

**BEFORE THE WASHINGTON STATE
UTILITIES AND TRANSPORTATION COMMISSION**

QWEST CORPORATION,

Complainant,

v.

**LEVEL 3 COMMUNICATIONS, LLC;
PAC-WEST TELECOMM, INC.;;
NORTHWEST TELEPHONE INC.; TCG-
SEATTLE; ELECTRIC LIGHTWAVE, INC.;;
ADVANCED TELCOM GROUP, INC. D/B/A
ESCHELON TELECOM, INC.; FOCAL
COMMUNICATIONS CORPORATION;
GLOBAL CROSSING LOCAL SERVICES
INC; AND, MCI WORLDCOM
COMMUNICATIONS, INC**

DOCKET NO. UT-063038

**DIRECT TESTIMONY
OF LARRY B. BROTHERSON
QWEST CORPORATION**

NOVEMBER 20, 2006

TABLE OF CONTENTS

	<u>Page</u>
I. IDENTIFICATION OF WITNESS.....	1
II. PURPOSE OF TESTIMONY	2
III. DEFINITION OF VNXX.....	5
IV. VNXX POLICY ISSUES.....	12
V. RESPONSE TO CLEC ARGUMENTS IN SUPPORT OF VNXX	27
VI. QWEST’S VNXX STUDY	40
VII. ADDITIONAL EVIDENCE BASED ON DISCOVERY	49
VIII. CONCLUSION	61

INDEX TO EXHIBITS

DESCRIPTION	<u>Exhibit</u>
VNXX Diagram.....	LBB-2
VNXX FX Diagram.....	LBB-3
Pac-West VNXX Analysis	CONFIDENTIAL LBB-4
NTI VNXX Analysis	CONFIDENTIAL LBB-5
Global Crossing VNXX Analysis	CONFIDENTIAL LBB-6
Electric Lightwave VNXX Analysis	CONFIDENTIAL LBB-7
Level 3 VNXX Analysis	CONFIDENTIAL LBB-8
Focal VNXX Analysis	CONFIDENTIAL LBB-9
TCG-Seattle VNXX Analysis	CONFIDENTIAL LBB-10

ATG d/b/a Eschelon VNXX Analysis CONFIDENTIAL LBB-11

Broadwing/Focal Data Request Responses LBB-13

ELI Data Request Responses LBB-14

Level 3 Data Request Responses LBB-15

Global Crossing Data Request Responses LBB-16

NTI Data Request Responses LBB-17

MCI/Verizon Data Request Responses LBB-18

Pac-West Data Request Responses LBB-19

TCG Data Request Responses LBB-20

ATI/Eschelon Data Request Responses LBB-21

1 **I. IDENTIFICATION OF WITNESS**

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

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

8 **Q. PLEASE DESCRIBE YOUR EMPLOYMENT BACKGROUND.**

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

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

3

4 **Q. WHAT IS YOUR EDUCATIONAL BACKGROUND?**

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

7

8 **II. PURPOSE OF TESTIMONY**

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

10 A. On May 22, 2006, Qwest filed a complaint against the CLEC Respondents seeking,
11 among other things, that the Washington Utilities and Transportation Commission
12 (“Commission”) issue an order that Virtual NXX (“VNXX”) numbering
13 arrangements in Washington violate state law, Qwest’s tariff, and is otherwise
14 contrary to the public interest. In addition, Qwest requested that the Commission
15 prohibit Respondents from using VNXX numbering by assigning NPA/NXXs in
16 local calling areas (“LCAs”) other than the LCA where the customer is physically
17 located, that the Respondents cease their misuse of such telephone numbering
18 resources, that Respondents be required to properly assign telephone numbers based
19 on the actual physical location of its customer, and require that Respondents
20 comply with Qwest’s access tariffs if they wish to enable toll-free long distance
21 calling for their own customers and the customers of other local exchange
22 companies (“LECs”).

23 The purpose of my testimony is to support these requests by explaining Qwest's

1 position on the VNXX issue. I will describe VNXX and numbering assignments
2 and describe how intercarrier compensation is based on the assignment of telephone
3 numbers to the physical locations of the originating and terminating end user
4 customers. I will discuss the policy reasons that VNXX should not be allowed. I
5 will present the results of an analysis of the usage data related to traffic exchanged
6 between Qwest and each of the Respondents that demonstrate that each of them, to
7 one degree or another, are using VNXX (and will also, in some cases, identify data
8 responses from the Respondents that support these conclusions). Finally, I will
9 discuss Qwest's recommendation for how the Commission should treat VNXX in
10 Washington and explain why the Commission should approve the policy proposed
11 by Qwest.

12
13 **Q. WHY DID QWEST FILE ITS COMPLAINT IN THIS DOCKET?**

14 A. In its orders in the Level 3 complaint case (Docket Nos. UT-053039) and the Pac-
15 West complaint case (Docket No. UT-053036), the Commission ruled that, under
16 the existing interconnections agreements ("ICAs") between the parties, Qwest was
17 obligated to pay terminating compensation on VNXX traffic to Level 3 and Pac-
18 West. However, the Commission was equally clear that it had not reached a final
19 policy decision on the VNXX issue. For example, in the *Level 3 Complaint Order*,
20 the Commission stated that it had "not considered the propriety of VNXX
21 arrangements" and that "no party in [prior] arbitration proceedings raised the issue

1 of whether these arrangements are appropriate or within the law.”¹ The Commission
2 also stated that “[s]hould Qwest wish to pursue the broader issue of VNXX
3 generally, it may file its own complaint about specific carriers and their behavior
4 regarding intercarrier compensation methods.”² The Commission repeated the same
5 message in its *Pac-West Complaint Order*.³

6 Because the Commission has not previously considered the propriety of VNXX
7 arrangement, Qwest filed the complaint in this docket to bring that issue directly
8 before the Commission.

9

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

12 A. I address the following issues in my testimony:

- 13 • I first provide an overview of telephone numbers, particularly in the context of
14 VNXX. I describe the fact that the NXX, under proper numbering guidelines, is
15 geographically related to a specific local calling area (“LCA”) or exchange. I
16 then define VNXX, and note that the Commission’s and FCC’s use of that term
17 is consistent with Qwest’s definition of the term. I define VNXX as the
18 inappropriate assignment by CLECs of local telephone numbers to end user
19 customers who are not located in the LCA to which that telephone number is
20 associated, thus creating an erroneous impression that a call directed to a local
21 number is a local call, when in fact it is delivered to a customer of a CLEC—
22 usually, but not always, an Internet Service Provider (“ISP”)—located in
23 another LCA or exchange (or even in another state). In other words, VNXX
24 refers to disguised interexchange calls.

¹ Order No. 05, *Level 3 Communications LLC v. Qwest Corporation*, Docket No. UT-053039 ¶ 35 (WUTC February 10, 2006) (“*Level 3 Complaint Order*”)

² *Id.* ¶ 40.

³ Order No. 05, *Pac-West Telecomm, Inc. v. Qwest Corporation*, Docket No. UT-053036 ¶ 43 (WUTC February 10, 2006) (“*Pac-West Complaint Order*”).

- 1 • I demonstrate that the proper means of determining whether a call is local or
2 interexchange is based on the physical locations of the end users to the call.
- 3 • I describe the compensation arrangements for local and toll traffic and the
4 question of whether terminating compensation (reciprocal compensation) should
5 be paid for VNXX traffic. I will describe how VNXX has widespread and
6 significant implications for the access compensation mechanisms in place in
7 Washington and erodes the financial support that switched access charges
8 provide to local rates.
- 9 • I address several critical policy issues related to VNXX, which include: (1) the
10 negative impacts that VNXX has on LCAs and call rating rules; (2) a limited
11 discussion of the negative impact of VNXX on network architecture issues; (3)
12 the fact that VNXX creates competitive disparities (it allows VNXX users to be
13 placed at a distinct competitive advantage because they do not have to follow
14 the rules that everyone else in the industry is bound by); (4) the fact that VNXX
15 ignores cost causation principles (an issue that Dr. Fitzsimmons addresses in
16 detail); and (5) the disruptive, contradictory, and unfair impacts that VNXX has
17 on existing intercarrier compensation regimes.
- 18 • I address the three primary arguments that CLECs typically make in an effort to
19 support VNXX. I point out that neither the NXX theory nor the POI theory has
20 any historical basis and that both are inconsistent with the call rating rules that
21 have applied in Washington for decades. I also address the erroneous claim that
22 VNXX and Qwest's FX service are the same. I demonstrate that they are
23 dramatically different, and that FX is consistent with existing tariffs and proper
24 cost causation principles.
- 25 • I present studies performed by Qwest that provides a conservative estimate of
26 the amount of VNXX traffic that each of the Respondents is carrying currently
27 in Washington.
- 28 • I also address the data requests that have been received from the Respondents in
29 this case and show how they support Qwest's claims that the individual
30 Respondents are using VNXX in Washington.
- 31 • I discuss Qwest's recommendation for relief in this docket, including Qwest's
32 recommendation that the Commission prohibit the use of VNXX in
33 Washington.

34 **III. DEFINITION OF VNXX**

35 **Q. PLEASE DESCRIBE HOW TELEPHONE NUMBERS, OR NXX CODES,**

1 **ARE ASSIGNED?**

2 A. An NXX code, which is also commonly referred to as a prefix or a central office
3 code, is the second set of three digits of a ten-digit telephone number (NPA-NXX-
4 XXXX). These three digits (NXX) are assigned to and indicate the specific
5 Washington central office switch from which a customer that is assigned a
6 telephone number associated with that central office is physically served. In other
7 words, in the number (206) 345-XXXX, the “345” prefix is assigned to a specific
8 central office in the (206) area code and thus identifies the general geographic area
9 in which the customer is located. As Mr. Linse points out in detail in his testimony,
10 NXX codes are assigned in accordance with the Central Office Code (NXX)
11 Assignment Guidelines (“COCAG”).

12
13 **Q. WHAT IS YOUR UNDERSTANDING OF COCAG’S REQUIREMENTS**
14 **REGARDING THE GEOGRAPHICAL NATURE OF NXX CODES?**

15 A. While I am not an expert on COCAG, it is my understanding that telephone
16 numbers are to assigned to wireline providers by the North American Numbering
17 Plan Administrator (“NANPA”), who are then required use them to provide service
18 to customer physically located in the same rate center with which the NXX is
19 associated. My understanding is that, under COCAG nomenclature, these are
20 known as “Geographic NPAs,” which means they correspond to discrete
21 geographic areas within numbering plan mandated by NANPA.

22
23 **Q. WHY IS IT NECESSARY TO ASSIGN NXX CODES TO LOCAL SERVICE**

1 **ASSOCIATED WITH GEOGRAPHIC RATE CENTERS?**

2 A. As Mr. Linse discusses, the industry framework for network architectures, rating
3 and billing for the Public Switched Telephone Network (“PSTN”) are based upon
4 geographic exchange and local calling area boundaries and their associated NXX
5 code and the rate center configuration. Numbering information, including the
6 assignment of NXX codes, is included in national databases that contain detailed
7 descriptions of all networks in the North American Numbering Plan (“NANP”) area
8 necessary for message routing, call setup, operator service access routing, message
9 rating, credit card and calling card services, and access to 911 emergency services.
10 NXX codes are activated and routed in all carrier networks nationally in accordance
11 with the information provided in these databases. These databases were designed to
12 provide the routing and rating information based on the NXX code, or NXX blocks,
13 and the associated geographic rate centers. The industry currently utilizes the NXX
14 data and its associated geographic identity to determine call routing, call rating, and
15 the appropriate inter-carrier charges associated with the call. The entire regulatory
16 structure of local and long distance calls arose based on NXX codes corresponding
17 with Central Office locations, and that remains the call rating structure today.

18
19 **Q. WHAT IS VNXX TRAFFIC?**

20 A. I have testified in numerous cases in which VNXX was the subject, and regulatory
21 agencies typically define VNXX in a consistent manner that is similar to the
22 following definition.

