1	BEFORE THE PUBLIC UTILITY COMMISSION	
2	OF OREGON	
3	ARB	565
4	In the Matter of	ARB 665
5	LEVEL 3 COMMUNICATIONS, LLC's	
6	Petition for Arbitration Pursuant to Section	
7	252(b) of the Communications Act of 1934, as amended by the Telecommunications Act of 1996, and the Applicable State Laws for	
8	Rates, Terms, and Conditions of	
9	Interconnection with Qwest Corporation	
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12	DIRECT TESTIMONY ON BEHALF OF LEVEL 3 C	
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17	July 14,	2006
18	322, 21,	
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I. <u>INTRODUCTION</u>

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Q.

PLEASE STATE YOUR NAME, POSITION, EMPLOYER, AND BUSINESS

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ADDRESS.

A. My name is Mack D. Greene. I am a Director with Level 3 Communications, LLC. My

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business address is 1025 Eldorado Blvd, Colorado, 8021. I am filing this testimony on

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behalf of Level 3 Communications, LLC of Broomfield, CO.

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PLEASE REVIEW YOUR EDUCATION AND RELEVANT WORK

8

EXPERIENCE.

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A. I have been employed by Level 3 Communications, LLC ("Level 3") since 2003.

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Presently, I serve Level 3 as the Director of Interconnection Services. In this position, I

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am responsible for negotiation, implementation and enforcement of interconnection

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agreements with over one hundred and fifty incumbent LECs (including RBOCs and

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rural LECs), competitive LECs, CMRS providers, cable MSOs and other

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communications providers nationwide. Further detail on my experience is contained

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II. STATEMENT OF SCOPE AND SUMMARY

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Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

within the other testimony I have filed in this case.

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A.

I am testifying on behalf of Level 3 Communications, LLC ("Level 3") regarding

19 20 interconnection agreement terms and conditions between Level 3 and Qwest that we have been unable to resolve during negotiations. Level 3 has recently revised its proposed

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terms to better represent the issues in dispute, provide a compromise proposal for some

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issues and aid in focusing on what the real issues in the case are about. To best achieve

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this goal, Level 3 has in many instances adopted Qwest's proposed language revised

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slightly to reflect the issue at hand.

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Q. PLEASE INTRODUCE YOUR TESTIMONY, INCLUDING YOUR APPROACH AND ORGANIZATION OF INFORMATION.

- A. In an effort to be as concise as possible, I am incorporating my prior testimony in this case by reference. In the context of my previous testimony, the technical conference conducted¹ ("Technical Conference") and evidence produced therein, and recent developments, Level 3 has updated its contract proposals in 4 key areas:
 - 1. The efficient combination of all traffic on the co-carrier trunks Level 3 already has in place;
 - 2. The appropriate allocation of costs on each side of a carrier's POI;
 - 3. The appropriate treatment of Enhanced Service Provider traffic in Oregon; and
 - 4. The clarification of certain interconnection rights of Level 3.

For each of these areas, I will refer to the matrix of contract language attached as Attachment 1 and my comments within, which contract language and comments I incorporate within this testimony.

Q. HOW DOES LEVEL 3 ILLUSTRATE WHOSE LANGAUGE IS WHOSE?

- A. I simply use different fonts to indicate whether contract language is Level 3's, Qwest's or agreed upon.:
 - Regular text means Level 3 and Qwest agree;
 - **Bolded, underlined text** means Qwest disagrees with Level 3's proposal; and
 - *Italicized bolded text* means Level 3 disagrees with Qwest's proposal.

Technical conference held on May 23, 2006 In the Matter of the Interconnection Agreement with Level 3 Communications, LLC and Qwest, Oregon Public Utility Commission, Arb. No 665

Q. A. Q. A.

III. <u>EFFICIENT USE OF CO-CARRIER TRUNKS BY COMBINING ALL TRAFFIC</u> <u>ON A SINGLE TRUNK</u>

Q. PLEASE SUMMARIZE WHAT THIS AREA OF DISPUTE CONCERNS?

- Level 3 needs to fully utilize its investment in its co-carrier network by combining all traffic, including IXC traffic on this single trunk group. It is simply more efficient and makes economic sense. Level 3's proposal encompasses provisions that clearly embed the right to combine all traffic in the contract, ensure full and total payment to Qwest for all of the different types of traffic exchanged, and acknowledges the need of third party carriers to receive IXC traffic over Feature Group D trunks.
 - LEVEL 3 MUST BE ALLOWED TO FULLY UTILIZE ITS CO-CARRIER
 NETWORK TO COMPETE AND REALIZE ITS FULL INVESTMENT.

Q. WHY DOES LEVEL 3 NEED TO COMBINE ALL OF ITS TRAFFIC ON A SINGLE TRUNK GROUP?

- Level 3 has invested an enormous amount of time and capital into creating an extensive co-carrier network in Oregon. By combining all the traffic on this single co-carrier network, Level 3 will be able to maximize its investment. There is no harm to any other party as demonstrated by acceptance of this architecture by Verizon, BellSouth and SBC. Qwest should not be able to force Level 3 to be anti-competitively burdened with the unnecessary costs where there is clearly no need to do so. Level 3's contract insertions into the Qwest language represented in Issue 3A, Att. A1–A2 embody this right.
- Q. WHAT OTHER COMPETITIVE DYNAMICS RECOMMEND THAT LEVEL 3
 BE ABLE TO COMBINE ALL THE TRAFFIC ON ITS CO-CARRIER
 NEWTORK?

1	A.	Combining all traffic on its co-carrier network represents an important opportunity for
2		Level 3 to make full economic use of its investment. In addition to its local competitors,
3		Level 3's competes in the long distance market with MCI, AT&T, and QCC. But MCI
4		and AT&T are now owned by Verizon and SBC respectively. QCC is already owned by
5		Qwest.
6	Q.	IS LEVEL 3 TRYING TO AVOID PAYING ACCESS CHARGES SO THAT IT
7		CAN COMPETE WITH ILEC-BACKED IXCS FOR THE LOW COST
8		TERMINATION OF LONG DISTANCE TRAFFIC?
9	A.	No. Level 3 will pay all lawful access charges.
10	Q.	THEN WHY DOES LEVEL 3 WANT TO PUT IXC TRAFFIC ON LOCAL
11		TRUNKS?
12	A.	Because it is cheaper and allows us to compete right now.
13		
14		2. LEVEL 3'S PROPOSAL FOR COMBINING TRAFFIC WILL FULLY
15		PROTECT 3RD PARTY CARRIERS.
16	Q.	HOW DOES LEVEL 3'S PROPOSAL ENSURE THAT 3 RD PARTY CARRIER'S
17		THAT MAY HAVE BILLING ISSUES ARE PROTECTED?
18	A.	Level 3 has proposed language that explicitly excludes IXC traffic that is not bound for
19		Qwest customers from being within the type of traffic that Level 3 may combine on its
20		co-carrier network. (Issue 1A, Att. A1). In this way any billing concerns unique to 3 rd
21		party carriers are cared for. Given the relatively small volume of this traffic, Level 3 is
22		willing to put it on regular Feature Group D trunks since it will not impact the overall
23		efficiency of Level 3's network. Level 3 reiterates this commitment in its proposed
24		contract language with the provision limiting transit of IXC traffic to only those NPA-
25		NXX codes homed to Qwest. (Issue 2C, Att. A2)

3. LEVEL 3'S PROPOSAL TO USE FACTORS AS THE BASIS FOR COMPUTING THE APPROPRIATE COMPENSATION FOR COMBINED TRAFFIC WILL FULLY PROTECT QWEST.

