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BEFORE THE ARIZONA CORPORATION COMMISSION

JEFF HATCH-MILLER
Chairman
MARC SPITZER
Commissioner
WILLIAM MUNDELL
Commissioner
MIKE GLEASON
Commissioner
KRISTIN MAYES
Commissioner

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IN THE MATTER OF LEVEL 3
COMMUNICATIONS, LLC'S PETITION FOR
ARBITRATION PURSUANT TO SECTION
252(b) OF THE COMMUNICATIONS ACT OF
1934, AS AMENDED BY THE
TELECOMMUNICATIONS ACTS OF 1996,
AND THE APPLICABLE STATE LAWS FOR
RATES, TERMS, AND CONDITIONS OF
INTERCONNECTION WITH QWEST
CORPORATION.

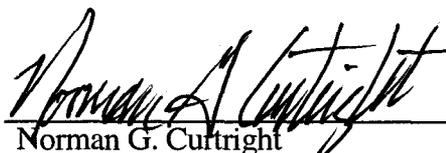
DOCKET NOS. T-01051B-05-0350
T-03654A-05-0350

NOTICE OF FILING

Please take notice that Qwest Corporation hereby files the Direct Testimony of Larry Brotherson, William R. Easton and Philip A. Linse, copies of which are attached, with associated exhibits.

RESPECTFULLY SUBMITTED this 15th day of July, 2005.

QWEST CORPORATION

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9 *Deane Kuman*

BEFORE THE ARIZONA CORPORATION COMMISSION

JEFF HATCH-MILLER
Chairman
MARC SPITZER
Commissioner
WILLIAM A. MUNDELL
Commissioner
MIKE GLEASON
Commissioner
KRISTIN MAYES
Commissioner

**IN THE MATTER OF THE PETITION)
OF LEVEL 3 COMMUNICATIONS, LLC)
FOR ARBITRATION OF AN)
INTERCONNECTION AGREEMENT)
WITH QWEST CORPORATION)

PURSUANT TO SECTION 252 (b) OF)
THE TELECOMMUNICATIONS ACT)
OF 1996)**

Docket No. T-03654A-05-0350

T-01051B-05-0350

DIRECT TESTIMONY OF LARRY B. BROTHERRSON

ON BEHALF OF

QWEST CORPORATION

(Disputed Issue Nos. 1a, 3, 4, 10, 11, 12, 14, 15, 16, 19)

JULY 15, 2005

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I. IDENTIFICATION OF WITNESS

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

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

Q. PLEASE DESCRIBE YOUR EMPLOYMENT BACKGROUND.

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

1 the witnesses for all interconnection arbitrations and for hearings involving disputes
2 over interconnection issues. Additionally, I work with various groups within the
3 Wholesale Markets organization of Qwest to develop testimony addressing issues
4 associated with interconnection services.

5
6 **Q. WHAT IS YOUR EDUCATIONAL BACKGROUND?**

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

9
10 **II. PURPOSE OF TESTIMONY**

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

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

18
19 Although there are many sub-issues, there are three major areas of dispute between
20 Level 3 and Qwest.

21 First, Level 3 and Qwest disagree on a variety of issues related to VoIP (Voice
22 over Internet Protocol), including the definition of VoIP; whether (assuming
23 traffic is properly categorized as VoIP traffic) interexchange calls between
24 local calling areas ("LCAs") are exempt from access charges if the call is

1 ultimately from a VoIP provider; how and under what circumstances access
2 charges or reciprocal compensation apply to VoIP traffic; the proper routing of
3 VOIP traffic, and other issues.
4

5 Second, Level 3 and Qwest disagree on the treatment of and compensation for
6 VNXX traffic (traffic that does not originate and terminate in the same LCA,
7 even though the telephone numbers of the called and calling parties would
8 lead the calling party to believe the call was a local call).
9

10 Finally, Level 3 and Qwest disagree on the proper type of and responsibility
11 for the trunks carrying toll traffic and how Qwest should be compensated for
12 the use of its network.
13

14 My testimony will address the first two issues relating to VoIP and VNXX. Mr.
15 Easton will address Level 3's reluctance to place toll traffic on Feature Group D
16 ("FGD") trunks and pay Qwest for the use of its network. Mr. Linse will address
17 network issues related to all three areas.
18

19 **Q. HOW HAVE YOU ORGANIZED YOUR TESTIMONY?**
20

21 A. During the negotiation period, Qwest provided Level 3 with a matrix similar in
22 format to others it has used in many other arbitrations with CLECs. The matrix
23 showed Qwest's proposed language, and then incorporated Level 3's proposed
24 additions in a strikethrough format. Because the Qwest proposed matrix also
25 followed the contract numbering order, issues dealing with paragraph 5.2 would be
26 addressed before issues dealing with paragraph 6.4 or 7.1. Level 3 objected to this

1 format and proposed its own matrix and format. In an effort to advance the
2 negotiations, Qwest agreed to the use of Level 3's matrix format. Unfortunately,
3 the structure that Level 3 uses in its matrix format is difficult to follow.

4
5 Level 3 groups contract paragraphs into what it has characterized as "Tier 1" issues
6 and "Tier 2" issues. In Level 3's words, Tier 2 issues are "derived" from Tier 1
7 issues. Therefore, the language sections in Level 3's matrix do not flow in the order
8 of the disputed issues in the contract; instead they follow the order in the tier
9 structure. Level 3 is, of course, free to use the format it prefers; however, in order
10 for me to respond to Level 3's issues in an orderly sequence, it is necessary to
11 address the competing language in a different order so that necessary pre-requisite
12 issues are dealt with first. For example, the Level 3 matrix shows the first issue
13 dealing with VOIP as language in contract sections 7.1.1.1 and 7.1.1.2, which deal
14 with operational audits and certification. Before discussing audits of VoIP, it is
15 obviously necessary to understand what VOIP is, how the FCC describes VoIP, and
16 what disagreements exist between the parties as to the requirements for a call to
17 qualify as VOIP. Therefore, my testimony will start by addressing Issue 16: the
18 definition of VOIP. Only after the Commission understands what each party claims
19 are the proper elements of VoIP, will other VoIP issues be meaningful, such as the
20 issue of the necessity of certification that VoIP traffic complies with the FCC
21 definition of VoIP. My testimony will address each disputed paragraph in the
22 agreement related to VoIP and VNXX even though I address the contract sections in
23 a different order from Level 3's matrix. My testimony will describe the parties'
24 positions for each disputed paragraph and demonstrate why Qwest's language is the

1 appropriate language and should be adopted by the Commission.
2

3 **III. EXECUTIVE OVERVIEW**

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

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

9 **VoIP Issues:**

- 10
- 11 • The first issue I address is the proper definition of VoIP. True VoIP calls are
12 calls initiated through the use of IP-compatible equipment over a broadband
13 connection. Calls initiated over typical CPE on the public switched telephone
14 network (“PSTN”) are not VoIP calls. Through my exhibits, I illustrate valid
15 VoIP calls and describe other calls that Level 3 improperly claims are VoIP.
16
 - 17 • I point out that VOIP is treated as an information service under FCC rules,
18 which means that the “ESP exemption” applies to VoIP calls under certain
19 circumstances. Under the exemption, the location of the ESP POP (also
20 referred to as the “VoIP provider POP”), rather than the VOIP customer, is
21 treated as the end user customer for purposes of determining whether a call is
22 local or interexchange. Level 3’s position is based on an erroneously broad
23 reading of the “ESP exemption.” Contrary to Level 3’s position, there is no FCC
24 rule or policy that “exempts” information service providers or calls from the
25 normal rules governing classification of calls as local or interexchange—the rule
26 simply moves the customer premises for analysis purposes from the actual VoIP
27 customer’s premises to the location of the ESP POP.
28
 - 29 • I comment on a variety of specific language submitted by Qwest and Level 3
30 related to VoIP issues and demonstrate that Level 3’s proposed language would
31 treat all VoIP calls as though they were local. I demonstrate that this is merely a
32 convenient fiction to avoid appropriate intercarrier compensation. When a
33 Qwest end user customer originates a call destined for a remote VoIP POP (that
34 is, a POP located outside of the local calling area (“LCA”) of the originating

1 caller), that call must be treated as an interexchange call for all purposes.
2 Likewise, when Qwest receives a call from a remote VoIP POP for termination
3 in a different LCA that call should also be treated as an interexchange call for all
4 purposes.
5

- 6 • By essentially pretending that VoIP calls from one LCA to another LCA are
7 local calls, Level 3 seeks special treatment for calls that, from the perspective of
8 the PSTN, are no different than other interexchange calls. Level 3's proposals, if
9 adopted, would dramatically undermine existing intercarrier compensation and
10 subject carriers to disparate treatment and would create a windfall for Level 3 at
11 the expense of Qwest's customers.
12
- 13 • Qwest's proposed language treats VoIP calls consistently with current
14 intercarrier compensation plans. Local VoIP calls should be treated like other
15 local calls, including making them subject to reciprocal compensation, while
16 VoIP calls that are interexchange in nature should be subject to appropriate state
17 and federal access tariffs.
18

19 **VNXX Issues**
20

- 21 • I first define VNXX, which is the inappropriate use by CLECs of local
22 telephone numbers that CLECs are able to obtain for calls that are actually
23 terminated to customers (usually ISPs) located in different LCAs than the party
24 making the call.
25
- 26 • I demonstrate that the proper means of determining whether a call is local or
27 interexchange is based on the physical locations of the parties to the call and
28 not, as Level 3 proposes, based on the telephone numbers. Level 3's proposal
29 would result in calls that are interexchange in nature being treated as though
30 they were local calls.
31
- 32 • Level 3's language acknowledges that with VNXX traffic the called and calling
33 parties are in different LCAs. Nevertheless, Level 3 would require treating the
34 call as local and the payment of reciprocal compensation on all VNXX traffic.
35 By, in effect, treating such traffic as local in nature, Level 3 creates a convenient
36 fiction that dramatically changes the distinction between local and
37 interexchange calls. Thus, Qwest would be required to transport large amounts
38 of traffic from distant towns to Level 3 for free, and then be required to pay
39 intercarrier compensation to terminate the traffic. Yet all of this traffic is
40 generated by customers who, for the most part, are calling into ISP customers of
41 Level 3. Such a result would be unfair and inconsistent with current law

1 including a recent decision of the Commission.
2

- 3 • I describe Qwest's FX service and point out the critical distinctions between FX
4 and VNXX traffic: a Qwest FX customer (1) actually buys a local connection in
5 each of the LCAs it wants local access to at tariffed local exchange rates and (2)
6 bears the full financial responsibility at tariffed rates to transport that traffic
7 from each LCA back to the LCA where the call is answered. Under VNXX, the
8 CLEC does neither.
9

10
11 **Other Issues**
12

- 13 • I address numerous other issues, most of them definitional in nature, that relate
14 to the VNXX and VoIP issues. In most cases, the Level 3 language is designed
15 to provide special treatment to its VoIP and VNXX traffic, while Qwest's
16 language, which has been adopted in many other interconnection agreements
17 and is consistent with SGAT language approved by the Commission, is
18 designed to treat Level 3's traffic in a manner consistent with how the
19 Commission has determined how local and interexchange traffic should be
20 handled with other carriers.
21