23 VNXX is an arrangement where a CLEC assigns a telephone number that it has

1 obtained from NANPA to one of its customers that is not physically located in the
2 LCA associated with the NXX of the assigned telephone number. The result is that
3 calls originate from a Qwest customer in the LCA associated with number assigned
4 to a CLEC customer (but the CLEC customer is physically located in a different
5 LCA). To the Qwest customer, the calls appear to be to a local number, the calling
6 party does not need to dial “1+”, and no toll charges are assessed to the calling
7 party. Yet, in reality, the calls actually terminate to the CLEC customer physically
8 located in another LCA. So, while the calls appear to be local, they are not.
9 Indeed, the only thing remotely local about the calls is that the telephone number
10 called makes them appear to be local. In other words, VNXX disguises
11 interexchange calls as local calls.

12 The practical effect is that, through the use of VNXX, the CLEC provides its
13 customer the functionality of interexchange service, but at no extra charge to the
14 calling party, and with no additional revenue to Qwest or to an IXC. VNXX thus
15 ignores the historic and current framework for NXX code assignments, network
16 architectures, and the rating and billing of calls that is based upon the geographic
17 assignment of NXX codes and the associated local rate center configuration.
18 VNXX is inconsistent with the existing national framework for PSTN calls within
19 which all carriers currently operate.

20
21 **Q. HAS THE WASHINGTON COMMISSION DEFINED VNXX?**

22 A. Yes. In its recent *Pac-West Complaint Order*, the Commission articulated a VNXX
23 definition very similar to the definition I provided above: “‘VNXX’ or ‘Virtual

1 NXX' refers to carrier's acquisition of a telephone for one local calling area that is
2 *used in another geographic area.* The call *appears* to be local based on the
3 telephone number."⁴ In the *Level 3 Complaint Order*, the Commission also noted
4 that "VNXX numbers have the same NXX as the local calling area of the end-user
5 customer, but may terminate in a different calling area, . . . LATA, or state."⁵

6 Although not as detailed as my description of VNXX, the Commission's
7 descriptions of VNXX are completely consistent with it. The Commission's
8 description of VNXX captures the essence of VNXX, which is the assignment of a
9 telephone number associated with one LCA that is used by a customer actually
10 located in a different LCA. Thus, even though the call is interexchange in nature
11 based on the location of the parties to the call, it "appears to be local based on the
12 telephone number."

13
14 **Q. HAS THE FCC DEFINED VNXX?**

15 A. Yes. The FCC has defined VNXX, as have numerous state commissions. In its
16 intercarrier compensation docket, the FCC described VNXX codes: "Virtual NXX
17 codes are central office codes that correspond with a particular geographic area that
18 are assigned to *a customer located in a different geographic area.*"⁶ Thus, the
19 FCC's conception of VNXX, like the Commission's definition, focuses on the

⁴ *Pac-West Complaint Order* at 2, n. 1 (emphasis added). The Commission repeated the same definition in the order denying rehearing in the Level Complaint Docket. Order No. 6, *Level 3 Communications v. Qwest Corporation*, Docket No. UT-053039, at 1, n. 1 (WUTC, June 9, 2006).

⁵ *Level 3 Complaint Order* at 1, n.1.

⁶ Notice of Proposed Rulemaking, *In the Matter of Developing a Unified Intercarrier Compensation Regime*, CC Docket No. 01-92, FCC 01-132, ¶ 115, n. 188 (April 27, 2001) (Emphasis added).

1 location of the parties to the call.

2

3 **Q. YOU INDICATED THAT OTHER STATE COMMISSIONS HAVE ALSO**
4 **DEFINED VNXX. IN YOUR EXPERIENCE ARE THOSE DEFINITIONS**
5 **CONSISTENT WITH THOSE OF THE COMMISSION AND THE FCC?**

6 A. Yes. The Iowa Board, in its recent decision in the arbitration between Qwest and
7 Level 3, adopted Qwest's proposed definition of VNXX, which is consistent with
8 my description of VNXX and with the definitions used by the Commission and the
9 FCC.⁷ The Oregon Commission has likewise used similar definitions.⁸

10 In each case, these definitions capture the fundamental elements of VNXX: (1) the
11 assignment of a telephone number associated with one LCA to a customer actually
12 located in a different LCA and (2) through such a number assignment practice, an
13 interexchange calls appear to the calling party to be local (when in reality it has all
14 the attributes of an interexchange call, in that it originates and terminates in
15 different LCAs).

16

17 **Q. BASED ON YOUR UNDERSTANDING, WHAT TYPES OF COMPANIES**
18 **ARE ENTITLED TO OBTAIN TELEPHONE NUMBERS FROM NANPA?**

⁷ Order on Reconsideration, *In Re Level 3 Communications, LLC, v. Qwest Corporation*, Docket No. ARB-05-4, at 37 (Iowa Util. Bd. July 19, 2006).

⁸ ALJ Ruling, Docket IC 12, p. 3 (Oregon PUC, August 16, 2005), affirmed unanimously in Order No. 06-037 (Ore. PUC, January 30, 2006) (emphasis added). The ALJ and Oregon Commission orders can be viewed at <http://edocs.puc.state.or.us/efdocs/HDA/ic12hda1032.pdf> and <http://apps.puc.state.or.us/orders/2006ords/06-037.pdf>.

1 A. It is my understanding that *only* LECs (including wireless carriers), providers of
2 *local exchange services*, are entitled to numbering resources from NANPA. Thus,
3 ILECs like Qwest and CLECs have access to telephone numbers. On the other
4 hand, interexchange carriers (“IXCs”), Internet Service Providers (“ISPs”),
5 Enhanced Services Providers (“ESPs”), and third party providers of VoIP services
6 (e.g., Vonage and Skype), are not entitled to obtain telephone numbers. Because
7 these companies act either as an end user purchasing local service or an IXC
8 purchasing access to a LCA, they are not entitled to their own NXX numbering
9 resources from NANPA. They must obtain number assignments from LECs that
10 are entitled, under NANPA rules, to receive telephone numbering resources and
11 assign them to end-user customers.

12

13 **Q. WHO USES VNXX NUMBER ASSIGNMENTS?**

14 A. Based on my experience, the most typical use of VNXX occurs when CLECs
15 provide “local” telephone numbers to ISPs and, in some cases, to other business
16 customers that do not have a physical presence in LCA associated with the assigned
17 telephone numbers. By far the most common use of VNXX is to provide what
18 appears to be local numbers to ISPs.

19

20 **Q. WHY DOES VNXX MATTER TO THE RELATIONS BETWEEN QWEST**
21 **AND CLECS?**

22 A. VNXX is an issue between local telephone companies such as a CLEC and an ILEC
23 because the intercarrier compensation issues associated with VNXX are unique to

1 the relationship between local telephone companies. For example, the question of
2 whether terminating compensation (reciprocal compensation) should be paid by one
3 carrier to another carrier is an issue unique to carriers entitled to interconnect under
4 section 251. VNXX, because it ignores LCAs and proper call rating rules, wreaks
5 havoc to intercarrier compensation relationships, including, as Dr. Fitzsimmons
6 points out, reversing and violating proper cost causation principles. The result, as
7 he points out, and as the *ISP Remand Order* confirms,⁹ are inappropriate arbitrage
8 opportunities and market distortions. In addition, VNXX does not advance the goal
9 of the 1996 Act to promote local exchange competition, because VNXX by
10 definition does not provide local service to customers that are physically located in
11 the same LCA.

12 13 **IV. VNXX POLICY ISSUES**

14 **Q. WHAT ARE THE MOST SIGNIFICANT POLICY ISSUES RELATED TO**
15 **VNXX?**

16 **A.** There are several, but the most significant are:

- 17 • The implications of VNXX on LCAs and call rating.
18 • The network architecture implications of VNXX.
19 • The implication of VNXX on competition.
20 • The impact of VNXX on the economic principles of cost causation.
21 • The intercarrier compensation implications of VNXX.
22

⁹ *ISP Remand Order ¶¶ 2, 5-7, 21, 66-67.*

1 **Q. PLEASE ADDRESS THE IMPLICATIONS OF VNXX ON LCAS AND**
2 **CALL RATING?**

3 A. As telecommunications has evolved, there are two basic types of calls from an end
4 user's perspective: local calls and long distance calls. Most customers pay for local
5 calls (calls to other customers located within the same LCA) on a flat-rated basis.
6 On the other hand, long distance calls require a different dialing pattern (they
7 typically require "1+" at the beginning of the call) and, although there are now
8 many different pricing plans for long distance calling, there is typically a per minute
9 charge for such calls. The widespread introduction of wireless services has added
10 new services and new ways of determining local and long distance traffic. But even
11 for wireless calls, the local/long distance distinction continues to exist under the
12 FCC's rules.

13 Because these traditional calling distinctions continue to exist (and will continue to
14 exist for the foreseeable future), the issue of LCAs and call rating remains of
15 critical importance. As a matter of public policy, it is important that state
16 commissions, who retain jurisdiction over LCA and call rating issues, assure that
17 the rules apply equally and consistently. And, of course, state commissions must
18 follow the rules laid down by governing state statutes and the commissions' own
19 rules.

20

21 **Q. WHAT IS YOUR UNDERSTANDING OF THE ROLE OF THE**
22 **WASHINGTON COMMISSION IN ESTABLISHING OR ALTERING**
23 **LCAS?**

1 A. It is my understanding that LCAs are approved by the Commission and that if a
2 LEC or customers in a particular area wish to expand a LCA, the Commission must
3 approve that process based on a variety of factors, the central factor being
4 community of interest concerns. WAC 480-120-265(2) states:

5 In evaluating requests for expanded local calling, the commission
6 will consider whether the local calling area is adequate to allow
7 customers to call and receive calls from community medical
8 facilities, police and fire departments, city or town government,
9 elementary and secondary schools, libraries, and a commercial
10 center. The commission will consider the overall community-of-
11 interest of the entire exchange, and may consider other pertinent
12 factors such as customer calling patterns, the availability and
13 feasibility of optional calling plans, and the level of local and
14 long distance competition.

15 Thus, under the Commission's rules, LCAs are meaningful and cannot simply be
16 ignored.

17

18 **Q. WHAT IS YOUR UNDERSTANDING OF THE PROPER TEST FOR CALL**
19 **RATING IN WASHINGTON?**

20 A. The proper test for rating or classifying calls in Washington is determined by *where*
21 *the called and calling parties are physically located.*

22

23 **Q. HAS THIS COMMISSION ADDRESSED THE SUBJECT OF VNXX**
24 **TRAFFIC AND CALL RATING?**

25 A. Yes. In the Commission's order in the last AT&T/Qwest arbitration, the
26 Commission rejected language proposed by AT&T that would have defined
27 "EAS/Local Traffic" on the basis of the NXXs assigned to the parties to the call. It

1 approved Qwest’s language, which defined the same term as “traffic that is
2 originated and terminated within the same local calling area as determined for
3 Qwest by the Commission.”¹⁰ In so ruling, the Commission noted with approval the
4 Arbitrator’s concern that AT&T’s definition “is too sweeping in its potential effect
5 and has potentially unacceptable consequences in terms of intercarrier
6 compensation.”¹¹ The Commission adopted the Arbitrator’s decision, agreeing that
7 “AT&T’s alternative simply goes too far—it is too sweeping in its implications—
8 to be adopted on the record in this proceeding.”¹² The concern expressed by the
9 Commission in its order, and the potential sweeping impact, not just on Qwest but
10 the entire industry, remains a critical issue.

11
12 **Q. WHAT DO THE WASHINGTON COMMISSION RULES STATE WITH**
13 **REGARD TO LCAS AND CALL RATING?**

14 A. WAC 480-120-021 contains the following definitions:

15 “Exchange” means a *geographic area* established by a company
16 for telecommunications service *within* that area.

17 “Interexchange” means telephone calls, traffic, facilities or other
18 items that originate in one exchange and terminate in another.

19 “Local calling area” means one or more rates centers *within*
20 *which* a customer can place calls without incurring long distance
21 (toll) charges. (Emphasis added).

¹⁰ Order No.05, *In the Matter of the Petition for Arbitration of AT&T Communications of the Pacific Northwest and TCG Seattle with Qwest Corporation Pursuant to 47 U.S.C. Section 252(b)*, Docket UT-033035, ¶¶ 12-16 (WUTC, February 6, 2004).

¹¹ *Id.* ¶ 14.

¹² *Id.* ¶ 15, quoting the Arbitrator’s Report.