- Q. IN WHAT WAYS DOES LEVEL 3 PROTECT QWEST BY ENSURING THAT IT RECEIVES THE FULL ACCESS REVENUE IT IS ENTITLED TO IF TRAFFIC IS COMBINED ON LEVEL 3'S CO-CARRIER NETWORK?
- A. The contract language proposed by Level 3 ensures that the factor rate is properly calculated; that the calculation is subject to verification and audit; and that Qwest is paid the appropriate amount for the traffic in question.
- Q. HOW DOES LEVEL 3'S PROPOSAL ENSURE AN ACCURATE CALCULATION OF THE FACTORS?
- A. As Verizon, BellSouth and SBC have recognized, Level 3 has developed a detailed process whereby factors are calculated as to each type of traffic which is being exchanged over the trunks in question. All of these carriers rely on Level 3's billing records. They can check these records against their own records if they suspect there is any significant error. This process is reflected in the contract language proposed by Level 3. The process involves defining the relevant traffic types, collecting all the relevant call detail, and the methodology of calculation. (Issue 18, Att. A3-A5)
- Q. IN WHAT WAYS DOES LEVEL 3 PROVIDE QWEST PROTECTION SHOULD THERE BE AN ERROR IN THE CALCULATIONS?
- A. Level 3 commits that the factors will be based upon verifiable Call Records using Qwest's proposed definition of call records. Level 3 has also proposed that the exchange of these factors be done on a monthly basis, such that a miscalculation can be uncovered and dealt with quickly. Next, the process requires the timeframe for data to be exchanged, the maintenance of all data upon which the factors were calculated for a year

A.

after the calculation. Finally, the process provides Qwest the right to an audit twice a year with a true up should an error be discovered with an error rate in excess of 2%. (Issue 18, Att. A3-A5)

Q. BUT WHAT IF LEVEL 3 MAKES A MISTAKE AND THE CALCULATIONS ARE WRONG?

In the real world, this doesn't happen much. We know this because we've been terminating long distance traffic over our co-carrier interconnection network with Verizon, AT&T and BellSouth for nearly two years. But if, for some reason, there is a problem, we've built in the audit process I referred to. This is no different than how tariffs work. You count the traffic, calculate percentage content of the various traffic types, apply the factors, but audit the records if there is significant error. We recalculate the factors every 30 days. That's extra work for Level 3 but we are willing to do it because we need to remain competitive in this market. And even though Qwest has a significant hand up on us, we are willing to go the extra mile because we are doing things a little bit differently and Qwest deserves to have reliable intercarrier billing. This is true even if the system overall is broken and results in vastly asymmetrical rates that favor incumbents. We understand that we must play by today's rules even if, as a larger matter, our network could provide services at far lower costs.

Q. HOW DOES LEVEL 3 MAKE SURE THAT QWEST RECEIVES ALL THE REVENUE TO WHICH IT IS ENTITLED FOR IXC TRAFFIC?

A. There is an explicit acknowledgement in the language presented by Level 3 that all the traffic in question will be paid at Qwest's state and federal tariffed rates. Furthermore, Level 3 has agreed to compensate Qwest for the facilities charges, based upon the charges for such facilities under state and federal tariffs, proportionalized for the type of traffic exchanged. (Issue 2A, Att. A2)

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IV. <u>APPROPRIATE ALLOCATION OF COST ON EACH SIDE OF THE</u> <u>CARRIER'S POI</u>

1. QWEST SHOULD NOT BE ALLOWED TO ASSESS NETWORK COSTS ON ITS SIDE OF THE POI?

Q. WHY SHOULDN'T QWEST BE PERMITTED TO ALLOCATE COSTS ON ITS SIDE OF THE POI TO LEVEL 3?

Putting aside the legal arguments that validate Level 3's position on this issue, it just makes sense to have each party incur its costs on its side of the POI. The only party that controls the unit cost of traffic delivery on its side of the POI is the party controlling the network on that side of the POI. If either party is allowed to shift this cost to the other party, there is no incentive on the party controlling the network to get more efficient or to keep unit costs down. While the intercarrier compensation regime in place today could certainly use some improvement, it is the regime that all carriers have based their business plans and investments upon to date. Fundamental to this regime has been that the costs of operating your network on your side of the POI are your costs to bear. Any shift in this cost burden to a competitor disadvantages the competitor to the benefit of the incumbent. (Issue 1A, Att. A5)

V. <u>APPROPRIATE TREATMENT OF ENHANCED SERVICE PROVIDER</u> TRAFFIC IN OREGON

- LEVEL 3'S INVESTMENT AND RESPONSIBILITY IN ESTABLISHING A
 POI WHERE IT EXCHANGES ISP AND VOIP TRAFFIC SHOULD PROVIDE
 BOTH PARTIES RECIPROCAL COMPENSATION RIGHTS.
- Q. WHY SHOULD LEVEL 3'S POI WHERE IT EXCHANGES TRAFFIC WITH QWEST CUSTOMERS LOCATED IN THE SAME LOCAL CALLING AREA SERVE AS THE RELEVANT POINT FOR ESTABLISHING INTERCARRIER COMPENSATION?
- A. Because it is a practical, fair solution to a complicated dispute. As a result of the fundamental differences between an internet call and a traditional voice call, the concept of where the call terminates simply cannot be as readily applied to an internet call. Under Level 3's proposal, wherever Level 3 has a POI in an Oregon local calling area ISP-bound and VoIP traffic would not be "VNXX" because Qwest would not transport traffic across local calling area boundaries.

When an end user makes a traditional voice call, the two ends of the call are easily determined, and the terminating point of the call is obviously the person or business that the end user has called. However, as the FCC explained in the ISP Remand Order, end users accessing the internet, "are interacting with a global network of connecting computers." If an end user views content from a webpage, the information for that webpage may be stored in different computers across the globe. The FCC said, "The Internet Communcation is not analogous to traditional telephone exchange services.

The FCC's discussion of the global nature of internet communications is found in paragraphs 58 through 63 in the *ISP Remand Order*.

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Paragraph 63 of the ISP Remand Order.

Local calls set up communcation between two parties that reside in the same local calling area."

Let me give an example of how internet technology makes it difficult to determine the "termination point" of an ISP-bound call. Suppose an end user is accessing the Internet at home in the suburbs of Portland in the evening. Perhaps the end user wants to check his/her checking account balance. It is conceivable that a local bank's server storing that data is physically located within the state of Oregon. However, if in this hypothetical example, the end user decides to have a longer Internet session the chances that the next servers he/she accesses are also physically located in Oregon are remote. What if the end user in the same Internet session decides to pay an utility bill? It is unlikely that a large regional utility company has state specific servers for bill payments. It is much more efficient to have servers that serve a larger geographic region because that is what servers are technically engineered to do and it is an economic use of an expensive piece of equipment. The point is that it is difficult to imagine an Internet session in which an end user would only access data from servers that are geographically located in one state, let alone one local calling area.

Q. DOES IT MAKE SENSE FOR QWEST'S OR LEVEL 3'S CUSTOMER'S ISP SERVER OR MODEM BANK TO BE THE "TERMINATION POINT" FOR THE CALL?

