more than an attempt to obtain more money wrapped in the enigma of contradictory requirements. Mr. Ducloo speaks to those issues at length. The economics of the situation, however, are clear: Qwest imposes unnecessary costs upon its competitor - Level 3 – for no other reason than to force upon Level 3 billing "solutions" that already are unworkable in the real world. Instead, as Level 3 already does with Verizon, BellSouth and SBC, the parties should exchange traffic over a single

set of interconnection trunks and apply factors – which Qwest itself already applies to both the interconnection trunks (to allocate billing for "locally" rated traffic and "intraLATA Toll" traffic) and on the FGD trunks (to allocate billing for "InterLATA interstate" and "InterLATA intrastate").

Q. Why does Qwest oppose level 3's proposal to use billing factors?

A. Mr. Easton argues that Level 3's proposal to use billing factors would not result in accurate bills. His argument lacks rational foundation as the telecommunications industry – and as I note above -- Qwest itself not only has used billing factors for decades. Requiring separate trunk groups, as suggested by Qwest, results in a deadweight economic loss to society.

Q. If billing accuracy is an issue in this proceeding, would that same issue be pertinent for the combined traffic on FGD trunks?

A. Yes. Qwest is apparently concerned about incentives to misreport traffic since different traffic is subject to different rates. If that were truly a concern, then Qwest would not have allowed other CLECs to combine all traffic on FGD trunks, especially since billing disputes are common for CABS. Qwest allows other CLECs to combine all traffic on FGD trunks, so it is only fair to allow Level 3 to combine all traffic on interconnection trunks.

Q. Does Qwest currently use billing factors for services in Oregon?

A. Yes. Qwest's Oregon access tariff (P.U.C. Oregon No. 24, Access Service Tariff; Section 2.3.10) has "jurisdictional report requirements" that date back to the 1980s. In fact, those requirements only require a "projected" percentage rounded to the nearest percent that is updated quarterly.

Q. What is Level 3's proposal for the use of billing factors?

A. The billing factors would be based on actual traffic data and adjusted as new data becomes available. Level 3 would provide updates for the factors quarterly or perhaps

more often. Level 3's proposal is certainly preferable to forcing a carrier to use FGD trunks in addition to interconnection trunks.

Q. Please summarize your position on combining traffic on trunk groups.

A. Qwest and Level 3 agree that there is no technical reason that would prohibit Qwest from combining all types of traffic on interconnection trunks. So the only issue to resolve is whether it is more efficient to use billing factors or to force Level 3 to incur the additional and unnecessary costs of the FGD trunks. Unless and until Qwest can show that billing factors are not appropriate, there is no economic justification for forcing these additional costs on Level 3. As such, the Commission should order Qwest to route all traffic to the interconnection trunks and allow Level 3 to provide billing factors that allow for the appropriate pricing of the traffic.

XI. ESP EXEMPTION

Q. Mr. Brotherson addresses the ESP exemption in his testimony at pages 16 – 19. Do you agree with his discussion?

A. No. Mr. Brotherson is correct that the exemption has a long history, but his interpretation of the exemption assumes that it was created solely for the benefit of Qwest and that it applies solely according to a pre-Act view of the world. Qwest's interpretation would force ISPs to purchase services only from ILECs since they would be the only provider with facilities in every local calling area. This is completely inconsistent with the wording of the exemption and with the pro-competitive intent of the Act.

Q. Has the purpose of the exemption changed since its inception?

A. No. The ESP exemption is the cornerstone of the policy of the United States "to promote the continued development of the Internet and other interactive computer services and interactive media…[and] to preserve the vibrant and competitive free market that presently exists for the Internet and other interactive computer services, unfettered by Federal or State regulation." 47 U.S.C. § 230(b)(1)-(2).

Q. What is Mr. Brotherson's position on this exemption?

A. Mr. Brotherson says the effect of the exemption is to allow ESPs to avoid access charges when making calls within a local calling area. (Brotherson Direct at 21) This makes no sense. If the ESP is making local calls, then access charges would not apply in any case. In fact, the FCC has noted that access charges do not apply to ISPs providing what appear to be long distance calls. As the FCC noted there are exceptions, "…(*e.g.,* long-distance calls handled by ISPs using IP telephony are generally exempt from access charges under the enhanced service provider (ESP) exemption)." [6] Using Qwest's application of the exemption, ESPs would be exempt from access charges for local calls and would pay access charges for calls outside the local calling area; in effect, Qwest's application of the exemption renders it useless.

Q. What is your interpretation of the ESP exemption?

A. ESPs – including ISPs – are treated as end users, rather than carriers, for purposes of the FCC's interstate access charges. ISPs are allowed to purchase their services from local tariffs and are not subject to access charges. As such, ESPs are "exempt" from access charges, and obtain service from their local telephone companies under intrastate local tariffs.[7]

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[6] *See, In the Matter of Developing a Unified Intercarrier Compensation Regime*, CC Docket No. 01-92; Notice of Proposed Rulemaking; Released April 27, 2001; at para. 6. See, also, the *ISP Remand Order* at para. 60.

[7] *See MTS and WATS Market Structure Order*, 97 FCC 2d at 715 (ESPs have been paying local business service rates for their interstate access and would experience rate shock that could affect their viability if full access charges were instead applied); *see also Amendments of Part 69 of the Commission's Rules Relating to Enhanced Service Providers*, CC Docket 87-215, Order, 3 FCC Rcd 2631, 2633 (1988) (*ESP Exemption Order*) ("the imposition of access charges at this time is not appropriate and could cause such disruption in this industry segment that provision of enhanced services to the public might be impaired"); *Access Charge Reform*, CC Docket No. 96-262, First Report and Order, 12 FCC Rcd 15982, 16133 (1997) (*1997 Access Charge Reform Order*), *aff'd, Southwestern Bell Telephone Co. v. FCC*, 153 F.3d 523 (8th Cir. 1998 ("[m]aintaining the existing pricing structure … avoids disrupting the still-evolving information services industry.")).

Q. Mr. Brotherson states that Qwest's language is essential to avoid ESPs from providing calls "…to another LCA in the LATA, to another LATA, to another state, or to another country…" (Brotherson direct at 22). Is that a relevant concern?

A. No. It is commonly recognized that ESPs and ISPs provide services that cross local calling boundaries, LATA boundaries and even state boundaries. The FCC has recognized that since the inception of the ESP exemption. For instance, the FCC stated in 1997 that, "ISPs may pay business line rates and the appropriate subscriber line charge, rather than interstate access rates, even for calls that appear to traverse state boundaries."[8]

Q. At page 22 of his testimony, Mr. Brotherson states that Level 3's interpretation of the ESP exemption would give "it access to Qwest's entire network essentially free of charge to terminate IXC traffic." Is that a correct statement?

A. No. Qwest's only responsibility is to route Qwest originated traffic to the POI for termination by Level 3. Level 3 has agreements with IXCs such that they do pay access charges for IXC traffic. That traffic is exchanged over meet point trunks and access charges are paid on that traffic. As it has stated repeatedly, Level 3 is willing to pay access charges for IXC traffic.

Q. From an economic perspective, what would be the impact of Qwest's interpretation of the ESP exemption?

A. Qwest's interpretation would not only eliminate the intended benefits of the exemption, but would actually force ESPs to deploy facilities in every local calling area in the nation. As with the single POI discussed above, forcing competitors to duplicate decades-old network architectures according to the retail designs of the incumbent (which retail regulation the incumbent is only partially subjected to) is ridiculous where a state seeks promotion of effective competition. The FCC never intended this result nor should any state commission. Instead, ESPs should be able to purchase local services from LECs

[8] *Id*. at para. 342.

without paying access charges and without placing equipment (a VoIP POP per Brotherson's LBB1) in every local calling area. Qwest's proposal disadvantages Level 3 and ESPs, and provides a distinct advantage to Qwest's affiliates who provide similar services.

Q. How would Qwest's position benefit Qwest and its affiliates?

A. Under Qwest's proposed language, there would have to be a VoIP POP in every local calling area where a call was originated; or, the calling and called parties would have to be physically located within the same local calling area. Assuming Qwest could make such a determination, the only party that could comply with this proposal would be Qwest. Other parties would have to essentially duplicate Qwest's network by placing facilities in every Qwest local calling area. What this means in simplest terms is that only an ILEC would benefit from the ESP exemption and all other providers would not only have to forfeit intercarrier compensation, but would have to pay access charges as well. Not only would such a result be contrary to the Act's goal of creating competition, but it would be contrary to the fundamental purpose of the ESP exemption. If Qwest's language were adopted, ISPs would only purchase services from ILECs – since CLEC service would have access charges on top of the actual cost of providing service. Qwest's position is unreasonable, anticompetitive and should be rejected.

XII. VNXX TRAFFIC

Q. Mr. Brotherson spends considerable time in his testimony addressing VNXX traffic. Please comment.

A. Qwest evidently considers VNXX traffic to be an improper scheme to convert toll calls to local calls. (Brotherson Direct at 44) But this functionality has been around for decades and it provides an important service to consumers and especially to the ISP industry. Qwest is offering services (Wholesale Dial, OneFlex™, etc.) that provide the very same functionality, so it must recognize the demand and benefits of such an offering.

Q. At page 43 of his testimony Mr. Brotherson states that "VNXX is an arrangement that provides the functionality of toll or toll-free 8XX service, but at no extra charge…." Is that correct?

A. No. From the consumer's perspective VNXX, FX and 8XX services offer similar results – dial-up access to the Internet without the imposition of additional per minute of use charges. But the similarity ends there. Mr. Brotherson is wrong to suggest that Level 3 is providing toll or 8XX functionality. Toll calls and 8XX calls use the familiar 1+ dialing pattern and consumers expect the calls to be routed to an IXC of their choosing for completion. They also know, because of the 1+ dialing, that they will pay toll charges for the call. VNXX calls are locally dialed calls, without the use of the 1+ dialing pattern and without the services of an IXC. In other words, the so called "VNXX" which is nothing more than an ILEC invented term that attempts to pull competitors back into the ILEC cost structures and retail offerings, makes no use of the interexchange carrier access network. Mr. Ducloo explains in great detail why 8XX services are not similar to VNXX calls in his rebuttal.

Q. At page 64 of his testimony, Mr. Brotherson states that "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." Is that a correct statement?

A. No. Level 3 is completely responsible for the termination of the call regardless of the location of the Level 3 subscriber. All Qwest is required to do is to deliver the call to the POI. Mr. Brotherson's statement completely misstates the way these calls are routed. He suggests that Level 3 uses Qwest's "toll network", and that is likewise incorrect. It is Level 3 – not Qwest – that is transporting these "Qwest originated" calls to their destination.

Q. Mr. Brotherson says there is no extra charge for the VNXX call. Is that correct?

A. No. From the perspective of the Qwest customer, the "VNXX" call is no different from any other locally dialed call and no per minute of use charges are imposed upon the Qwest end user, unlike a 1+ call to an IXC or 8XX service. From the perspective of Qwest, the VNXX call imposes no additional costs. From Level 3's perspective, the call is picked up at the POI and delivered over Level 3's network to its customers. Level 3 imposes no additional charge to Level 3's customers for these calls, but even if it did, such fact would not convert the call to a "toll' call nor would it impose any additional costs upon Qwest.

Q. Referring to the use of numbering codes, at page 48 he states that this "is an unintended and inappropriate use of the assigned NXX." Do you agree?

A. No. Nor is Mr. Brotherson able to cite to any rules which support his proposition. Rather, he mixes retail regulation with interconnection requirements in ways that are enormously beneficial to Qwest resulting in windfall profits, but cites to nothing that would require interconnecting carriers to mimic ILEC architecture for purposes of routing locally dialed calls to the parties' single point of interconnection within the LATA. Moreover, based upon my review of carrier offerings throughout the industry, the use of VNXX codes is not only common but intended, as previously indicated. To find otherwise would impose the exact kinds of regulatory and economic constraints upon competitors that the FCC and state commissions nationwide intend to lift. Thus the issue of "physical location of the end user" is a red herring developed by an incumbent wireline provider seeking desperately to protect toll revenues in an age where intermodal competition means competing upon the basis of the best technology without the constraints of economic regulation common in a period of single technology monopoly regulation.