1 Each of these definitions make it clear that the distinction between local and
2 interexchange calling is based on the location of customers (*i.e.*, whether the call is
3 between exchanges or is it within an exchange or EAS area). As I noted above, the
4 Commission's rule on the expansion of LCAs requires the Commission to focus on
5 geographic issues, such as whether a long distance call must be made to access
6 medical facilities, schools, and government. The rule specifically requires the
7 Commission to "consider the overall community-of-interest of the entire
8 exchange;" an exchange, as noted above, is a "geographic area" established for
9 "telecommunications *within* that area."

10 These rules show that the local/interexchange distinction continues to exist and that
11 (1) the distinction is geographic in nature and (2) focuses on the ability of
12 customers to call other customers within certain geographic areas. Qwest's
13 approved tariffs are consistent with the Commission's rules.¹³ It would be difficult
14 to conceive of a clearer expression of the geographic nature of local calling in
15 Washington; it would likewise be difficult to find a more explicit description of the

¹³ Qwest's Exchange and Network Services Tariff contains the following definitions:

"Exchange" is "[a] specified geographic area established for the furnishing of communication service. It may consist of one or more central offices together with the associated plant used in furnishing service *within that area*." (WN U-40 Exchange and Network Services, § 2.1, at original page 6; emphasis added).

"Local exchange" is an "[e]xchange in which the customer's premises are located." (*Id.* at original sheet 11; emphasis added).

"Local service" is "[e]xchange access service furnished between customer premises located within the sale local service area." (*Id.*; emphasis added).

"Local service area" is "[t]he area within which exchange access service under specific rates. The area may include one or more exchanges without the application of toll charges." (*Id.*; emphasis added).

Consistent the Commission rules, the focus of these tariffs are on the geographic area defined as a local exchange area, and the relevant points for call rating are "between customer premises located with the same" LCA.

1 fact that call rating is related to customer locations.

2

3 **Q. IS VNXX CONSISTENT WITH LCAS AND PROPER CALL RATING?**

4 A. No. VNXX is inappropriate because CLECs, like those identified as Respondents
5 in this case, obtain local numbering resources from the NANPA in various parts of
6 a state that are then actually assigned to its customers with no physical presence in
7 the LCA with which the local numbers are associated. In other words, VNXX
8 effectively ignores LCAs and the call rating rules that apply in Washington. The
9 long term implications of allowing VNXX are significant.

10

11 **Q. YOU MENTIONED THAT THERE ARE NETWORK ARCHITECTURE**
12 **IMPLICATIONS OF VNXX. HOW DOES VNXX CIRCUMVENT THE**
13 **CURRENT FRAMEWORK FOR NETWORK ARCHITECTURES?**

14 A. Mr. Linse deals with this issue in greater detail. However, from my perspective,
15 VNXX undercuts the existing network architecture because it results in CLECs
16 assigning telephone numbers with NXX codes associated with a particular central
17 office to customers who are not located in the LCA associated with the telephone
18 numbers. When the customer is physically located in a different geographical area
19 the result compromises the architectural integrity of the network. With VNXX, the
20 physical location of the CLEC customer is in most cases in a LCA that would
21 require a toll call from the LCA with which the telephone number is associated.
22 The NXX is labeled "virtual" because it is an assigned number that tells callers that
23 it is in the *calling party's* LCA, rather than the *called party's* LCA. In other words,

1 a call to the ""virtual" NXX looks like a local call within the LCA to which the
2 VNXX number appears to be assigned; but in reality the call is not a local call.
3 Instead, the call is terminated in a different LCA, and perhaps even in a different
4 state. Exhibit LBB-2 attached hereto demonstrates visually how VNXX
5 circumvents the proper use of telephone numbers and is inconsistent with the
6 existing network.

7
8 **Q. WHAT ARE THE COMPETITIVE IMPLICATIONS OF VNXX?**

9 A. The competitive issue turns on a fairly simple question: Are all carriers going to
10 operate under the same set of rules or will some be exempted from them (to their
11 competitive advantage)? For example, IXCs are required to honor LCA boundaries
12 and, when they carry traffic between LCAs (whether intrastate or interstate); they
13 are required to compensate the LEC whose customer originated the traffic (through
14 originating access charges) and the LEC that terminated the traffic (through
15 terminating access charges). The entire compensation scheme for interexchange
16 traffic is built around the proper application of the distinction between local and
17 long distance calling. But if one set of competitors (IXCs) are required to play by
18 the rules relating to LCAs and call rating (and are, as a consequence, required to
19 follow the intercarrier compensation rules that flow from the application of proper
20 call rating) and another set of competitors (CLECs) can ignore those same rules
21 with impunity, then the underlying integrity of the whole call rating system is up for
22 grabs.

23 Similarly, while the rules are somewhat different for wireless, and the wireless

1 equivalents of LCAs (Metropolitan Trading Areas or “MTAs”) are much larger, the
2 distinction between local wireless calling and long distance wireless calling is still a
3 critical element to the provision of service and what intercarrier compensation
4 system will apply to that traffic. Wireless carriers must play by the rules as well.

5 VNXX, quite simply, represents an effort by one group in the industry to seek to be
6 treated in a competitively advantageous manner to the rest of the industry.

7

8 **Q. YOU MENTIONED THAT THERE ARE ECONOMIC COST CAUSATION**
9 **ISSUES RELATED TO VNXX. WHAT ARE THEY?**

10 A. The issue is whether proper cost causation principles are being applied with regard
11 to VNXX. Dr. Fitzsimmons addresses that issue at length. His fundamental
12 conclusion, that VNXX turns proper cost causation upside down, is one with which
13 I agree.

14

15 **Q. PLEASE ADDRESS THE INTERCARRIER COMPENSATION**
16 **IMPLICATIONS OF VNXX. WHAT IS THE COMPENSATION**
17 **MECHANISM FOR VOICE TELECOMMUNICATIONS TRAFFIC?**

18 A. As I stated, voice telecommunications traffic is typically categorized as either local
19 or toll, determined by the physical locations of the calling and called parties and the
20 geographical boundaries of the originating and terminating LCAs. Local traffic is
21 telecommunications traffic that originates and terminates in a geographically-
22 defined LCA between local exchange carriers. These geographically-defined areas
23 allow for an end-user customer’s unlimited local calling within these areas for a

1 Commission-approved flat rate. Intercarrier compensation between the local
2 exchange carriers for local traffic is based on reciprocal compensation rules. When
3 two carriers collaborate to complete a local call, the originating carrier is
4 compensated by its end user, and the terminating carrier is entitled to compensation
5 from the originating carrier pursuant to Section 251(b)(5) of the Act. Reciprocal
6 compensation is the payment between Qwest and CLECs for the transport and
7 termination of local traffic to its respective networks. Interexchange (toll) traffic is
8 traffic that originates and terminates between end users located in different local
9 calling areas/EAS areas commonly referred to as “long distance” traffic. The
10 FCC’s existing rules categorize traffic that originates and terminates in different
11 LCAs as interexchange traffic and applicable interexchange compensation rules
12 apply. This interexchange access traffic is compensated for in compliance with the
13 access compensation rules that have been defined since 1984 and that are still in
14 effect today.

15
16 **Q. WHY IS COMPENSATION FOR VNXX SERVICE AN ISSUE IN THIS**
17 **COMPLAINT?**

18 A. The parties do not agree on the means of compensation for VNXX traffic. Qwest
19 and CLECs disagree on the appropriate compensation for VNXX and, in various
20 arbitration proceedings, CLECs have requested that compensation language be
21 added to the definition of VNXX based on the assumption that VNXX traffic is
22 local in nature and should be included in the category of calls entitled to reciprocal
23 compensation (or if the traffic is ISP traffic, that they are entitled to terminating
24 compensation under the compensation regime of the *ISP Remand Order*). In other

1 words, even though the traffic is clearly interexchange in nature, the CLECs that
2 use VNXX, want Qwest to pay them to terminate traffic instead of looking to an
3 IXC to pay them for terminating what is interexchange traffic. With this approach,
4 instead of Qwest recovering the cost of originating and transporting interexchange
5 traffic, Qwest would deliver interexchange traffic for free and then pay CLECs to
6 terminate the traffic. In other words, CLECs propose a fundamental change
7 (indeed, a complete reversal) in intercarrier compensation for VNXX traffic.
8

9 **Q. WHY IS INTEREXCHANGE ACCESS COMPENSATION APPROPRIATE**
10 **FOR VNXX?**

11 A. With VNXX, the Respondents in this case require Qwest to originate and transport
12 interexchange calls, without compensation to Qwest, from multiple LCAs to distant
13 LCAs. These CLECs do not pay Qwest the access charges that would otherwise be
14 due on interexchange calls or a 1+800 service, nor do they purchase dedicated
15 transport to route these calls. This creates financial consequences for Qwest in that
16 it erodes the structure of financial support that interexchange access charges
17 provide to local rates, and distorts the interexchange carrier compensation scheme
18 that has been in place since 1984 (and in other forms since the 1940s).
19

20 **Q. CLECS HAVE ALSO ATTEMPTED TO CLASSIFY VNXX TRAFFIC AS**
21 **ISP TRAFFIC SUBJECT TO THE FCC'S *ISP REMAND ORDER*. PLEASE**
22 **RESPOND.**

23 A. CLECs have also attempted to cast this issue as to whether Qwest may exclude ISP

1 traffic from compensation due under the FCC's *ISP Remand Order* through
2 contract terms that identify geographic designations based on LCAs. They attempt
3 to blur the two issues, namely the distinction between a local and a toll call and the
4 distinction between a voice and an ISP call. Each must be evaluated separately. A
5 call from a customer in Seattle to a customer located in Miami, Florida is a long
6 distance call, regardless of the telephone number dialed. The fact that the customer
7 at the other end of that long distance call is an ISP does not magically transform the
8 call into a local call. And a VNXX call to an ISP physically located in Seattle, but
9 with an Olympia NPA NXX, placed by an end user customer in Olympia is not a
10 local call either. However, Qwest also makes clear that Qwest *will* pay reciprocal
11 compensation, a charge for terminating local traffic, on traffic that actually
12 originates and terminates at physical locations within the same LCA, as established
13 by the Commission. If the call is a voice call, the Commission ordered that
14 reciprocal voice rate applies (subject to the CLEC's election under the mirroring
15 rule). If the call is an ISP call, the FCC ordered that the ISP rate applies (which is
16 now capped at \$.0007 per MOU). Qwest also makes clear that calls that originate
17 and terminate at locations in different LCAs are not local calls and not entitled to
18 reciprocal compensation for voice traffic or terminating compensation under the
19 *ISP Remand Order* for ISP traffic. The "VNXX" number is not and should not be
20 determinative. And, of course, as stated earlier, if the VNXX call is an ISP call, no
21 terminating compensation is due, just as it would not be due on a typical voice call.
22 The fact that the call is an ISP call grants it no special status.

23

24 **Q. IF ISP TRAFFIC AND VOICE TRAFFIC ARE TREATED THE SAME FOR**

1 **THE VNXX DEFINITION, HOW IS A CALL DETERMINED TO BE**
2 **LOCAL OR TOLL?**

3 A. In regard to defining VNXX traffic, ISP traffic should be treated no differently than
4 voice traffic. In determining if a call is local or long distance, the location of the
5 origination and termination is the decisive factor: calls that physically originate and
6 terminate within the same LCA are rated as local calls. The ESP Point of Presence
7 is the point of termination (for a call to an ISP) and origination (for a call
8 terminating from a VoIP provider). Calls routed through a point of interface, which
9 are delivered to an end user (such as an ISP) **outside** of the originating LCA, are
10 interexchange calls. VNXX services that deliver traffic to an ISP that is not located
11 within the same LCA as the originating LCA are simply interexchange toll calls and
12 must remain subject to the access charge provisions that govern interexchange toll
13 traffic.