No. I have read the FCC's *ISP Remand Order* and the FCC does not say that the ISP server or modem bank is the "termination point" for the ISP-bound call. It is a strange legal fiction to think that the physical location of a particular ISP server or set of modem banks is the same as the location of the Qwest or Level 3 ISP customer. For example, AOL, one of the largest ISPs in the country has its corporate headquarters in Virginia and

service centers in various locations distributed across the United States and is also a big customer of Level 3's. AOL picks up the vast majority of its traffic from Level 3 at one location in Virginia. It does not make sense for Virginia to be the "termination point" for Oregon end user's calls that use AOL as their ISP. Similarly, other large ISP customers of Level 3's have corporate offices and "interconnect" with Level 3 at different geographic locations in the country. However, these various physical locations are not where the traffic "terminates" because obviously the traffic travels further on the internet after it is delivered to the ISP customer. It does not make sense in terms of internet protocol technology to use the corporate headquarters of the ISP as the "termination point". The FCC does not say to use the protocol conversion to internet protocol data packets as the "termination point" either.

Q. IS IT BETTER TO USE A PHYSICAL LOCATION ON THE NETWORK FOR DETERMINING THE "TERMINATION POINT" OF AN ISP-BOUND CALL?

A. Yes. The reason ISP customers use Qwest and Level 3 is because Qwest and Level 3 provide the underlying physical infrastructure network that gives the ISP "presence" and access to end users in the local calling area. This, in turn, gives the end user dialing the internet access to the internet. In reality, the ISP can only achieve physical presence in the local calling area through the network of the wholesale network provider they choose to use, whether it be Qwest, Level 3 or another competitor.

Q. HOW DOES QWEST ADDRESS THE ISSUE OF WHERE ITS OWN ISP CUSTOMERS ARE "PHYSICALLY LOCATED"?

A. Qwest markets its own Wholesale Dial service for ISPs through its affiliated enhanced service provider, Qwest Communications Corporation ("QCC"). QCC owns the Network Access Server ("NAS") that it uses to provide service to ISP customers. The ISP customer for Qwest's Wholesale Dial service does not have any of its own equipment located at the Qwest end office. According to Qwest, QCC receives calls as an "end

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Q. WHAT AR THE BENEFITS TO LEVEL 3'S PROPOSAL?

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A. It is a practical solution that the Oregon network points of interconnection for Qwest and Level 3 be the "termination points" for non-VNXX ISP-bound and VoIP traffic. This is a simple, clear and enforceable solution, and a compromise Level 3 is willing to live with in Oregon. This solution has a number of benefits. First, it does not require Qwest to pay for transporting or routing traffic across local calling area boundaries. After the call is put on the Level 3 network, Level 3 is responsible for all costs associated with transport and delivery wherever the IP packets may travel on the internet. Second, this compromise solution mirrors the demarcation of the parties' financial and operational responsibilities

user." In other words, for its Wholesale Dial product, Qwest terminates calls to itself (its affiliate).

Level 3 could, of course, go through the same corporate legal gymnastics by creating a separate affiliate that would be an enhanced services provider and an "end user" and simply sell its affiliate a service that would allow the ISP-bound traffic to be terminated wherever Level 3 has a Point of Interconnection. This would elevate form over substance and there is no reason, of course, to require Level 3 to go through such a pointless exercise that would do nothing to increase either economic or technological efficiency and that would not help Level 3 to serve its customers.

Alternatively, Qwest's position would require ISPs desiring to serve Oregon end users

without the imposition of long distance charges to actually deploy expensive, high

capacity equipment in each local calling area in order for Level 3's traffic to be non-

VNXX traffic – a result which is neither sound policy nor efficient network planning.

This would necessarily increase costs to the end user without any increase in value. Of

course, Qwest does not engineer its own network in such a wasteful way.

for these calls under the original agreement – at the POI. Third, it mirrors the demarcation of the parties' financial and operational responsibilities under the FCC's interconnection rules – at the POI. Fourth, it is not susceptible to the corporate or network game-playing that accompanies Qwest's proposal. Fifth, it will eliminate the billing disputes between the parties for this type of traffic because this non-VNXX ISP-bound and VoIP traffic could be easily measured. Sixth, the "VNXX" aspect of both Level 3's and Qwest's wholesale dial-up ISP and VoIP service would be treated the same in Oregon.

Q. DOES LEVEL 3'S CONTRACT PROPOSAL MAKE THIS CLEAR?

- A. Yes. Throughout the newly proposed contract language, Level 3 has strived to make it abundantly clear that when it has gone to the expense and investment of establishing a POI, and Enhanced Service Provider traffic that has been either originated or terminated to a Qwest customer located in the same local calling as the POI, reciprocal compensation should be paid to both Parties. (Issues, 3, 3B, 3C; Att. A9-A11; Issue 1A, Att. A12)
 - 2. VOIP AND ISP-BOUND TRAFFIC SHOULD BE CONSIDERED LOCAL WHEN IT IS EXCHANGED OVER FACILITIES THAT ARE IN THE SAME LOCAL CALLING AREA AS THE END-USER MAKING OR RECEIVING THE CALL.
- Q. UNDER WHAT CIRCUMSTANCES SHOULD LEVEL 3 RECEIVE
 RECIPROCAL COMPENSATION FOR ENHANCED SERVICE PROVIDER
 CALLS THAT ARE TRANSPORTED BETWEEN LOCAL CALLING AREAS?
- A. When Level 3 pays for the transport from the local calling area of the originating Qwest customer to the Level 3 POI, it should be paid reciprocal compensation. To capture this

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concept, Level 3 has proposed a new term in the Agreement, Transport Assumed IP Traffic. (Issue 1A, Att. A12)

Q. WHY DOES IT MAKE SENSE TO COMPENSATE LEVEL 3 UNDER THESE CIRCUMSTNACES?

It is only by adopting the Level 3 proposal can Qwest and Level 3 be put in competitive parity. As Level 3 demonstrated during the Technical Conference, Qwest has technically established its network in materially the same manner as has Level 3. It is only by Qwest's interposition of a corporate affiliate and its strained regulatory positions that it contends its affiliate (an ESP analogous to Level 3's customers) is not subject to the access charges its seeks to impose on Level 3. Level 3's proposal establishes the exact type of "presence" that Qwest's affiliate establishes. Qwest's proposal would deny competitive parity to all carriers, and there is simply no reason to do so.

By agreeing to a compromise to pay Qwest for the transport from the local calling area to Level 3's POI, Qwest is fully compensated for any incremental transport costs it may incur. Eschewing Qwest attempt to thwart competition by another carrier through the interposition of a cobbled-up retail product, Level 3's proposal returns to a fundamental principle in this area – namely that an ILEC should not be able to use its dominant network as a barrier to competition.

3. THE CONTRACT SHOULD CLEARLY DEFINE VOIP.

Q. WHAT ARE THE DIFFUCLTIES IN QWEST'S USE OF THE TERM "VOIP POP"

A. Quite simply, Qwest's term "VoIP POP" is not defined – despite repeated requests from Level 3 to do so. Qwest would have the Commission adopt a term, "VoIP POP", which lacks any definition, and it is a term that is central to the parties' obligation to

compensate each other for the exchange of traffic. This can only lead to protracted disputes and litigation. Furthermore, this lack of definition by Qwest underscores both the difficulties inherent in establishing what constitutes "presence" in the internet world and the ability of an incumbent to use such ambiguity to its benefit. Another advantage of using the POI as the operative point is that it is a point that both parties agree upon as to what constitutes a POI and where it is located. In a matter as important as this, certainty must be obtained. (Issue 16, Att. A11)

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4. QWEST'S ABILITY TO ASSESS ACCESS CHARGES ON VOIP SHOULD BE SUBJECT TO DISPUTE RESOLUTION.