Q. Do the code assignment guidelines allow for VNXX or FX numbers to be assigned?

A. Yes. In fact Section 2.14 of the Numbering Guidelines specifically identifies foreign exchange services as being eligible for number assignment:

> It is assumed from a wireline perspective that CO Codes/blocks allocated to a Wireline Service Provider are to be utilized to provide service to a customer's premise physically located in the same rate center that the CO Codes/blocks are assigned. **Exceptions exist, for example tariffed services such as foreign exchange service.** [9] (emphasis added)

If it were improper or a violation of the guidelines to use virtual NXX codes then all ILECs currently providing FX and FX-type services would be in violation today.

Q. Mr. Brotherson states that "Level 3 wants to shift all of the costs of this arrangement to Qwest." (Brotherson direct at 51) is that a correct statement?

A. No. There is no additional cost for VNXX calls over and above the cost for a traditional local call. Qwest's obligations and costs are the same in delivering a call originated by one of its customers, regardless of whether the call terminates at a so-called "virtual" or "physical" NXX behind the CLEC switch. Qwest systems and network route these calls in exactly the same way they route other local calls. In response to Level 3 Request No. 023I, Qwest stated in pertinent part, "The costs Qwest incurs do not vary based upon the physical location of the Level 3 customer."

It is clear that Level 3 is providing a service to Qwest in terminating the traffic originated by Qwest customers. If Level 3 or some other provider did not terminate those calls, Qwest would need to deploy facilities and capacity sufficient to terminate those calls. As such, Qwest should be economically indifferent as to whether it pays Level 3 for terminating those calls, or whether it transports and terminates the traffic itself.

[9] Alliance for Telecommunications Industry Solutions; Sponsor of Industry Numbering Committee; Central Code (NXX) Assignment Guidelines; Released May 28, 2004; hereinafter referred to as "Numbering Guidelines".

Q. You stated earlier that Qwest offers services such as wholesale dial and OneFlex[tm]. Please describe Qwest's wholesale dial service.

A. According to its online literature, Qwest's service "…provides a secure, reliable, cost-effective dial-up network infrastructure solution for Internet service providers (ISPs). The service provides the ISPs' end users with seamless dial-up functionality that remains transparent." One of the benefits touted by Qwest is the availability of "local access telephone numbers." [10] In fact, Wholesale Dial provides a dial-up network infrastructure "covering more than 85 percent of the U.S. population with a local call." So, as you can see, this is yet another example of services provided to ISPs for the purpose of providing local dial-up access for consumers in areas where the ISPs may or may not have a physical presence.

Q. At page 51 of Mr. Brotherson's testimony he discusses how Level 3's definitions would convert toll calls to local calls. Does Qwest's OneFlex[tm] service do that very thing?

A. Yes. In my direct, I noted that Qwest offers a service called OneFlex™ which permits subscribers to have as many as five virtual numbers. I called Qwest's customer service number (1-866-283-0043) to discuss the characteristics and capabilities of this service. The customer service representative (Lisa) was quick to tell me that a subscriber can get up to five virtual numbers of his or her choice so friends and relatives can call without toll charges. I asked her if I could get a local number in Bend, Oregon, and I was told that I could. When I asked how the system works, she said I would be assigned a local number for Bend, Oregon and when my Mother in Bend dials that number she will be connected to me in Denver on a local basis with no toll charges. On Qwest's website, it describes the virtual numbers as follows:

[10] See Qwest's Website for Large Business Internet Solutions; http://www.qwest.com/pcat/large_business/product/1,1016,2098_4_28,00.html

> Virtual Numbers are alias phone numbers that can be associated with your OneFlex™ phone number. Your friends and family can dial your Virtual phone number and avoid incurring long-distance charges. For example, if you live in Denver and your primary # is 303.xxx.xxxx and your family lives in Omaha, your family has to call long-distance. With OneFlex, you can get a virtual phone number assigned to your account with an Omaha area code, so your family doesn't have to pay long-distance charges.
>
> You can have up to 5 Virtual Phone Numbers attached to one primary OneFlex phone number.

Q. With a OneFlex[tm] virtual number, could anyone within that local calling area call you in Denver on a local as opposed to a toll basis?

A. Yes. As such, Qwest is selling a service that does exactly what Level 3's service accomplishes – provides a virtual presence for a customer that does not have a physical presence in the exchange. It is disingenuous for Qwest to object to Level 3's service when it offers the same capability to its customers.

Q. OneFlex[tm] is a VoIP product, correct?

A. Yes. But the point is the same; whether it's an FX service, VNXX service or a VoIP service, the consumer is able to purchase a virtual presence in an exchange where he or she has no physical presence. This is the purpose of Level 3's proposed language regarding geographically independent telephone numbers.

Q. Does Qwest have facilities in every local calling area where they offer virtual numbers?

A. I don't know. But even if it did, it would be because of its historical network development, not because of a technical necessity. Any ruling by this Commission on VNXX and ISP-bound traffic should be technologically and competitively neutral. A ruling requiring physical facilities in every local calling area is not technologically or competitively neutral in that it reflects only Qwest's network topology.

Q. Is Mr. Brotherson correct to state that Level 3's language would change the Commission's defined local calling areas? (Brotherson direct at 51)

A. No. Nothing in Level 3's proposed language would change the Commission's defined local calling areas. Level 3 assigns numbers associated with local calling areas for its customers. That assignment process does nothing to change the established boundaries of the local calling areas. If that were true, then Qwest's foreign exchange service has been guilty of changing Commission defined local calling areas since at least 1954.

Q. Mr. Brotherson raises concerns about numbering resources. Does VNXX impact the numbering resources any differently than other services?

A. No.

Q. Is number exhaust a problem in the Qwest region?

A. No. As of December 31, 2004, 49.5 percent of the numbers available in Oregon were available for assignment.[11] In fact, only 2.6 percent of the number blocks are pooled in Oregon, indicating that more efficient utilization could occur with additional pooling.[12] Thousands block number pooling has made it unnecessary to distribute nearly 153 million telephone numbers. CLECs are increasing their efficiency in number utilization, while ILECs are decreasing. The overall utilization rate for ILECs was 53.5 percent, down from 60.3 percent six months before. The overall utilization for CLECs was 16.4 percent, up from 14.9 percent six months before.[13]

Q. Mr. Brotherson suggests that Level 3's use of numbers that are not associated with a physical location of a customer is somehow improper. Do you agree?

A. No. As noted above, this type of number assignment is common and accepted. The FCC's Number Utilization Report states, "Carriers use other types of non-geographic

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[11] See FCC Industry Analysis and Technology Division Report entitled, "Numbering Resource Utilization in the United States as of December 31, 2004." ("*Number Utilization Report*") Table 4.

[12] *Id.* at Table 8.

[13] *Id.* at page 2.

numbering resources as well: millions of numbers are used to provide toll-free services using non-geographic area codes such as 800, 888, 877 and 866."[14] Other non geographic numbers include 500 and 900 area codes. Area code 500 is used for "follow me" service and area code 900 is used for information services. Millions of wireless numbers are also assigned without reference to geographic location. The fact that a few numbers are also used for VNXX applications should not be of concern to NANPA or the Commission.

Q. Are carriers returning numbers to the administrator?

A. Yes. In the first half of 2004, carriers returned 5.1 million telephone numbers to the numbering administrator. In the second half of 2004, carriers returned 4.8 million telephone numbers to the NANPA.[15]

Q. Please summarize your position on the economic impact of Qwest's positions on VNXX and other IP-enabled services?

A. Qwest's positions that require a physical presence (i.e., VoIP POP) or a call definition that is based on the physical location of the calling and called parties, are a fabrication designed to accommodate it's deployed network, not an efficient forward looking network. The physical presence requirement would result in uneconomic duplication of the Qwest network design. The requirement for physical locations of the calling and called parties has **never** been an industry standard and is being used by Qwest to redefine local calling, for the single purpose of denying competitors compensation for terminating calls originated by Qwest customers. Not only do these positions deny compensation, but they impose unwarranted costs on Qwest's competitors and harm the efficient operation of the market. Qwest's positions should be rejected.

[14] *Id.* at page 5.
[15] *Id.* at page 3.

Q. Does this conclude your testimony?

A. Yes, it does.

Oregon
ARB 665
L3CI 01-023I

INTERVENOR: Level 3 Communications, Inc.

REQUEST NO: 023I

Does Qwest contend that the costs it incurs in originating a call to a Level 3 customer differ in any respect whatsoever based upon the physical location of the Level 3 customer? If Qwest responds to the above question with anything other than an unequivocal "no," please provide a detailed explanation of how the location of Level 3's customer on Level 3's side of the POI could affect Qwest's costs. Include in that explanation all cost studies and any other documentation in your possession that you believe provide support for your position.

RESPONSE:

No. The costs Qwest incurs do not vary based upon the physical location of the Level 3 customer. Qwest's overall costs incurred to complete a call, however, vary depending on the originating voice caller's location and the location of the Level 3 POI.

Respondent: Larry Brotherson

State Of Iowa

Level 3 Communications, LLC

DATA REQUEST

DATE: 06/15/2005

DOCKET NO: ARB-05-4

REQUEST NO: 01 - 038

WITNESS: Brotherson, Larry

REQUEST:

Please provide Qwest's definition of a "local" call when assessing charges (such as message unit or similar charges) to local exchange customers for such a call, and provide the source for this definition.

RESPONSE:

A local call is a call which physically originates and terminates within the same local calling area as defined by the Iowa Utilities Board. It is the geographical area within which calls are permitted as part of the local exchange rate paid by the subscriber.

Respondent: Larry Brotherson

BEFORE THE PUBLIC UTILITY COMMISSION

OF OREGON

In the Matter of LEVEL 3 COMMUNICATIONS, INC's Petition for Arbitration Pursuant to Section 252(b) of the Communications Act of 1934, as amended by the Telecommunications Act of 1996, and the Applicable State Laws for Rates, Terms, and Conditions of Interconnection with Qwest Corporation	Docket No. ARB 665

REBUTTAL TESTIMONY OF ROGIER DUCLOO ON BEHALF OF LEVEL 3 COMMUNICATIONS, LLC

September 6, 2005

Table of Contents

I. INTRODUCTION

Q. Please state your name, position, employer, and business address.

A. My name is Rogier R. Ducloo. I am a Director with Level 3 Communications, LLC. My business address is 1025 Eldorado Blvd, Colorado, 8021. I am filing this testimony on behalf of Level 3 Communications, LLC of Broomfield, CO.

Q. Are you the same Rogier Ducloo who filed Direct Testimony in this case on August 12, 2005?

A. Yes, I am.

Q. What is the purpose of your testimony?

A. I am testifying in reply to the Direct Testimony of Qwest witnesses Messrs. Brotherson, Easton, and Linse. Each of these witnesses make statements in their testimony that are inaccurate and confusing; moreover, they frequently misrepresent Level 3's position on the issues. For these reasons, I would like to clarify some of the issues they address.

Q. How have you organized your testimony?

A. I demonstrate below that: (1) Qwest's objections to Single Point per LATA are without merit; (2) Level 3's contract language adequately addresses their concerns with exchanging differently rated traffic over a single interconnection network. In the last part of my testimony address several additional points made by Qwest's witnesses.

II. ISSUE 1: SINGLE POINT OF INTERCONNECTION PER LATA

Q. Mr. Linse states that the real issue in this Arbitration is "whether Qwest should be required to provide interconnection where it is not technically feasible or to provision/build transport facilities without compensation for the building of such transport facilities." Is that the real issue?

A. No. Mr. Linse's statement assumes that Qwest is entitled to compensation for originating traffic on Qwest's side of the POI. This is contrary to federal law. Secondly, Mr. Linse mixes issues of technical feasibility and compensation. The two are not linked.

Q: Please explain further.

A: Mr. Linse claims that "[t]he real issue is whether Qwest should be required to provide interconnection where it is not technically feasible…" (Linse Direct p. 6). But a few lines later on the same page, Mr. Linse claims that "…the real issue here is one of Level 3 not wanting to compensate Qwest for the use of its network." So it appears that Mr. Linse actually equates technical feasibility with economic cost. This is a judgment that the FCC, Congress, and the federal courts have already made. The single POI rule says what it says: each carrier bears the costs of originating and transporting its traffic to the POI. Mr. Gates provides a discussion on the economics underlying the wisdom of a single POI per LATA rule in his testimony.

Q. Setting aside that Mr. Linse's positions are contrary to the single POI rule, are there any other inconsistencies in this part of his testimony?