22 **IV. DISPUTED ISSUE 16: DEFINITION OF VOIP**
23

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

27 **A.** I will begin by describing the manner in which voice communications have taken
28 place on the public switched telephone network (PSTN) for decades. The PSTN is
29 a circuit based, switched network that employs an analog protocol called Time-
30 Division Multiplexing ("TDM") to transmit voice messages. When one customer
31 calls another customer under these circumstances, an actual circuit must be
32 established between the two callers that remains in place for the duration of the call.
33 Thus, when such a call is made, each party's loop is used for the duration of the call

1 as are the switches and other facilities through which the call is routed. Such calls,
2 because of the physical circuit that must be connected from end to end, are often
3 referred to as "circuit-switched."
4

5 Both physically and conceptually, VoIP is different. Rather than being based on an
6 actual physical circuit, VoIP is based on digital packets that are created in a digital
7 format known as Internet Protocol or "IP." Thus, a VoIP call must be initiated by
8 an end user customer in IP through the use of IP compatible equipment,¹ which
9 converts the conversation into multiple digital IP packets of information (each of
10 which represents a small digitized portion of the voice call between the parties).
11 Instead of passing over a single circuit, each packet is capable of independently
12 traveling a different route than other packets. Once the packets are created by the
13 IP-compatible customer premises equipment ("CPE"), they are individually
14 forwarded onto the Internet by routers. As noted, because no specific circuit must
15 be established, a traditional circuit switch is not necessary to establish a circuit and

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

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

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

1 the packets do not necessarily follow the same path (this is one of the reasons the
2 Internet is often depicted as a cloud rather than a physical connection from one
3 point to another).
4

5 Thus, the first distinguishing characteristic of VoIP is that it must be initiated at the
6 end user customer's premises in IP using IP-compatible CPE. The second
7 characteristic is that the VoIP call must be initiated over a broadband connection
8 such as cable modem or DSL that does not pass through the PSTN local switch.
9

10 There are two types of VoIP calls that meet these two defining characteristics of
11 VoIP. One of the types is irrelevant to this case, while the other type of VoIP call is
12 at the very center of the VoIP issues before the Commission in this docket.
13

14 The first type of VoIP call takes place between two VoIP customers, both served by
15 a broadband connection. The call is, of course, initiated in IP over a broadband
16 connection. When the called party is also a VoIP customer on a broadband
17 connection, the call is never converted into TDM (the language of the circuit-
18 switched PSTN). Instead, the packets are transported over the Internet directly to
19 the called party, where the called party's IP compatible equipment reassembles the
20 packets in the proper order so they become a voice conversation again. The
21 breakdown into IP packets, the transmission of the individual packets, and the
22 reassembly of the IP packets into voice sounds all take place on the Internet or a
23 private IP network. If, as in the foregoing example, a call goes from one IP capable
24 piece of equipment to another IP capable piece of equipment, over broadband
25 connections through transmission IP packets, the call is completed without ever

1 touching the circuit switched PSTN. Thus, this type of call is a VoIP call, but it
2 does not interconnect with the PSTN in any manner. Because such calls originate
3 and terminate in IP format, they are often referred to as "IP-IP calls." They occur
4 entirely over the Internet, are not exchanged between carriers, and there are
5 therefore no intercarrier compensation or other interconnection issues that result
6 from IP-IP traffic. Such calls are therefore completely irrelevant to the issues in this
7 case.

8
9 The second type of VoIP is central to the VoIP issues in this docket. This is a call
10 that is initiated through IP-compatible CPE over a broadband connection, but the
11 called party is not a VoIP customer. Instead, the called party is a typical customer
12 served on the PSTN by a loop attached to a circuit switch and whose CPE is not
13 IP-compatible. In this situation, the exchange of traffic is completely different than
14 in the first type of call. In order to complete the call, the IP packets created by the
15 equipment of the calling party must, at some point (a function of the VoIP
16 provider's equipment) be converted into a TDM voice format, transferred to the
17 PSTN on a connection that will route through circuit switches to the end office
18 serving the customer, and finally sent over the loop to the customer. This type of
19 call, which is often referred to as an "IP-TDM call" because it was originated in IP
20 format and terminated to the PSTN in TDM format, is a VoIP call because it meets
21 the criteria of originating in IP format using IP-compatible CPE over a broadband
22 connection. It is terminated, however, using local switching and loops. This type
23 of call creates intercarrier compensation and other issues that must be dealt with in
24 this docket.
25

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

9
10 **Q. PLEASE DESCRIBE THE PARTIES' DISPUTE RELATING TO ISSUE 16.**

11
12 A. Issue 16 focuses on the appropriate definition of VoIP in the context of the second
13 type of call described above, traffic originating from a VoIP customer in IP that is
14 terminated over the PSTN in TDM. It is this type of traffic that raises issues in this
15 docket. The first type (IP-IP), because it never enters the PSTN, is not addressed by
16 the interconnection agreement.

17
18 **Q. WITH THAT BACKGROUND, PLEASE DESCRIBE THE ISSUES THAT**
19 **ARE RAISED BY THE COMPETING VOIP DEFINITIONS.**

20
21 A. The ultimate issues relate to intercarrier compensation. Qwest's definition centers
22 on two basic issues related to VoIP:

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

1 2) Assuming a VoIP provider is qualified to purchase a connection out of the
2 local exchange tariffs, how are calls that terminate within and outside the local
3 calling area ("LCA") in which the VoIP provider is physically located
4 handled?

5
6 **Q. WHY DOES THE QWEST DEFINITION REQUIRE THAT A VOIP CALL**
7 **ORIGINATE IN IP OVER A BROADBAND FACILITY USING IP**
8 **EQUIPMENT IN ORDER TO BE ENTITLED TO TERMINATION**
9 **THROUGH A LOCAL NETWORK CONNECTION?**

10
11 **A.** The first reason is simply that this definition appears to be consistent with the way
12 the FCC has thus far defined VoIP.

13
14 The second reason is far more complicated. It relates to a historic category of
15 providers known as "Enhanced Service Providers" or "ESPs." Under current FCC
16 rules (all of which are subject to being changed when the FCC makes its final
17 decisions on these issues) providers of VoIP are considered to be ESPs. ESPs are
18 entitled to terminate calls through a connection to the PSTN purchased from a local
19 tariff under certain circumstances. But a VoIP provider is considered an ESP only
20 if the call meets the fundamental requirements to qualify as VoIP: the call must
21 originate in IP through the use of IP-compatible CPE over a broadband facility.
22 This is the only type of call that meets the definition of VoIP proposed by Qwest
23 and is thus the only type of traffic that qualifies for the ESP exemption.

24
25 If a call originates as a voice call on the PSTN and is then terminated as a voice call

1 on the PSTN, this is a TDM-IP-TDM or “IP in the middle” call, which is subject to
2 typical intercarrier compensation rules: if it is a local call, it is subject to reciprocal
3 compensation; if it is an interexchange (toll) call it is subject to access charges such
4 as Feature Group D. The FCC ruled in the *AT&T Declaratory Ruling* that this type
5 of call is not a VoIP call even if at some point during the call it was converted to IP
6 because, before delivery, it was reconverted to TDM and delivered over the PSTN.²
7 Since, in this proceeding, we are only addressing the calls that Qwest is being asked
8 to terminate on the PSTN, the termination of each call is in TDM over the PSTN.
9 Thus, if the call is not originated in IP over a broadband facility, it will be both
10 originating and terminating in traditional PSTN format, thus losing its current status
11 as an enhanced or information service call, and access charges will apply.

12
13 **Q. YOU MENTIONED THE ESP EXEMPTION. CAN YOU DESCRIBE IT**
14 **FOR US?**

15 A. First, the ESP exemption is relevant to this docket because, under current rules that
16 are the subject of ongoing FCC consideration, true VoIP service qualifies as an
17 “information service.” Thus, VoIP providers served by Level 3 are entitled to
18 receive service pursuant to the ESP exemption, but only in very specific
19 circumstances. All of this ultimately becomes relevant to how VoIP is defined and

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

1 to the intercarrier compensation regime that applies under certain circumstances.
2 Thus, it is important for the Commission to understand the fundamentals of the ESP
3 exemption.

4
5 The ESP exemption has a long history with the FCC. It was originally established
6 at the time access charges were established following the Modified Final Judgment
7 (MFJ) that governed the divestiture of the old Bell System. While establishing the
8 access charge regime in use today for all interexchange carriers ("IXCs"), the FCC
9 permitted Enhanced Service Providers ("ESPs") to connect their POP (point of
10 presence) to the local network via local exchange service as opposed to tariffed
11 feature group services that IXCs were (and still are) required to purchase, even
12 though the ESPs used the local exchange facilities for interstate access. The ESP
13 exemption was never really an exemption at all—it was simply a regulatory
14 decision that, for a variety of policy reasons, interstate access by ESPs located
15 within a local calling area ("LCA") would be treated as local for purposes of
16 assessing the correct access charge. Thus, under the exemption, the ESP can order a
17 local service connection to its POP in the same manner as the service can be
18 ordered by other end user customers located within a particular LCA. In other
19 words, under the ESP exemption, the ESP is treated like an end user customer as
20 opposed to an IXC for purposes of obtaining access to a LCA. In that LCA, the
21 ESP can obtain the same business services that any other end user business can
22 obtain on a retail basis. The effect of the exemption, then, is that unlimited calls
23 may be terminated by the ESP within such LCAs and it will be charged typical retail
24 business rates instead of access charges to do so. But that is the extent of the

1 exemption. For example, to the extent the ESP seeks to terminate calls to
2 customers within the LATA but outside that LCA, the exemption does not apply
3 and they will be handed off to the end user customer's (ESP's) Primary
4 Interexchange Carrier ("PIC") choice for delivery to the other LCA. Exhibit LBB 1
5 depicts the two examples. In LBB1, I depict the termination of VoIP calls from the
6 Internet through valid routing. When the VoIP provider and the end user customer
7 are in the same LCA, the ESP (Level 3 in the exhibit) obtains a local connection to
8 the network by purchasing Local Interconnection Service ("LIS") in Phoenix. In
9 this example, the call is handed off by the ESP within the Phoenix LCA for
10 termination to a Qwest end user customer also in the Phoenix LCA via the LIS
11 trunk. The exhibit further shows a call where the ESP is within the Phoenix LCA
12 and the Qwest end user customer is located in the Flagstaff LCA. The call is routed
13 through use of the PICed IXC using FGD trunks for termination to the end user
14 customer. This is explained in more detail in the following section.