Q. SHOULD QWEST HAVE THE UNFETTERED AND UNILATERAL RIGHT TO ASSESS ACCESS CHARGES ON TRAFFIC AS IT DEEMS APPROPRIATE?

No. Level 3 has proposed to modify Qwest's proposal as to its right to assess access charges on VoIP traffic by making such determination subject to dispute resolution. The whole interconnection agreement process involves the balancing of the rights and protections of the parties, and the radical shift in power that Qwest is suggesting in this context is wrong. Without the counterbalance of dispute resolution, there would be little to no incentive for Qwest not to redefine as much traffic as possible to gain the advantage of higher compensation. Given Qwest's superior resources and litigation budget, it is hard to perceive how subjecting Qwest's behavior in this regard to dispute resolution not fair and prudent. (Issue IA, Att. A17)

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5. LEVEL 3 SHOULD NOT BE THE GUARANTOR OF ITS CUSTOMERS.

Q. TO WHAT DEGREE SHOULD LEVEL 3 BE REQUIRED TO GUARANTEE THE VOIP CONFIGURATION OF ITS CUSTOMERS?

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In a competitive and dynamic marketplace, where carriers are competing to gain customers, the additional obligation to guarantee the VoIP configuration of the other carrier's customers is not warranted or appropriate. This is what I understand the Qwest proposal does by asking for certification. While I am not a lawyer, as a business person I am comfortable with the responsibility to make prudent inquiry and investigation as to the practices of my customers – and represent that as a result of this inquiry these customers are acting properly. This is what the Level 3 proposal reflects. I am not comfortable, however, assuming the full risk through "certification" of my customer's conduct. Followed to its logical conclusion, Qwest would have Level 3 (1) foretell and provide exact specifications as to what customer configurations meet Qwest's requirements; (2) continually update these specifications as the technology changed and get Qwest to sign off on them (possibly providing valuable confidential information in the process); (3) demand that all customers meet these specifications; (4) expend huge amount of resources to conduct unnecessary and ongoing inspections of customer premises to ensure the specifications were met, (5) possibly gain financial guarantees in the form of bonds from its customers – the list goes on and on. Qwest's request in this vein is unreasonable. (Issue 1A, Att. A13)

VI. <u>INTERCONNECTION RIGHTS</u>

Q. WHAT IS THE SUBSTANCE OF THE ISSUES IN THIS AREA?

A. There are a number of sections in the proposed agreement in which it is prudent to explicitly outline what the fundamental rights of Level 3 are to interconnect and some related technical aspects.

Q. WILL YOU PROVIDE A BRIEF OUTLINE OF THESE?

- A. Yes.
 - First is Qwest's view that Level 3 has to have a local customer to be able to interconnect. In light of Qwest's views on what constitutes a local customer, it is

preferable to just reflect that Level 3's interconnection rights are pursuant to the Act. (Issue 1B, Att. A14)

- Second is Qwest's attempt to restrict Level 3 from interconnecting beyond the DS1 or DS3 levels. Level 3 allows interconnection at any technically feasible level, including OC-3 and above optical connections. (Issue 1B, Att. A14)
- Third is Level 3's desire to avoid disputes by clarifying that it may purchase transport services from Qwest at TELRIC rates – and order private line or other facilities from Qwest's tariffs to establish a POI. (Issue 1B, Att. A14)
- Fourth is a clarification that Level 3 has the ability to order a direct trunk group to
 a Qwest end office for the purposes of network management and routing of traffic
 to and from the POI. (Issue 1B, Att. A15)
- Fifth is the acknowledgment that VoIP traffic, due to its technical nature, may appropriately lack CPN (such as circumstances when a computer is originating a call and the VoIP service the caller is subscribed to is outbound only, e.g Skype out). (Issue 20, Att. A16)
- Finally, the last item is when Level 3 provisions its own quad link SS7 trunks. If you have a single highway, you certainly don't need two sets of traffic lights for each lane of traffic. The same is true of networks. If you have a single network, then you don't need two traffic cops to run that network. The SS7 network is the traffic cop. Quad links are what the SS7 network uses to control the traffic on the network. Level 3's proposal reflects this right to just use one set of SS7 quad links. So all you need is one set of SS7 quad links to run one network. (Issue 30, Att. A17)

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VII. <u>CONCLUSION</u>

WHAT ARE YOUR CONCLUSIONS AS TO THE CONTRACT LANAAGUEG
MOS RECENTLY SUGGESTED BY LEVEL 3 WHICH ARE THE SUBSTANCE
OF THIS TESTIMONY

At the end of the day, Level 3 wants to continue providing its services in Oregon. To do so, it requires an interconnection agreement with fair and equitable terms. Fair and equitable means that Qwest is not able to discriminate against Level 3 based upon its network architecture and corporate structure. Fair and equitable means that the resources of Level 3 are not eroded in the future due to disputes over ambiguous language. Fair and equitable means that the agreement complies with Oregon and federal law. Fair and equitable that competition among carries that provide means advanced telecommunications services is not castrated by the imposition of unnecessary costs on their deployment of assets. And finally – and most importantly – fair and equitable means ensuring that the citizens and business of Oregon have true, competitive choices and complete access to advanced telecommunications services. The terms proposed by Level 3 are fair and equitable.

Q. DOES THIS CONCLUDE YOUR TESTIMONY.

A. Yes.

LEVEL 3/801 GREENE/1 OF 17

Key: Straight Text = Agreed

Bold Underline = Level 3 Proposed

Bold Italics = Qwest Proposed

Attachment 1 to Mack Green Testimony Level 3/Qwest Proposed Contract Language

Issue # Section #	Issue Addressed/Contract Language	M. Greene Comments on Level 3 and Qwest Contract Proposals
	Efficient was of an apprior towards by combining all tool	Tip on a simple towns.
Efficient use of co-carrier trunks by combining all traffic on a single trunk		
Issue 1A	7.1.1 This Section describes the Interconnection of Qwest's	
Sec. 7.1.1	network and CLEC's network for the purpose of	
Sec. 7.1.1	exchanging Exchange Service (EAS/Local traffic), IntraLATA Toll carried solely by local exchange carriers	
	and not by an IXC (IntraLATA LEC Toll), IntraLATA	Deflects I amal 2's right to combine
	Toll and InterLATA Traffic carried by an IXC for	Reflects Level 3's right to combine
	termination to a customer of Qwest, SP-Bound traffic,	the type of traffic it carries on its co-
	and Jointly Provided Switched Access (InterLATA and	carrier trunks. Excludes IXC traffic
	IntraLATA traffic). Qwest will provide Interconnection	terminated by 3 rd party carriers.
	at any Technically Feasible point within its network	
	consistent with Section 51.321 of the FCC rules and	
	Applicable law Interconnection, which Qwest currently	
	names "Local Interconnection Service" (LIS), is provided	Clarifies that Technical Esseibility is
	for the purpose of connecting End Office Switches to End	Clarifies that Technical Feasibility is determined per the law
	Office Switches or End Office Switches to local or Access	determined per the law
	Tandem Switches for the exchange of Exchange Service	
	(EAS/Local traffic); or End Office Switches to Access	
	Tandem Switches for the exchange of Exchange Access	
	(IntraLATA Toll carried solely by local exchange carriers)	
	or Jointly Provided Switched Access traffic, ISP-bound,	
	VoIP, Exchange Service, and terminating IntraLATA	
	Toll or interLATA Traffic carried by an IXC for	Reflects Level 3's right to combine
	termination to a customer of Qwest Qwest Tandem	the type of traffic it carries on its co-
	Switch to CLEC Tandem Switch connections will be	carrier trunks. Excludes IXC traffic
	provided where Technically Feasible. New or continued	terminated by 3 rd party carriers.
	Qwest local Tandem Switch to Qwest Access Tandem	terrimated by 5 party earriers.
	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.	