A. Yes. When one thinks a little deeper about Mr. Linse's claim that Level 3 doesn't want to pay Qwest for use of Qwest's network, two things are apparent. First, he claims that Level 3 is making use of Qwest's network when a Qwest customer calls Level 3. From a business perspective, that's a convenient theory, but it doesn't pass the straight face test. I'd love to charge my competitors for my costs when customers on *my* networks call customers on my competitors' networks. But that's not how interconnection works. When a Qwest customer located in Salem calls a Level 3 customer, that customer makes a call that utilizes Qwest's network until that call reaches the POI. At the POI, Level 3 places the call on Level 3's facilities and, if it is a modem call, places it on the worldwide web to any point, including the New York Times web page, wherever that may "physically reside". By the same token, when the Qwest end user calls the Salem Statesman Journal, the call rides on the Qwest network until it either terminates to the end office serving the Statesman Journal (assuming that the Statesman Journal is also Qwest's customer) or to the carrier that serves the Statesman Journal. In the latter

example, Qwest would hand off the call to a fellow carrier at the Single POI. That carrier would carry the call over its own facilities and terminate it to the Statesman Journal. In both examples Qwest's responsibilities ended at the POI. The difference with the second example is that the call terminated to a brick and mortar building "physically located" in the Salem local calling area. So it seems like a "local" call. In the previous example, it terminated into the vastness of the Internet. As to the previous example, there is an intuitive appeal to the idea that such a call is somehow "interexchange" because relative to the Statesman Journal, the New York Times web page is somewhere else. That's part of the challenge of the Internet – distance (and time) do not matter on an IP network. Accordingly IP-based carriers (including Qwest or its affiliates who offer these services – I really can't tell from their webpage which it is) do not charge their end user customers "long distance" charges, nor is the service offered as a "long distance" service. So from a retail perspective, the service is no different than a call to the Statesman Journal. From a network perspective it is no different either. It is always a locally dialed call that is handed off at the POI. The call makes no use of the access network. If one accepts Qwest's reasoning, prior to the 1996 Act, Qwest was not allowed to provide an "interexchange" service that crossed LATA boundaries. Rather Qwest would have handed that call off to an "interexchange carrier" that charged minute-sensitive rates for such carriage and received "originating access" which included the subsidy given to ILECs who were precluded from offering such services at that time. Along comes competition, however, and now another LEC can pick up that locally dialed call and take it anywhere. While a call terminating to the Internet is "interstate" for purposes of jurisdiction, the FCC has stated that the call is not an "interexchange" call in the traditional sense of someone pre-selecting an IXC and paying that IXC to utilize the access network to carry a call. The truth of the matter is that as much as Qwest would like to make calls to the Internet appear as traditional

"interexchange" calls, they aren't. There are no exchanges on the Internet. These are locally dialed calls handed off at the POI. Level 3 does the work and receives no additional compensation from Qwest's customer for providing such service.

Second, his claims that Level 3 will not pay Qwest for using Qwest's network is not true at all relative to what really happens when calls are exchanged. Let me explain. When a Level 3 end user calls an end user connected to Qwest's network, Level 3 would pay Qwest the costs of terminating that call. For VoIP traffic that would be seven one hundredths (.0007) of a penny per minute, which is consistent with what the FCC stated in the ISP-Remand Order: that the costs of terminating an ISP-bound or voice call are the same. Since the costs are the same on Qwest's side of the network regardless of whether Qwest brings the call to Level 3 at the POI or accepts a call from Level 3 at the POI, symmetrical intercarrier compensation rates make sense. Moreover, to the extent the calls are "IP-in the middle", or traditional interexchange calls that Level 3 would terminate to Qwest over this same network, Level 3 would pay Qwest the same subsidy-laden rates Qwest would receive were these calls handed off over the duplicative Feature Group D ("FGD") network Qwest would have Level 3 establish. So either way, Qwest is paid for its use of the network.

Q. Are Mr. Linse's claims contradicted by Qwest's discovery responses?

A. Yes. Qwest admits in response to Level 3 Data Request 001A-S1 that the location of the POI does not determine whether Qwest has an obligation to pay reciprocal compensation. (Level 3/Exhibit 501, Ducloo/Page 1 of 1). Interestingly, Qwest qualifies this answer by stating that "under Qwest's proposed language, the physical location of the called and calling parties determine the nature of the compensation" but as I've stated above, from a network perspective, the location of the parties does not affect the carriers' costs because all calls are handed off between the two carriers at the POI and the FCC has already affirmed as much in the ISP-Remand Order. In its response to Level 3 Request No.

002A-S1, Qwest admits that its obligations to pay reciprocal compensation do not vary based upon the location of Level 3's switch. Again Qwest explains away its contract proposals by importing concepts of retail regulation by claiming that the location of the calling and called parties have something to do with its costs. This is true only as a matter of how Qwest words its contract; it bears no relationship to what actually occurs on the network. (Level 3/Exhibit 502, Ducloo/Page 1 of 1).

Q. Does Level 3's choice of a single POI per LATA impose any substantial additional costs on Qwest??

A. No, it does not. To illustrate my answer, I will provide an example relevant to this case. Qwest appears to want Level 3 to have to create a point of interconnection in each local calling area. In most locations, Level 3 has chosen a single POI per LATA. So, without waiving our right to a single POI per LATA, let's run some numbers to see what financial impact the additional transport might have on Qwest. In other words, let's estimate the incremental cost to Qwest of carrying traffic originated by its own customers to a single POI per LATA versus a point in each local calling area.

We can start with Qwest's currently-tariffed switched access DS-3 mileage rate element of $21.11. (Qwest Oregon SGAT; Section 7.3.3.5; over 50 miles) We know that a DS3 carries about 29 million minutes of use. (672 circuits X 30 days X 24 hours X 60 minutes = 29,030,400 minutes) To be conservative, let's assume that the DS3 is underutilized and is only carrying about 50 percent of its capacity, or 14.5 million minutes. If we divide $21.11 by 14.5-million minutes and multiply by some assumed additional miles — say 100 miles — the incremental per-minute cost is only $0.00015, i.e., about 15 thousandths of a cent. There is virtually no incremental cost incurred by Qwest to comply with the requirement to interconnect and exchange traffic with Level 3 at a single POI per LATA as opposed to a POI per LCA.

Q. Mr. Linse claims at page 9 of his testimony that the single POI is not the financial demarcation point.

A. I am not entirely certain of the genesis of Mr. Linse's claim. Just to be clear, he states the following:

> 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. (Qwest/6, Linse/9).

Mr. Linse's statement above is packed with several overlapping concepts best examined individually.

First, he states that the single point of interconnection per LATA is not the "financial demarcation point between Level 3 and Qwest." He provides no authority for this proposition other than his opinion. I would note that the single POI per LATA rule would have little meaning if it did not require originating carriers to haul traffic to the single POI in the LATA at their own expense. Mr. Gates explains the economic reasons that led the FCC and multiple federal district and federal circuit courts to affirm this rule.

Second, Mr. Linse states that Level 3 incorrectly defines the POI as a point that is physically located on Qwest's network. This raises factual questions about how parties interconnect and some legal questions that I'm sure Level 3's lawyers find interesting. I'll deal with the facts and only point to what might be a legal explanation for Mr. Linse's statement. The single POI is an interface between the Qwest network and the Level 3 network. At the physical, network level, Level 3 typically brings fiber optic strands to the single POI, which is usually located within a Qwest tandem office. There the strands terminate to fiber optic termination equipment, which connect to add/drop multiplexers and other equipment that allow Level 3's network to communicate directly with Qwest's network. Qwest, for its part, typically connects DS-1 or DS-3 copper coaxial and other

cabling to Level 3's facilities in collocation space Level 3 purchases from Qwest. While there may be other arrangements, none that Level 3 uses are so atypical as to raise the question of whether Level 3 has connected "on" or "within" Qwest's network. It really depends upon how you look at it, but common sense tells me that Qwest's distinction is largely semantic: Level 3's single POI is equally a point **on** the Qwest network as it is **within** the Qwest network.

Another possible explanation for Mr. Linse's statement that Level 3 had incorrectly defined its POI as "on" Qwest's network might be a point that Mr. Gates has provided regarding the concept of relative use of facilities ("RUF"). Backing up just slightly, RUF is the concept that applies to entrance facilities that Level 3 might purchase from Qwest which are dedicated to the exclusive use of the two carriers. So, if Mr. Linse bases his claim upon a world view that (incorrectly) sees RUF as an exception to the single POI rule, his statement might have a basis. As Mr. Gates explains at page 39 of his direct testimony, RUF arises from and applies only to entrance facilities dedicated to the transmission of traffic ***between*** an ILEC's network and the CLEC's network. In other words, where a CLEC obtained an entrance facility from the ILEC to connect to the CLEC's switch, the effect of this rule (which remains embodied in 47 CFR § 51.709(b)) was to reduce the ILEC's charges for the entrance facility based on what proportion of the traffic going over it was ILEC-originated, as opposed to CLEC-originated. As Mr. Gates indicates, the FCC's *Triennial Review Remand Order*, however, relieved ILECs from obligations to provide entrance facilities — at least not at TELRIC-based rates — for these purposes. But even here, Mr. Linse's claim about "on" or "within" doesn't follow because the FCC's determination suggests therefore, that interconnection must occur "on" the ILEC's network and not "within" it as one can no longer unbundle entrance facility elements "within" the ILEC network. This seems logical. Therefore, Level 3 is not responsible for the costs "within" Qwest's network.

Q. Does the Level 3 language propose that there is no demarcation point between the networks as Mr. Linse suggests?

A. Absolutely not. It is physically impossible not to have a demarcation point. Any fiber, coaxial cable, copper twisted pair or other means of connectivity must have a termination block or termination point. The demarcation point is always a location of that type and is always clear. Control and maintenance on one side of that point will be Qwest's responsibility and on the other side Level 3's responsibility. Physically, it can't be any other way.

Moreover, according to agreed upon terms within the contract there is no way that Level 3's contract provisions (presumably Level 3 Section 7.1.1) "extend Qwest's interconnection responsibility to any point on the Qwest network to a point not even within Qwest's serving territory." Setting aside the clarity of the single POI per LATA rule, and the physical impossibility of what Mr. Linse appears to suggest, the contract itself contains several references to demarcation point. The first refers to a demarcation point as the boundary line between Qwest's network and any other networks including a CLEC's network ("'Demarcation Point' means the point where Qwest owned or controlled facilities cease, and CLEC, End User Customer, premises owner or landlord ownership or control of facilities begin."). The second reference is within the definition of POI ("'Point of Interface', "Point of Interconnection," or "POI" is a demarcation between the networks of two (2) LECs (including a LEC and CLEC). The POI is that point where the exchange of traffic takes place."). Moreover, the POI is often accomplished by using meet points. As Mr. Gates explained in his direct testimony the FCC has relieved ILECs of the obligation to unbundle entrance facilities. Accordingly, if a carrier wants to interconnect with Qwest, then that carrier must interconnect "on" Qwest's network, which means it pays the full freight to get to the POI for its traffic and to pick up Qwest's traffic. In that regard, the concepts of meet point and POI merge.

Interestingly, the agreed upon definition of Meet Point ("'Meet Point' is a point of Interconnection between two networks, designated by two Telecommunications Carriers, at which one Carrier's responsibility for service begins and the other Carrier's responsibility ends.") again confirms that the POI would be the financial, legal and technical boundary between the two parties' networks. Taken together and examined against the background, common usage and practice within the telecommunications industry these definitions make very clear that financial, legal and technical responsibility for each company's network ends at the POI. So Mr. Linse's claims that Level 3's contract provisions require Qwest to extend its interconnection obligations to anywhere, including outside of Qwest's serving territory, make no sense.

Q. Nevertheless Mr. Linse implies at pages 6 and 11 of his testimony that the Level 3 language may obligate Qwest to exchange traffic where it is not technically feasible to do so. Is this true?

A. No. Mr. Linse is mainly concerned with the potential routing of long distance traffic over Qwest's Local Only Tandem switches. He appears concerned that Level 3 might route jointly provisioned switched access traffic over the interconnection trunks. This is incorrect. Not only do the parties already have in place jointly provisioned trunk groups that provide for routing of switched access traffic to and from third party long distance carriers, they have also agreed to language in Section 7.5.1 of the Agreement that keeps these arrangements in place. So any suggestion of misrouting is not only technically not possible as these trunks are in place, the contract already deals with the issue.