15
16 **Q. CAN YOU DESCRIBE THE REQUIREMENT THAT CALLS WITHIN THE**
17 **LCA WHERE THE VOIP PROVIDER PURCHASES A LOCAL**
18 **CONNECTION ARE LOCAL AND CALLS BOUND FOR LOCATIONS**
19 **OUTSIDE THE LCA ARE TOLL?**
20

21 **A.** Yes. Under current rules, a voice call between separate LCAs is a toll call and must
22 be treated as such. This rule applies equally to VoIP. Thus, when a call is
23 originated in IP format on IP-compatible equipment and is handed off to Qwest
24 within a LCA where the ESP is located, but the call is being sent for termination to
25 another LCA, the provider is not entitled to free transport to the terminating LCA

1 under the ESP exemption or on any other basis, nor is it allowed to connect to the
2 terminating LCA as an end user customer under the ESP exemption if it does not
3 have a physical presence in that LCA. Calls of this sort are properly classified as
4 interexchange traffic and must be handed off to an interexchange carrier (IXC),
5 which must connect to Qwest typically via a Feature Group connection. Assuming
6 a call is VoIP, and has been converted from IP protocol to PSTN protocol, the call
7 can be delivered to Qwest over Local Interconnection Service (LIS) trunks if, and
8 only if, the hand off to Qwest is for termination of the call within the same LCA as
9 the VoIP provider's POP. Because the VoIP provider (as an ESP) purchases its
10 connection to the local network as an end user customer, the call will be treated as a
11 local call and no access charges would apply if the call is sent to a party physically
12 located in the same LCA as the VoIP provider's POP. It would also be treated as a
13 local call for purposes of 251(b)(5) reciprocal compensation purposes. If the hand
14 off is for termination at a distant local exchange outside of the LCA where the VoIP
15 POP is located, the call must be delivered to Qwest on FGD for termination to that
16 LCA. The second call example on Exhibit LBB 1 shows a call from a VoIP
17 provider's POP (end user customer) in Phoenix who seeks to complete a call to
18 Flagstaff. In that example the call is handed off to the IXC PICed by the end user
19 customer (or VoIP Provider), and the IXC delivers the call to Flagstaff over Feature
20 Group D. If the VoIP Provider purchases a local connection from its POP to the
21 Qwest local switch in Phoenix, then Qwest's switch will recognize the call to
22 Flagstaff as a toll call and route the call to the appropriate IXC. If the VoIP
23 Provider purchases a local connection from its POP to the Level 3 switch in
24 Phoenix then Level 3's switch is required to route the call to an IXC.

1

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

14

15 **Q. THE FCC HAS DISTINGUISHED VOIP TRAFFIC THAT CONNECTS TO**
16 **THE PSTN FROM VOIP TRAFFIC THAT IS TRANSPORTED SOLELY**
17 **OVER THE INTERNET OR A PRIVATE IP NETWORK. IS THE**
18 **DISTINCTION RELEVANT TO THE DISCUSSION OF VOIP IN AN**
19 **INTERCONNECTION AGREEMENT?**

20 **A.** Absolutely. The FCC has been careful to distinguish VoIP traffic that connects to
21 the PSTN from VoIP traffic that is handled entirely by the Internet, specifically
22 using the term "interconnected VoIP services" to describe "those VoIP services that
23 can be used to receive telephone calls that originate on the PSTN and can be used to

1 terminate calls to the PSTN.”³ The FCC singled out Interconnected VoIP services
2 because “consumers expect that VoIP services that are interconnected with the
3 PSTN will function in some ways like a “regular telephone” service.”⁴
4 Interconnected VoIP service was defined “as bearing the following characteristics:
5 (1) the service enables real-time, two-way voice communications; (2) the service
6 requires a broadband connection from the end user customer’s location; (3) the
7 service requires IP-compatible CPE; and (4) the service offering permits users
8 generally to receive calls that originate on the PSTN and to terminate calls to the
9 PSTN.”⁵ The issues between Qwest and Level 3 with regard to VoIP relate
10 specifically to Interconnected VoIP traffic that is terminated or transmitted to the
11 Qwest network (i.e., to the PSTN).

12
13 **Q. WHAT IS THE DIFFERENCE BETWEEN QWEST’S AND LEVEL 3’S**
14 **PROPOSED DEFINITIONS OF VOIP?**

15 **A.** It is easy to see the distinction between the two company’s positions by looking at
16 the language in dispute. Qwest’s proposed definition of VoIP traffic for the
17 interconnection agreement with Level 3 is shown in the paragraph below. All of
18 Level 3’s proposed changes are in bold face type and the language Level 3 proposes
19 to be deleted is shown as a strikethrough. Where Level 3 seeks to add additional
20 language to the paragraph, the proposal is shown in a bold underlined format.

³ *FCC VoIP 911 Order* ¶ 23.

⁴ *Id.*

⁵ *Id.* ¶ 24.

1
2 “VoIP” (Voice over Internet Protocol) traffic is traffic that originates in
3 Internet Protocol ~~at the premises of the party making the call~~ using IP-
4 Telephone handsets, ~~end user premises~~ Internet Protocol (IP) adapters, CPE-
5 based Internet Protocol Telephone (IPT) Management “plug and play”
6 hardware, IPT application management and monitoring hardware or such
7 similar equipment and is transmitted over a broadband connection to or from
8 the VoIP provider. ~~VoIP is treated as an Information Service, and is~~
9 ~~subject to interconnection and compensation rules and treatment~~
10 ~~accordingly under this Agreement based on treating the VoIP Provider~~
11 ~~Point of Presence (“POP”) as an end user premise for purposes of~~
12 ~~determining the end point for a specific call. Thus, CLEC is permitted to~~
13 ~~utilize LIS trunks to terminate VoIP traffic under this Agreement only~~
14 ~~pursuant to the same rules that apply to traffic from all other end users,~~
15 ~~including the requirement that the VoIP Provider POP must be in the~~
16 ~~same Local Calling Area as the called party~~
17

18 Qwest’s definition is pictorially illustrated in Exhibit LBB2 attached to this
19 document.

20
21 **Q. WHAT IS THE EFFECT OF LEVEL 3’S DELETIONS FROM QWEST’S**
22 **PROPOSED LANGUAGE?**

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

26
27 “Under our present rules, enhanced service providers are treated as end users
28 for purposes of applying access charges. See 47 C.F.R. § 69.2(m);
29 *Northwestern Bell Telephone Company Petition for a Declaratory Ruling,*
30 *Memorandum Opinion and Order, 2 FCC Rcd 5986, 5988 at para. 20 (1987),*
31 *appeal docketed, No. 87-1745 (D.C.Cir. Dec. 4, 1987).* Therefore, enhanced
32 service providers generally pay local business rates and interstate subscriber
33 line charges for their switched access connections to local exchange company

1 central offices.”⁶

2
3 The FCC was clear on how an ESP would be treated. Level 3’s language is a direct
4 attempt to avoid the FCC’s ruling. Level 3 seeks to delete Qwest’s language in an
5 explicit attempt to avoid access charges when a call is between two LCAs (i.e.,
6 avoid access charges on calls that are clearly interexchange in nature). The Qwest
7 language that states that the VoIP Provider’s POP will be treated as an end user
8 customer must be incorporated into the agreement because that is precisely the
9 manner in which the ESP exemption operates (under the exemption, the ESP is
10 treated as an end user customer). Thus, Qwest’s language that the VoIP Provider’s
11 POP will be considered as an end user customer for purposes of determining the end
12 points of the call is essential in order to resolve any doubt that if the call is
13 transported to another LCA in the LATA, to another LATA, to another state, or to
14 another country, the call must be delivered to an IXC and the IXC that transports the
15 call will be responsible for access charges. Otherwise, the interconnection
16 agreement will enable Level 3 to provide a service to ESPs (or to itself acting as an

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

1 ESP) that gives it access to Qwest's entire network essentially free of charge to
2 terminate IXC traffic.

3
4 As Qwest understands Level 3's proposal (which essentially treats *all* VoIP traffic
5 as though it were local traffic), Qwest would receive reciprocal compensation for
6 terminating such traffic. The reciprocal compensation rate, of course, is
7 dramatically less than FGD rates and was never designed for the termination of
8 interexchange traffic (reciprocal compensation traditionally applies to the
9 termination of local traffic only). Thus, Level 3's proposal would result in a
10 fundamental restructure of intercarrier compensation on traffic that, other than the
11 manner in which it originates, looks precisely the same to the PSTN as any other
12 interexchange traffic. As the Commission reviews this matter, Qwest suggests that
13 it refuse to consider such an elemental change in intercarrier compensation. To the
14 PSTN, there is no difference between a typical interexchange call that terminates on
15 the PSTN (and is therefore subject to appropriate access charges) and a VoIP
16 originated call that, once it is converted into TDM, is placed on the PSTN for
17 termination. Qwest is unaware of any good reason, let alone a compelling reason,
18 to treat these calls in a completely different manner for intercarrier compensation
19 purposes. Level 3's proposal should, therefore, be rejected.

20
21 For traffic to meet Qwest's VoIP definition, it must originate in IP; otherwise it is
22 simply another call originated in TDM that terminates in TDM. Consistent with the

1 FCC's ruling discussed above and in more detail below, Qwest's definition requires
2 that the call originate in IP using IP CPE and be transmitted over a broadband
3 connection to the VoIP Provider. Unless it meets these requirements it will fail to
4 meet the criteria of the FCC in the AT&T case discussed above, where the FCC
5 rejected AT&T's effort to avoid access charges on calls that originate and terminate
6 in TDM.
7

8 Qwest's definition also identifies VoIP is an "information service," a contention
9 that Level 3 does not appear to challenge. Designating VoIP as an information
10 service in Qwest's definition makes the PSTN portion of the service subject to
11 interconnection and compensation based on treating the VoIP Provider's POP as an
12 end user customer's premises. Therefore, LIS trunks may be used to terminate
13 VoIP traffic based on rules that apply to other end user customers, including the
14 requirement that the VoIP Provider's POP (served by Level 3) where the VOIP
15 traffic is delivered to the public network be physically located in the same LCA as
16 the called party. Other types of VoIP calls can also be delivered to Qwest for
17 termination, of course, but since they do not qualify for the ESP exemption, such
18 traffic should be classified as toll traffic and all existing access rules are applicable
19 to it.
20

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

22 A. Level 3 attempts to remove the requirement that the call *originate* at the end user
23 premises and to strike the words "end user premises" when referring to "end user
24 customer's premises IP adapters." Origination *at the end user premises* in IP is a
25 critical requirement that must remain in the agreement. The rationale for Level 3's

1 effort to delete this requirement from the definition is far from clear (it certainly did
2 not make it clear in its Petition), but it is an essential piece of the definition of VoIP.
3 First, under the ICA, these calls will terminate on the Qwest local network (the
4 PSTN). As mentioned above, when an end user customer call is originated on the
5 PSTN, routed over PSTN loops to a PSTN switch, and Level 3 terminates the same
6 call on the PSTN, that call does not qualify as an enhanced or information service.
7 It is irrelevant that a VoIP provider may have converted it to IP protocol in the
8 middle for some distance. A call not originating over broadband in IP does not meet
9 the requirements for the FCC ESP exemption. The FCC made this perfectly clear in
10 2004 in its Phone-to-Phone IP exemption decision (the “*AT&T Declaratory*
11 *Order*”), where the FCC determined that a service that begins on the PSTN and
12 ends on the PSTN, even though it may use the Internet for a portion of the transport
13 of that service, offers no net protocol conversion, and is therefore a
14 telecommunications service (as opposed to an information service):

15
16 “The service at issue in AT&T’s petition consists of an interexchange call that
17 is initiated in the same manner as traditional interexchange calls—by and end
18 user who dials 1+ the called number from a regular telephone. When the call
19 reaches AT&T’s network, AT&T converts it from its existing format into an
20 IP format and transports it over AT&T’s Internet backbone. AT&T then
21 converts the call back from the IP format and delivers it to the called party
22 local exchange carrier (LEC) local business lines. We clarify that, under the
23 current rules, the service that AT&T describes is a telecommunications service
24 upon which interstate access charges may be assessed. We emphasize that our
25 decision is limited to the type of service described by AT&T in this
26 proceeding, i.e. an interexchange service that: (1) uses ordinary customer
27 premises equipment (CPE) with no enhanced functionality; (2) originates and
28 terminates over the public switched telephone network (PSTN); and (3)
29 undergoes no net protocol conversion and provides no enhanced functionality

1 to end users due to the providers use of IP technology.”⁷
2

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

15
16 “originates in Internet Protocol **at the premises of the party making the call**
17 using IP-Telephone handsets, **end user premises** Internet Protocol (IP)
18 adapters, CPE-based Internet Protocol Telephone (IPT) Management “plug
19 and play” hardware, IPT application management and monitoring hardware or
20 such similar equipment and is transmitted over a broadband connection to the
21 VoIP provider.”
22

23 Qwest’s language requiring that the call originate at the end user customer’s
24 premises in broadband is also an absolute necessity if the call is to be treated as an
25 enhanced or information service and thus entitled to the ESP exemption. Any

⁷ AT&T Declaratory Order, ¶ 1.