14

15 **Q. DO CLECS CONFUSE THE ISSUE OF ISP TRAFFIC WITH VNXX**
16 **ISSUES?**

17 A. Yes. VNXX is not just a phenomenon associated solely with ISP calls, although it
18 is in that context that VNXX issues usually arise. A VNXX call can be to an ISP
19 such as AOL located in another town or to a voice customer such as the local
20 hardware store in that other town. VNXX arrangements can exist for both ISP and
21 voice traffic. The issue of VNXX traffic (whether ISP or other types of traffic) has
22 not been substantively addressed by the FCC, but it has been extensively litigated
23 before many state commissions. Language from the *ISP Remand Order* is
24 instructive:

1 Congress preserved the pre-Act regulatory treatment of all the
2 access services enumerated under Section 251(g). These services
3 thus remain subject to Commission jurisdiction under Section
4 201 (or, to the extent they are *intrastate* services, they remain
5 subject to the jurisdiction of state commissions), whether those
6 obligations implicate pricing policies as in *Comptel* or reciprocal
7 compensation. *This analysis properly applies to the access*
8 *services that incumbent LECs provide (either individually or*
9 *jointly with other local carriers) to connect subscribers with ISPs*
10 *for Internet-bound traffic.*¹⁴

11 The FCC was focused upon problems unique to the compensation mechanism that
12 applied to traffic where the ISP was located in the same LCA. While the FCC has
13 opened a docket to scrutinize these issues as a part of an overall examination of
14 intercarrier compensation,¹⁵ the applicable law has not changed. Until the FCC
15 takes further action in its intercarrier compensation docket, expanding reciprocal
16 compensation to include calls from across the state or country would be unlawful.

17

18 **Q. HOW DOES VNXX TRAFFIC BYPASS APPROPRIATE ACCESS**
19 **SERVICES?**

20 A. The Respondents in this case use VNXX numbers to allow end users to make what
21 appears to them to be local calls. Through the use of a routing number, the calls are
22 routed not to destinations in the same local calling area, but rather over Qwest's
23 facilities to a CLEC that in turn terminates the calls to destinations in distant local
24 calling areas. At least some of the Respondents use Qwest's Local Interconnection
25 Service ("LIS") trunks to transport VNXX calls that terminate to locations outside

¹⁴ *ISP Remand Order* ¶ 39 (emphasis added, footnote omitted).

¹⁵ *In the Matter of Developing a Unified Intercarrier Compensation Regime*, 16 FCC Rcd 9610 (2001) ("*Intercarrier Compensation NPRM*").

1 of the originating LCA. With traditional long distance service, calls that terminate
2 outside of the LCA are routed to an interexchange carrier over Switched Access
3 Service trunks and terminate to locations across the country where appropriate
4 access charges and end user toll charges would apply. Although both VNXX and
5 toll traffic may originate in Washington and terminate to locations across the
6 country, only VNXX avoids carrier access charges and end user toll charges.

7

8 **Q. WHY DOES QWEST BELIEVE VNXX SHOULD BE PROHIBITED?**

9 A. VNXX traffic is traffic that originates and terminates at physical locations that *are*
10 *not* within the same LCA. Carriers seeking to receive reciprocal compensation on
11 VNXX services are attempting to redefine existing tariffed services and
12 Commission-established local boundaries and categorize them in a unique way in
13 an attempt to collect reciprocal compensation and avoid access charges. Reciprocal
14 compensation as used in the Act is the charge to terminate “local” traffic. These
15 VNXX numbers, and the facilities that would be used to connect to locations where
16 such calls would be terminated, are interexchange in nature and are therefore not
17 subject to reciprocal compensation. By attempting to fool the systems with a local
18 number, the call detail itself would not indicate that any compensation associated
19 with this interexchange or toll call should be made. The assignment of telephone
20 numbers in the VNXX manner should not result in inter-exchange calls between
21 two communities not in the same LCA to masquerade as local calls.

22 The attorneys can address these issues in their briefs, but Qwest’s position is not
23 unique to this case on the question whether VNXX should be banned. For example,

1 I am aware of recent cases—such as a recent First Circuit decision that upholds a
2 decision of the Vermont board and a recent decision of the Oregon commission—
3 where VNXX routing has been banned by state commissions.
4

5 **Q. IN SUMMARY, WHAT IS QWEST’S POSITION FOR VNXX**
6 **COMPENSATION?**

7 A. Under the Telecommunications Act of 1996, Qwest has a duty to provide
8 interconnection with its local exchange network “on rates, terms and conditions that
9 are just, reasonable, and nondiscriminatory” and in accordance with the
10 requirements of Section 252 of the Act.¹⁶ Section 252 of the Act in turn provides
11 that determinations by a state commission of the just and reasonable rate for the
12 interconnection shall be “based on the cost...of providing the interconnection,”
13 “nondiscriminatory” and “may include a reasonable profit.”¹⁷ As the FCC has
14 recognized, these provisions make clear that CLECs must compensate incumbent
15 LECs for the costs incumbent LECs incur to provide interconnection.¹⁸ Qwest has
16 fulfilled its duty to provide interconnection by developing LIS for CLECs to
17 interconnect with Qwest for the mutual exchange of “local” traffic. With VNXX
18 service, however, Qwest is not being compensated for originating and transporting
19 “interexchange” calls and does not receive the access compensation that is due for
20 carrying these interexchange calls. It makes sense that the cost causer compensates

¹⁶ 47 U.S.C. §251(c)(2)(D).

¹⁷ 47 U.S.C. §252(d)(1)

¹⁸ See *Implementation of the Local Competition Provisions in the Telecommunications Act of 1996*, ¶ 209, 11 FCC Rec. 15499 (August 8, 1996), *aff’d in part and rev’d in part*, *Iowa Utils. Bd. v. FCC*, 525 U.S. 1133 (1999) (the “*Local Competition Order*”).

1 Qwest for interconnection and transport costs. If the cost causer (CLECs utilizing
2 VNXX service) do not pay, then Qwest end users would have to bear the cost,
3 including customers who have no interest in surfing the internet via dial-up ISP
4 services. Qwest's end users should not have to bear the burden of paying for
5 CLEC's ISP service.

6
7 **V. RESPONSE TO CLEC ARGUMENTS IN SUPPORT OF VNXX**

8 **Q. IN YOUR EXPERIENCE IN OTHER CASES, HAVE CLECS MADE**
9 **ARGUMENTS AS TO WHY THEY BELIEVE VNXX IS LAWFUL AND**
10 **SHOULD BE ALLOWED?**

11 A. Yes. I have seen a variety of arguments advanced by CLECs, but they come down
12 to three basic theories:

13 **The NXX Theory:** This argument is that call rating rules are not based on the
14 actual location of the parties to the call, but are based solely on the telephone
15 numbers assigned to the parties to the call. If the parties to a call have NXXs
16 assigned to the same LCA, it does not matter where the customers actually are
17 physically located or what Qwest must do to deliver that traffic, because if the
18 numbers are local then the call is local. This argument is based on the
19 euphemistic phrase "locally-dialed call." In other words, according to these
20 CLECs, proper call rating rules are based on telephone numbers and not
21 customer location.

22 **The Point of Interconnection ("POI") Theory.** This is a relatively new
23 argument. This theory states that if the CLEC maintains a POI in a LCA then

1 all traffic originated in that LCA with Qwest customers and delivered to the
2 CLEC POI in the same LCA is local traffic.

3 **The FX Theory.** This argument is based on the claim that VNXX is just like
4 Qwest's FX service and that it should therefore be allowed and that the
5 intercarrier compensation for VNXX traffic should be based on treating all
6 such traffic as local in nature.

7 Each of these theories is deeply flawed and should be rejected by the Commission.
8

9 **Q. PLEASE ADDRESS WHAT YOU SEE AS THE FUNDAMENTAL FLAW IN**
10 **EACH OF THESE THEORIES?**

11 A. The single most fundamental flaw in the support of VNXX is that each CLEC
12 theory attempts to create a service that abandons the call rating system that has
13 governed the industry for decades throughout the United States: that local and
14 interexchange calls are defined by the relative locations of the parties to the call.
15

16 **Q. PLEASE ADDRESS THE VALIDITY OF THE NXX THEORY.**

17 A. Earlier I addressed the rules, the AT&T arbitration decision, and Qwest tariffs that
18 make it clear that Washington call rating rules are based on the location of the
19 parties to a call. Those rules are consistent with historical call rating.

20 The fact is that historically telephone companies have routinely assigned an end
21 user a telephone number that identifies the LCA in which the end user was located.
22 In other words, the NXX assigned to a customer was specifically designed to

1 identify the general geographical location of the customer. It was not until certain
2 CLECs began obtaining numbers associated with LCAs that were assigned to
3 customers with absolutely no physical presence in that LCA that geographical
4 information related to calls became suspect. That is not the fault of the network,
5 nor does it represent an effort by carriers or regulatory commissions to redefine
6 local calls. It is the CLECs that disregard the geographical nature of calls as
7 mandated by traditional call rating rules. As Mr. Linse points out, the telephone
8 numbers assigned by CLECs in Washington are telephone numbers that should,
9 according to the COCAG, correspond to discrete geographic areas.

10

11 **Q. THE NXX THEORY SUGGESTS THAT THE GEOGRAPHIC LOCATION**
12 **OF CUSTOMERS IS NO LONGER RELEVANT. DO YOU AGREE?**

13 A. No. There are two major problems with such an argument. The first, of course, is
14 that the entire PSTN and the regulatory structure related to retail service pricing and
15 intercarrier compensation are based on the LCA of the parties to a call. FCC
16 jurisdiction over interstate calls is determined by the NPA/NXX of the calling and
17 called parties because those NPA/NXXs have traditionally related to geographic
18 areas. State telephone rates are established recognizing both local and intrastate toll
19 calls based on this numbering scheme. Intrastate access and exchanges of traffic
20 between independent companies is based on this 100-year-old convention. Thus,
21 this issue has a rational historical basis that is still recognized in the rules that apply
22 in Washington. These rules are not just an arbitrary scheme. They have governed
23 the industry for more than 100 years, and are based on good reasons that still exist
24 today.

1 The second problem with the NXX theory is that PSTN numbers must relate to the
2 geographic locations of the end-user customers to maintain the current structure of
3 the PSTN, or call rating will break down entirely. When CLECs connect to the
4 PSTN, and assign NANPA provided telephone numbers to their end-user
5 customers, they must comply with the same rules that apply to the hundreds of
6 companies whose networks comprise the PSTN.

7

8 **Q. CAN YOU PROVIDE AN EXAMPLE THAT ILLUSTRATES AN**
9 **UNINTENDED CONSEQUENCE THAT COULD RESULT FROM**
10 **ABANDONING CUSTOMER LOCATION AS A RELEVANT FACTOR IN**
11 **ASSIGNING NUMBERS?**

12 A. Yes. The Local Exchange Routing Guide (LERG) is a database that identifies
13 switches and telephone numbers associated with those switches, based on the
14 NPA/NXX codes assigned by NANPA. Of course, the entire basis for whether to
15 assess toll charges to a call relate to the specific physical locations at which traffic
16 bound for particular switches may be delivered. To the extent that telephone
17 numbers lose their geographic significance, then next-door neighbors calling each
18 other could each have telephone numbers assigned to different LCAs, and parties
19 on opposite ends of the state could in theory be in the same LCA (in both
20 circumstances, of course, the concept of a LCA becomes meaningless). The point
21 is that there are compelling policy reasons (completely aside from legal mandates,
22 telephone numbering rules, or technical capabilities) to maintain the system of
23 rating calls based on physical location; telephone numbers must retain their
24 geographic associations.

1 **Q. PLEASE ADDRESS THE ISSUE FROM A COMMON SENSE**
2 **PERSPECTIVE.**

3 A. From a purely common sense perspective, the NXX theory does not make sense and
4 ignores a fundamental building block of telecommunications in Washington and in
5 every other state (i.e., the concept of LCA). As I discussed earlier, the Washington
6 Commission has historically defined LCAs based primarily on the existence or non-
7 existence of a community of interest among the residents and businesses of specific
8 geographical locations.