To the extent Mr. Linse is concerned that "switched access" traffic will be routed to local only tandems, there are two responses. The first is technical: whether a call is destined for an NPA-NXX that subtends the "local only" tandem. If so, then it makes no difference whether the call is later characterized for billing purposes as "switched access" "VoIP" "ISP-bound" or "interexchange" or whatever. That's a rating issue, which is

entirely separate from and occurs subsequent to the routing of the call. Again, to the extent that the call must route to another carrier or route to another end office, Level 3's proposals address those situations. Moreover, where the occasional exception comes up, Level 3 is a practical company and has worked with Qwest and every other ILEC including SBC, Verizon, and BellSouth, to solve issues like these in practical ways for all parties concerned.

As to the question of rating, Qwest has a legal theory through which it attempts to base characterization of the nature of traffic based upon Qwest's network architecture. Whatever appeal that may have to the logic of how things appear from solely a circuit-switched incumbent's perspective, their determinations are legal claims, not technical network issues. Let me provide an example to make this clearer. Take a call made by a Level 3 or Qwest VoIP customer. The call originates in IP format. Neither company's network knows or can know the "physical location" of the end user. The call originates somewhere on the Internet over some sort of broadband – whether DSL, WiFi, cable Modem, or other technology. A traditional NPA-NXX number is associated with the device that the customer making the call uses because telephones on circuit switched networks cannot make calls to IP addresses. A call is placed to another NPA-NXX, but this call is headed toward a circuit switched landline customer. Once Level 3 hands that call off at the single POI per LATA (or via an additional POI that Level 3, for network control and other reasons, has established within the LATA), such traffic could route to a "local only" tandem with no difficulty so long as the terminating NPA-NXX was associated with an end office that subtended that tandem. As to the network, there is no logic to Qwest's distinction because calls are routed to and from NPA-NXX according to the routing instructions contained in the local exchange routing guide ("LERG"). So it really doesn't matter as a technical matter whether, when, or how the FCC classifies this traffic (unless, of course, in the highly unlikely event that the FCC includes specific

routing instructions in its rules). Accordingly, Level 3's language accommodates this by focusing on the technical routing issues and proposes, as a policy mater, that the compensation for information services mirror existing compensation for information service. So one is an issue of making the networks work, the other is an issue of who gets paid how much for exchanging traffic.

Q. Mr. Linse points that Qwest must build facilities to the Level 3 POI and suggests that therefore Level 3 should be responsible for these costs. Is that correct?

A. No. Federal law is clear: competitive carriers may establish a single point of interconnection per LATA. Qwest's view of POI actually mixes concepts of retail regulation with interconnection between LECs to require that Level 3 assume costs of transport within Qwest's network (where Level 3 has no control over such costs). As a facilities-based competitor of Qwest, Level 3 has constructed a nationwide (and international) network. In order to connect its network to Qwest's network, Level 3 constructed, leased, or purchased transmission facilities and equipment that reaches into the Qwest network at POIs Level 3 has established. Qwest customers benefit from Level 3 building these facilities in many ways, not the least of which is obtaining access to one of the world's largest Internet backbones.

Q. Mr. Linse states that Level 3 language for paragraph 7.1.2 "methods of interconnection" is inappropriate. Would you agree?

A. No, I would not. He states that the Level 3 language mischaracterizes the methods of interconnection with the methods of establishing a POI. Since the establishment of a POI is essential for several of the methods of interconnection, any language that talks about methods of interconnection will logically need to talk about methods of establishing a POI. In point of fact, the Qwest language talks about the POI as well.

Q. Are there problems with the Qwest contract language for paragraph 7.1.2?

A. Yes. The Qwest language does not specifically allow interconnection through a POI established at a third party collocation site. It is relatively common for CLECs to share a collocation site. Level 3 establishes POIs in third party collocation sites in a number of states and may need to do so in new locations in the future. Language in 7.1.2 should allow for this circumstance.

III. ISSUE 2: COMBINING DIFFERENT TRAFFIC TYPES ON INTERCONNECTION TRUNKS

Q. What is Level 3's position on this issue?

A. Level 3 and Qwest are perfectly capable of exchanging locally dialed traffic as well as all forms of traffic (including traditional circuit switch "interexchange" or "switched access" traffic) over Level 3's existing and extensive interconnection network. Qwest's requirement for Feature Group D ("FGD") trunks is unnecessary and duplicative.

Q. What is Qwest's position?

A. Qwest asserts that Level 3 must order and provision FGD trunks to each POI as well as separate interconnection trunk groups for local and intraLATA traffic based solely upon billing concerns. Qwest further claims that establishing a duplicative FGD network for purposes of exchanging "switched access" or "interexchange" or "FGD" would be just as efficient for Level 3 as it would be to use Level 3's existing and extensive interconnection network to exchange all such traffic today.

Q. Why are Mr. Linse's claims that Level 3 must establish FGD trunking incorrect?

A. There is no issue as to whether traffic subject to different rating schemes can be exchanged over a single network as Qwest readily concedes in discovery responses (Qwest Response to Level 3 No. 038I-S1, attached hereto as Level 3/503, Ducloo/Page 1 of 1). Moreover, Mr. Linse readily concedes at page 31 of his testimony that Qwest can route local traffic over the same trunks as Qwest currently routes "switched access" or

"interexchange" or "FGD" traffic today. The converse is equally as true. Moreover, regardless of whether a small amount of "locally" rated traffic rides over FGD trunks (as with AT&T and others) or a small amount of "switched access" or "long distance" traffic rides over interconnection trunks (as Level 3 has accomplished with Verizon, SBC, and BellSouth) the billing concerns are the same. Either way there is a concern that the CLEC terminating traffic to the ILEC or the ILEC terminating the traffic to the CLEC will over-report the lower rated traffic. Or looked at from the perspective that Qwest addresses, the party receiving the traffic will be concerned about ensuring that the traffic subject to the highest compensation rates will be reported at the most "accurate" levels.

All telecommunications traffic, regardless of what compensation billing systems later apply to it – whether those systems "mechanically" record the traffic or whether the parties sample traffic streams and apply billing factors – can be exchanged over Level 3's existing, well-engineered network today without the need for any additional billing systems or personnel. As the parties today routinely exchange billing information and factors related to intraLATA toll, ISP-bound and other forms of traffic that occasionally appear on these trunks, there would not be any additional cost to Qwest for the parties to do the same and include "interstate" circuit switched (*i.e.* IP in the middle) and VoIP traffic within that calculation. Moreover, Qwest has no systems in place today, nor could it reasonably develop systems capable of determining the actual physical location of any end user. Thus, FGD trunks are irrelevant to rating any call. There is no certainty that the end users are physically located in the rate center associated with the switch associated with the calling and called NPA-NXX codes. Accordingly, Mr. Linse's objections to Level 3's Section 7.2.2.9.3.1 are unfounded.

Q. What is the problem with ordering FGD trunk groups to each POI?

A. Almost all of Level 3's traffic is locally dialed traffic. In other words, Level 3 picks up and delivers all traffic to POIs located within the LATAs in which the traffic originates

from Qwest's customers or in which Level 3 brings it for termination to Qwest customers. Level 3 offers no retail interexchange services. Accordingly, end users have no reason to dial 1+ to reach Level 3's services. Thus, Level 3 has, and will have, very little traffic that utilizes traditional "access" networks such that any separate trunking, much less FGD trunks, which merely provide additional call recording functionalities, are necessary. So, it makes no sense for Level 3 to order separate FGD trunks for a small amount of access traffic. To the extent that 1+ dialed traffic must be exchanged with third party "interexchange carriers" Level 3 and Qwest have "meet point" trunk groups in place that provide that functionality.

Q. Why does Level 3 want to put all of the traffic on interconnection trunks rather than FGD trunks as Qwest is proposing?

A. Setting aside the sheer lack of necessity of establishing a duplicative network solely to address Qwest's illusory billing concerns, Qwest claims that its tariffs require that Level 3 utilize these trunks. Under those tariffs, Qwest would essentially impose retail rates on a co-carrier. In today's world, there is no justification for forcing retail rates upon a facilities-based co-carrier's exchange of traffic within a LATA. That traffic is, can be and should be exchanged over interconnection trunks. Even assuming that Qwest's insistence upon Feature Group D trunks were rational, and assuming that billing concerns for these charges could not be addressed as Level 3 has addressed them with Verizon, BellSouth, and SBC in interconnection agreements approved by thirty-six (36) state commissions, and assuming that the entire reason for distinguishing between "access" traffic and "local" traffic evaporated with the approval of 271 authority for every major ILEC, there is simply no technical reason for doing so.

Q. What is Qwest's objection to the use of interconnection trunks for all traffic types?

A. Qwest's objections boil down to an issue of access billing. Qwest is afraid that Qwest won't receive the access charges to which it believes it is entitled on long distance calls.

Historically Qwest has billed access charges on FGD trunks. What Qwest is proposing is for all traffic to go down FGD trunks so it can individually bill for the small number of access calls that go to and from Level 3. These FGD trunks would also unnecessarily tie up additional trunk ports on access and end office switches throughout Qwest's network. These circuits are sold in increments far beyond Level 3's existing needs, which results in additional unnecessary costs. Moreover, requiring FGD trunks would require additional time and delay provisioning and testing these trunks, which would significantly (and unnecessarily) delay Level 3' ability to offer many of its VoIP services.

Q. What is Level 3's solution to the billing issue that Qwest raises?

A. Level 3 is proposing that the companies use Percent Local Use ("PLU") and Percent Interstate Use ("PIU") to separately bill long distance traffic. PLU and PIU factors would be created based on periodic traffic studies. This method allows each company to bill the other for access charges in a fair and equitable manner. As I have said before, Level 3 expects to have only a small amount of access traffic anyway, and with access rates at historic lows, it isn't worth the effort to record minute by minute usage for each and every call and bill separately for those calls.

Q. Is Level 3 using this methodology with other ILECs?

A. Yes, Level 3 is combining all traffic on interconnection trunks in the SBC, BellSouth, and Verizon territories. We are using the PLU/PIU method of billing in the 36 states comprising these Bell operating regions with problems no more severe or any different than the sorts of verification that occurs daily between carriers exchanging not only vast amounts of traffic, but vast amounts of billing information about that traffic. If anything, Level 3's billing factors tend to reduce the costs of billing by virtue of the fact that reliable sampling and application of factors, as proposed by Level 3, actually requires far less effort than billing each and every call. It is unreasonable for Qwest to refuse this efficient and equitable solution.

Q. Qwest raises an issue of billing jointly provided switched access calls if the PLU/PIU methodology is adopted. How does Level 3 propose to handle this issue?

A. Both Mr. Linse and Mr. Easton raise this issue in their testimony (pages 32 and 36-37 respectively). They both claim that traffic cannot be combined on interconnection trunks because billing records cannot be created for third parties for jointly provided switched access. However, Level 3 has already agreed to provision separate Meet Point Trunks to handle jointly provided switched access traffic according to the terms mutually agreeable to Qwest in the most current round of interconnection negotiations leading up to this arbitration. Accordingly, any claims even remotely related to problems about such billing (or routing) are unfounded.

Q. Are Meet Point Trunks commonly used for jointly provided switched access traffic?

A. Yes. Since Level 3 does not have connectivity to all IXCs, Qwest is required to provide access to those IXCs through its tandem switches. Special trunks, called Meet Point Trunks, are typically provisioned to handle this traffic. The appropriate billing records can be created for traffic on the Meet Point Trunks.

Q. Has Level 3 agreed to provision Meet Point Trunks at Qwest tandem switches?

A. Yes. Level 3 has agreed to provision Meet Point Trunks at Qwest tandem switches where Level 3 has traffic to the area served by the tandem switches. These trunks are in addition to interconnection trunks.

Q. Will Meet Point Trunking handle the problem raised by Mr. Linse and Mr. Easton?

A. Yes. Since Level 3 has agreed to establish Meet Point Trunks, the issue raised by the Qwest witnesses regarding jointly provided switched access is not an issue for the interconnection trunks. All remaining traffic can be carried on the Interconnection Trunks and billed using PLU/PIU factors.

