

BEFORE THE
WASHINGTON UTILITIES AND
TRANSPORTATION COMMISSION

IN THE MATTER OF LEVEL 3
COMMUNICATIONS, LLC'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,

LEVEL 3 COMMUNICATIONS, LLC,

Petitioner.

Docket No. UT-063006

REPLY TESTIMONY OF

MACK D. GREENE

**ON BEHALF OF
LEVEL 3 COMMUNICATIONS, LLC**

SEPTEMBER 15, 2006

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1 **I. STATEMENT OF SCOPE AND SUMMARY**

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

3 A. I am testifying on behalf of Level 3 Communications, LLC (“Level 3”) in
4 response to certain aspects of the replacement testimony filed by the Qwest witnesses in
5 this case.

6 **II. PROPER ICA TO UTILIZE IN THIS ARBITRATION**

7 **Q. WHAT IS THE PROPER ICA FOR THE COMMISSION TO UTILIZE IN**
8 **THIS ARBITRATION?**

9 A. In his replacement direct testimony, Mr. Brotherson suggests that the ICA to
10 utilize in this arbitration is Qwest’s 2005 template and not the agreement filed with the
11 Level 3 petition.¹ He is wrong on two counts. First, though I am not a lawyer, it is my
12 understanding that Level 3 is the petitioning party in this case and as such has the
13 responsibility to reflect in its petition the agreement that best reflects the agreements and
14 disagreements of the parties at the time of the filing of the petition. The ICA filed with
15 the Level 3 petition accomplishes this task. If Qwest disagreed with any of the
16 representations reflected in that agreement, it is Qwest’s responsibility in its answer to
17 bring those disagreements forward. The blanket assertion that the ICA put forth by
18 Qwest best represents the template agreement of the parties is just that – merely an
19 assertion. Without Qwest specifically pointing out to Level 3 in this docket those areas
20 that its new “template” differs from the agreement that Level 3 and Qwest negotiated
21 from that resulted in the petition, there is no way of knowing what terms and conditions
22 Level 3 is truly agreeing to or Qwest is just inserting.

¹ Replacement Direct Testimony of Larry B. Brotherson, Qwest Corporation, WUTC Docket No. UT-063006, filed August 18, 2006 (“Brotherson Testimony”), at pp. 3-4.

1 Secondly, while I have not been personally involved in negotiating the 2005
2 template agreement that Mr. Brotherson refers to, it is my understanding that that
3 negotiation is ongoing and as yet not finalized. Until such time as the whole negotiation
4 on Qwest's newest template proposal is finalized, there is no way to determine if any
5 given term or condition is agreed to by either party. The baseline ICA filed by Level 3 is
6 the agreement that the Commission can have confidence in as reflecting those areas of
7 agreement that are not at issue in this arbitration.

8 **III. THE POINT WHERE LEVEL 3 IS RESPONSIBLE TO**
9 **PICK UP TRAFFIC AND TRANSPORT IT TO ITS ENHANCED**
10 **SERVICE CUSTOMERS IS THE RELEVANT POINT FOR**
11 **DETERMINING INTERCARRIER COMPENSATION**

12 **Q. WHY DOES IT MAKE SENSE TO HAVE THE POINT WHERE**
13 **LEVEL 3 IS RESPONSIBLE TO PICK UP OR DELIVER ENHANCED**
14 **SERVICE TRAFFIC BE THE RELEVANT POINT FROM WHICH TO**
15 **DETERMINE INTERCARRIER COEMPANTION?**

16 **A.** Because of fundamental differences between an Internet call and a traditional
17 voice call, the concept of where the call terminates simply cannot be as readily applied to
18 an Internet call. When an end user makes a traditional voice call, the two ends of the call
19 are easily determined and the terminating point of the call is obviously the person or
20 business that the end user has called. However, as the FCC explained in the *ISP Remand*
21 *Order*, end users accessing the Internet, "are interacting with a global network of
22 connecting computers."² If an end user views content from a webpage, the information
23 for that webpage may be stored in different computers across the globe. The FCC said,
24 "The Internet Communication is not analogous to traditional telephone exchange services.

² The FCC's discussion of the global nature of Internet communications is found in the *ISP Remand Order* at ¶¶ 58-63.