9 The language used to distinguish among different types of calls likewise is
10 focused on geography. For example, the use by telephone companies and state
11 commissions of the word “local” is not an accident: the concept of calling *within*
12 a certain specified geographical area where the residents and businesses share a
13 geographically-based community of interest has been plainly distinguished from
14 calls *between* geographical areas, often hundreds of miles apart, where no such
15 community of interest exists. Historically, the Washington Commission has
16 treated local calls (*i.e.*, where the parties to the call are in the same geographical
17 area) different from toll calls. State commissions have recognized the community
18 of interest within certain defined rural areas or even within large metropolitan
19 areas, and have therefore required that telephone companies provide service
20 *within* these defined geographical areas on a flat-rated basis. These requirements
21 have been based on the idea that calls to and from neighbors and local businesses
22 within an area of community of interest should not be constrained by per-minute
23 charges. Thus, prices for local service in those areas have traditionally been flat-
24 rated so that no extra charges apply, no matter how much time a customer spends

1 on the telephone calling others located in the same LCA. To suggest that the
2 concept of local service and local calls is based purely on telephone numbers and
3 not on geographical proximity is incorrect and historically inaccurate.
4

5 **Q. DO THE RECOGNIZED DISTINCTIONS BETWEEN LOCAL AND TOLL**
6 **HAVE PRICING DIFFERENCES AS WELL?**

7 A. Consistent with the underlying logic of creating geographically-based local calling
8 areas, state commissions and telephone companies have also historically based the
9 pricing of toll calls on the relative lack of geographical proximity. Thus, telephone
10 companies, regulatory commissions, and the public refer to such calls as “long
11 distance” calls. The phrase “long distance” (like the word “local”) has a direct
12 geographical component inherent in its name. Likewise, another synonym for long
13 distance calls—interexchange calls—suggests that the calls originate in one
14 exchange and terminate in another distant exchange. Thus, a simple analysis of the
15 language used to describe the two types of service (“local calls” versus “long
16 distance calls”) demonstrates the underlying error of the CLECs’ position. The
17 defining and distinguishing factor for local and toll calling has been geographical
18 proximity (or the lack thereof).

19

20 **Q. PLEASE ADDRESS THE VALIDITY OF THE POI THEORY.**

21 A. The fundamental issue is actually quite straightforward, which is how a local call
22 should be defined and rated: whether it should be based on the location of the two
23 parties who make the call or whether it should be based on the location of the

1 calling party and the POI between the switches of Qwest and a CLEC. The POI
2 theory is completely inconsistent with Washington call rating rules, has no
3 historical validity, and would be extremely bad policy, with major potential
4 negative consequences.

5 As I discussed above, the proper means test for rating or classifying calls in
6 Washington (which, in turn, helps define what calls are local calls) is determined by
7 *where the called and calling parties are physically located*. On the other hand, the
8 POI proposal is novel, and represents a dramatic departure from the call rating
9 method that has been used in this state for decades. Instead of examining the
10 physical location of the parties to the call, proponents of the POI theory use the
11 location of a POI and the calling party as the measuring points to rate a call. As I
12 will discuss below, this approach is unprecedented in my experience. A POI is not
13 (and never has been) a relevant location for determining the proper rating of calls in
14 Washington (or, to the best of my knowledge, anywhere else in the country).

15

16 **Q. WHAT IS A POINT OF INTERCONNECTION (“POI”)?**

17 A. A POI is simply the point where two telecommunications companies interconnect
18 the facilities that link their respective switching equipment. Typical language in
19 ICAs defines a POI as “a demarcation between the networks of the two (2) LECs
20 (including a LEC and CLEC). The POI is that point where the exchange of traffic
21 takes place.” In other cases, there has been no disagreement as to the meaning of
22 POI. It is simply the physical point where the trunks connecting a Qwest switch
23 and a CLEC switch are connected so traffic from each parties’ network will flow to

1 the network of the other carrier.

2

3 **Q. IS THE CONCEPT OF A POI NEW TO THE TELEPHONE INDUSTRY?**

4 A. No. A POI is not something that is unique to CLECs and ILECs. The concept of
5 POI has existed for well over one hundred years, as long as telephone companies
6 have connected to each other.

7

8 **Q. DO IXCS HAVE POIS IN A LCA?**

9 A. Yes, IXCs have POIs. It is not uncommon (indeed, it is quite typical) for an IXC to
10 pick up traffic within a LCA on its own network and transport it to an IXC switch
11 located in a different LCA. In fact, an entire industry, CAPs (“Competitive Access
12 Providers”), developed for that specific purpose. From the point where the call is
13 handed off, the call may be delivered to a customer in another distant LCA. The
14 fact that the POI where the IXC picked up the call was within a particular LCA has
15 never been relevant for call rating purposes. The fact that a calling party and an
16 IXC’s POI are in the same LCA does not transform calls originated in the LCA
17 where the IXC POI is located but delivered to a called party located in a different
18 LCA into a local call. Based on the rating method that has existed for decades, such
19 traffic is interexchange traffic. That the traffic may have been exchanged with the
20 IXCs POI in the LCA has no impact on call rating, which has always been based on
21 where the called and calling parties are located.

22

23 **Q. WOULD THE ACCEPTANCE OF A POI THEORY CHANGE THE**

1 **DEFINITION OF A LOCAL CALL IN WASHINGTON?**

2 A. Yes. The POI theory would represent a dramatic departure from decades of call
3 rating history. The effect would be very simple. The CLEC, through VNXX
4 arrangements, would be able to arrange the functional equivalent to an incoming 1-
5 800 toll service. But in any LCA in which a CLEC has a POI, all that traffic would
6 be treated as local traffic, even though there is no customer located at the POI, no
7 traffic stops at the POI, and the traffic, after going through the CLEC's switch, is
8 delivered to the CLEC's customer in a different LCA.

9 Yet in precisely the same circumstances (*i.e.*, where an IXC has a POI in one LCA,
10 but arranges an incoming 800 service for a customer in a different LCA), the traffic
11 is *not* local, and the IXC, pursuant to existing access charge rules, pays both
12 originating and terminating access charges for that traffic. Furthermore, an IXC
13 cannot charge reciprocal compensation nor can an IXC purchase TELRIC-rated
14 transport from an ILEC. A central tenet of the 1996 Act was to assure that
15 competitors operated on "a level playing field." Yet the POI theory would be
16 blatantly discriminatory in favor of the CLEC. It sets up a system in which a CLEC
17 would be able to operate in a manner that is highly advantageous to it, while IXCs,
18 with whom that CLEC is directly competing for transporting this interexchange
19 traffic, are the victims of a discriminatory scheme. At the same time, Qwest would
20 be subject to wildly different intercarrier compensation schemes for traffic that is
21 identical.

22
23 **Q. DOES QWEST HAVE POINTS OF INTERCONNECTION WITH OTHER**

1 **LOCAL EXCHANGE CARRIERS IN WASHINGTON?**

2 A. Yes, Qwest interconnects with virtually all other local exchange providers,
3 including most independent telephone companies. In many instances the POI
4 between Qwest and an independent telephone company lies within the local calling
5 boundaries of that independent company. But the location of POIs between the
6 switches of Qwest and Washington independent companies has never been relevant
7 to whether calls between customers of Qwest and the independent company are
8 treated as local or long distance. Just because the trunks to the Qwest switch extend
9 into the LCA of an independent company does not cause the end user customers
10 that Qwest serves to be treated as though they were physically located with the
11 territory of the independent company. Just as in the IXC scenario, call rating
12 between an Oregon independent telephone company customer and a Qwest
13 customer is based solely on where those customers are located, not where the two
14 companies choose to place its POI. In the end, call rating is still determined by the
15 LCA where the Qwest end user is located and the LCA in which the independent
16 company's end user is located. Thus, the POI theory would become a major
17 unprecedented exception to call rating in Washington. Naturally, if the POI theory
18 were accepted, the entire call rating system in Washington would then be called into
19 question. The implications of a wholesale change in call rating in Washington
20 could result in negative unintended consequences.

21

22 **Q. TO YOUR KNOWLEDGE HAS POI EVER BEEN USED AS A POINT FOR**
23 **RATING CALLS AS LOCAL OR INTEREXCHANGE?**

24 A. No. I have been in the telecommunications industry for nearly 30 years and the

1 demarcation point between telephone company trunks has never been used as the
2 relevant point to rate a call between customers of the two companies. Even when
3 the call itself was routed in circuitous routes, the final test has always been the
4 locations of the calling and called parties to the call. Telephone consumers in
5 Washington have a clear understanding (VNXX being the most obvious exception)
6 of where they are calling in terms of the person they are attempting to reach. It is
7 usually very clear to the caller whether a local or a long distance call is being made.
8 However, it is unlikely that any end user customers (unless they work in the
9 network department for a telephone company) would have the slightest idea where
10 a POI between Qwest and a CLEC or Qwest and an ILEC is located.

11
12 **Q. PLEASE COMMENT ON THE ARGUMENT THAT VNXX TRAFFIC IS**
13 **THE SAME AS QWEST'S FX SERVICE.**

14 A. CLECs originally argued that they should be permitted to offer local service from a
15 single switch in the LATA. They did not want to put a switch in each LCA so
16 Qwest provided Single Point of Presence ("SPOP") permitting a CLEC to use a
17 single switch for multiple LCAs within a LATA. CLECs did not want the
18 obligation of picking up and delivering traffic at the local boundaries on their own
19 facilities and so Qwest offered LIS to transport local traffic. The result is that, for
20 the most part, CLECs have no switch in most LCAs, no collocation in the LCA to
21 hand traffic off to a dedicated facilities, no transport network of their own other
22 than LIS (an interconnection product created for the exchange of local traffic); yet,
23 to justify VNXX, they claim they are just acting like the ILEC that offers FX. The
24 fact is that the only similarity between an FX call and a VNXX call is that both are

1 answered in a different LCA than where the call originated. Other than that, the
 2 two approaches could not be more different. A VNXX scheme is nothing like FX
 3 service in terms of their regulatory treatment (which, after all, is the primary issue
 4 in this case). Focusing on three major areas of costs and cost recovery, the
 5 following chart illustrates the dramatic difference between a VNXX scheme and
 6 FX.

7 **Comparison of VNXX Service v. Qwest FX Service**

8 **For Calls Outside the Local Calling Area**

9 **VNXX Service**

Qwest FX Service

<p>Local Origination Costs: The CLEC pays nothing to compensate Qwest for the use of Qwest's local network (loops, switches, etc.) within each LCA.</p>	<p>Local Origination Costs: The Qwest FX customer buys local exchange service at tariffed rates in the LCA where traffic originates, in the local calling area at the applicable tariffed rate.</p>
<p>Transport Costs: CLEC's typically assert that they have no responsibility for any costs on Qwest's side of the POI. However, in states where CLECs are required to pay for transport, they assert that they should only pay TELRIC-based transport charges.</p>	<p>Transport Costs: The Qwest FX customer pays for transport to its answering location at retail private line transport rates.</p>
<p>Termination Costs: CLECs claim the right to charge \$.0007 to terminate all long distance ISP traffic (VNXX).</p>	<p>Termination Costs: The Qwest FX customer is treated as an end user and as such may not charge terminating compensation.</p>

10

11 **Q. PLEASE EXPLAIN THE PRINCIPAL DIFFERENCES.**

12 A. There are three major differences. The difference that has been addressed most
 13 often in state commission orders and court decisions is the fact that FX customers
 14 are not only financially responsible for the transport of the FX traffic from the LCA

1 where calls originate to the LCA where the calls are answered, but are also
2 responsible to pay tariffed private line/special access rates for that transport. On the
3 other hand, with VNXX, the CLEC's disclaim all responsibility to pay for any
4 transport at all (and in other states, where the state commissions have mandated that
5 the CLEC pay for transport, the CLEC asserts that it should only be required to pay
6 for TELRIC-rated transport; TELRIC rates, which is a cost methodology designed
7 to price wholesale services to be used for local exchange competition, are
8 dramatically lower than the private line transport rates paid by FX customers.