Q. Is this the way that jointly provided switched access traffic is handled in the SBC, Verizon, and BellSouth regions?

A. Yes it is.

Q. Is there a related issue with SS7 call set up messages?

A. Yes, there is. Qwest and Level 3 need to exchange SS7 messages in the course of interconnection and the exchange of traffic. Qwest would like to require unnecessary, duplicative links between the two SS7 networks. Level 3 would like to use the same SS7 links for both local and toll messages.

Q. What is Level 3's position on this issue?

A. This issue is similar to the previous issue on combining both local and interlata switched access traffic on single trunk groups. Level 3 is proposing to use SS7 Quad Links for both local and toll traffic. This is an efficient use of scarce resources for both the links (which are already provisioned in a redundant manner for reliability) and ports on the Signaling Transfer Points ("STPs"). Level 3 proposes using the same PLU and PIU calculations discussed above for calculation of charges for SS7 messages.

Q. What is Qwest's position on this issue?

A. Qwest is proposing that Qwest and Level 3 put in separate, duplicative SS7 quad links (one set for local traffic and one set for toll traffic) between their SS7 networks. Qwest does not want Level 3 to use existing SS7 quad links for both local and toll traffic.

Q. Does this issue have anything to do with SS7 as an unbundled network element?

A. No. Level 3 does not use Qwest SS7 as a UNE and does not desire to do so. The dispute concerns how to interconnect the Qwest SS7 network with a future, as yet to be constructed, Level 3 SS7 network. This is purely an interconnection issue and does not involve UNEs. The exchange of SS7 traffic is essential for interconnection and should be done efficiently and economically.

Q. What is the SS7 network and what are SS7 quad links?

A. The SS7 network is the part of the PSTN that allows switches and databases to communicate with each other. Its main function is for call set up, but it is also used for database look up such as required by 800 service. SS7 quad links are the data links that connect two SS7 networks. Without these links, neither Qwest nor Level 3 could complete calls to the other company's network. Figure 1 (Attached hereto as Level 3/Exhibit 504, Ducloo/Page 1 of 1) shows a set of Quad Links connecting Level 3 Signaling Transfer Points ("STPs") and Qwest STPs with the associated Interconnection Trunk Groups. Figure 2 (Attached hereto as Level 3/Exhibit 505, Ducloo/Page 1 of 1) shows the SS7 Quad links and the associated signaling and transport paths for "Local" traffic over Interconnection Trunk Groups. Figure 3 (Attached hereto as Level 3/Exhibit 506, Ducloo/Page 1 of 1) shows Quad Links and the associated signaling and transport paths for IntraLATA Toll traffic. Figure 4 (Attached hereto as Level 3/Exhibit 507, Ducloo/Page 1 of 1) shows Quad Links and the associated signaling and transport paths for InterLATA Toll traffic.

Q. What efficiencies would be obtained by combining local and toll SS7 messages on one set of quad links?

A. Using the same quad links for both local and toll call set up messages will save both Qwest and Level 3 transmission links and ports on their SS7 switches. Since transmission links and SS7 ports are provisioned in a redundant manner for additional reliability, the Qwest proposal will waste a significant number of transmission links and ports on both networks, doubling the links and ports that are needed. Figure 5 (Attached hereto as Level 3/Exhibit 508, Ducloo/Page 1 of 1) shows the Level 3 Configuration that requires only one set of Quad Links between the companies. Figure 6 (Attached hereto as Level 3/Exhibit 509, Ducloo/Page 1 of 1) shows the Qwest proposal that would require a duplicate set of Quad links, wasting network resources.

Q. Is it possible for Qwest to implement the sharing of links between local and toll traffic?

A. Yes. Qwest does not need to distinguish between messages relating to local calls and messages relating to toll traffic. There is a simpler way to handle the billing issues for these messages. The same PLU and PIU factors that are used to correctly bill access charges for the actual calls can be used to charge for SS7 messages. The data traffic flowing between the two SS7 networks mirrors the actual call traffic flowing between the two networks as the SS7 messages are setting up and managing the calls. The PLU and PIU for the one can be used to accurately calculate billing for the other. Qwest can simply calculate the charges based on total messages and then factor the bill down using the PLU and PIU. If, hypothetically, the bill from Qwest to Level 3 for SS7 messages was $20,000 for one month and the PLU is 65%, then the actual bill would be $7,000. The calculations are simple and eliminate the concerns expressed by Mr. Linse.

Q. If the Commission decides that local and toll messages can share common quad links, should access charges apply to all of the messages as Qwest suggests?

A. No, that would be patently unfair to Level 3, especially because Qwest customers originate most of the local calls. Local calls should remain on a bill and keep basis. Only messages for toll traffic should be assessed access rates. The method I describe above will provide for the correct compensation without the difficulties of billing each message as Qwest would propose.

Q. What does Qwest say about the use of SS7 quad links for local and IP traffic?

A. Qwest, in other states, has made the very troubling statement that SS7 quad links that are used for local traffic cannot be used for IP traffic. Nowhere in the network today are SS7 messages segregated into IP messages and non-IP messages. To segment these messages would require the proliferation of SS7 Quad links throughout the industry. A ruling in

favor of this Qwest proposal could disrupt call flow among many companies, forcing whole network architectures to change.

Q. What should this Commission do with respect to this SS7 issue?

A. The Commission should rule in favor of Level 3's language, which presents an efficient and fair way of managing the SS7 network, saving transmission links and SS7 switch ports in both the Level 3 and the Qwest networks.

IV. ADDITIONAL INTERCONNECTION TRUNKING ISSUES RAISED BY QWEST

Q. Qwest witnesses state in their testimony that Qwest should not be required to pay for interconnection costs within the Qwest network. Is this an equitable view of interconnection?

A. No. Nine years after the Act, Qwest is still trying to treat interconnection as a new form of access. After divestiture, Qwest was allowed to collect access revenue from all of the IXCs, which made sense at the time as its ILEC predecessor was not allowed to sell retail interexchange (for which IXCs charged per minute of use charges) services outside of LATA boundaries. That has changed, and now Qwest competes nationwide for the provision of service packages on a nationwide basis. Mr. Gates examines some of these service offerings in his testimony.

Despite the passage of the Act, enormous change in telecommunications markets, and the advent of IP technologies that remove the necessity of most traditional regulatory distinctions, Qwest still wants to treat its competitors as if they were interexchange carriers. While I can understand Qwest's motives – what carrier would not want to reverse compensation flows and receive 50 to 100 times what its competitor currently charges for the termination of vast amounts of traffic within each LATA? - this is not the way interconnection was set up by the Act, the FCC or, I believe, by the Commission.

Q. Which party pays for interconnection trunking?

A. As Mr. Gates points out and as Level 3 will show in its briefs, the FCC, federal district courts, and federal circuit courts nationwide have repeatedly confirmed that each party is responsible for its costs of originating traffic to the single point of interconnection per LATA. In a sense, as Mr. Gates explains, in both his direct and his rebuttal testimony, the Act, for purpose of intercarrier compensation and to ensure that ILEC retail offerings were not used to constrain competition, established the LATA as a local calling area for interconnection purposes. This means that each party pays its own costs of originating traffic to the POI. Where the terminating party is also the presubscribed long distance carrier of the originating ILEC customer, the call is routed via an access tandem to the access network, in which case rules governing the offering of access services would apply. In either case, however, the long established rule, and until the rules change, the party **originating** a call is supposed to compensate the other party for transport and termination applies. This means that with respect to locally dialed traffic handed off at the POI – where the originating customer is not presubscribed to and paying the terminating carrier an additional per minute of use charge for what until after the Telecommunications Act of 1996 was the only way to receive a competitive telecommunications service – and the originating carrier pays the freight to get there. So the party originating traffic pays for transport (trunking) in both networks. While a terminating party pays system is conceivable, it is likely that regulators have stayed away from it for the very simple reason that it would lead to regulatory arbitrage because the originating carrier would have great incentive to shift its costs to the terminating carrier.

Q. What is Qwest's position on charges for transport and termination?

A. Qwest's positions result from reverse engineering sound network principles, sound technical principles, as demonstrated in my direct testimony and herein, and rational economic principles as Mr. Gates demonstrates, into a system that asymmetrically

compensates Qwest. When traffic enters the Internet from Qwest customers dialing into Level 3's network, Qwest would have Level 3 assume Qwest's costs of bringing the traffic to the POI and/or receive nothing for terminating this traffic. When traffic leaves Level 3's network – *i.e.* VoIP calls terminating from the single POI to Qwest's network, Qwest would have Level 3 pay terminating access charges that exceed FCC reciprocal compensation rates by several orders of magnitude. Qwest's contract proposals consistently result in the competing carrier always paying much more to Qwest – whether Qwest changes the rules of compensation or disguises their cost shifting via requirements that tie intermodal competitors to legacy retail distinctions. While such a system might continue to insulate Qwest from competitive pressures, it is neither mandated by the Act, pro-competitive policy, or sound principles for exchange of traffic.

Q. Is this the reason that Level 3 adds language to the contract in several places in an attempt to clarify the limitations on the charges Qwest can assess to Level 3 on the Qwest side of the POI?

A. Yes. Level 3 was careful in its revisions to Qwest's proposed agreement to highlight those areas where Qwest shifts the costs to Level 3 for traffic originating on Qwest's side of the POI. At several places throughout the contract, Level 3 has added the following language:

> 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.

Qwest claims in its testimony that Level 3 is trying to avoid paying Qwest what is due under the law. While the lawyers can argue over the meaning of the law, one thing is clear: Qwest's interpretations of the flow of payments make sense only if one adopts Qwest's view of the law.

Q. Is there any technological reason to adopt Qwest's position that Level 3 should pay Qwest's costs of originating and transporting traffic to the POI?

A. Viewed from a network perspective, Qwest's propositions make no sense. As I explained in my direct testimony, Level 3's permit Level 3 (and Qwest where it deploys IP networks) to control vast networks covering enormous geographic areas with a few strategically deployed soft switches and related equipment. There can be no sound technological reason to require Level 3 to vastly increase either the deployment of the equipment or the costs of using that equipment every time its network touches circuit switched networks controlled by Incumbent LECs. Accordingly, Level 3's language reflects the very straightforward principle that all traffic is exchanged at the single POI per LATA. Each party bears its costs for getting to that point. Intercarrier compensation payments would flow accordingly.

Q. Has Level 3 ever charged Qwest for transport within the Level 3 network?

A. No. Level 3 only charges Qwest for termination. By FCC rules, Level 3 could charge Qwest for transport on Qwest originated traffic. Under FCC rules, reciprocal compensation should pay for transport and termination. Level 3 does not charge Qwest for transport, only for termination.

Q. Mr. Linse seems to be concerned about Level 3's language allowing direct connection to Qwest equipment. Is this a legitimate concern?

A. No, it is not. Connection to any type of equipment, whether it is to a switch, a multiplexer, a fiber hub or any other type of equipment, is always accomplished through a connection block on some type of distribution frame. Typically, Level 3 comes into a Qwest office with fiber facilities that are either terminated on collocated equipment or to a Qwest fiber panel. The POI or SPOI can be at either of those facilities. The fiber connects to equipment that converts the optical signal to an electrical signal and "demultiplexes" (*i.e.* unpacks the multiple high speed signals into lower speed

component increments) to DS3 or DS1 speeds (and signaling parameters). On this side of the Level 3 equipment, Qwest coaxial cables providing operating at those speeds are connected. The POI or SPOI may be a terminal on the multiplexer, either a Qwest demultiplexer or a Level 3 demultiplexer. Or the POI or SPOI may be on a terminal block or distribution frame at the DS3 or DS1 level somewhere in the collocation space or somewhere in the Qwest office. Generally, Qwest and Level 3 engineers and technicians decide where the most convenient place is for the actual, physical hand off. Mr. Linse's concern is unfounded. The Level 3 equipment and Level 3's interconnection with Qwest equipment is not some alien invasion that will somehow pollute Qwest's network.

Q. Mr. Linse suggests on page 22 of his testimony that Level 3 will not add direct trunking when traffic volumes warrant. Is this correct?

A. No, it is not. Level 3 always operates in a manner consistent with good engineering policy. Level 3 has always added direct trunks when the traffic warrants. Level 3 typically adds direct trunks when traffic volumes reach 512 BHCCS. There may be, however, circumstances when traffic should be allowed to increase beyond this point for a period of time. Level 3 may expect a decrease in traffic to a particular end office, for example. Level 3 does not believe that the 512 BHCCS rule should be applied without any consideration of business and technical realities.