1 attempt by Level 3 to remove this requirement from the contract will, in effect,
2 modify the ESP exemption and authorize it to do what the FCC said AT&T could
3 not do: take simple calls that originate on the PSTN, deliver them to Qwest in
4 another LCA, terminate the call on the PSTN, and claim the call is exempt from
5 access charges. Thus, Level 3's first two strikethrough proposals must be rejected.
6 The call must originate over broadband in IP to be an enhanced or information
7 services VoIP call.

8
9 Next, Level 3 proposes some perplexing language to the VoIP definition regarding
10 traffic direction, wanting it to read that VoIP may be "transmitted over a broadband
11 connection to or from the VoIP provider". What these additional terms mean is not
12 clear. For example, calls delivered to Qwest from a VoIP provider for termination
13 will go through a Qwest switch and over a loop connected to that switch for
14 termination on the PSTN to a traditional telephone. However, a call **from** the VoIP
15 provider that transits directly to a VoIP end user customer over broadband will not
16 go through a public network switch and thus, the PSTN is not used to complete the
17 call.⁸ As such, Qwest would not be involved in switching the call on the PSTN and
18 Level 3's proposed language is inappropriate. I am unaware of any other situation
19 or scenario in which a call would come *from* the VoIP provider in broadband that
20 would involve Qwest or the PSTN. These first two changes go to the heart of what
21 is a VoIP call. They make clear what type of calls an ESP is entitled to purchase
22 access to the public network from the Qwest (or Level 3) local tariff as an enhanced

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

1 service and not through FGD, as prescribed by the FCC. Qwest's language is
2 critical to the definition and accurately limits the ESP exemption to only qualified
3 situations. It must be adopted.

4

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

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

15

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

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

23

24

25

7.2.2.12 VoIP Traffic. VoIP traffic as defined in this agreement shall be
treated as an Information Service, and is subject to interconnection and

1 compensation rules and treatment accordingly under this Agreement based on
2 treating the VoIP Provider Point of Presence ("POP") is an end user premise
3 for purposes of determining the end points for a specific call.
4

5 7.2.2.2.12.1 CLEC is permitted to utilize LIS trunks to terminate VoIP
6 traffic under this Agreement only pursuant to the same rules that apply to
7 traffic from all other end users, including the requirement that the VoIP
8 Provider POP must be in the same Local Calling Area as the called
9 party.
10

11 **Q. LEVEL 3 OBJECTS TO THE REQUIREMENT THAT THE VOIP**
12 **PROVIDER POINT OF PRESENCE (POP) BE CONSIDERED AN END**
13 **USER CUSTOMER FOR PURPOSES OF DETERMINING THE END**
14 **POINTS OF A CALL. CAN YOU COMMENT?**
15

16 A. The language requiring that the VoIP POP be considered an end user customer was
17 a portion of the definitions moved into the body of the agreement at 7.2.2.12. Level
18 3's definition deletes that language. The language is critically important due to the
19 ESP Exemption, and must be included somewhere in the agreement. Since both
20 Level 3 and Qwest agree that the traffic that is handed off to the public network
21 from the VoIP POP arrived over the Internet and is an alternative to traditional IXC
22 traffic, the only real question is whether or not the VoIP provider must purchase
23 FGD to terminate its calls. In answer to that question, the FCC has said no. *If the*
24 *VoIP provider is acting as an ESP, it is entitled to purchase its connection out of the*
25 *local exchange tariffs and obtain local service within the LCA where it is physically*
26 *located.* In this respect, the ESP is treated as any other end user customer.
27

28 **Q. BASED UPON THESE FACTS WHAT SHOULD THE COMMISSION DO**

1 **WITH RESPECT TO ISSUE 16, DEFINITION OF VOIP?**

2 A. For all the reasons stated above, the Commission should adopt Qwest's proposed
3 definition of VoIP that includes the requirement that the call must originate at the
4 premises of the party making the call, through the use of IP-compatible CPE, over a
5 broadband circuit in IP to avoid the scenario of calls the both originate and
6 terminate as PSTN calls. Further, consistent with the proper criteria for VoIP and
7 with the FCC's ESP Exemption, neither PSTN to PSTN calls are VoIP and are not
8 entitled to the ESP exemption under FCC decisions. Qwest's proposed language
9 for Sections 7.2.2.12 and 7.2.2.12.1, make clear that VoIP traffic *as defined in this*
10 *agreement* will be treated as an information service, will be entitled to the ESP
11 exemption, and the VoIP providers POP will be treated as an end user customer's
12 premises for purpose of determining the end points of a call. This will ensure that
13 the intrastate access regime as currently approved by this Commission is not
14 changed at this time. The Commission, therefore, should adopt Qwest's proposed
15 language.

16
17 **Q. PLEASE SUMMARIZE QWEST'S BASIC POSITIONS ON VOIP.**

18
19 A. The first issue is the proper definition of VoIP. Consistent with FCC decisions,
20 there are two key essential features that must be present for a VoIP call: (1) the call
21 must originate on IP-compatible CPE (both Qwest's and Level 3's language
22 provides greater detail on the proper description of such CPE) and (2) it must also
23 originate on a broadband connection, such as DSL, cable modem, or other
24 equivalent high-speed connection to the Internet. If these two criteria are not met,

1 then the call cannot be deemed to be VoIP.

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

12
13 **Q. PLEASE ADDRESS EACH TYPE OF TRAFFIC AND DESCRIBE**
14 **QWEST'S POSITION AS TO THE PROPER TREATMENT OF EACH**
15 **UNDER THE INTERCONNECTION AGREEMENT.**

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

21

1 **Q. PLEASE DISCUSS IP-TDM TRAFFIC.**

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

5
6 There is really only one specific implication of the status of IP-TDM traffic as VoIP
7 traffic that distinguishes it from the rules that apply to other traffic. That is the
8 application of the so-called ESP exemption. Both parties agree that, until the FCC
9 definitively rules on the issue, VoIP will be treated as an "information service"
10 under the Act. Thus, under certain circumstances, the provider of true VoIP service
11 is classified as an ESP and, where applicable, qualifies for the exemption. While it
12 is unclear from the Level 3 Petition, Level 3 appears to believe the exemption
13 applies much more broadly than Qwest believes it does. Under the proper
14 application of the exemption, a VoIP provider is treated as an end user customer for
15 purposes of access to a LCA in which the VoIP provider maintains a point of
16 presence ("POP"). Level 3, however, appears to believe that, either through the
17 application of the ESP exemption or for some other undisclosed reason, VoIP
18 providers are entitled to LATA-wide exemption from access charges. Qwest
19 adamantly opposes that position on both legal and policy grounds. Thus, for
20 purposes of termination of IP-TDM traffic in the LCA in which the VoIP provider
21 POP is located, the VoIP provider is allowed to terminate that traffic with Qwest

1 through the same types of retail services available to other business end user
2 customers as opposed to being required to originate and terminate traffic through
3 access charges. But that is the full extent of application of the exemption.

4
5 Thus, for all other applications of intercarrier compensation, the same rules that
6 apply to all other traffic apply to IP-TDM traffic. Rather than determining the
7 application of these rules from the physical location of the VoIP end user customer
8 that actually originates the call, the VoIP provider POP is treated as the end user
9 location. Thus, as explained in the next section, if the VoIP provider POP is
10 physically located in the same LCA as the called party, the call is treated as local,
11 and reciprocal compensation would apply. Likewise, if the VoIP provider POP is in
12 a different LCA from the called party, the call is an interexchange call that should
13 be handed off to the IXC selected by the end user customer, which transports the
14 call to the LCA of the called party, where Qwest terminates it to its end user
15 customer. The IXC would pay the appropriate access charges to terminate the
16 traffic.

17
18 In summary, under Qwest's proposed language, other than for the application of the
19 ESP exemption, IP-TDM traffic should be treated in the same manner as other
20 similar traffic. Level 3 appears to propose that these traditional means of
21 intercarrier compensation be completely scrapped in favor of treating all VoIP as
22 though it were local traffic. Thus far, Level 3 has not offered any compelling legal

1 reason why VoIP should be given special treatment. There is certainly no good
2 policy reason. It is easy to see why Level 3 wants to change the compensation
3 scheme in such a radical manner; it would allow Level 3 or its VoIP provider
4 customers to avoid charges that other identically-situated carriers must pay. Qwest
5 strongly opposes such an approach.

6
7 **Q. PLEASE DISCUSS TDM-IP-TDM (IP IN THE MIDDLE) TRAFFIC.**

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

17 **V. DISPUTED ISSUE 1A: SECTION 7.1.1.1 OPERATION AUDITS**

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

19 A. This dispute first highlights the reason that I am addressing the issues in a different
20 order than that presented by Level 3. In its petition and matrix, Level 3 lists issue
21 1A as the first of its Tier 1 issues. This single issue number, 1A, has three Qwest

1 proposed paragraphs, and six Level 3 proposed paragraphs even though in some
2 instances, they have the same number; for example 7.1.1.1, the two paragraphs are
3 totally unrelated and deal with totally different issues. My testimony in this section
4 will deal with two of the Qwest proposed paragraphs, 7.1.1.1 Verification audits,
5 and 7.1.1.2 VoIP certification. Although this is listed as the first issue on Level 3's
6 matrix, an understanding of the parties disagreement over what VoIP is, which I
7 discussed above in issue 16, is necessary to understand the dispute about the
8 language of 7.1.1.1. The third Qwest proposed paragraph in issue 1A is 7.1.1,
9 which deals with points of interconnection. Mr. Easton's and Mr. Linse's will
10 address that in their testimony along with the six Level 3 proposed paragraphs in
11 issue 1A.