9 The second major difference is critical, but is often overlooked. The FX customer
10 is also required to purchase local exchange service in the originating LCA at the
11 local exchange rates in that LCA (in other words, FX service is really a
12 combination of two services: local exchange service plus private line transport).
13 Local exchange rates, of course, are the rates that allow customers to make local
14 calls within the exchange, and are designed (at least in part) to compensate Qwest
15 for the large investments it has made in loop, feeder, and distributions facilities in
16 each LCA, plus the cost of the switch in that LCA. In other words, the FX
17 customer pays Qwest (at applicable tariff rates) for the use of the local network
18 within the LCA. In the IXC context, an IXC, even if it has a POI in a LCA, pays
19 originating access charges to Qwest. Thus, like the FX customer, an IXC
20 compensates Qwest for the use of the loops and switches that are absolutely
21 essential to the ability of its long distance customers to originate long distance calls.
22 But in the VNXX situation, CLECs (even if they are compelled to pay TELRIC-
23 based transport) pay absolutely nothing to compensate the LEC for the use of the
24 local loops and switches that are just as necessary for them to provide the service to

1 their ISP customers that allows for the origination of traffic within a LCA. In other
2 words, it is just as essential for a CLEC and its ISP customers to have access to
3 Qwest's local facilities and switching as it is for an FX customer or an IXC. The
4 FX and IXC customers compensate Qwest for the use of these facilities, but a
5 CLEC using VNXX pays nothing.

6 The third difference relates to termination of traffic. As an end user, an FX
7 customer has no right to seek terminating compensation. Nor does an IXC—
8 indeed, the IXC must also pay terminating access charges to the LEC that
9 terminates the IXC's interexchange traffic. Yet here again CLECs seek a dramatic
10 advantage. Not only does a CLEC disclaim all financial responsibility for
11 origination and transport costs, but it also demands that the Qwest pay it \$.0007 to
12 terminate traffic for which the CLEC and its ISP customers are cost causers.

13 Exhibit LBB-3 graphically illustrates the differences discussed above.

14 While Qwest believes strongly that VNXX traffic should be prohibited or subject to
15 originating access charges (since it is identical to IXC traffic), if Qwest is not
16 allowed to recover originating access charges it would be egregiously unfair to
17 require it at the same time to provide LATA-wide transport and to pay terminating
18 compensation to CLECs on VNXX traffic.

19

20

VI. QWEST'S VNXX STUDY

21 **Q. ARE YOU FAMILIAR WITH QWEST'S CROSS7 SYSTEM?**

22 A. Yes, I am familiar with the CroSS7 system (which is an acronym that stands for

1 Call Recording Over Signaling System 7). The CroSS7 system is Qwest's
2 recording system for traffic carried over trunks using Signaling System 7 ("SS7")
3 signaling that interconnect Qwest with Competitive Local Exchange Carriers
4 ("CLECs") and Wireless Service Providers ("WSPs").
5

6 **Q. PLEASE BE MORE SPECIFIC ABOUT WHAT PRECISELY CROSS7**
7 **RECORDS ARE AND HOW THOSE RECORDS ARE USED?**

8 A. Qwest's CroSS7 system creates records from information extracted from the SS7
9 signaling for traffic carried over the SS7-signaled LIS trunk groups interconnecting
10 Qwest with CLECs and SS7-signaled Type 2 trunks interconnecting Qwest with
11 WSPs. Qwest uses the CLEC originating CroSS7 records for billing to the CLECs.
12 These CroSS7 records are also summarized on a monthly basis into several reports
13 that are used for validation of billed charges. The "Traffic Routing" reports, used in
14 Qwest's VNXX analyses, provide information by state, direction of the call (e.g.
15 originated by Qwest or originated by the other carrier), carrier (CLEC or WSP),
16 type of trunk group (tandem or end office) with completed messages and
17 conversation (or "talk time") minutes categorized as follows:

- 18 • Qwest Local/Extended Area Service ("EAS")
- 19 • Non-Qwest Local/EAS
- 20 • Qwest IntraLATA Toll – Exchange Access or Intra Local Access and
21 Transport Area ("LATA") toll traffic that originates or terminates to a
22 Qwest telephone number. Qwest is not necessarily the toll provider
23 for these calls.
- 24 • Non-Qwest IntraLATA Toll – Exchange Access or IntraLATA toll
25 traffic that originating or terminates to a non-Qwest telephone number

- 1 • InterLATA toll traffic – InterLATA or intraLATA toll traffic carried
2 by an interexchange carrier
- 3 • No-Calling Party Number or No-Charged Party Number (or an invalid
4 originating number)
- 5 • Error

6 Qwest uses the Qwest Local/EAS originating and terminating minutes of use by
7 trunk group from the Traffic Routing reports in its VNXX analyses.

8

9 **Q. PLEASE PROVIDE A LAYPERSON’S DESCRIPTION OF HOW CROSS7**
10 **CAPTURES THE USAGE DATA ON LIS TRUNKS?**

11 A. I am not a computer systems engineer or a programmer, but I am generally familiar
12 with how CroSS7 works. There may be a number of SS7 messages that are
13 signaled during the setup, connection, and conclusion of a completed call. With
14 information that is extracted from the messages from the SS7 signaling system,
15 Cross7 call detail records are created that include the following information:

- 16 • The originating telephone number (charged party number and/or
17 calling party number)
- 18 • The “Common Language Location Identifier (“CLLI”) of the
19 originating switch at the end of the LIS trunk.
- 20 • The Access Customer Name Abbreviation (“ACNA”) for that
21 originating switch.
- 22 • The time and date that the call originated.
- 23 • The terminating telephone number.
- 24 • The CLLI of the terminating switch at the end of the LIS trunk.

- 1 • The ACNA associated with the terminating switch.
- 2 • The Local Routing Number if the terminating number was ported to
- 3 another carrier.
- 4 • The time and date that the call was completed.
- 5 • The trunk identification for the LIS trunk that carried the call.
- 6 • The number of conversation minutes of use.

7 These records are summarized and sorted by jurisdiction and by whether the call
8 transits Qwest or not in the creation of the CroSS7 Traffic Routing reports that are
9 used for Qwest's VNXX analyses.

10

11 **Q. ARE YOU FAMILIAR WITH QWEST'S TUMS SYSTEM?**

12 A. Yes, I am familiar with Qwest's TUMS system (which is an acronym that stands for
13 Trunk Usage Measurement Set-Up). The TUMS system is a repository of
14 information regarding the trunk groups utilizing SS7 signaling that interconnect
15 Qwest with CLECs and WSPs and are monitored by CroSS7.

16

17 **Q. PLEASE BE MORE SPECIFIC ABOUT THE INFORMATION**
18 **AVAILABLE IN TUMS AND HOW THAT DATA IS USED?**

19 A. Information for new connects, augments or disconnected trunk groups are included
20 in the TUMS data base reflecting order activity. For Qwest's VNXX analysis,
21 information is pulled from the "Trunk Group by LATA/ACNA" report option. This
22 report option identifies each trunk group utilizing SS7 signaling for each CLEC or
23 WSP within a LATA; and for each trunk group, the report includes information

1 regarding its size (number of DS0 equivalent voice grade circuits), the CLLI of the
2 Qwest switch, the CLLI of the point of interconnection between Qwest and the
3 CLEC or WSP, the CLLI of the CLEC or WSP switch, the trunk group identifier
4 (including information about whether the trunk group was designed to carry local or
5 toll traffic) and whether the trunk group is active or disconnected. Of course,
6 information regarding the CLLI for a CLECs or WSPs switch also is available from
7 the Telcordia's LERG.

8

9 **Q. PLEASE PROVIDE A LAYPERSON'S DESCRIPTION OF HOW TUMS**
10 **CAPTURES THE INFORMATION REGARDING THE TRUNK GROUPS**
11 **INTERCONNECTING QWEST AND THE CLECS AND WSPS?**

12 A. I am not a computer systems engineer or a programmer, but I am generally familiar
13 with how TUMS works. TUMS automates the loading of trunk data into the
14 CroSS7 system for Automatic Message Accounting (AMA) recording purposes.
15 The TUMS system utilizes existing Qwest systems to access the trunk service order
16 and design data. As new trunk service orders are received and designed the TUMS
17 database is updated with this data and that data is checked for validity.

18

19 **Q. IT IS MY UNDERSTANDING THAT THROUGH THE USE OF CROSS7**
20 **AND TUMS, QWEST IS ABLE TO CREATE A MINIMUM ESTIMATE OF**
21 **THE AMOUNT OF VNXX TRAFFIC A CLEC IS GENERATING IN**
22 **WASHINGTON. IS THAT CORRECT?**

23 A. Yes. Qwest's calculations of the amount of VNXX traffic is developed by

1 identifying those trunk groups that may carry VNXX traffic and analyzing the
2 originating and terminating Qwest Local/EAS minutes of use data from the CroSS7
3 Traffic Routing report. The identification of those trunk groups that may carry
4 VNXX traffic is based on (1) a review of the CLLI locations of both the Qwest and
5 CLEC switches for each LIS trunk group using SS7 signaling based on TUMS
6 information and (2) determination of whether those two CLLIs are located within
7 the same LCA based on information contained in Section 5.1.1.B, Local Exchange
8 and Local Calling Area, of Qwest Corporation's Exchange and Network Services
9 Catalog No. 2 in Washington.

10

11 **Q. USING THE INFORMATION DESCRIBED ABOVE AND OTHER**
12 **AVAILABLE INFORMATION, HAS QWEST DEVELOPED A**
13 **METHODOLOGY FOR DETERMINING IF A CLEC IS USING VNXX?**

14 A. Yes.

15

16 **Q PLEASE DESCRIBE THE METHODOLOGY?**

17 A. The first step of the VNXX methodology is to identify those LIS trunks using SS7
18 signaling that have the potential for carrying VNXX traffic. The universe of LIS
19 trunks using SS7 signaling for each CLEC is available from TUMS. Based on the
20 EAS or LCA information contained in Section 5.1.1.B. of Qwest Corporation's
21 Exchange and Network Services Catalog No. 2 in Washington, a review is
22 conducted for each trunk group to determine whether the CLLIs of the Qwest and
23 CLEC switches are located within the same EAS area or LCA. With this

1 methodology, Qwest uses the switch location of the CLEC as a proxy for the
2 terminating location of a call that is destined for a CLEC customer because Qwest
3 does not know where the actual customer of the CLEC is physically located. If the
4 CLEC and Qwest switches are not within the same EAS area or LCA, those trunk
5 groups are identified for further investigation.

6 The second step of the VNXX methodology is to analyze the balance of originating
7 and terminating Qwest local/EAS minutes of use exchanged on each of those trunks
8 groups where the CLEC and Qwest switches are not within the same EAS area or
9 LCA. The purpose of this step is identify those trunk groups where Qwest
10 EAS/Local minutes of use are out-of-balance, i.e. the traffic is disproportionately
11 terminating to the CLEC, and quantify the associated suspected VNXX minutes of
12 use. If Qwest determines from the CroSS7 Traffic Routing report data that it
13 terminates more Qwest EAS/Local minutes of use to the CLEC than the CLEC
14 terminates to Qwest, the difference is calculated. If, based on the CroSS7 data, the
15 CLEC terminates more Qwest EAS/Local minutes of use to Qwest than Qwest
16 terminates to the CLEC, the difference is shown as zero.

17 The final step of the VNXX methodology is to calculate the percentage of
18 suspected VNXX traffic. That percentage is calculated by summing the suspected
19 VNXX minutes of use identified in the second step above and dividing that sum by
20 the total number of Qwest local/EAS minutes of use terminated to the CLEC for all
21 CroSS7 monitored LIS trunk groups in the study period, generally one month.

22

23 **Q. IS IT QWEST'S POSITION THAT THE CLEC'S SWITCH IS THE**

1 **RELEVANT LOCATION FOR OBTAINING PRECISE NUMBERS OF**
2 **VNXX MINUTES OF USE?**

3 A. No. The proper location for a precise assessment of VNXX traffic requires two
4 basic pieces of information: the location of the calling party (which is information
5 that Qwest has in its possession for Qwest originating traffic), and also the physical
6 location where the traffic is delivered to the CLEC's customer—in the case of
7 VNXX traffic, Qwest's experience is that these customers are usually, though not
8 necessarily, ISPs. The physical location of the CLEC's customer is not information
9 that CLECs provide to Qwest. Thus, in an effort to make a rough, but conservative,
10 minimum estimate of VNXX traffic, Qwest used the CLEC's switch location that is
11 available from TUMS as rough proxy for the customer location, recognizing that in
12 many cases, the CLEC customer will be located in a LCA different than the LCA
13 where the switch is located. It is for that reason that the estimates of VNXX traffic
14 made via Qwest's methodology is conservative. In many cases the actual location
15 of the CLEC customer may be in another state, in which case all of that CLEC's
16 traffic originating in Washington delivered to that customer is VNXX traffic. In
17 many other cases, even if the CLEC customer is located in Washington, it may well
18 be located in a LCA different from the LCA where the switch is located.