Q. Mr. Linse spends a good bit of time defending the 512 BHCCS threshold for adding direct trunking to end offices. Do you have some concerns with the 512 BHCCS threshold?

A. Yes, I do. If you perform the calculation, the 512 BHCCS threshold has the CLEC adding a direct trunk when the equivalent traffic will fill only 14 of the 24 channels in the DS1 that will be established. This represents slightly less than 60% utilization of the direct trunk. Qwest becomes very concerned when utilization of any interconnection

trunk drops below 50%. So they are having the CLEC establish a direct trunk when the traffic barely reaches 60% and they want to disconnect trunks when the utilization falls below 50%. A very small change in business, such as the loss of one customer with 20 phone lines, could cause Level 3's business to a particular end office to change by 10%. So the 512 BHCCS rule that Qwest is promoting may be a bit too restrictive. The maximum capacity of a DS1 is 864 BHCCS. A more reasonable threshold would be 75% of this level, or 648 BHCCS instead of 512. In some situations where business is known to be quite variable, even higher thresholds should be contemplated. The Level 3 Language is more flexible in dealing with the unique situations that may arise.

Q. Does Mr. Linse admit that Level 3 has been cooperative when working with Qwest on trunking issues?

A. Yes, he does. Level 3 plans to continue its cooperation in maintaining efficient interconnection with Qwest. The Level 3 language allows for more innovation in doing this.

Q. Mr. Linse states a concern that if CLECs do not follow the 512 BHCCS rule, Qwest's tandem switches will be exhausted. Is this a valid concern?

A. No, it is not. Seven years ago, when there were dozens of new CLECs with little engineering experience, this may have been a concern. Today, with far fewer CLECs, all of whom have experienced engineering staffs, there is no need to worry about this issue. CLECs have just as much interest in maintaining an efficient network as Qwest does. It is more expensive to route traffic through the Qwest tandem, and CLECs realize this. There are economic constraints that dictate an efficient network, as well as good engineering practice that everyone understands.

Q. Mr. Linse seems concerned that Level 3 has removed language from 7.2.2.9.6 that specifies the types of switches where traffic is terminated. Why is Level 3 removing the specific switch type?

A. There are two reasons. First, as I have mentioned several times before, the Qwest language is limiting and restrictive. The Level 3 language is permissive and flexible. Second, it is not clear how the Qwest language would be applied to switches that carry multiple traffic types. Qwest does not mention switches that handle both local and toll traffic types. It is also not clear that Level 3 would be allowed to interconnect with new, VoIP switches that Qwest may install in its network. Level 3 should have the ability to interconnect with any switch type, either existing or future switch types. Future switches may be called "edge switches" instead of tandems or end offices, for example. Level 3 should be allowed to interconnect at any technically feasible point on the west network.

V. ISSUE 3: VNXX TRAFFIC

Q. Mr. Brotherson attempts to distinguish VNXX traffic from normal FX service that Qwest offers. (Brotherson Direct at 62). Would you agree from a technical point of view?

A. No, I would not. VNXX and FX are essentially the same in the modern network where CLECs coexist with Qwest. With both FX and VNXX, the originating party must take their customer traffic to the POI. Qwest does this by selling private line service to the FX subscriber. Level 3 provides the same type of transport to its VNXX customers.

Q. How are these VNXX calls routed?

A. VNXX calls are routed between the local switches as normal local calls, or as toll calls, depending on whether the NPA-NXX of the VNXX number being called is included in the calling switch's table of "locally dialable" NPA-NXXs. Neither the originating nor terminating switch has any way to know where the end user with the VNXX service is actually located, nor does it matter for proper switching and delivery of the traffic. The

switch that hosts the VNXX customer has a circuit coming in that it associates with phone service, providing dial tone and other local services. The switch has no way to know whether the customer loop is 500 yards, 2 miles, or 200 miles long.

Q. How are these VNXX calls billed?

A. Neither CLEC nor ILEC billing systems, nor the FCC for that matter, distinguishes between "local" ISP-bound traffic and "toll" ISP-bound traffic. Accordingly, carriers bill for ISP-bound traffic based upon billing records collected from the interconnection trunks and other factors that the parties have agreed to use. For example, assume that a person signs up for Qwest's wireline (circuit-switched) telephone service. Assume further that this person decides to access the Internet via a dial-up account (perhaps DSL or cable modem are too expensive or not available). They call a telephone number that routes to Level 3's network. When that person wishes to access the Internet, Qwest's network routes that call to Level 3's POI. As to how these calls might be rated according to traditional (largely pre-Act) methods, the originating and terminating phone numbers are assigned to switches. Those switches also have rate centers associated with them. Rate centers are geographic coordinates that carriers on circuit switched networks have traditionally used to apply distance sensitive charges to calls. In that sense, they are economic boundaries, not network boundaries. Returning to our call flow, if the originating and terminating NPA-NXX appear as "local" to each other when the call record data is later examined, then the originating carrier would rate the call as "local" call and there is no toll charge. It does not matter if the calling or called party is 500 yards, 2 miles, or 200 miles from the end office out of which the number is assigned because in every instance the call is handed to Level 3 at the POI where Level 3 then carries this call.

Q. What are the main issues that should be considered when deciding the disposition of VNXX traffic?

A. The use of VNXX/FX allows CLECs and their ISP customers to compete with Qwest and the Qwest ISP without duplicating the Qwest network or placing modem banks in every wirecenter. The use of VNXX allows the CLEC and its customers to provide Internet service in small to medium sized communities where competitive ISP service would not otherwise be available.

Q. Will Qwest's position on VNXX harm the Internet?

A. Yes, it will. Qwest essentially wants to charge access rates for Internet traffic. This will kill competition among ISPs and will lead to higher prices for Internet service. Only ISPs who collocate modem banks at every Qwest office will be able to compete. This is more expensive and will drive up costs.

Q. At page 63 of his testimony, Mr. Brotherson says that a VNXX call "…is routed and terminated as any other toll call." Is that a correct statement?

A. No. The call routing and processing requirements for VNXX and toll services are dramatically different. VNXX calls are routed to the local switch like any other local call. They are then routed to the foreign exchange via some form of transport for termination. Further, the VNXX number is almost always associated with one exchange. However, toll calls such as an 8XX service are routed from the customer premise, through the local central office to the access tandem for additional routing and billing instructions. The call requires a Line Information Database ("LIDB") dip for information on the IXC carrying the call and the true ten digit terminating routing number associated with the 8XX number. Plus, unlike VNXX calls, the 8XX calls could be coming from numerous, even hundreds of exchanges in a large geographic area (i.e. eastern United States), while VNXX service is generally associated with just one foreign exchange.

Finally, the ILECs have always booked FX revenues and expenses as local, while they booked 8XX service revenues and expenses as toll.

VNXX and 8XX services also impact the ILEC in different ways. VNXX service routes calls just like other local calls. There is no need to take a VNXX call to the access tandem, although depending upon network configuration, a FX call could be routed through a local tandem. I'm not aware of any ILEC claiming that VNXX calls impose additional costs on their network or operations. There is an additional cost associated with 8XX service calls because the toll dialing pattern automatically routes the call to the access tandem. At the tandem there is the additional cost associated with a database dip and number conversion.

Level 3's service is therefore clearly distinct from 8XX service. Customers perceive the service as local and the ISPs use the service to acquire a "local presence" for their customers, just like Qwest's customers who utilize Qwest's Wholesale Dial service. The Level 3 service is dialed and routed on a local, as opposed to a toll basis. Like Qwest's Wholesale Dial service, the Level 3 service does not require sophisticated database dips or number conversions, and as such, does not impose those additional costs on the ILEC. The Level 3 service is associated with a specific exchange, and not hundreds or thousands of exchanges normally associated with 800 service.

Q. At page 64 of his testimony, Mr. Brotherson states that "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." Is that a correct statement?

A. No. Level 3 is completely responsible for the termination of the call regardless of the location of the Level 3 subscriber. All Qwest is required to do is to deliver the call to the POI. Mr. Brotherson's statement completely misstates the way these calls are routed. He suggests that Level 3 uses Qwest's "toll network", and that is likewise incorrect. It is Level 3 – not Qwest – that is transporting these calls to their destination.

VI. ISSUE 8: DEFINITION OF CALL RECORD

Q. What is the issue between the companies on call records?

A. As Mr. Linse indicates in his testimony under this issue, the companies have differences on the information that should be included in the record of a call.

Q. What is the reason that Level 3 needs additional information in the call record?

A. There are situations where Level 3 does not know the identification of the carrier originating a call. Without the information that Level 3 is requesting, Level 3 does not know what party to bill for the call. Level 3 needs the information it is requesting for proper billing. Qwest should respect this request and provide the information.

Q. Mr. Linse makes a point of saying that the information Level 3 is requesting is not always available and is not required by current industry standards. Is this true?

A. Mr. Linse is incorrect in some of his statements. While the information Level 3 is requesting in the call record is not available 100% of the time, it is available most of the time. There are no industry standards on the information that must be provided. Telecommunications carriers, however, frequently tailor such guidelines to the practical realities of their operating environments. With the advent of new carriers and different types of call routing, the identification of originating carriers has become more difficult. The information Level 3 is requesting is an attempt to solve these problems.

Q. Will the Qwest language result in incorrect billing of calls?

A. Yes, it will. As I stated above, the information Level 3 is requesting is necessary on an increasing number of calls for proper billing of the correct carrier to occur. Qwest needs to realize these needs and accommodate them so that proper billing can go forward.

Q. Will other carriers need this information in the future?

A. Absolutely. Qwest is being short sighted on this issue.

Q. Does the Qwest language on this issue address all of Level 3's concerns as Mr. Linse suggests?

A. No it does not. Level 3 is making a specific request for language that will address new industry billing problems. These problems should be addressed here and now, between these companies, and not wait years before the industry advisory bodies decide on changes to the guidelines. Level 3's language should be adopted.

VII. ISSUE 20: SIGNALING PARAMETERS

Q. What is the main issue on signaling parameters?

A. Level 3 is proposing a new signaling parameter that Qwest and Level 3 could use to track VoIP traffic. Level 3 believes that there will be a need in the near future to track VoIP traffic and to treat it differently than normal, PSTN traffic, with respect to reciprocal compensation.

Q. Mr. Linse raises numerous objections to Level 3's proposal. Do you find his arguments persuasive?

A. No, I don't. The SS7 protocol has many optional fields and many fields in use with unassigned codes. It is quite appropriate for two companies to decide on the use of an optional field or the use of an unassigned code in an existing field. Level 3 is proposing to use the Call Record Information ("CRI") field to track VoIP traffic. This is a perfectly reasonable proposal and could easily be adopted by the industry as a guideline once Qwest and Level 3 begin using it.

Q. Why should this be decided now, rather than waiting for an industry standard or guideline?

A. We expect that FCC will rule in the near future on the disposition of VoIP traffic. When the FCC does rule, it would be very good for the companies to have experience with a method of tracking the amount of VoIP traffic to and from their respective networks for

proper billing. The use of CRI is a good, efficient way to communicate to each other when a call is VoIP based.

Q. Would the use of a CRI code for this purpose be a colossal undertaking as Mr. Linse suggests?

A. No. It would be fairly easy. The companies could decide on the use of a non-assigned CRI code and then program that code into their SS7 networks. The selection could be done very quickly. Programming a new code into the SS7 equipment is not that difficult as CRI codes are added by the industry periodically and must be programmed once they are added.

Q. Does this conclude your testimony?

A. Yes.

Oregon
ARB 665
L3CI 01-001A-S1

INTERVENOR: Level 3 Communications, Inc.

REQUEST NO: 001A-S1

The location of the POI between Qwest and Level 3 in Oregon does not determine whether Qwest has an obligation to pay reciprocal compensation to Level 3 for Level 3's transport of Qwest's traffic. If your answer is anything other than an unqualified admission, please describe in detail your qualification or denial, and provide any information or evidence which supports your qualification or denial.