12
13 **Q. WHAT IS QWEST'S PROPOSED LANGUAGE FOR 7.1.1.1?**

14 **A.** Qwest's proposal for section 7.1.1.1 of the interconnection agreement states:

15
16 7.1.1.1. CLEC agrees to allow Qwest to conduct operational verification
17 audits of those network elements controlled by CLEC and to work
18 cooperatively with Qwest to conduct an operational verification audit of any
19 other provider that CLEC used to originate, route and transport VoIP traffic
20 that is delivered to Qwest, as well as to make available any supporting
21 documentation and records in order to ensure CLEC's compliance with the
22 obligations set forth in the VoIP definition and elsewhere in this Agreement.
23 Qwest shall have the right to redefine this traffic as Switched Access in the
24 event of an "operational verification audit failure". An "operational
25 verification audit failure" is defined as: (a) Qwest's inability to conduct a
26 post-provisioning operational verification audit due to insufficient cooperation
27 by CLEC or CLEC's other providers, or (b) a determination by Qwest in a
28 post-provisioning operational verification audit that the CLEC or CLEC's end
29 users are not originating in a manner consistent with the obligations set forth
30 in the VoIP definition and elsewhere in this Agreement.
31

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

2 A. This is somewhat confusing. Apparently because Level 3 does not believe there
3 should be any provision in the contract for audits to assure the traffic is VoIP, Level
4 3 offers no changes to Qwest's proposed language and simply wants it stricken.
5 Since Level 3 presumably believes the Qwest language will be stricken, Level 3
6 went ahead and used the 'available' number 7.1.1.1 to introduce an unrelated issue
7 dealing with single point of interconnection (SPOI). My testimony will address the
8 Qwest proposed 7.1.1.1 dealing with verification audits of VoIP traffic and which
9 will require Commission resolution and a decision on the situations in which
10 Qwest's 7.1.1.1 is acceptable. Mr. Easton's testimony will address the SPOI issue.
11 In addressing the dispute with Level 3 over the SPOI, he will address the second
12 proposed paragraph numbered 7.1.1.1 (Level 3's SPOI language).

13

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

16

17 A. Level 3 seeks to strike Qwest language which is necessary so that Qwest can verify
18 that the traffic that Level 3 identifies as VoIP traffic is valid VoIP traffic entitled to
19 the ESP exemption. Determining whether the traffic is proper VoIP traffic has
20 implications for a determination of whether it is local or interexchange for the
21 application of the appropriate intercarrier compensation regime. Thus, the proper
22 classification of traffic impacts the compensation obligations of both Qwest and
23 Level 3. Only traffic that qualifies as an Enhanced or Information Service is
24 entitled to the FCC's ESP exemption. Only VoIP traffic that originates on
25 broadband in IP can be terminated on the PSTN in TDM protocol under the ESP

1 Exemption. Thus, verification is critical.

2
3 First, the Qwest proposed language gives Qwest the right to do a verification audit
4 to assure that the VoIP traffic being delivered to Qwest for termination complies
5 with the definition and obligations of VoIP in this agreement. As discussed above,
6 the definition of VoIP is strongly disputed. Second, the contract makes clear that
7 when traffic does not qualify for the ESP exemption, an exemption that alleviates
8 the requirement to purchase switched access connections to the local network, that
9 Qwest has the right to redefine the non-qualifying traffic as Switched Access. If the
10 traffic does not qualify for the ESP exemption, then the only other connection to the
11 PSTN available is a Feature Group connection such as FGD.

12
13 **Q. WHAT IS THE FUNDAMENTAL DISPUTE RELATED TO THIS**
14 **LANGUAGE?**

15
16 A. Qwest and Level 3 are not in agreement regarding intercarrier compensation for
17 VoIP traffic that does not originate and terminate at physical locations within the
18 same LCAs. The VoIP compensation issue will be discussed in more detail in Issue
19 3B of my testimony regarding compensation for ISP Traffic. Level 3 apparently
20 does not agree that Qwest has the right to recognize VoIP traffic as Switched
21 Access in the event of an "operational verification audit failure," because Level 3
22 takes the position that Switched Access rates should never apply to VoIP traffic, no
23 matter where it originates or terminates.

24
25 **Q. DOES QWEST BELIEVE THAT OPERATIONAL AUDITS ARE**

1 **NECESSARY?**

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

10

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

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

23

24 **Q. HAVE THE PARTIES AGREED TO AUDIT PROVISIONS ELSEWHERE**

1 **IN THIS CONTRACT?**

2 A. Yes. As a matter of fact, an entire section, Section 18, of the agreement is devoted
3 to the procedures for auditing “books, records, and other documents used in
4 providing services under this Agreement.”⁹ In addition to the provisions of Section
5 18, the parties have agreed to audit provisions for safety audits,¹⁰ service eligibility
6 audits for high capacity combination or commingled facilities,¹¹ Qwest’s loop
7 information,¹² and a comprehensive audit of Qwest’s use of CLEC’s Directory
8 Assistance Listings.¹³

9

10 **Q. HAS LEVEL 3 PROPOSED OTHER AUDIT PROVISIONS?**

11 A. Yes. In Level 3’s proposed Section 7.3.9, which is covered under Disputed Issue
12 18, Level 3 includes proposed section 7.3.9.5.1 for auditing of company factors. As
13 a matter of principle, and as evidenced by the provisions the parties have agreed to,
14 Qwest does not oppose the inclusion of audit provisions, and the audit provision
15 included in disputed issue 18 is not the reason that Qwest opposes Level 3’s
16 proposed language, as Mr. Easton will explain. It is apparent from Level 3’s
17 proposal and from the agreed upon language elsewhere in this contract Level 3 does
18 not oppose audits in general. But for reasons yet to be explained, Level 3 opposes

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

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

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

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

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

1 the audit provision proposed by Qwest in section 7.1.1.1 dealing with the
2 origination and routing of VoIP calls.

3
4 **Q. SHOULD THE COMMISSION ADOPT QWEST'S LANGUAGE FOR**
5 **SECTION 7.1.1.1?**

6 A. Yes. To ensure fair and accurate billing for VoIP traffic, the commission should
7 approve Qwest's proposed language for Section 7.1.1.1.

8
9 **VI. DISPUTED ISSUE 1A: SECTION 7.1.1.2 CERTIFICATION**

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

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

18
19 **Q. WHAT IS QWEST'S LANGUAGE PROPOSAL THAT RELATES TO THIS**
20 **ISSUE?**

21 A. Qwest's proposal for section 7.1.1.2 of the interconnection agreement states:

22
23 7.1.1.2 Prior to using Local Interconnection Service trunks to terminate VoIP
24 traffic, CLEC certifies that the (a) types of equipment VoIP end users will use
25 are consistent with the origination of VoIP as defined in this Agreement; and

1 (b) types of configurations that VoIP end users will use to originate calls using
2 IP technology are consistent with the VoIP configuration as defined in this
3 Agreement
4

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

6 A. As was the case with section 7.1.1.1, this gets a bit confusing. Apparently Level 3
7 opposes any provision in the contract for certification of VoIP traffic. Therefore,
8 Level 3 offers no changes to Qwest's proposed language and instead seeks to
9 eliminate it completely. Since Level 3 presumably assumes the Qwest language
10 will be stricken, Level 3 has used the 'available' number 7.1.1.2 to introduce
11 additional language dealing with single point of interconnection (SPOI). My
12 testimony will address the Qwest proposed 7.1.1.2 dealing with certification of
13 VoIP traffic and which will require Commission resolution one way or the other.
14 Mr. Easton will address the SPOI issue in his testimony.
15

16 **Q. DOES QWEST BELIEVE THAT CERTIFICATION IS NECESSARY?**

17 A. Yes. As discussed above, Qwest and Level 3 have a fundamental disagreement
18 regarding what qualifies as a VoIP call. Level 3 should be willing (and the
19 Commission should require Level 3) to certify that VoIP traffic that it sends to
20 Qwest meets the definition established by the FCC.
21

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

24 A. Yes. There are many certification provisions included in the agreed upon language
25 in this contract. For example, numerous provisions are included in Section 12
26 requiring Level 3 to certify that its OSS can properly communicate with and submit

1 orders to Qwest's OSS. In addition, Level 3 must certify that it is entitled to certain
2 high capacity loops or transport UNEs per the Triennial Review Remand Order;¹⁴
3 Level 3 must certify that it meets service eligibility criteria for high capacity EELs;¹⁵
4 both parties must certify their service management systems;¹⁶ and Qwest must
5 certify Right of Way ("ROW") agreements to Level 3.¹⁷ Clearly, both parties have
6 agreed to certification obligations elsewhere in this agreement.

7
8 **Q. SHOULD THE COMMISSION ADOPT QWEST'S PROPOSED**
9 **LANGUAGE FOR SECTION 7.1.1.2?**

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

11
12 **VII. DISPUTED ISSUE 3 VNXX TRAFFIC**

13
14 **Q. PLEASE DESCRIBE THE PARTIES' DISPUTE RELATING TO ISSUE 3.**

15
16 A. Level 3 listed three separate issues under Issue 3 denominated as Issues 3a, 3b, and
17 3c. Issue 3a concerns section 7.3.6.2 of the agreement and involves intercarrier
18 compensation for calls not physically originating and terminating within the same
19 LCA. Issue 3b relates to section IV of the agreement's definition of Virtual NXX
20 or "VNXX traffic." Finally, Issue 3c addresses whether intercarrier compensation is

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

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

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

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

1 required on VNXX traffic in section 7.3.6.1.

2

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

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

12

13 **Q. WHAT IS VNXX TRAFFIC?**

14 A. In short, VNXX is an arrangement that provides the functionality of toll or 8XX
15 service, but at no extra charge. An NXX code, commonly referred to as a prefix, is
16 the second set of three digits of a ten-digit telephone number (NPA-NXX-XXXX).
17 These three digits (NXX) are assigned to and indicate a specific central office from
18 which a particular customer is physically served. In other words, in the number
19 (602) 255-XXXX, the "255" prefix is assigned to a specific central office in the
20 (602) area code and thus identifies the general geographic area in which the
21 customer is located. A "virtual" NXX, or VNXX undercuts that concept because it
22 results in a carrier-assigned NXX associated with a particular central office, but
23 where the carrier has no customers physically located. Instead, these telephone
24 numbers are assigned to a customer physically located outside the LCA of the

1 central office associated with the particular NXX. With VNXX, the physical
2 location of the CLEC customer is in most cases in a LCA that would require a toll
3 call from the LCA with which the telephone number is associated. This scheme
4 requires the assignment of a "virtual" NXX. The NXX is labeled "virtual" because
5 it is an assigned number that tells callers that it is in the *calling party's* LCA, rather
6 than the *called party's* LCA. In other words, a call to the "virtual" NXX does not
7 result in a local call within the LCA that the VNXX number appears to be assigned;
8 but in reality the call is terminated in a different LCA, and perhaps even in a
9 different state. Exhibit LBB3 attached hereto demonstrates visually how VNXX
10 circumvents the proper numbering plan.

11
12 VNXX has become an issue because CLECs, like Level 3 in Arizona, obtain local
13 numbers from the North American Numbering Plan Administrator ("NANPA") in
14 various parts of a state that are actually assigned to its customers (*i.e.*, ISPs) with no
15 physical presence whatsoever in the LCA with which the local numbers are
16 associated; thus, the traffic directed to those numbers is, instead of being routed to
17 customer in the same LCA as the calling party, routed to one of the points of
18 interconnection ("POIs") of the CLEC and is then terminated with the CLEC's ISP
19 customer at a physical location in another LCA or even in another state.