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Issue 2B Sec. 7.2.2.9.3.2, Sec. 7.2.2.9.3.2 & 7.2.2.9.3.1	7.2.2.9.3.2 CLEC may combine Exchange Service (EAS/Local) traffic, ISP-Bound Traffic, Exchange Access, VoIP Traffic and Switched Access Feature Group D traffic including Jointly Provided Switched Access traffic, on the same Feature Group D trunk group or over the same interconnection trunk groups as provided in Section 7.3.9.	Reflects Level 3's right to combine the type of traffic it carries on its co-carrier trunks and Feature Group D trunks. Excludes IXC traffic terminated by 3 rd party carriers.
	7.2.2.9.3.1.1. If CLEC utilizes trunking arrangements as described in Section 7.2.2.9.3.1, Exchange Service (EAS/Local) traffic shall not be combined with Switched Access, not including Jointly Provided Switched Access, on the same trunk group, i.e. Exchange Service (EAS/Local) traffic may not be combined with Switched Access Feature Group D traffic to a Qwest Access Tandem Switch and/or End Office Switch	Qwest's limitation on Level 3 on using its co-carrier trunks to combine all traffic.
	7.2.2.9.3.2 CLEC may combine originating Exchange Service (EAS/Local) traffic, ISP-Bound Traffic, IntraLATA LEC Toll, VoIP Traffic and Switched Access Feature Group D traffic including Jointly Provided Switched Access traffic, on the same Feature Group D trunk group.	Qwest proposal restricts Level 3's ability to combine all traffic to Feature Group D trunks.
Issue 2C Sec. 7.2.2.3.5	7.2.2.3.5 Transit Limitation: For Telephone Toll and VoIP traffic that Level 3 terminates to Qwest, Level 3 agrees to route over the local interconnection trunks only such IntraLATA Toll Traffic, InterLATA Traffic and VoIP traffic that would route to NPA-NXX codes homed to Qwest switches.	Explicit prohibition on Level 3 from exchanging on its co-carrier trunks IXC traffic to be terminated by 3 rd party carriers.
Issue 2A Sec. 7.2.2.9.3.1	Where CLEC exchanges Telephone Exchange Service, Exchange Access Service, and Information Services traffic with Qwest over a single interconnection network, CLEC agrees to pay Qwest, on Qwest's side of the POI, state or federally tariffed rates applicable to the facilities charges for IntraLATA and/or InterLATA traffic in proportion to the total amount of traffic exchanged over the interconnection facility utilized. The facility charge that is the basis for the proportional charge for the IntraLATA and/or InterLATA traffic exchanged shall be that which corresponds to those facilities utilized by Qwest and Level 3 to exchange the combined traffic.	Reflects Level 3's commitment to pay Qwest the appropriate charges on a proportional basis for the facility charges for IXC traffic at state or federal tariff rates.
Issue 18	7.3.9 To the extent a Party combines ISP-bound Traffic, VoIP traffic and Exchange Service (EAS/Local),	Provides a detailed and explicit process by which the proportional

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Key: Straight Text = Agreed

Bold Underline = Level 3 Proposed

Bold Italics = Qwest Proposed

Sec. 7.3.9

IntraLATA LEC Toll, and Jointly Provided Switched Access (InterLATA and IntraLATA calls exchanged with a third party IXC) traffic on a single LIS trunk group, the originating Party, at the terminating Party's request will declare monthly quarterly PLU(s) PIU(s), and PIPU(s), collectively "Jurisdictional Factors.". Such Jurisdictional Factors PLUs will be verifiable with either call summary records utilizing **Call Record** Calling Party Number information for jurisdictionalization or call detail samples. The terminating Party should apportion per minute of use (MOU) charges appropriately.

charges for combined traffic will be calculated – the same process utilized by Verizon, SBC & BellSouth.

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

7.3.9.1.1 PIPU - Percent IP Usage: This factor represents the traffic that is VOIP traffic as a percentage of all traffic. CLEC has introduced this factor to identify VoIP traffic for billing purposes to Qwest on an interim basis until an industry standard is implemented.

PIPU factor used to track and calculate VoIP traffic pending industry adoption of methodology.

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

PIU factor for calculating IXC traffic, specifically acknowledging that so called "IP in the middle" traffic is included in the calculation.

7.3.9.1.3 PLU - Percent 251(b)(5), all ISP-bound and VoIP traffic which is not VNXX traffic.

PLU factor for all local traffic and ISP traffic, specifically excluding VNXX traffic

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

Provides for the monthly exchange of factors to 2 decimal places.

Obligates the factor calculating party to collect all call detail to derive the calculation.

7.3.9.2.1 PIPU: The PIPU is calculated by

Provides for the methodology of

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dividing the total VoIP MOU by the total MOU. The PIPU is calculated on a statewide basis.

calculation

7.3.9.2.1.1 Upon ILEC request, CLEC will provide a PIPU factor for all minutes of usage exchanged directly between the Parties over the Interconnection Trunk Groups in each state. CLEC will provide separate PIPU factors for CLEC Terminating VoIP traffic and CLEC Originating VoIP traffic Accordingly, the PIPU factor is based upon CLEC's actual and verifiable Call Detail Records of IPoriginated traffic

Reflects that the factor is to be calculated based upon actual and verifiable call detail records.

7.3.9.3 Exchange of Data:

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

Provides the time period for the exchange of data and billing information.

7.3.9.4 Maintenance of Records

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

Obligates both parties to maintain all the traffic data supporting the factor calculations for a one year period.

7.3.9.5 Audits

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

Provides for audit rights up to twice a year.

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

Obligates the audited party to provide all requested data in electronic format for the audit period covered.

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7.3.9.6 <u>True-Up</u>

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

Provides for a right of true up should the calculations be found to be in error

7.2.2.9.3.2.1 CLEC shall provide to Qwest, each quarter, Percent Local Use (PLU) factor(s) that can be verified with individual call detail records or the Parties may use call records or mechanized jurisdictionalization using Calling Party Number (CPN) information in lieu of PLU, if CPN is available. Where CLEC utilizes an affiliate's Interexchange Carrier (IXC) Feature Group D trunks to deliver Exchange Service (EAS/Local) traffic with interexchange Switched Access traffic to Qwest, Qwest shall establish trunk group(s) to deliver Exchange Service (EAS/Local), Transit, and IntraLATA LEC Toll, to CLEC. Qwest will use or establish a POI for such trunk group in accordance with Section 7.1.

Qwest's acceptance of the use of factors but limiting their use to only Feature Group D trunks.