RESPONSE:

Qwest objects to this data request (and any data request styled "requests for admission") in its entirety. OAR 860-014-0070, which Level 3 cites as the basis for the data request, defines data requests as follows: "Data requests are written interrogatories or requests for production of documents." OAR 860-014-0070(1). The term "data request" does not include requests for admission. Therefore, the request for admission is an unauthorized form of discovery under the rules of the Oregon Public Utility Commission and Qwest therefore objects to responding to said request for admission. Subject to and without waiving these objections, Qwest further objects to this request because requests for admission are requests for admission *of facts*, and the vast majority of the "requests for admission" do not seek admissions "of fact," but rather, call for legal conclusions, confirmation of Level 3's advocacy, speculation or opinions. In addition, some requests are overly broad and unduly burdensome, thus seeking Qwest to perform special studies in order to answer them. As such, Level 3's requests for admission are not within the letter or spirit of the Commission's discovery rules.

SUPPLEMENTAL RESPONSE DATED 07/08/05:

Without waiving the foregoing objections, Qwest provides the following response:

Admit. Under Qwest's proposed language, the physical location of the called and calling parties determine the nature of compensation.

Oregon
ARB 665
L3CI 01-002A-S1

INTERVENOR: Level 3 Communications, Inc.

REQUEST NO: 002A-S1

The location of the Level 3's switch in Oregon does not determine whether Qwest has an obligation to pay reciprocal compensation to Level 3 for Level 3's transport of Qwest's traffic. If your answer is anything other than an unqualified admission, please describe in detail your qualification or denial, and provide any information or evidence which supports your qualification or denial.

RESPONSE:

Please see Qwest's response to Data Request/Request for Admission No. 1, which Qwest incorporates fully herein.

SUPPLEMENTAL RESPONSE DATED 07/08/05:

Without waiving the foregoing objection, Qwest provides the following response:

Admit. Under Qwest's proposed language, the physical location of the called and calling parties determine the nature of compensation.

Oregon
ARB 665
L3CI 01-038IS1

INTERVENOR: Level 3 Communications, Inc.

REQUEST NO: 038IS1

Please describe the facilities (switches, optical fiber, multiplexer, etc.) that Qwest uses or expects to use in delivering traffic from its end users to Level 3. Assume for purposes of this question that Level 3 and Qwest interconnect at a single POI in a LATA, and that Qwest is responsible for delivering its originated traffic to that POI.

RESPONSE:

Qwest objects to this request on the basis that the phrase "uses or expects to use" calls for Qwest to speculate about possible future conditions. Qwest further objects that this request is ambiguous such that Qwest cannot determine what specific information Level 3 is seeking. This request may also be overbroad and unduly burdensome depending on what detailed information Level 3 is seeking.

SUPPLEMENTAL RESPONSE DATED 7/08/05:

Without waiving the foregoing objections, Qwest states:

Qwest currently may utilize circuit switch facilities, fiber optic transport, and multiplexing equipment, as well as copper facilities in the exchange of traffic with Level 3 for the delivery of Qwest end-user traffic to Level 3.

Respondent: Daniel Collins, Staff Advocate

SS7 Quad Links

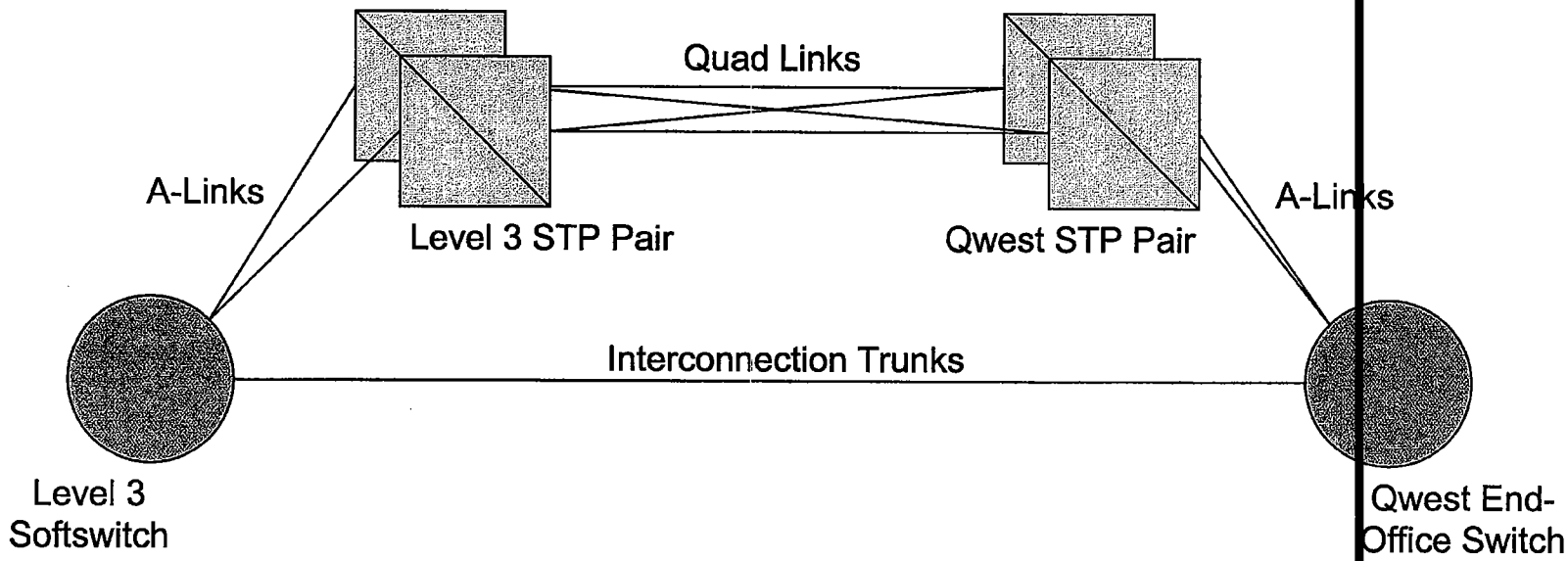

Figure 1

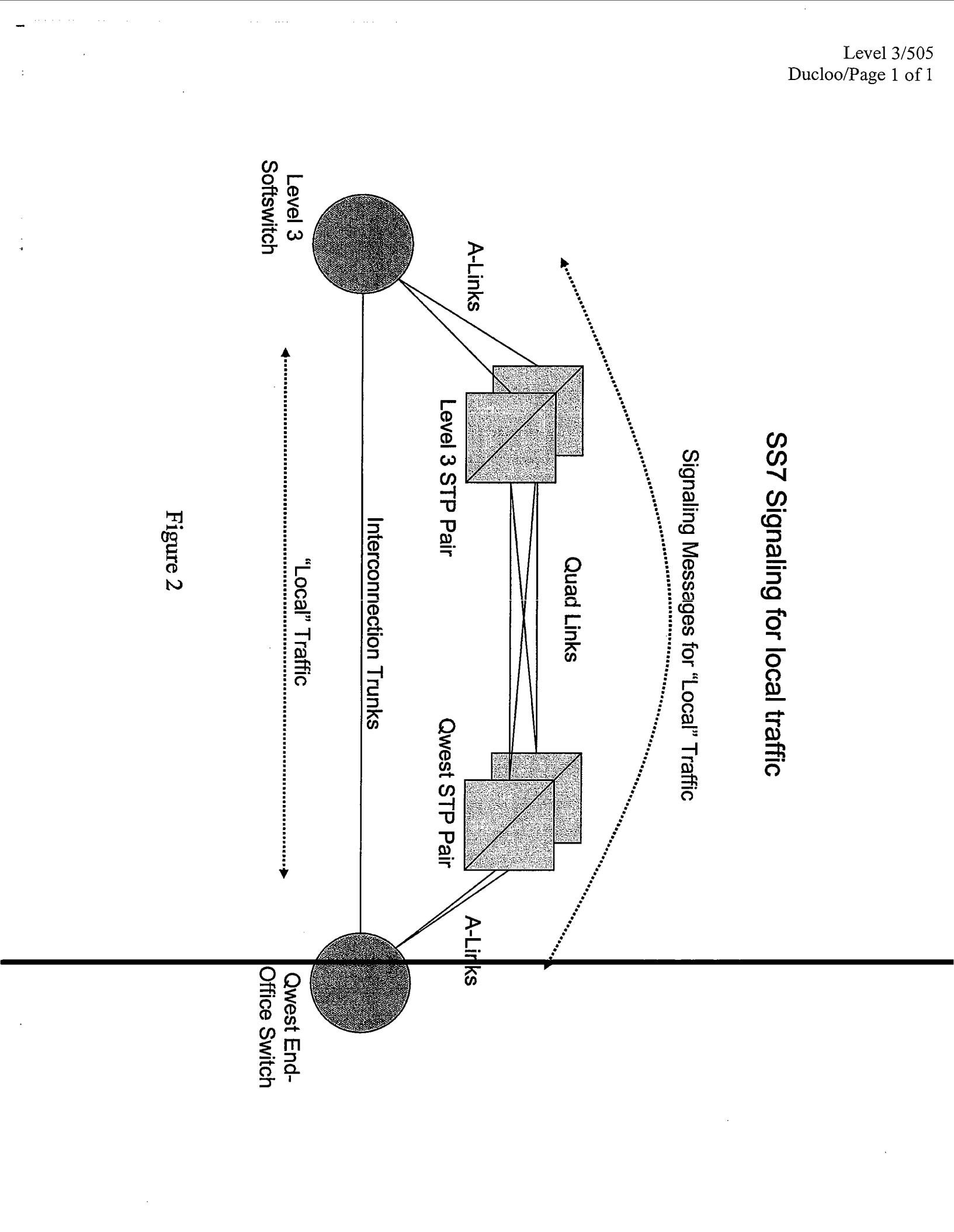
SS7 Signaling for local traffic
Signaling Messages for "Local" Traffic
Level 3 Softswitch
A-Links
Level 3 STP Pair
Quad Links
Qwest STP Pair
A-Links
Interconnection Trunks
"Local" Traffic
Qwest End-Office Switch

Figure 2

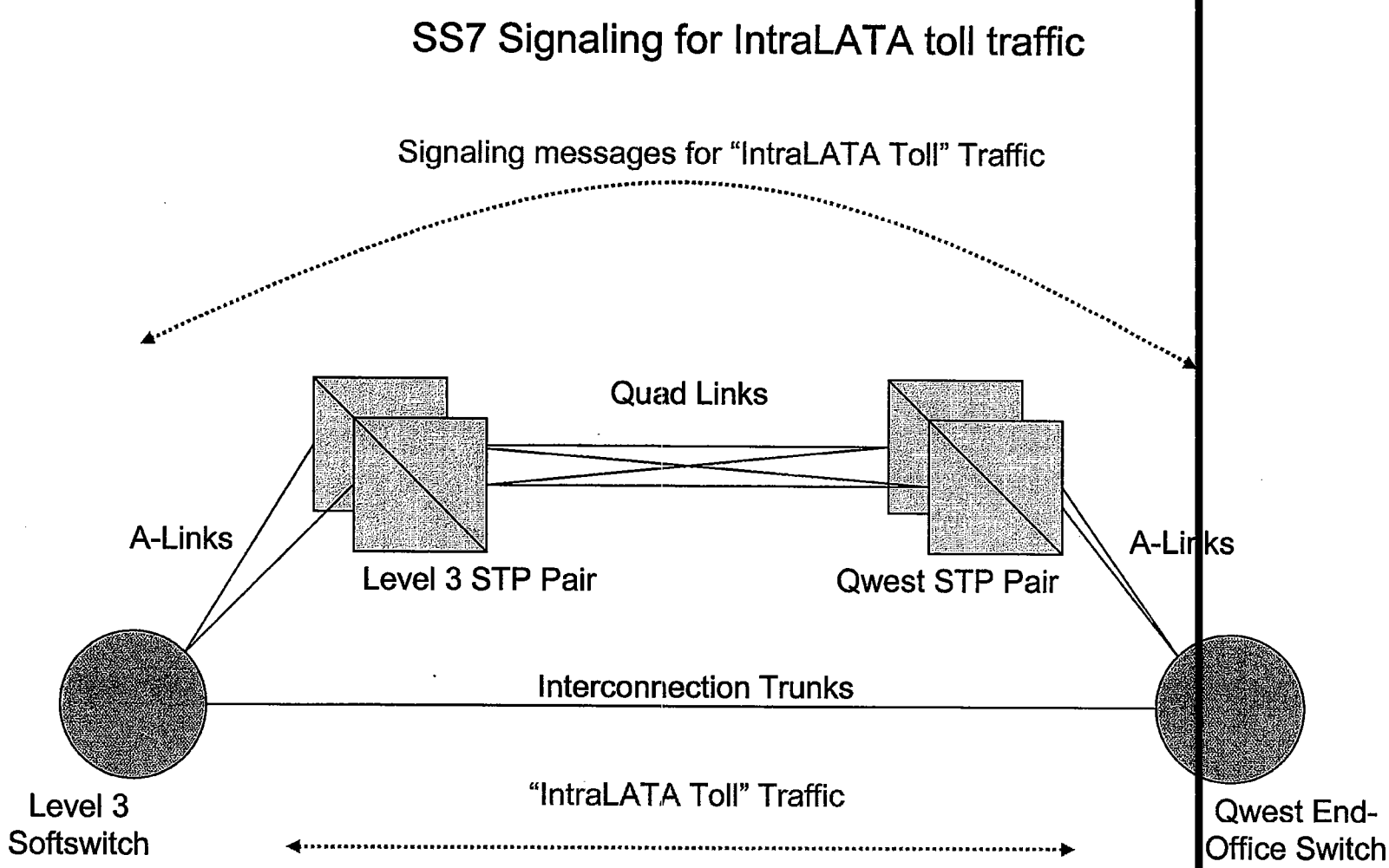
SS7 Signaling for IntraLATA toll traffic
Signaling messages for "IntraLATA Toll" Traffic
Quad Links
A-Links
Level 3 STP Pair
Qwest STP Pair
A-Links
Interconnection Trunks
"IntraLATA Toll" Traffic
Level 3
Softswitch
Qwest End-
Office Switch