20
21 **Q. IS THE VNXX ISSUE CONNECTED TO THE SINGLE POINT OF**
22 **INTERCONNECTION (SPOI) ISSUE?**

23 A. Yes. In the early 2000s CLECs argued that they should be entitled to serve a LATA
24 from a single switch rather than placing switches in numerous LCAs in order to

1 offer local service. Qwest agreed and has offered such a form of interconnection
2 (SPOI) for several years. If a CLEC provides local service from a single switch
3 within a LATA, it is entitled (because it is a CLEC) to be assigned NXXs for LCAs
4 both near and far from the switch. The manner in which those NXXs are used is a
5 critical matter. If a CLEC is assigned an NXX and it has constructed or leases loops
6 to retail subscribers located within the LCA of the NXX, that is consistent with the
7 intended use of the assigned NXX (i.e., to allow the CLEC to provide local
8 exchange service to customers located within that LCA). But if a CLEC is assigned
9 an NXX from a distant LCA and it creates a primary line of business that creates a
10 deliberate misimpression that, from a carrier-to-carrier perspective, toll free calling
11 is really conventional local calling, then that is an unintended and inappropriate use
12 of the assigned NXX.

13
14 **Q. WHAT IS QWEST'S PROPOSAL FOR ISSUE 3B, DEFINITION FOR**
15 **VNXX TRAFFIC?**

16 A. Qwest proposes the following definition of VNXX Traffic:

17
18 "VNXX Traffic" is all traffic originated by the Qwest End User Customer that
19 is not terminated to CLEC's End User Customer physically located within the
20 same Qwest Local Calling Area (as approved by the state Commission) as the
21 originating caller, regardless of the NPA-NXX dialed and, specifically,
22 regardless of whether CLEC's End User Customer is assigned an NPA-NXX
23 associated with a rate center in which the Qwest End User Customer is
24 physically located.
25

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

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

1
2 VNXX Traffic shall include the following:
3

4 **ISP-bound VNXX traffic** is telecommunications over which the FCC has
5 exercised exclusive jurisdiction under Section 201 of the Act and to which
6 traffic a compensation rate of \$0.0007 / MOU applies. ISP-bound VNXX
7 traffic uses geographically independent telephone numbers (“GITN”), and thus
8 the telephone numbers associated with the calling and called parties may or
9 may not bear NPA-NXX codes associated with the physical location of either
10 party. This traffic typically originates on the PSTN and terminates to the
11 Internet via an Internet Service Provider (“ISP”).
12

13 **VoIP VNXX** traffic is telecommunications over which the FCC has exercised
14 exclusive jurisdiction under Section 201 of the Act and to which traffic a
15 compensation rate of \$0.0007 / MOU applies. VoIP VNXX traffic uses
16 geographically independent telephone numbers (“GITN”), and thus the
17 telephone numbers associated with the calling and called parties may or may
18 not bear NPA-NXX codes associated with the physical location of either party.
19 Because VoIP VNXX traffic originates on the Internet, the physical location
20 of the calling and called parties can change at any time. For example, VoIP
21 VNXX traffic presents billing situations where the (i) caller and called parties
22 are physically located in the same ILEC retail (for purposes of offering circuit
23 switched “local telephone service”) local calling area and the NPA-NXX
24 codes associated with each party are associated with different ILEC LCAs; (ii)
25 caller and called parties are physically located in the same ILEC retail (for
26 purposes of offering circuit switched “local telephone service”) local calling
27 area and the NPA-NXX codes associated with each party are associated with
28 the same ILEC LCAs; (iii) caller and called parties are physically located in
29 the different ILEC retail (for purposes of offering circuit switched “local
30 telephone service”) local calling area and the NPA-NXX codes associated
31 with each party are associated with same ILEC LCAs; and (iv) caller and called
32 parties are physically located in the different ILEC retail (for purposes of
33 offering circuit switched “local telephone service”) local calling area and the
34 NPA-NXX codes associated with each party are associated with different
35 ILEC LCAs. Examples of VoIP VNXX traffic include the Qwest “One Flex”
36 service and Level 3’s (3)VoIP Enhanced Local service.
37

38 **Circuit Switched VNXX traffic** is traditional “telecommunications services”
39 associated with legacy circuit switched telecommunications providers, most of
40 which built their networks under monopoly regulatory structures that evolved
41 around the turn of the last century. Under this scenario, costs are apportioned

1 according to the belief that bandwidth is scarce and transport expensive. The
2 ILEC offers to a customer the ability to obtain a "local" service (as defined in
3 the ILEC's retail tariff) by paying for dedicated transport between the physical
4 location of the customer and the physical location of the NPA-NXX. Thus,
5 this term entirely describes a service offered by ILECs, but which cannot be
6 offered by IP-based competitors as such networks do not dedicate facilities on
7 an end-to-end basis.

8
9 **Q. WHAT IS THE BASIC DIFFERENCE BETWEEN THE TWO**
10 **COMPANIES' DEFINITIONS OF VNXX?**

11 A. Both sides agree that a VNXX call originates in one LCA and terminates in another.
12 In addition, both Level 3 and Qwest agree that, with VNXX, the physical location
13 of the end user customer who is being called bears no relationship to the local
14 number that is assigned to the call. For example, Qwest's definition defines VNXX
15 traffic as "traffic...that is not terminated to CLEC's End User Customer physically
16 located within the same Qwest LCA as the originating caller, regardless of the
17 NPA-NXX dialed." Level 3's definition states that "VNXX traffic uses
18 geographically independent telephone numbers ("GITN"), and thus the telephone
19 numbers associated with the calling and called parties may or may not bear NPA-
20 NXX codes associated with the physical location of either party."
21

22 What the parties do not agree on is the means of compensation or appropriate
23 trunking for VNXX traffic. For instance, Level 3 adds "compensation" language
24 into the definition on the assumption that reciprocal compensation applies to VNXX
25 traffic, attempting to set the compensation rate¹⁸ for a call originating in one LCA

¹⁸ If the Commission were to adopt Level 3's proposed definition, it would then mandate reciprocal compensation payments at the local ISP rate of \$.0007 and would completely eliminate the concept of a toll call with regard to this traffic.

1 and terminating in a different one. Thus, as noted above, under Level 3's proposal,
2 instead of Qwest recovering the cost of delivering the traffic, Qwest would pay
3 Level 3 a compensation rate to terminate the traffic. In other words, Level 3
4 proposes a fundamental change in intercarrier compensation for VNXX traffic.

5
6 Level 3's language is improper for several reasons. First, because this section is for
7 defining *what* VNXX traffic is and not its rates, and second, and of critical
8 importance, Level 3's proposed definition of VNXX would convert toll calls to
9 local calls, and change the Commission's defined LCAs. For example, Level 3's
10 language would enable a customer physically located in the Phoenix LCA to have a
11 Flagstaff telephone number, so that calls to and from that person by local
12 subscribers in Flagstaff would be treated as local calls even though they are routed
13 over the PSTN to Phoenix just like other toll calls. This is improper because,
14 among other reasons, Level 3 wants to shift all of the costs of this arrangement to
15 Qwest.

16
17 **Q. LEVEL 3'S DEFINITION CONTAINS THREE CATEGORIES OF VNXX**
18 **TRAFFIC. DO YOU AGREE WITH "CATEGORIES" IN REGARD TO**
19 **VNXX CALLS?**

20 **A.** No. The ISP and VoIP paragraphs of Level 3's definition are essentially the same
21 for both categories. For example, both sections state that "VNXX traffic uses
22 geographically independent telephone numbers...not associated with the physical
23 location of either party..." In the VoIP section above, I stated that it appears that
24 Level 3 wants to treat all VoIP traffic as if it were local and it is through this

1 definition that it attempts to do so. Both the ISP and VoIP sections attempt to
2 impose “the compensation rate of \$0.0007/MOU” on this interexchange traffic.
3 The only actual difference between the paragraphs is the claim that an ISP VNXX
4 call originates on the PSTN and terminates to an ISP while VoIP VNXX calls
5 originate on the Internet and terminate to an end customer on the PSTN. These
6 comments, however, do not change the actual definition of what constitutes VNXX
7 traffic. The categories (ISP or VoIP) are irrelevant to establishing the VNXX
8 definition which deals with the geographic location of customers and NXX
9 numbers.

10
11 Level 3’s third category is both unnecessary and out of place in this section.
12 Labeled “Circuit Switched VNXX traffic,” the alleged definition contains only
13 Level 3’s biased legal opinion regarding “traditional ‘telecommunications
14 services.’” The language does not add any substance to the definition of VNXX
15 traffic and is obviously extraneous to the subject matter of this section of the
16 contract.

17
18 On the whole, Level 3 is attempting to create distinctions where none exist in order
19 to avoid the existing intercarrier compensation mechanisms—in effect to avoid
20 costs that other carriers pay and replace them with revenues. All three proposed
21 categories of VNXX are based on the termination of a call being physically located
22 in a different LCA. The labeled distinctions are irrelevant to the definition of
23 VNXX and only confuse the language and the underlying issues.

24
25 **Q. HAS THIS COMMISSION ADDRESSED THE SUBJECT OF VNXX**

1 **TRAFFIC PREVIOUSLY?**
2

3 A. Yes. In the recent AT&T arbitration this Commission addressed the issue of
4 VNXX traffic. The issue arose with in the context of the definition of Exchange
5 Service i.e. local service. In that case AT&T argued that the nature and
6 compensation of a call should be based on the NPA-NXX of the calling and called
7 parties, and not the physical location of the parties. Qwest's language on the other
8 hand said that local traffic was traffic that originated and terminated in the same
9 local calling area as determined by the Commission. After reviewing the arguments
10 for both sides the Commission found the "Qwest's definition of Exchange Service
11 comports with existing law and rules and should be adopted."¹⁹
12

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

16 A. The type of business of an end user customer does not affect whether a call is local
17 or not. If an end user customer is located in Flagstaff (whose ISP's modems and
18 routers are physically located in Phoenix, but whose number is a Flagstaff NPA
19 NXX) logs onto the Internet, the call to the ISP telephone number is not a local call
20 because it originates in Flagstaff and terminates in Phoenix.²⁰ It makes no
21 difference if the call is to an ISP, a hardware store, or a restaurant in Phoenix,

¹⁹ Opinion and Order, *In the Matter of the Petition of AT&T Communications of the Mountain States, Inc. and TCG Phoenix, for Arbitration with Qwest Corporation, Inc. Pursuant to 47 U.S.C. Section 252(b)*, Docket Nos. T-02428A-03-0553 and T-01051B-03-0553, at 13 (Ariz. Corp. Comm'n, April 6, 2004).

²⁰ Flagstaff is in a different LCA than Phoenix.

1 because it is a call that originates in Flagstaff and terminates in Phoenix. The
2 location of the calling and called parties determines the nature of the call, not the
3 business type. A toll call is a toll call. Level 3's avoidance of that fact is
4 demonstrated by its creation of VNXX categories. ISP, VoIP or circuit based
5 VNXX calls do not change a toll call into a local call. This language does not
6 belong in the contract anywhere, including in the definition of VNXX.