19
20 **Q. WHAT IS YOUR BASIS FOR STATING THAT THE CUSTOMER**
21 **LOCATION SHOULD BE THE RELEVANT POINT TO DETERMINE THE**
22 **PROPER CATEGORIZATION OF A CALL?**

23 A. My conclusion is based on my examination of the call rating rules in Washington
24 and determination that calls are rated on the basis of location of the parties to the

1 call (and the CLEC switch is not a customer location).

2

3 **Q. HAS QWEST PERFORMED AN ANALYSIS OF THE WASHINGTON**
4 **TRAFFIC FROM QWEST CUSTOMERS TO CUSTOMERS OF THE NINE**
5 **CLECS THAT ARE PARTIES TO THIS CASE?**

6 A. Yes.

7

8 **Q. HAVE THESE ANALYSES BEEN PERFORMED ON THE BASIS OF THE**
9 **STANDARD QWEST METHODOLOGY THAT YOU DESCRIBED ABOVE,**
10 **AND HAVE YOU REVIEWED THEM TO BE SURE THAT THEY WERE**
11 **PERFORMED PURSUANT TO THAT METHODOLOGY USING DATA**
12 **AVAILABLE TO QWEST?**

13 A. Yes. Each analysis using September 2006 data was performed pursuant to the
14 Qwest methodology and I examined the data for each study to assure myself that
15 the proper data had been used.

16

17 **Q. HAVE YOU ATTACHED COPIES OF THE ANALYSES PERFORMED**
18 **FOR EACH OF THE CLEC PARTIES TO THIS CASE?**

19 A. Yes. However, given the fact that the data in each study is proprietary and probably
20 competitively sensitive to each CLEC, Qwest is providing copies of the individual
21 exhibits only to the party as to which the study relates. Whether the individual
22 CLECs are willing to share the information with the other CLECs in this docket is a
23 question that Qwest does not feel it should determine. Attached hereto are the

1 following confidential exhibits (with an identification of the party to which the data
2 relates):

- 3 Exhibit LBB-4 Pac-West Telecomm, Inc.
4 Exhibit LBB-5 Northwest Telephone Inc.
5 Exhibit LBB-6 Global Crossing Local Services, Inc.
6 Exhibit LBB-7 Electric Lightwave, Inc.
7 Exhibit LBB-8 Level 3 Comm. LLC
8 Exhibit LBB-9 Focal Comm. Corp.
9 Exhibit LBB-10 TCG-Seattle
10 Exhibit LBB-11 Advanced Telecom Group Inc. d/b/a Eschelon Telecom, Inc.
11 Exhibit LBB-12 MCI WorldCom Comm., Inc.

12

13 **Q. WHAT ARE YOUR CONCLUSIONS BASED ON THE INFORMATION**
14 **PROVIDED IN YOUR ATTACHED EXHIBITS?**

15 A. The studies demonstrate that each of the nine CLECs is using VNXX in
16 Washington, some to a much greater degree than others.

17

18 **VII. ADDITIONAL EVIDENCE BASED ON DISCOVERY**

19 **Q. HAVE YOU HAD AN OPPORTUNITY TO REVIEW RESPONSES MADE**
20 **BY THE RESPONDENTS TO DATA REQUESTS PROPOUNDED BY**
21 **QWEST.**

1 A. Yes. However, I would note that a few of the Respondents have not responded to
2 all of Qwest's Data Requests. Nonetheless, while some of the responses are less
3 than clear, my review indicates that the Respondents all use, to one degree or
4 another, VNXX to serve their customers. That is consistent with Qwest's own
5 analysis of each of the Respondents' traffic.

6

7 **Q. DO BROADWING'S RESPONSES DEMONSTRATE THAT IT IS USING**
8 **VNXX?**

9 A. Attached hereto as LBB-13 is a partial set of non-confidential data responses
10 provided by Broadwing (Focal). Unless otherwise noted, the data responses
11 referred to below are part of LBB-13. The same procedure will be followed for
12 each CLEC discussed below.

13 Based upon my interpretation of the responses of Broadwing, it certainly
14 acknowledges (without coming right out and saying it) that it uses VNXX in
15 Washington. For example, in its response to Data Request No. 1, Broadwing states
16 that it provides a product to ISPs called "Multiple Exchange (MX) service."

17 Broadwing describes the service as follows:

18 Multiple Exchange (MX) is an inbound-only, intraLATA foreign
19 exchange service that allow customers to expand its inbound
20 calling area to other rate centers within a LATA. Multiple
21 Exchange allows customers to select local coverage in a single
22 rate center up to all Broadwing-served rate centers within a
23 LATA. MX terminates incoming telephone calls from across the
24 LATA into Broadwing facilities. *When a call is placed to an MX*
25 *number, the caller's local carrier will bill the caller based on the*
26 *rate center assigned to the MX number.*" (Emphasis added).

1 Thus, as I understand the response, if an ISP customer of Broadwing wants to
2 receive dial-up calls from Olympia and if, hypothetically, Broadwing's ISP
3 customer's equipment is located in Seattle, Broadwing will assign an Olympia
4 telephone number to its ISP customer that the ISP can provide to its Olympia dial-
5 up customers to call. If that customer desires to have access to customers in other
6 LCAs in the same LATA, it appears that the same procedure would be followed.
7 Broadwing would obtain local telephone numbers and provide them to its customer,
8 which will then provide this "local" number to its end user customers. Based on
9 Broadwing's Confidential response to Data Request No. 3 (which is not attached), it
10 is clear that Broadwing provides its service from numerous separate LCAs in
11 Washington.

12 In its response to Data Request No. 2, Broadwing notes that it delivers traffic from
13 its switch to the "ISP's location, which in certain cases may be in a Broadwing
14 collocation facility located adjacent to Broadwing's switch in Washington." This
15 indicates that Broadwing's ISP customers are highly unlikely to have equipment
16 located in more than one location per LATA. The result of all this is clear.
17 Broadwing, acting as a CLEC, gathers traffic from multiple LCAs in Washington
18 and delivers that traffic to its ISP customers in a centralized location (perhaps even
19 in another state). In other words, much of this traffic is VNXX in that the caller
20 calls an apparently local number, but the traffic is actually routed to ISPs located, at
21 least some of the time, in a different LCA than the calling party. This, of course, is
22 VNXX traffic.

23 In its response to Data Request No. 6, Broadwing identifies two services—Virtual

1 Office (VO) and Virtual Exchange (VX)—that provide local presences for
2 customers in rate centers of a flat-rated basis. It is not clear to me how Broadwing
3 accomplishes this, but it is clear that Broadwing does not have switches in all of
4 these areas. Thus, while it refers to these services as foreign exchange services, it
5 appears clear that Broadwing uses Qwest's, and not its own, facilities to provide
6 this service, including Qwest's facilities within the LCA and Qwest transport to the
7 remote area where the calls are answered. These services thus appear to have all of
8 the hallmarks of VNXX.

9 It is also clear that Broadwing uses a definition of local traffic that is based on the
10 NXX theory, discussed above, because it uses the term locally-dialed traffic.
11 (Response to Data Request No. 25(d)). Finally, in its response to Data Request No.
12 5, Broadwing states that it operates as an IXC in Washington. As such, it is
13 certainly familiar with the appropriate intercarrier compensation methodologies for
14 interexchange traffic.

15
16 **Q. DO ELI'S RESPONSES DEMONSTRATE THAT IT IS USING VNXX IN**
17 **WASHINGTON?**

18 A. Yes. Based upon my interpretation of ELI's responses, ELI likewise indirectly
19 acknowledges that it uses VNXX. For example, its response to Data Request No. 1
20 (which is part of LBB-14) acknowledges that it provides a service for ISPs, which it
21 markets as a service called RSVP: "RSVP is a wholesale dial-up access product to
22 allow our customers to use or lease dialup facilities to reach the internet." In its
23 response to Data Request No. 2, ELI acknowledges that assigns telephone numbers

1 to its ISP customers, that if “the end user dials an ISP number *that is local to the*
2 *end user* it is picked up by ELI in the calling parties LCA either on Local
3 Interconnect Trunks, paid for by ELI, or at an ELI fiber collocate,” and that it
4 performs the TDM-IP protocol conversion on behalf of ISP. (See also responses to
5 Request for Admission Nos. 1, 3, 4). ELI’s response to Data Request No. 3 shows
6 that it has obtained telephone numbers in numerous separate LCAs in Washington.

7 Level 3 also admits “that on occasion it obtains local telephone numbers to non-ISP
8 customers, even though such non-ISP customers are not physically located in the
9 same LCA with which the telephone numbers are associated” and that some portion
10 of ELI’s reciprocal compensation bills to Qwest “represent traffic that originates in
11 one LCA and terminates with non-ISP customers that are physically located in a
12 LCA different than the LCA of the calling party.” (Response to Request for
13 Admission Nos. 10-11). The only way this can reasonably be read is that ELI bills
14 Qwest reciprocal compensation for VNXX traffic.

15 ELI also appears to subscribe to the erroneous NXX theory. It states, for example,
16 that “if the NPA/NXX of the calling number is in the same LCA as the NPA/NXX
17 of the called number the call is local.” (Response to Data Request No. 14). Thus,
18 from ELI’s perspective, it treats traffic that is delivered from one customer with the
19 same NXX as another customer as local, even though they may be located in
20 different LCAs. This erroneous application of the NXX theory is inconsistent with
21 Washington call rating rules.

22
23 **Q. PLEASE ADDRESS WHAT LEVEL 3’S RESPONSES DEMONSTRATE IN**

1 **WASHINGTON?**

2 A. Before addressing the data responses, it is important to note that in the recent
3 complaint case, Level 3 did not challenge the proposition that it uses VNXX
4 routing in Washington. *See Level 3 Complaint Order ¶¶ 8, 35, 78.* Thus, there
5 does not appear to be a factual dispute as to whether Level 3 uses VNXX in
6 Washington.

7 Further, in its discovery responses, Level 3 acknowledges that it provides a service
8 to ISPs called “Managed Modem Service,” which it characterizes as “a fully
9 outsourced *locally dialed* Internet Access platform for ISP customers.” (Response
10 to Data Request No. 1; included as part of LBB-15). Level also identifies numerous
11 other services it provides to ISPs. (*Id.*) Level 3’s response to Data Request No. 2
12 outlines the specific elements of Level 3’s service to ISPs, which includes
13 providing local telephone numbers to ISPs in Washington. Level 3’s confidential
14 data response (a copy of which is not attached) shows that it provides origination
15 service for ISPs from numerous LCAs in Washington. This is consistent with Level
16 3’s representations that it is the largest provider of dial-up ISP service for ISPs in
17 the country, and that it can provide access to thousands of LCAs (including over 90
18 percent in the United States). Level 3’s response to Data Request No. 9 makes it
19 clear that “[t]he rate Level 3 bills Qwest for terminating *locally dialed* MOUs
20 originated by Qwest end users is \$0.0007 per MOU.” (Emphasis added; see also
21 response to Request for Admission No. 7). Level 3, as it has sometimes argued in
22 other proceedings, advocates the NXX theory, which focuses on the telephone
23 numbers as opposed to the actual physical location of the customers to the call. As
24 discussed above, this is a convenient excuse for VNXX traffic, but is inconsistent

1 with proper call rating.

2

3 **Q. WHAT DO GLOBAL CROSSING'S RESPONSES DEMONSTRATE**
4 **REGARDING ITS USE OF VNXX IN WASHINGTON?**

5 A. Global Crossing ("Global") claims that it does not provide services to ISPs but that
6 it "does provide services to wholesale customers who may, in turn, provide services
7 to ISPs." (See LBB-16; Response to Data Request No. 2). Global, through an
8 affiliate, provides IXC services, and thus is familiar with the intercarrier rules that
9 govern IXC traffic. (Response to Data Request No.5).