Figure 3

SS7 Signaling for InterLATA traffic

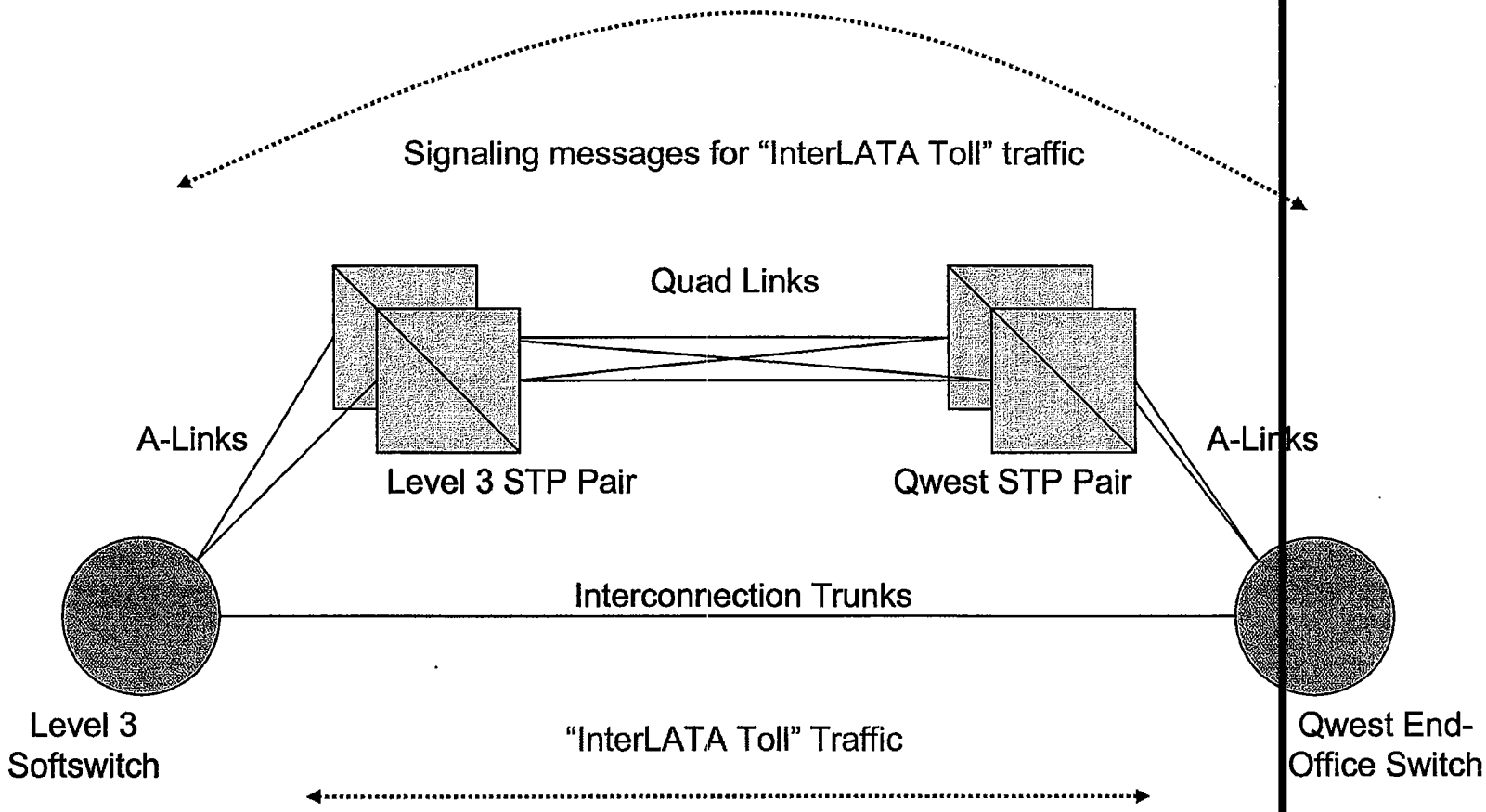

Figure 4

Level 3 Configuration

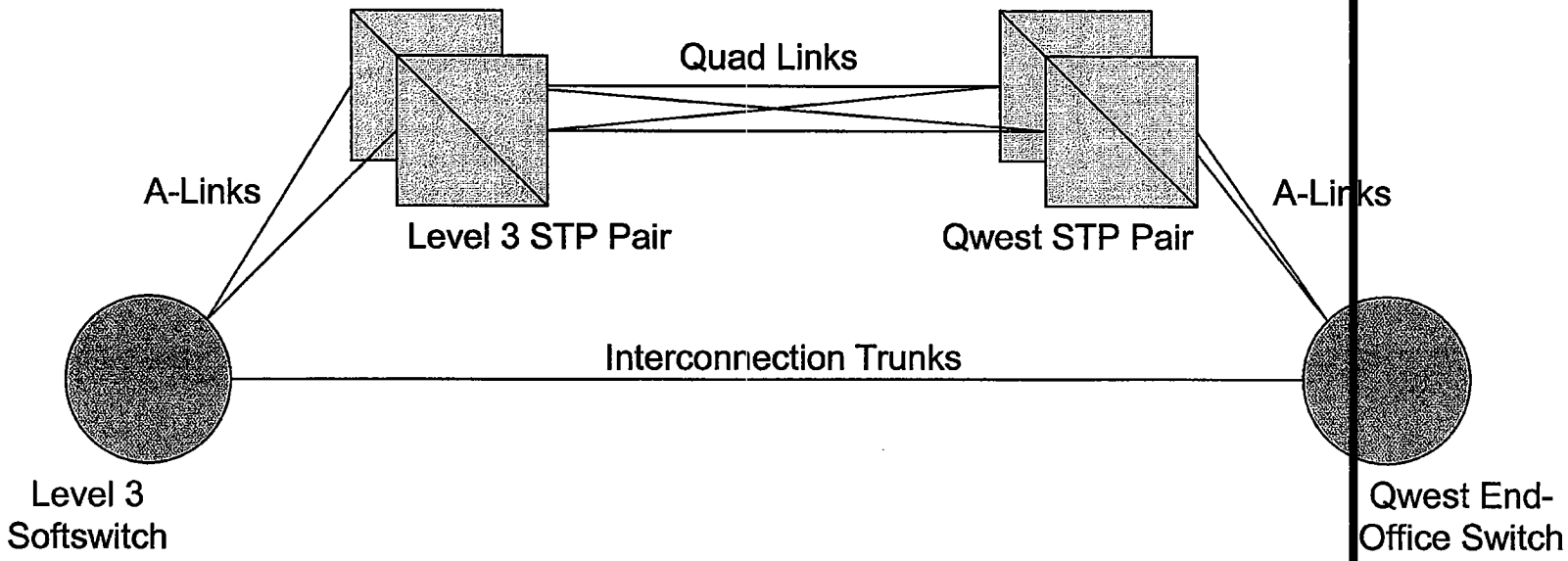

Figure 5

QWEST Configuration

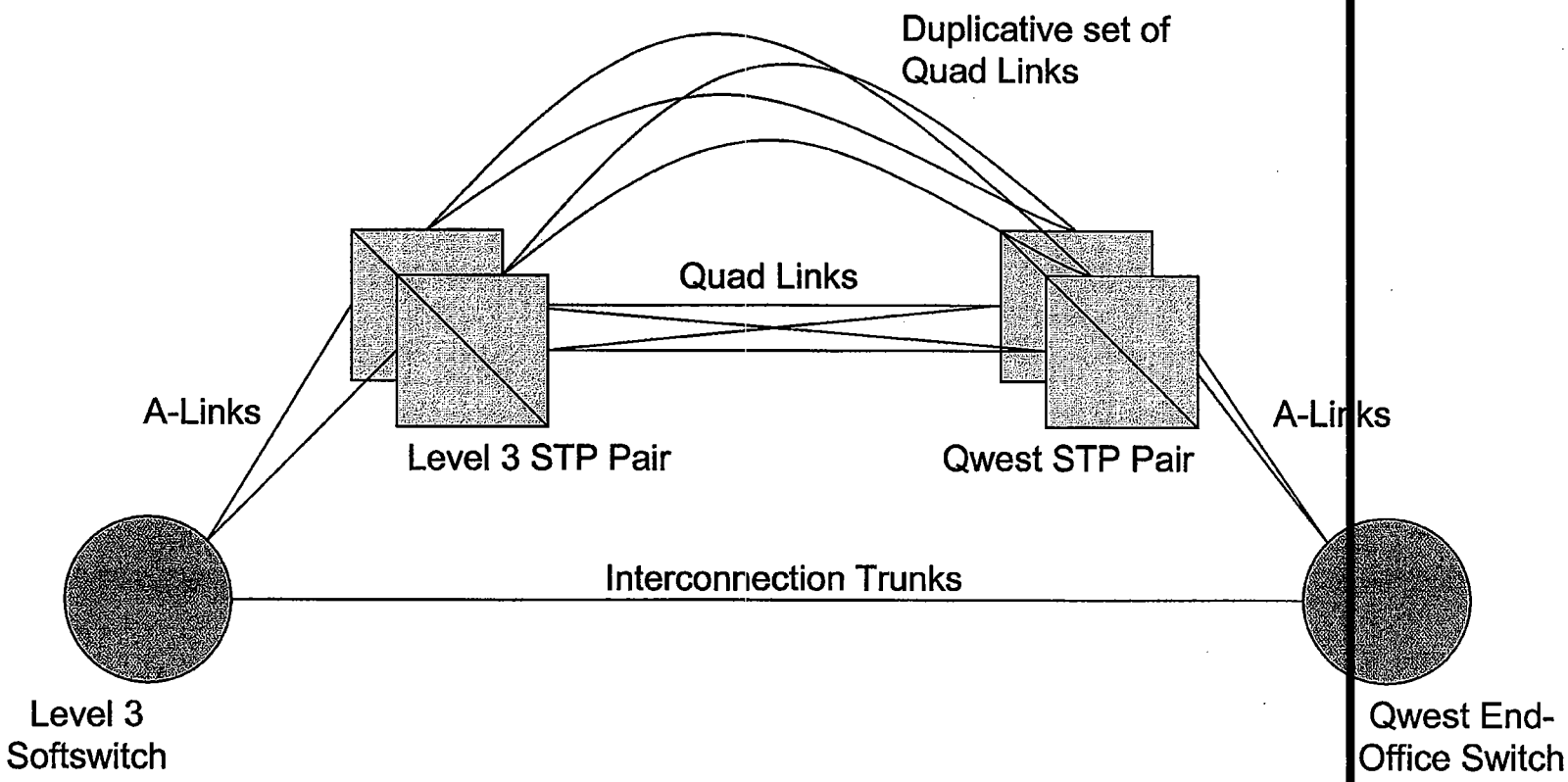

Figure 6