7
8 **Q. IF ISP TRAFFIC AND VOICE TRAFFIC ARE TREATED THE SAME FOR**
9 **THE VNXX DEFINITION, HOW IS A CALL DETERMINED TO BE**
10 **LOCAL OR TOLL?**

11 A. In regard to defining VNXX traffic, ISP traffic should be treated no differently than
12 voice traffic. In determining if a call is local or toll, the location of the origination
13 and termination is the decisive factor: calls that physically originate and terminate
14 within the same LCA are rated as local calls. The ESP POP is the point of
15 termination (for an ISP) and origination (for terminating VoIP). Calls routed to a
16 point of interface for termination **outside** of the originating LCA are interexchange
17 calls. VNXX services that terminate traffic to an ISP whose Internet equipment
18 (e.g., modems, servers, and routers) is not located within the same LCA as the
19 originating LCA are simply interexchange toll calls and must remain subject to the
20 access charge provisions that govern interexchange toll traffic. In the case of VoIP
21 calls, where a VoIP Provider's point of presence is in one LCA, say Phoenix, and
22 the VoIP Provider's CLEC, for example Level 3, wants to deliver a call on behalf of
23 its end user customer (the VoIP Provider) to an end user customer in Flagstaff,
24 Level 3 should hand that call to an "intraLATA" toll provider for termination.

1 Level 3's definitional language attempts to say this is a toll call or not depending on
2 to whom the call is placed. Again, a toll call is a toll call. Qwest's definition of
3 VNXX traffic is clear, concise, and accurate, while Level 3's definition
4 unnecessarily complicates the issue. Qwest's language should be adopted.

5
6 **Q. IN ITS PETITION LEVEL 3 REFERS TO ITS VNXX PRODUCT AS AN**
7 **"FX LIKE" PRODUCT. IS VNXX LIKE FOREIGN EXCHANGE (FX)**
8 **SERVICE?**

9
10 **A.** No. Level 3's VNXX product uses the PSTN to route and terminate calls to end
11 user customers connected to the PSTN in another LCA. In all respects, except the
12 number assignment, the call is routed and terminated as any other toll call. Qwest's
13 FX product, on the other hand, delivers the FX calls within the LCA where the
14 number is actually associated. In other words, a Qwest FX customer actually
15 purchases a local service connection in the LCA associated with the telephone
16 number. That local service connection is purchased by the FX customer out of the
17 local exchange tariffs that apply to that LCA. The calls are then transported on
18 what is, in effect, the end user customer's private network (private line) to another
19 location. In other words, after purchasing the local connection in the LCA, the FX
20 customer bears full financial responsibility to transport it to the location where the
21 call is actually answered. It does this at tariffed rates. Qwest, and other telephone
22 companies, have been selling such private line services to PBX owners and other
23 customers for decades. Calls are delivered to the customer's PBX and any call
24 delivery behind the PBX is, for purposes of transport to the customer's actual
25 location, carried on the owner's private network. Qwest and other telephone

1 companies delivered the call to the PBX location. Private transport beyond that is
2 the business of and financial responsibility of the PBX owner.

3
4 Level 3's approach is fundamentally distinct from FX service. Under FX, the
5 customer who desires a presence in another LCA is fully responsible to transport the
6 traffic to the location where it wants the call answered. Under level 3's proposal,
7 Level 3 wants the call routed over the PSTN, but feels no responsibility for
8 providing the transport to the distant location. In calling its product an FX-like
9 product, Level 3 attempts to confuse this critical distinction. Calls over the public
10 switched network between communities that use the toll network are toll calls no
11 matter how the numbers are assigned. Calls delivered to end user customers within
12 a LCA and transported over private networks are more than a mere technical
13 distinction. It is consistent with the way Commissions have been distinguishing
14 between toll and local calls since access charges were established.

15
16 **ISSUE 3A RECIPROCAL COMPENSATION FOR VNXX**
17

18 **Q. PLEASE DESCRIBE ISSUE 3A AND WHAT THE PARTIES DISPUTE IN**
19 **THIS ISSUE.**

20 **A.** Now that the distinction between a local call and VNXX has been established, Issue
21 3a can be addressed. Qwest's position is clear. VNXX calls are not local calls
22 subject to reciprocal compensation payments under 251(b)(5). Qwest's proposed
23 language makes clear that Qwest will not treat VNXX calls as local and will not pay
24 local reciprocal compensation on such VNXX traffic. Level 3 attempts to cast this
25 issue as to whether Qwest may exclude ISP traffic from compensation due under the

1 FCC's *ISP Remand Order* through contract terms that identify geographic
2 designations based on LCAs. A call from a customer in Phoenix to a customer
3 located in Miami, Florida is a toll call, irregardless of the telephone number dialed.
4 The fact that the customer at the other end of that toll call is an ISP does not
5 magically change the call into a local call. And a VNXX call to an ISP physically
6 located in Phoenix, but with a Flagstaff NPA NXX, placed by an end user customer
7 in Flagstaff is not a local call either. However, Qwest also makes clear that Qwest
8 *will* pay reciprocal compensation, a charge for terminating local traffic, on traffic
9 that actually originates and terminates at physical locations within the same LCA, as
10 established by the Commission. Qwest also makes clear that calls that originate and
11 terminate at locations in different LCAs are not local calls and not entitled to
12 reciprocal compensation. The "VNXX" number is not and should not be
13 determinative. And, of course, as stated earlier, if the VNXX call is an ISP call, no
14 reciprocal compensation is due, just as it would not be due on a typical voice call.
15 The fact that the call is ISP grants it no special status, legal or otherwise.

16
17 **Q. WHAT IS QWEST'S LANGUAGE PROPOSAL FOR ISSUE 3A, SECTION**
18 **7.3.6.3?**

19 A. Qwest's proposal for Section 7.3.6.3 of the interconnection agreement states:

20
21 7.3.6.3 Qwest will not pay reciprocal compensation on VNXX traffic.

22
23 **Q. WHAT IS LEVEL 3'S LANGUAGE PROPOSAL FOR SECTION 7.3.6.3?**

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

25

1 7.3.6.3 If CLEC designates different rating and routing points such that
2 traffic that originates in one rate center terminates to a routing point
3 designated by CLEC in a rate center that is not local to the calling party even
4 though the called NXX is local to the calling party, such traffic ("Virtual
5 Foreign Exchange" traffic) shall be rated in reference to the rate centers
6 associated with the NXX prefixes of the calling and called parties' numbers,
7 and treated as 251(b)(5) traffic for purposes of compensation.
8

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

12 A. No. First, Qwest agrees that, under the *ISP Remand Order* and until addressed more
13 definitively by the FCC, reciprocal compensation is due on ISP calls that originate
14 and terminate to locations within a LCA. However, the FCC has not ruled that all
15 ISP traffic is subject to intercarrier compensation. Level 3's fundamental argument
16 is that the *ISP Remand Order*, read in combination with the *Core Forbearance*
17 *Order*,²¹ requires that intercarrier compensation must be paid on *all* ISP traffic,
18 including VNXX ISP traffic.²² Level 3 argues that traffic bound for an ISP located
19 in Phoenix is subject to intercarrier compensation, regardless of whether it
20 originated across town in the LCA, from the other end of the state, or from across
21 the country. However, there is nothing in the *ISP Remand Order* or *Core*
22 *Forbearance Order* that requires that state commissions adopt ICA language that
23 allows intercarrier compensation for VNXX ISP traffic. These orders relate only to
24 local ISP traffic, where the ISP is physically located in the same LCA as the

²¹ Order, *Petition of Core Communications for Forbearance Under 47 USC § 160(c) from the Application of the ISP Remand Order*, Order FCC 04-241 WC Docket No. 03-171 (rel. October 18, 2004) ("*Core Forbearance Order*").

²² Level 3 Petition ¶¶ 56-66.

1 customer placing the call. Qwest addresses its legal position on this issue in its
2 Response to Level 3's Petition and will do in more detail in its briefs in this case.

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

6 A. Yes. VNXX is not just a phenomenon associated with ISP calls, although it is in
7 that context that VNXX issues often arise. A VNXX call can be to an ISP such as
8 AOL located in another town or to a voice customer such as the local hardware
9 store in that other town. VNXX arrangements can exist for both ISP and voice
10 traffic. The issue of VNXX traffic (whether ISP or other types of traffic) has been
11 addressed to some degree by the FCC and has been extensively litigated before
12 many state commissions. The majority of state commissions have ruled that traffic,
13 whether voice traffic or ISP that does not physically originate and terminate in the
14 same LCA is not subject to reciprocal compensation under existing interconnection
15 agreements. Here, however, the issue is not the interpretation of an existing
16 interconnection agreement, but what the language of a new agreement should
17 provide. In this case, Level 3 is asking the Commission to require local reciprocal
18 compensation for non-local calls, deviating from the policy that reciprocal
19 compensation is recoverable only for the termination of "local" traffic (as defined
20 by state commission tariffs). In that regard, language from the *ISP Remand Order*
21 is instructive:

22
23 Congress preserved the pre-Act regulatory treatment of all the access services
24 enumerated under Section 251(g). These services thus remain subject to
25 Commission jurisdiction under Section 201 (or, to the extent they are

1 *intrastate services, they remain subject to the jurisdiction of state*
2 *commissions), whether those obligations implicate pricing policies as in*
3 *Comptel or reciprocal compensation. This analysis properly applies to the*
4 *access services that incumbent LECs provide (either individually or jointly*
5 *with other local carriers) to connect subscribers with ISPs for Internet-bound*
6 *traffic.*²³
7

8 The FCC was focused upon problems unique to the compensation mechanism that
9 applied to traffic where the ISP was located in the same LCA. Level 3 attempts to
10 inject language that “ISP-bound” VNXX traffic is subject to ISP compensation, and
11 argues that the FCC changed the access charge structure and issued an exemption
12 for “all” calls sent to the Internet, regardless of where the call originates and
13 terminates. While the FCC has opened a docket to scrutinize these issues as a part
14 of an overall examination of intercarrier compensation,²⁴ the applicable law has not
15 changed. Until the FCC takes further action in its intercarrier compensation docket,
16 expanding reciprocal compensation to include calls from across the state or country
17 must not be permitted.
18

19 **Q. LEVEL 3 ARGUES THAT THERE IS A COST DIFFERENCE IN**
20 **TERMINATING ISP AND NON ISP CALLS. PLEASE RESPOND.**

21 A. Level 3 argues that its cost to terminate an ISP call is not different than the cost to
22 terminate a non ISP call. Qwest has never suggested that there is a cost difference
23 to Level 3 and, whether there is or is not a difference, the question is completely
24 irrelevant. The question before the Commission is not the cost of termination, but

²³ *ISP Remand Order ¶ 39* (emphasis added, footnote omitted).

²⁴ *In the Matter of Developing a Unified Intercarrier Compensation Regime*, 16 FCC Rcd 9610 (2001) (“*Intercarrier Compensation NPRM*”).

1 whether a CLEC, by serving ISPs, may gather traffic from multiple LCAs at no cost
2 to itself (remember that Level 3 also claims it should pay no costs on Qwest's side
3 of the POI) and then be able to charge Qwest for terminating *all* of that traffic,
4 whether it is local or not. As many other state commissions that have addressed the
5 issue have concluded and as the FCC clearly concluded in the *ISP Remand Order*,
6 requiring reciprocal compensation on ISP traffic leads to uneconomic arbitrage and
7 windfall revenues.