1 Local calls set up communication between two parties that reside in the same local calling
2 area.”³

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

17 **Q. DOES IT MAKE SENSE FOR QWEST’S OR LEVEL 3’S CUSTOMER’S**
18 **ISP SERVER OR MODEM BANK TO BE THE “TERMINATION**
19 **POINT” FOR THE CALL?**

20 A. No. I have read the FCC’s *ISP Remand Order* and the FCC does not say that the
21 ISP server or modem bank is the “termination point” for the ISP-bound call. It is a
22 strange legal fiction to think that the physical location of a particular ISP server or set of
23 modem banks is the same as the location of the Qwest or Level 3 ISP customer. For
24 example, AOL, one of the largest ISPs in the country, has its corporate headquarters in
25 Virginia and service centers in various locations distributed across the United States and

³ *ISP Remand Order*, at ¶ 63.

1 is also a big customer of Level 3. AOL picks up the vast majority of its traffic from
2 Level 3 at one location in Virginia. It does not make sense for Virginia to be the
3 “termination point” for Washington State end user’s calls that use AOL as their ISP.
4 Similarly, other large ISP customers of Level 3’s have corporate offices and
5 “interconnect” with Level 3 at different geographic locations in the country. However,
6 these various physical locations are not where the traffic “terminates” because obviously
7 the traffic travels further on the Internet after it is delivered to the ISP customer. It does
8 not make sense in terms of Internet protocol technology to use the corporate headquarters
9 of the ISP as the “termination point.” If Qwest is given its way, hundreds of thousands of
10 Washington State citizens could wake up tomorrow and have to pay long-distance
11 charges for calls to their ISP – calls that everyone assumes are included within their basic
12 service.

13 **Q. IS IT BETTER TO USE A PHYSICAL LOCATION ON THE NETWORK**
14 **FOR DETERMINING THE “TERMINATION POINT” OF AN ISP-**
15 **BOUND CALL?**

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

22 **Q. HOW DOES QWEST ADDRESS THE ISSUE OF WHERE ITS OWN ISP**
23 **CUSTOMERS ARE “PHYSICALLY LOCATED”?**

24 A. According to Qwest, Qwest markets its own Wholesale Dial service for ISPs
25 through its affiliated enhanced service provider, Qwest Communications Corporation
26 (“QCC”). QCC owns the Network Access Server (“NAS”) that it uses to provide service

1 to ISP customers. The ISP customer for Qwest's Wholesale Dial service does not have
2 any of its own equipment located at the Qwest end office. According to Qwest, QCC
3 receives calls as an "end user." In other words, for its Wholesale Dial product, Qwest
4 terminates calls to itself (its affiliate).

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

12 Alternatively, Qwest's position would require ISPs desiring to serve Washington
13 State end users to actually deploy expensive, high-capacity equipment in each local
14 calling area in order for Level 3's traffic to be non-VNXX traffic – a result which is
15 neither sound policy nor efficient network planning. This would necessarily increase
16 costs to the end user without any increase in value. Of course, Qwest does not engineer
17 its own network in such a wasteful way.

18 **IV. LEVEL 3'S PROPOSED DEFINITION OF**
19 **VNXX MAKES SENSE.**

20 **Q. DOES QWEST PROPERLY DEFINE VoIP?**

21 A. No. First, Qwest attempts to insert into the definition the requirement that a VoIP
22 call originate at the premises of the party making the call.⁴ While I will let the lawyers
23 address the fact that no FCC order makes this a requirement for VoIP, I will address the
24 technical impossibility of what Qwest is seeking.

⁴ Brotherson Testimony, p. 57, l. 21.

1 Today, VoIP calls are generated over broadband through a variety of means –
2 cable terminal adapters, DSL adapters among them. One of the methodologies for
3 generating a VoIP call in wide use involves a laptop using WIFI. The caller, sitting in a
4 public area such as a pedestrian mall, accesses his VoIP provider through WIFI and
5 makes a call – maybe across the street, maybe across the country. In any event, where
6 this person is sitting can hardly be described as their “premise.” Qwest would have this
7 Commission define VoIP in such a way as to deny one of its primary characteristics –
8 geographic portability. From just a technical viewpoint, this makes no sense.

9 Secondly, Qwest demands that the “VoIP POP” (point of presence) be the
10 relevant point from which to determine the end point of the call.⁵ But Qwest fails to even
11 define what a VoIP POP is! Despite repeated requests from Level 3, Qwest has
12 steadfastly refused to define it. But under Qwest’s contract this term defines VoIP
13 compensation between the parties. So if Qwest cannot define it, then we are nearly
14 certain to have disputes over intercarrier compensation for VoIP traffic. This would
15 make it difficult for Level 3 (or any other carrier) to make network and investment
16 decisions.