Appropriate Allocation of Costs on each Carrier's side of the POI

Issue 1A

Sec. 7.1.1.4

7.1.1.4 Cost Responsibility. Where Level 3 establishes a POI within a local calling area, each party will be responsible for constructing, maintaining, and operating all facilities on its side of such POI. Intercarrier compensation for VoIP and ISP-bound traffic will be paid on such traffic in accordance with this Agreement and compensation for InterLATA or IntraLATA Toll will be paid according to applicable tariffs.

Explicit acknowledgement of level 3's obligation and responsibilities for its facilities on its side of the POI. Reiterates that compensation for InterLATA and IntraLATA toll traffic will be paid.

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Issue 1 G

Sec. 7.3.1.1.3 &

Sec.

7.3.1.1.3.1

7.3.1.1.3 Except for the transport costs for Transport
Assumed IP Traffic, each party is solely responsible for
any and all costs arising from or related to establishing
and maintaining the interconnection trunks and
facilities such Party uses to connect to the POI.

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 and all traffic that is VNXX 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 Owest 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 ISPbound 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.

Provides for the equal assumption of all costs for the transport of traffic on each carrier's respective side of the POI. Excepts out "Transport Assumed IP Traffic" which is defined as IP traffic that Level 3 pays Telric transport rates for between local calling areas.

Reflects Qwest's view that CLECs should share costs on Qwest's side of the POI.

Reflects one of Qwest's definition for VNXX traffic.

Provides for exclusion of ISP-bound and VNXX traffic from the "RUF" calculation.

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Issue 1 H

Sec. 7.3.2.2 and Sec. 7.3.2.2.1 7.3.2.2 Except for the transport costs for Transport Assumed IP Traffic, each party is solely responsible for any and all costs arising from or related to establishing and maintaining the interconnection trunks and facilities such party uses to connect to the POI. Thus, where Level 3 has established a POI in a Local Calling Area, Level 3 will not be responsible for paying to Qwest DTT charges for Qwest-originated traffic.

7.3.2.2 If the Parties elect to establish LIS two-way DTT trunks, for reciprocal exchange of Exchange Service (EAS/Local) traffic the cost of the LIS two-way DTT facilities shall be shared among the Parties by reducing the LIS two-way DTT rate element charges as follows:

7.3.2.2.1 Direct Trunked Transport - The provider of the LIS two-way DTT facility will initially share the cost of the LIS two-way DTT facility by assuming an initial relative use factor of fifty percent (50%) for a minimum of one (1) quarter if the Parties have not exchanged LIS traffic previously. The nominal charge to the other Party for the use of the DTT facility, as described in Exhibit A, shall be reduced by this initial relative use factor. Payments by the other Party will be according to this initial relative use factor for a minimum of one (1) quarter. The initial relative use factor will continue for both bill reduction and payments until the Parties agree to a new factor,-based upon actual minutes of use data for non-ISP-bound traffic to substantiate a change in that factor. If a CLEC's End User Customers are assigned a NPA-NXXs associated with a rate center other than the rate center where the Customer is physically located, traffic that does not originate and terminate within the same Qwest local calling area (as approved by the Commission), regardless of the called and calling NPA-NXXs, involving those Customers is referred to as "VNXX traffic". For purposes of determining the RUF, the terminating carrier is responsible for ISP-bound traffic and for VNXX traffic. If either Party demonstrates with non-ISP-bound traffic data that actual minutes of use during the first quarter justify a new relative use factor, that Party will send a notice to the other Party. Once the Parties finalize a new factor, the bill reductions and payments will apply going forward, from the date the original notice was sent. ISP-bound traffic is interstate in nature. Qwest has never agreed to exchange VNXX Traffic with

Similar to prior issue 1 G.

Provides for the equal assumption of all costs for the transport of traffic on each carrier's respective side of the POI. Excepts out "Transport Assumed IP Traffic" which is defined as IP traffic that Level 3 pays Telric transport rates for between local calling areas.

Reflects Qwest's view that CLECs should share costs on Qwest's side of the POI.

Reflects one of Qwest's definition for VNXX traffic.

Provides for exclusion of ISP-bound and VNXX traffic from the "RUF" calculation.

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CLEC.	
shall have an obligation to pay) any nonrecurring charges for rearrangement assessed for any LIS trunk rearrangement ordered for purposes of exchanging ISP-Bound Traffic, 251(b)(5) Traffic, and VoIP Traffic that either Party delivers at a POI, other than the intercarrier compensation rates. 7.3.3.2 Nonrecurring charges for rearrangement	Confirms that subsequent after incurring the initial costs of installing trunks, rearrangement costs are the responsibility for the carrier that has the cost responsibility for its side of the POI. Reflects Qwest's desire to shift ½ the costs of trunk rearrangement on its side of the POI to a CLEC.

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Appropriate Treatment of Enhanced Service Provider Traffic in Oregon

Issue 3,

Sec. 7.3.6.3

7.3.6.3 Level 3 routes ISP-bound or VoIP Traffic through switches that are not located within Qwest local calling areas within the state of Oregon. Without waiving its rights under federal or state law, however, Level 3 agrees that for purposes of this Agreement, it will maintain POIs in place as of the date of Execution of this Agreement and that it will also establish POIs in Qwest local calling areas where required.

Where Level 3 establishes a POI within a Qwest local calling area, calls originated by Qwest customers in such local calling area routed through such Level 3 POI to ISPs served by Level 3 network will be considered local to that calling area. They will be compensated at \$0.0007 per MOU.

Where Level 3 establishes a POI within a Qwest local calling area, calls originated in TDM by Qwest customers in such local calling area routed through such Level 3 POI to an ESP VoIP providers served by the Level 3 network will be considered local to that rate center. These calls will be compensated on the basis of \$0.0007 per MOU. Because VoIP traffic is two way, where Level 3 delivers a VoIP call through a Level 3 POI that is located in the same local calling area as the Qwest customer to which the call is being delivered, the call will also be considered local and will be compensated at \$0.0007 per MOU.

ISP-bound and VoIP traffic that is not routed through a Level 3 POI that is located in the same local calling area as the Qwest customer that the call is either originated by or terminated to, or calls that do not constitute Transport Assumed IP-Traffic will be considered VNXX traffic under Oregon Law..

Where Level 3 terminates IntraLATA Toll Traffic or InterLATA Traffic transported by an IXC, , Level 3 agrees to rate such traffic according to Qwest's applicable tariffs as more fully described in Section 7.3.9.

Reflects Level 3's commitment to maintain its POIs in Oregon and establish POIs where required.

Reflects that where Level 3 establishes a POI, ISP traffic that is delivered to Level 3 at the POI will be rated as local and compensated at \$.0007.

Acknowledges that VoIP traffic is to be treated in a similar manner as ISP traffic, making the POI the relevant point for the determination of compensation. Reflects VoIP's 2 way nature and the obligation of both parties to compensate each other for termination.

Acknowledges that traffic that does not originate and terminate in the same local calling area or is not Transport Assumed IP Traffic is VNXX traffic under Oregon law.

Reaffirms again Level 3's commitment to compensate Qwest for IXC interlata and intralata traffic.

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Key: Straight Text = Agreed

<u>Bold Underline</u> = Level 3 Proposed *Bold Italics* = Qwest Proposed

Issue	3	С,
Sec 7.3	.6.1	

7.3.6.1 Subject to the terms of this *Section* Agreement, intercarrier compensation for ISP-bound traffic <u>and VoIP</u> <u>traffic</u> exchanged between Qwest and <u>Level 3</u> (where the end users are physically located within the same Local Calling Area) will be billed <u>and paid</u> as follows, without limitation as to the number of MOU ("minutes of use") or whether the MOU are generated in "new markets" as that term has been defined by the FCC:

\$0.0007 per MOU or the state ordered rate, whichever is lower.