10 Global admits that on occasion it provides local telephone numbers to non-ISP
11 customers that are not located in the same LCA with which their assigned telephone
12 numbers are associated with. (Response to Request for Admission No. 9). And
13 Global cannot admit or deny that on occasion it "provides telephone numbers to
14 non-ISP customers, even though such non-ISP customers are not physically located
15 in the same LCA with which the number is associated, and that such non-ISP
16 customers of Global Crossing provide those numbers to customers located in the
17 LCA associated with the numbers in order to allow them to call the customer of
18 Global Crossing on a toll-free basis." Global's ambivalence on this issue is
19 apparently based on its claims that it does not know what its customers do with the
20 telephone numbers provided to them by Global. Significantly, Global does not
21 deny the possibility that such VNXX calling takes place. (Response to Request for
22 Admission No. 10). Global admits that "in Washington some portion of the
23 reciprocal compensation bills that Global Crossing renders to Qwest represent

1 traffic that originates in one LCA and terminates to non-ISP customers of Global
2 Crossing that are physically located in a different LCA of the calling party.”
3 (Response to Request for Admission No. 11). Global also agrees that it has billed
4 Qwest reciprocal compensation for traffic the originates and terminates in “Global
5 Crossing’s local calling area.” (Response to Data Request No. 20). Presumably,
6 Global’s LCA is bigger than Qwest’s LCAs—Global has redefined its LCAs in an
7 attempt to make toll traffic into local traffic, and thus allow it to receive reciprocal
8 compensation.

9
10 **Q. WHAT DO NORTHWEST TELEPHONE, INC’S (“NTI”) RESPONSES**
11 **DEMONSTRATE REGARDING ITS USE OF VNXX IN WASHINGTON?**

12 A. The relevant NTI responses are attached as LBB-17. They demonstrate that,
13 consistent with Qwest’s internal analysis, NTI is using VNXX in Washington.

14 It is clear from the responses, that NTI provides a managed modem type offering to
15 ISPs. For example, NTI acknowledges that it offers modem functionality and
16 authentication. (Response to Data Request No. 4, Responses to Request for
17 Admission Nos. 5-6).

18 NTI states that “[c]alls between Qwest local exchange customers and NTI local
19 exchange customers who have telephone numbers *rated to the same local calling*
20 *area* are subject to reciprocal compensation. . . .” (Response to Data Request No. 6;
21 emphasis added). In its Response to Request for Admission No. 2, NTI admits that
22 it “provides telephone numbers to its ISP customers *that are rated to a particular*
23 *local calling area*” (See also Response to Request for Admission No. 3). In

1 other words, NTI applies the NXX theory in its assessment of terminating
2 compensation. (See Response to Request for Admission No. 7—stating that it
3 applies the \$.0007 rate “to calls in which the telephone numbers of the calling and
4 called parties are rated to the same local calling area.”). In other words, it charges
5 Qwest terminating compensation for at least some traffic on the basis of whether
6 the NXXs of the calling parties are “rated to the same” LCA, and not whether they
7 are actually located in the same LCA. Thus, NTI imposes termination charges on at
8 least some traffic that originates and terminates in different LCAs. The same is true
9 of Non-ISP customers (Responses to Request for Admission Nos. 9-11). As I have
10 stated, I believe this is the improper use of VNXX that violates Washington call
11 rating rules. It is clear from NTI’s responses that it uses VNXX in Washington.
12

13 **Q. DO MCI’S RESPONSES DEMONSTRATE THAT IT IS USING VNXX IN**
14 **WASHINGTON?**

15 A. Attached hereto as LBB-18 is a partial set of non-confidential data responses
16 provided by MCI (Verizon Access).

17 Based on the responses, it is clear that an affiliate of Verizon Access—Verizon
18 Services—provides large customers (“ISPs and corporations”) “the ability for their
19 users to connect to these customers’ Internet-protocol (‘IP’)-enabled networks using
20 land-line, dial-up telephone service.” (Response to Data Request No. 1). Included
21 in this service is “network access server functionality,” in some circumstances
22 “transmission of customer traffic between the Verizon Access network access
23 server and the Internet,” and “transmission of customer traffic between the network

1 access server and the Internet.” Verizon Access acknowledges that “Verizon
2 Services utilizes certain capabilities from Verizon Access in providing some of its
3 services.” (Response to Data Request No. 2). Verizon Access also acknowledges
4 that some “of the NPA/NXX combinations assigned to Verizon Access for use in
5 Washington may be utilized by ISP customers of Verizon Services.” (Response to
6 Data Request No. 3). Verizon Access also states that “it does not attempt to
7 prohibit the use of VNXX arrangements.” (Response to Data Request No. 4).

8 Like other carriers, Verizon Access states that “[i]f the calling and called telephone
9 numbers are rated in the same local exchange calling, the originating carrier would
10 be charged the reciprocal compensation” in the Qwest/Verizon Access ICA.
11 (Response to Data Request No. 6(e); see also Response to Data Request No. 23).

12 Given these admissions, and the results of the study of MCI (Verizon Access)
13 traffic, it is clear that it is using VNXX in Washington.
14

15 **Q. PLEASE ADDRESS WHAT PAC-WEST’S RESPONSES DEMONSTRATE**
16 **IN WASHINGTON?**

17 A. As is the case with Level 3, in the recent complaint case brought by Pac-West
18 against Qwest, Pac-West does not challenge the fact that it uses VNXX routing in
19 Washington. See *Pac-West Complaint Order ¶¶ 7, 41-42, 54*. Thus, there does not
20 appear to be a factual dispute as to whether Pac-West uses VNXX in Washington.

21 Attached hereto as LBB-19 is a partial set of non-confidential data responses
22 provided by Pac-West. Unlike several of the other Respondents, Pac-West’s

1 discovery responses were largely unresponsive. However, Pac-West acknowledges
2 that its method for assessing terminating compensation bills is to compare
3 “NPA/NXX to determine the appropriate rating of a call” (Responses to Data
4 Request No. 6, 16). Pac-West also agreed that it “does not track or rate traffic
5 based on the ‘physical location’ of the customers.” *Id.* Pac-West thus subscribes to
6 the theory that calls are subject to terminating compensation if they are “locally
7 dialed.” (Response to Request for Admission Nos. 1-2).

8

9 **Q. PLEASE DESCRIBE WHAT TCG’S RESPONSES INDICATE WITH**
10 **REGARD TO ITS USE OF VNXX IN WASHINGTON?**

11 A. Attached hereto as LBB-20 is a partial set of non-confidential data responses
12 provided by TCG.

13 TCG provides an ISP service whereby ISPs “use the service to permit their
14 customers to dial-up a local non-toll number to access the public internet.”
15 (Response to Data Request No. 1). TCG provides telephone numbers “that enable
16 end users to dial their ISP provider as a local call.” (Response to Data Request No.
17 2(a)).

18 Unlike other carriers, TCG exchanges traffic with Qwest on a bill and keep basis.
19 (Response to Data Request No. 6(e)). Nonetheless, some of TCG’s traffic is
20 VNXX in nature. (See Response to Request for Admission No. 9).

21

22 **Q. DO THE RESPONSES OF ADVANCED TELECOM (ATI) PROVIDE ANY**

1 **USEFUL INFORMATION AS TO ITS USE OF VNXX IN WASHINGTON?**

2 A. Attached hereto as Exhibit LBB-21 are the relevant, non-confidential data
3 responses of ATI.

4 ATI is a subsidiary of Eschelon. It states in its responses that it has no ISP-specific
5 products. (Response to Data Request No. 1). Nonetheless, it acknowledges that its
6 services could be used as components by ISPs and that some of the telephone
7 numbers it assigns might be provided to ISPs. (Responses to Data Request Nos. 2-
8 3; Responses to Request for Admission Nos. 1-3). ATI states that it does not bill
9 Qwest \$.0007 per MOU for any traffic. (Response to Request for Admission No. 7).
10 However, Qwest's payments to ATI indicate that Qwest is compensating ATI at
11 that rate for some traffic—the traffic terminating to ATI's ISP customers. While it
12 would appear, based on ATI's discovery responses, that ATI does not provide any
13 substantial services to ISPs, Qwest's analysis has led it to believe that, in fact, ATI
14 is providing services to ISPs. Qwest recently provided ATI with a list of telephone
15 numbers that Qwest had identified as being associated with ISP customers of ATI.
16 Qwest requested a response from ATI regarding its investigation into the nature of
17 the services provided for those telephone numbers, *i.e.* whether those services are
18 ISP-related. To date, ATI has not responded to Qwest's request.

19 Aside from the ISP issue, ATI admits that it provides telephone numbers for its
20 non-ISP customers, that on occasion it provides such numbers to non-ISP customers
21 even though the ATI customers are not physically located in the LCA with which
22 the number is associated, and that ATI's customers "provide those telephone
23 numbers to customers located in the LCA associated with the numbers in order to

1 allow them to call the customer of Eschelon on a toll-free basis.” (Responses to
2 Request for Admission Nos. 8-11). Finally, ATI admitted that “some portion of the
3 reciprocal compensation bills that Eschelon renders to Qwest represent traffic that
4 originates in one LCA and terminates with non-ISP customers of Eschelon that are
5 physically located in a LCA different than the LCA of the calling party.”
6 (Response to Request for Admission No. 11).

7 Based on Qwest’s study of ATI traffic and the foregoing responses, it is clear that
8 ATI uses VNXX. It certainly uses it to allow for toll-free interexchange calling to
9 ATI’s non-ISP customers. It is also clear that ATI bills Qwest reciprocal
10 compensation for such traffic. ATI’s use of VNXX demonstrates that VNXX,
11 while most commonly used for services provided by CLECs to ISPs, may also be
12 used to provide service to other kinds of customers. VNXX is just as inappropriate
13 in non-ISP contexts. In fact, the financial result is often worse for Qwest, because
14 state voice reciprocal compensation rates are usually higher than \$.0007 per MOU,
15 as is the case in Washington.

16 17 **VIII. CONCLUSION**

18 **Q. WHAT IS QWEST’S RECOMMENDATION FOR VNXX?**

19 A. Before addressing Qwest’s recommendation, I will briefly summarize some key
20 points. VNXX traffic is not local traffic. Because it originates in one LCA and
21 terminated in another LCA it is interexchange in nature and neither reciprocal
22 compensation under section 251(b)(5) nor terminating compensation under the *ISP*
23 *Remand Order* is appropriate. To the contrary, the Commission should follow the

1 principles of cost causation, and put an end to imposing terminating compensation
2 on Qwest, which is not the cost causer, and likewise putting an end to Qwest's
3 payment of such compensation to CLECs. While the Respondents in this case may
4 lawfully offer their end users the ability to receive interexchange calls from in
5 Washington so that the calling party does not incur a toll charge, they should do
6 so in compliance with the existing numbering guidelines for providing toll free
7 services. There are a variety of lawful ways this can be accomplished, but
8 pretending that interexchange calls are really local in nature is not one of them. As
9 stated in Qwest's complaint, Qwest requests that the Commission enter an order:

- 10 1. Holding that VNXX violates state law and Qwest's tariff and is
11 otherwise contrary to the public interest;
- 12
13 2. Prohibiting Respondents from using VNXX numbering by
14 assigning NPA/NXXs in local calling areas other than the local calling
15 area where the customer is physically located or has a physical presence:
- 16
17 3. Requiring that Respondents cease their misuse of such telephone
18 numbering resources;
- 19
20 4. Requiring that Respondents properly assign telephone numbers
21 based on the actual physical location of its customer: and
- 22
23 5. Requiring that Respondents comply with Qwest's access tariffs if
24 they wish to enable toll-free long distance calling for their own
25 customers and the customers of other local exchange companies.

26 I have demonstrated through my testimony that using VNXX numbers destroys the
27 integrity of the Commission-established distinction between local and long distance
28 calls. VNXX distorts the established compensation structures for local calls and
29 long distance calls. In addition, VNXX imposes an obligation on Qwest to provide
30 free transport to CLECs for interexchange calls. Thus, for the reasons in the

1 complaint, and in the testimony filed by Mr. Linse and Dr. Fitzsimmons, VNXX
2 should be prohibited in Washington. The Respondents should cease using VNXX
3 and should likewise discontinue the practice of billing terminating compensation
4 charges to Qwest on interexchange calls under the pretense that the traffic is local in
5 nature.

6

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

8 A. Yes.

9