17 **Q. MR. BROTHERSON ATTEMPTS TO PORTRAY IN HIS TESTIMONY**
18 **(PAGES 10-37) THAT LEVEL 3’S DEFINITION OF VNXX TRAFFIC IS**
19 **SOMEHOW INCONSISTENT WITH LEVEL 3’S POSITION ON THE**
20 **TREATMENT OF ISP-BOUND AND VOIP TRAFFIC UNDER THE**
21 **PARTIES’ AGREEMENT. CAN YOU RESPOND?**

22 A. Certainly. Level 3’s new definition of “VNXX traffic” addresses what is
23 undoubtedly a complicated issue but in as clear and simple a way as possible. Contrary
24 to Mr. Brotherson’s interpretation, Level 3’s definition is entirely consistent with how we
25 propose to treat ISP-bound and VoIP traffic for compensation purposes. More

⁵ Brotherson Testimony, p. 63, ll. 14 -18.

1 importantly, and as we discussed at length during the technical conference on August 24,
2 2006, Level 3's definition takes into consideration the technical nature of the parties'
3 interconnection architecture in Washington State. Qwest's does not. According to my
4 layman's understanding of Washington State law, it is consistent with compensation
5 requirements which essentially boil down to the fact that where an ILEC agrees to the
6 FCC's rules on exchange of ISP-bound traffic, all of that traffic is subject to \$0.0007 per
7 MOU. If they do not, then the state reciprocal compensation rate applies. I understand
8 that the Washington State reciprocal compensation rate applies to all traffic rated as local
9 regardless of whether voice communications occur or not. Moreover, Level 3's
10 definition simply states that ISP-bound and VoIP traffic will not be considered VNXX
11 traffic for compensation purposes under the parties' agreement. Lastly, Level 3's
12 language is consistent with other provisions in the agreement, with Level 3's positions on
13 other issues.

14 **V. QWEST SHOULD NOT BE AFFORDED THE**
15 **UNILATERAL RIGHT TO REDEFINE THE**
16 **JURISDICTIONAL NATURE OF TRAFFIC.**

17 **Q. SHOULD THE COMMISSION GRANT QWEST'S REQUEST TO GIVE**
18 **THEM THE ABILITY TO UNILATERALLY REDEFINE VOIP**
19 **TRAFFIC AS SWITCHED ACCESS?**

20 A. No. Qwest in its proposed contract language seeks to be granted the unilateral
21 right to redefine traffic as switched access – the highest compensated traffic – if in its
22 opinion it is "nonqualifying."⁶ In a business context this is unacceptable. Given the
23 incentives that Qwest would have to recharacterize the traffic to enhance its revenues and
24 the harm to Level 3 should Qwest do so (need to reserve funds, costs and reduces to
25 litigate with Qwest, etc.) and given the fact that Qwest is a competitor of Level 3 in this

⁶ Brotherson Testimony, p. 71, l. 19-p.73, l. 13.

1 area, it is completely unreasonable and improper to tilt the playing field in favor of
2 Qwest.

3 **VI. QWEST'S REQUIREMENT TO HAVE LEVEL 3**
4 **GUARANTEE THE VOIP PRODUCTS OF THEIR**
5 **CUSTOMERS IS ANTI-COMPETITIVE AND DISCRIMINATORY.**

6 **Q. SHOULD QWEST BE PERMITTED TO BURDEN LEVEL 3 WITH THE**
7 **COSTS AND LIABILITY OF GUARANTEEING THEIR CUSTOMER'S**
8 **VoIP OFFERINGS?**

9 A. No. Qwest is seeking to have this Commission adopt language that would
10 essentially turn Level 3 into the guarantor of all of its VoIP customers' product practices.
11 Qwest does this by proposing language that Level 3 certify that a call is VoIP.⁷ Though
12 Mr. Brotherson accurately reflects that Level 3 and Qwest have agreed to customary
13 certification provisions in the contract, none require that one carrier assume all liabilities
14 for the activities of its end users and indemnify the other carrier against that. In order for
15 Level 3 to fully satisfy Qwest's demand in this regard, it would have to establish an
16 ongoing audit process for all customers' VoIP offerings. Following Qwest's logic, this
17 would appear to mean that Level 3 would be required to slog through this process on a
18 daily basis. Worse yet, each and every Level 3 customer would have to agree to it. No
19 carrier could comply.

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

21 A. Yes.

⁷ Brotherson Testimony, p. 77, l. 1-p. 78, l. 14.