Outlines Qwest's position that end users must be physically located in the local calling area to qualify for the receipt of intercarrier compensation.

Reflects Qwest's view that the state has an independent right from the FCC to determine the rate for ISP and VoIP traffic.

Issue 3 B,

Sec. Definitions

"VNXX" calls are all calls that are NOT

- 1. Calls made by Qwest local telephone service customers to local telephone numbers that Level 3 picks up at a Level 3 POI physically located in the same local calling area as the Qwest customer making the call or where Level 3 picks up the call using a Qwest facility physically located in same local calling area as the Qwest customer making the call so long as Level 3 pays Qwest TELRIC based costs for the Qwest facility used to carry that that call to the Level 3 POI;
- 2. Calls made by Level 3 VoIP customers to

 Qwest local telephone service customers that
 Level 3 delivers through a Level 3 POI
 physically located in the same local calling area
 as the called Qwest end user customer or
 where Level 3 delivers that call using a Qwest
 facility physically located in the same local
 calling area as the called Qwest end user
 customer so long as Level 3 pays Qwest
 TELRIC based costs for the Qwest facility
 used to deliver that call.
- 3. Non-VoIP 1+ dialed calls (they originate in TDM format) that Level 3 terminates for IXCs to Qwest telephone service subscribers using Level 3's LIS trunks.

_"VNXX traffic" is all traffic originated by the Qwest End User Customer that is not terminated to CLEC's End User Customer physically located within the Explicitly acknowledges that VNXX traffic is not:

- ISP bound traffic that is delivered to Level 3 at its POI in the same local calling area as the Qwest originating customer.
- VOIP traffic that Level 3
 delivers to Qwest at a Level 3
 POI located in the same local
 calling area as the Qwest
 customer; and
- Non-VoIP 1+ dialed calls.

Reflects Qwest's view that any traffic in which the end user customers are not physically located

	same Qwest Local Calling Area (as approved by the state Commission) as the originating caller, regardless of the NPA-NXX dialed and, specifically, regardless of whether CLEC's End User Customer is assigned an NPA-NXX associated with a rate center in which the Qwest End User Customer is physically located.	in the same local calling areas constitutes VNXX traffic.
Issue No. 4 Sec. 7.3.4.1 and 7.3.4.2	7.3.4.2 The Parties will not pay reciprocal compensation on traffic, including traffic that a Party may claim is ISP-Bound Traffic, when the traffic is VNXX traffic does not originate and terminate within the same Qwest local calling area (as approved by the state Commission), regardless of the calling and called NPA-NXXs and, specifically regardless of whether an End User Customer is assigned an NPA-NXX associated with a rate center different from the rate center where the customer is physically located (a/k/a "VNXX Traffic"). Qwest's agreement to the terms in this paragraph is without waiver or prejudice to Qwest's position that it has never agreed to exchange VNXX Traffic with CLEC.	Level 3's acknowledgment that no compensation will be paid for VNXX traffic. Qwest's reiteration of its position that as to the definition of VNXX, along with another reservation of rights.
Issue No. 16 Sec. 4 – Definitions and 7.2.2.12	"VoIP" (Voice over Internet Protocol) traffic is traffic that originates or terminates in Internet Protocol at the premises of the party making the call using IP-Telephone handsets, end user premises Internet Protocol (IP) adapters, CPE-based Internet Protocol Telephone (IPT) Management "plug and play" hardware, IPT application management and monitoring hardware or such similar equipment and is transmitted over a broadband connection to or from the VoIP provider. PSTN-IP-PSTN Traffic as defined herein shall not constitute VoIP traffic. 7.2.2.12 VoIP traffic. VoIP traffic as defined in this agreement shall be treated as an Information Service, and is subject to interconnection and compensation rules and treatment accordingly under this Agreement based on treating the VoIP Provider Point of Presence ("POP") Level 3 POI as an end user premise for purposes of determining the end points for a specific call.	Level 3 reflection that VoIP traffic may originate or terminate in IP. Qwest's view that VoIP must originate at the premises of the party making the call – and that end user premise IP adapters or similar equipment is required. Level 3's acknowledgement that PSTN-IP-PSTN traffic is not included within the universe of VoIP. Qwest's view that the undefined VoIP POP is the end point of a VOIP call. Level 3's proposal that the POI better represents the financial end point of the call.
	7.2.2.12.1 CLEC is permitted to utilize LIS trunks to terminate VoIP traffic under this Agreement only pursuant to the same rules that apply to traffic from all other end	Qwest's attempt at restricting LIS

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	users, including the requirement that the <i>VoIP Provider</i> **POP Level 3 POI** must be in the same Local Calling Area as the called party.	trunk use to only those calls that meet the undefined VoIP POP criteria. Level 3's view that LIS trunks may be utilized when Level 3 has a POI in the local calling area.
Issue 26	"PSTN-IP-PSTN Traffic" PSTN-IP-PSTN Traffic is defined as traffic that (1) uses ordinary customer premises equipment (CPE) with no enhanced functionality; (2) originates from and terminates to landline customers that draw dial tone from a circuit switch; (3) originating customer dials 1 plus the called party's number, just as in any other circuit-switched long distance call; and (4) the call undergoes no net protocol conversion and provides no enhanced functionality to such landline customers due to the intermediate provider's use of IP technology.	Level 3 proposed definition that clearly excludes from the definition of VoIP traffic so called "IP in the middle" traffic – thereby retaining access revenues for Qwest when IP is used merely as a transport medium for traditional IXC calls.
Issue 1A, Sec. 7.1.1.3	7.1.1.3 POI: Where Level 3 maintains a POI in a local calling area, the Parties agree that VoIP and ISP-bound traffic exchanged via such POI will be rated as Local. Where Level 3 does not have a POI in the local calling area from which the ISP-bound or VoIP call originated, but Level 3 pays Qwest's TELRIC costs for transporting such call from such local calling area to Level 3 facilities, the Parties agree to rate such traffic as Local ("Transport Assumed IP Traffic").	For ISP-bound and VoIP traffic exchanged at a Level 3 POI in a local calling area, acknowledges such traffic is rated as local. Also rates as local traffic "Transport Assumed IP Traffic" which is either ISP or VOIP traffic for which Level 3 pays Qwest the Telric costs of transport from the local calling area in which the call originates to the Level 3 facilities.

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Issue 1A Sec. 7.1.1.1	7.1.1.1 CLEC agrees to allow Qwest to conduct operational verification audits of those network elements controlled by CLEC and to work cooperatively with Qwest to conduct an operational verification audit of any other provider that CLEC used to originate, route and transport VoIP traffic that is delivered to Qwest, as well as to make available any supporting documentation and records in order to ensure CLEC's compliance with the obligations set forth in the VoIP definition and elsewhere in this Agreement. Subject to this Agreement's dispute	Acceptance by Level 3 of Qwest language regarding operational audits to assess accuracy of records for VoIP traffic. Limits Qwest's unilateral right to	
	resolution provisions, Qwest shall have the right to redefine this traffic as Switched Access in the event of an "operational verification audit failure". An "operational verification audit failure" is defined as: (a) Qwest's inability to conduct a post-provisioning operational verification audit due to insufficient cooperation by CLEC or CLEC's other providers, or (b) a determination by Qwest in a	redefine VoIP traffic as access traffic by making such determination subject to dispute resolution. Clarifies that the determination of an	
	post-provisioning operational verification audit that the CLEC or CLEC's end users are not originating in a manner consistent with the obligations set forth in the VoIP definition and elsewhere in this Agreement.	operational audit failure is made by Qwest to prevent the argument that a unilateral pronouncement by Qwest is conclusive.	
Issue 1A Sec. 7.1.1.2	7.1.1.2 Prior to using Local Interconnection Service trunks to terminate VoIP traffic, CLEC <i>certifies</i> represents that the (a) types of equipment VoIP end users will use are consistent with the origination of VoIP as defined in this Agreement; and (b) types of configurations that VoIP end users will use to originate calls using IP technology are consistent with the VoIP configuration as defined in this Agreement.	Reflects Level 3's agreement to represent those aspects of VoIP that Qwest is requesting, but doesn't make Level 3 an ultimate guarantor as the Qwest language implies.	

Interconnection Rights			
Issue No. 1B Sec. 7.1.2	7.1.2 The Parties will negotiate the facilities arrangement used to interconnect their respective networks. CLEC shall establish at least one (1) physical Point of Interconnection in Qwest territory in each LATA CLEC has local Customers wishes to Interconnect pursuant to Sections 251 and 252 of the Act. The Parties shall establish, through negotiations, at least one (1) of the following Interconnection arrangements, at any Technically Feasible point:	Level 3 wants to clarify that its responsibility is to have a POI pursuant to the Act. Qwest seeks to limit Level 3's rights by requiring undefined "local Customers."	
	(1) a DS1 or DS3 Qwest provided facility interconnection facilities via DS-1, DS-3, OC-3 and/or higher speed optical connections; (2) Collocation; (3) negotiated Mid-Span Meet POI facilities; or (4) other Technically Feasible methods of Interconnection, such as an Ocn Qwest provided facility, via the Bona Fide Request (BFR) process unless a particular arrangement has been previously provided to a third party, or is offered by Qwest pursuant to as a product Section 251 and 252 of the Act to any other provider. Ocn Qwest provided facilities may also be ordered through FCC Tariff No. 1.	Level 3 wants to include higher band width facilities within its interconnection rights. Qwest wants to limit Level 3 to DSI or DS3 facilities. Level 3's language rejects the limitation that Qwest seeks to impose, namely that a BFR is restricted to a "product" developed by Qwest.	
Issue No. 1 D Sec. 7.2.2.1.2.2.	7.2.2.1.2.2. <u>Level 3</u> may purchase transport services from Qwest <u>at TELRIC Rates</u> , <u>order private line or other facilities from Qwest's tariff or establish a POI via a third party, including a third party that has leased the private line transport service facility from Qwest. Such transport provides a transmission path for the LIS trunk to deliver the originating Party's Exchange Service EAS/Local traffic to the terminating Party's End Office Switch or Tandem Switch for call termination. Transport may be purchased from Qwest as Tandem Switch routed (i.e., tandem switching, tandem transmission and direct trunked transport) or direct routed (i.e., direct trunked transport). This Section is not intended to alter either Party's obligation under Section 251(a) of the Act</u>	Clarification of Level 3's rights to transport at TELRIC, private line or other facilities at tariffed rates.	
Issue 1F Sec. 7.2.2.9.6	7.2.2.9.6 The Parties shall terminate Exchange Service (EAS/Local) traffic on Tandem Switches or End Office Switches. CLEC may interconnect at either the Qwest local tandem or the Qwest access tandem for the delivery of local exchange traffic. When CLEC is		

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

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Sec. 7.3.8.

7.3.8 Signaling Parameters: Qwest and CLEC are required to provide each other the proper signaling information (e.g., originating Calling Party Number and destination called party number, etc.) per 47 CFR 64.1601 to enable each Party to issue bills in a complete and timely fashion. All CCS signaling parameters will be provided including Calling Party Number ("CPN"), Originating Line Information Parameter (OLIP) on calls to 8XX telephone numbers, calling party category, Charge Number, etc. All privacy indicators will be honored. If either Party fails to provide CPN (valid originating information), and cannot substantiate technical restrictions (e.g. i.e, MF signaling, **IP** origination, etc.) such traffic will be billed as interstate Switched Access. Excluding VoIP traffic which is lawfully originated without CPN, Traffic sent to the other Party without CPN (valid originating information) will be handled in the following manner. The transit provider will be responsible for only its portion of this traffic, which will not exceed more than five percent (5%) of the total Exchange Service (EAS/Local) and IntraLATA LEC Toll traffic delivered to the other Party. The Switch owner will provide to the other Party, upon request, information to demonstrate that Party's portion of no CPN traffic does not exceed five percent (5%) of the total traffic delivered. The Parties will coordinate and exchange data as necessary to determine the cause of the CPN failure and to assist its correction. All Exchange Service (EAS/Local) and IntraLATA LEC Toll calls exchanged without CPN information will be billed as either Exchange Service (EAS/Local) Traffic or IntraLATA LEC Toll Traffic in direct proportion to the minutes of use (MOU) of calls exchanged with CPN information for the preceding quarter, utilizing a PLU factor determined in accordance with Section 7.2.2.9.3.2 of this Agreement

Issue 30

Sec. 7.2.2.6.1, 7.2.2.6.1.2, 7.2.2.6.1.3

7.2.2.6.1.1 Either party may choose to provide its own SS7 signaling (via a single set of Quad links) for its facility-based services, or to the extent available, it may purchase SS7 signaling from the other party under the terms and conditions of that party's tariff offering. Alternatively, either party may choose to obtain SS7 signaling from a third-party provider.

7.2.2.6.1.2 In the event that LEVEL 3 constructs Quad Links, the point at which Level 3's single set of Quad Links physically link to Qwest's STP shall establish a meet point demarcating each Party's respective legal and financial responsibilities for their respective network and traffic exchanged between

Provides for the rights to obtain your own quad links or from the other party.

Provides for the right to just use one set of quad links.

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Bold Italics = Qwest Proposed

those networks.

7.2.2.6.1.3 To the extent that Qwest and Level 3 establish a mid-span meet or alternative form of establishing physical linking of SS7 Quad links, they will negotiate mutually agreeable terms and conditions for the apportioning facilities costs.

Obligates the parties to negotiate agreeable terms when a single set of quad links are self provisioned.



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July 14, 2006

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 – Level 3 Communications, LLC's Direct Testimony

Dear Sir or Madam:

Enclosed for filing in the above-referenced docket are an original and five copies of the Direct Testimony of Mack Greene on Behalf of Level 3 Communications, LLC. Please contact me with any questions.

Very truly yours,

Wendy L. Martin
Wendy L. Martin

Enclosures

cc: ARB 665 Service List

CERTIFICATE OF SERVICE ARB 665

I hereby certify that a true and correct copy of **DIRECT TESTIMONY OF MACK GREENE ON BEHALF OF LEVEL 3 COMMUNICATIONS, LLC** was served via U.S. Mail on the following parties on July 14, 2006:

Thomas M. Dethlefs Qwest Corporation 1801 California Street, 10th Floor Denver CO 80202

Alex M. Duarte Qwest Corporation Suite 810 421 SW Oak Street Portland OR 97204

ATER WYNNE LLP