8
9 **Q. WHY SHOULD QWEST'S LANGUAGE BE ADOPTED?**

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

20
21 **Q. WHY DOES QWEST BELIEVE ITS LANGUAGE SHOULD BE ADOPTED?**

22 A. Carriers seeking to receive reciprocal compensation on VNXX services are
23 attempting to redefine existing tariffed services and Commission-established local
24 boundaries and categorize them in a unique way in an attempt to collect reciprocal

1 compensation and avoid access charges. These VNXX numbers, and the facilities
2 that would be used to connect to locations where such calls would be terminated,
3 are interexchange in nature and are therefore not subject to reciprocal
4 compensation. By attempting to fool the systems with a local number, the call
5 detail itself would not indicate that any compensation associated with this
6 interexchange or toll call should be made. The assignment of telephone numbers in
7 the VNXX manner should not result in inter-exchange calls between two
8 communities not in the same LCA to masquerade as local calls.

9
10 **Q. WHAT IS THE APPROPRIATE COMPENSATION MECHANISM FOR**
11 **THESE TYPES OF CALLS?**

12 A. The costs of carrying VNXX calls between different LCAs should not be borne by
13 end user customers of the local exchange where the call originated. The VNXX
14 service providers, and the ultimate cost-causer, the ISP whose customers generate
15 the traffic via dial-up Internet connections, should bear the financial responsibility
16 for such traffic. After all, it is the CLEC and its ISP customers who generate the
17 traffic. The telecommunications carrier who wishes to deliver this interexchange
18 traffic elsewhere must bear the financial responsibility of the interexchange
19 transport to the ISP. The appropriate compensation mechanism for VNXX services
20 is that the VNXX service provider that is transporting traffic between LCAs should
21 pay the appropriate charges to transport calls between the LCAs. Such calls should
22 not be considered local calls.

23
24 **ISSUE 3C: RECIPROCAL COMPENSATION FOR ISP TRAFFIC**

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

2 A. In Issue 3b the definition of VNXX traffic was discussed. Issue 3a dealt with Level
3 3's claim that VNXX traffic should be subject to reciprocal compensation. There
4 was no distinction made by Level 3 between a voice call and an ISP call; Level 3's
5 language tries to include VNXX in the category of calls entitled to reciprocal
6 compensation. Qwest's proposed language made clear that VNXX traffic was not
7 local traffic subject to reciprocal compensation. Now in Issue 3c the language
8 addresses the payment of reciprocal compensation for ISP traffic generally.
9

10 **Q. WHAT IS QWEST'S LANGUAGE PROPOSAL FOR ISSUE 3C, SECTION**
11 **7.3.6.1, INTERCARRIER COMPENSATION FOR ISP BOUND TRAFFIC?**

12 A. Qwest proposal for the definition of Section 7.3.6.1 is as follows:
13

14 7.3.6.1 Subject to the terms of this Section, intercarrier compensation for
15 ISP-bound traffic exchanged between Qwest and CLEC (where the end users
16 are physically located within the same Local Calling Area) will be billed as
17 follows, without limitation as to the number of MOU ("minutes of use") or
18 whether the MOU are generated in "new markets" as that term has been
19 defined by the FCC:

20 \$.0007 per MOU or the state ordered rate, whichever is lower.
21

22 **Q. WHAT IS LEVEL 3'S LANGUAGE PROPOSAL FOR ISSUE 3C, SECTION**
23 **7.3.6.1, INTERCARRIER COMPENSATION FOR VNXX TRAFFIC?**

24 A. Level 3's counter-proposal for the definition of Section 7.3.6.1 is as follows:
25

26 7.3.6.1 Intercarrier compensation for ISP-bound traffic Section 251(b)(5)
27 traffic, and VoIP traffic exchanged between Qwest and CLEC will be billed
28 and paid without limitation as to the number of MOU ("minutes of use") or
29 whether the MOU are generated in "new markets" as that term has been
30 defined by the FCC in the ISP Remand Order at a rate of \$.0007 per MOU.

1

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

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

11

12 **Q. HOW IS LEVEL 3 ATTEMPTING TO ELIMINATE ACCESS CHARGES**
13 **IN ARIZONA?**

14 A. In a very roundabout, but very clever way. Level 3 proposes language saying the
15 rate of \$.0007 shall apply to "251(b)(5) traffic." To find out what this means, one
16 must go to the definitions section of Level 3's proposed agreement to see how it
17 defines "251(b)(5) traffic." It does this in its definition of the term
18 "telecommunications," which, under Level 3'sd definition, "includes, but is not
19 limited to *Section 251(b)(5) Traffic, which is defined as Telephone Exchange*
20 *Service, Exchange Access Service, Information Service, and Telephone Toll Service*
21 *(including but not limited to IntraLATA and InterLATA Toll) traffic and is also*
22 *defined to include ISP-Bound traffic, VoIP traffic."* Thus, while including "ISP-
23 bound traffic and VoIP," Level 3 also includes toll traffic in section 251(b)(5)
24 traffic. As far as I know, it is unprecedented for a CLEC to claim that toll traffic is

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

10
11 **VIII. DISPUTED ISSUE 4: COMPENSATION FOR VOICE AND VoIP**
12 **TRAFFIC**

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

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

1 compensation for VNXX calls that are from outside the LCA.

2

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

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

5

6 7.3.4.1 Intercarrier compensation for Exchange Service (EAS/Local) and
7 VoIP traffic exchanged between CLEC and Qwest (where the end users are
8 physically located within the same Local Calling Area) will be billed at
9 \$.00097.

10

11 7.3.4.2 The Parties will not pay reciprocal compensation on traffic,
12 including traffic that a Party may claim is ISP-Bound Traffic, when the traffic
13 does not originate and terminate within the same Qwest local calling area (as
14 approved by the state Commission), regardless of the calling and called NPA-
15 NXXs and, specifically regardless of whether an End User Customer is
16 assigned an NPA-NXX associated with a rate center different from the rate
17 center where the customer is physically located (a/k/a "VNXX Traffic").
18 Qwest's agreement to the terms in this paragraph is without waiver or
19 prejudice to Qwest's position that it has never agreed to exchange VNXX
20 Traffic with CLEC.

21

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

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

24

25 7.3.4.1 Subject to the terms of this Section, intercarrier compensation for
26 Section 251(b)(5) Traffic where originating and terminating NPA-NXX codes
27 correspond to rate centers located within Qwest defined local calling areas
28 (including ISP-bound and VoIP Traffic) exchanged between Qwest and CLEC
29 will be billed as follows, without limitation as to the number of MOU
30 ("minutes of use") or whether the MOU are generated in "new markets" as
31 that term has been defined by the FCC: \$.0007 per MOU.

32

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

34 A. Yes. The Qwest proposed rate in my testimony reflects the rate of \$.00097

1 established by the Commission for voice traffic. The FCC did nothing to take away
2 the state commissions' right to set the voice rate for reciprocal compensation. The
3 FCC did nothing to take away the state commissions' right to set the voice rate for
4 reciprocal compensation. Level 3 thinks a different rate, \$.0007, should apply and
5 not the rate established by the Arizona Commission. In addition, Level 3 again tries
6 to insert 251(b)(5) language, which, based on the discussion above, includes toll.
7 Level 3 also attempts to include any VNXX calls by tying the traffic to the NPA-
8 NXX, and not to the towns where the customers reside.

9
10 **Q. WHY SHOULD THE COMMISSION ADOPT THE QWEST LANGUAGE**
11 **OVER THE LEVEL 3 LANGUAGE?**

12 A. I will not repeat the arguments on this issue. I addressed them in the VNXX
13 definition section, as well as the compensation for ISP issue. In both instances,
14 Level 3 sought to expand the definition of 251(b)(5) traffic to include calls from
15 outside the LCA if the terminating party had an assigned NXX associated with the
16 local exchange of the calling party. Level 3 is attempting through its language in
17 7.3.4.1 to do the same thing for voice and VoIP calls. Qwest's language makes
18 clear that VNXX traffic, including voice and VoIP VNXX traffic, is not local and is
19 not subject to reciprocal compensation rules for local traffic. Level 3's attempt to
20 change the FCC's orders and redefine 251(b)(5) to include toll is also addressed in
21 Issues 10 and 19.

22
23 **IX. DISPUTED ISSUE 19: ISP BOUND 3:1 RATIO, Section 7.3.6.2**
24

1 **Q. WHAT IS THE DISPUTED LANGUAGE FOR SECTION 7.3.6.2?**

2 A. Section 7.3.6.2 states:

3 7.3.6.2 Identification of ISP-Bound Traffic – ~~unless the Commission has~~
4 ~~previously ruled that Qwest's method for tracking ISP-Bound Traffic is~~
5 ~~sufficient,~~ Qwest will presume traffic delivered to CLEC that exceeds a 3:1
6 ratio of terminating (Qwest to CLEC) to originating (CLEC to Qwest) traffic
7 is ISP- Bound traffic. Either party may rebut this presumption by
8 demonstrating the factual ratio to the state Commission. Traffic exchanged
9 that is not ISP-Bound Traffic will be considered to be Section 251(b) (5)
10 traffic.

11

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

14

15 A. There are two issues in regard to Section 7.3.6.2. In the first instance Level 3 seeks
16 to strike language dealing with the situation where a State Commission has
17 previously ruled on what is an appropriate method of tracking ISP-bound Traffic. I
18 show this disputed language in ~~strike-through-text~~. The second issue deals with
19 Level 3's attempt to insert additional language in the section dealing with 3:1 that
20 will presume all traffic exchanged between Qwest and Level 3 that is not ISP-bound
21 traffic is 251(b)(5) traffic. I show this proposed Level 3 change in underlined text.
22 I will address each of these issues separately.

23

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

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

8
9 “A carrier may rebut the presumption, for example, by demonstrating to the
10 appropriate state commission that traffic above the 3:1 ratio is in fact local
11 traffic delivered to non-ISP customers. In that case, the state commission will
12 order payment of the state-approved or state-arbitrated reciprocal compensation
13 rates for that traffic. Conversely, if a carrier can demonstrate to the state
14 commission that traffic it delivers to another carrier is ISP-bound traffic, even
15 though it does not exceed the 3:1 ratio, the state commission will relieve the
16 originating carrier of reciprocal compensation payments for that traffic, which
17 is subject instead to the compensation regime set forth in this Order”²⁵
18

19 Qwest has brought this issue up elsewhere and has successfully rebutted the 3:1
20 presumption. In Arizona, because Qwest has not yet brought this matter before the
21 Commission, the Commission has not yet ruled on Qwest’s method of identifying
22 ISP traffic. In Arizona, Qwest has not yet brought this matter before the
23 Commission. The Commission has not yet ruled on Qwest’s methodology of
24 identifying ISP traffic. Because Level 3 does not object to the language “Either
25 party may rebut this presumption by demonstrating the factual ratio to the state
26 Commission”, Qwest has no objection to the language ‘~~unless the Commission has~~
27 ~~previously ruled that Qwest’s method for tracking ISP-Bound Traffic is~~

²⁵ *ISP Remand Order*, ¶ 79.

1 A. The Commission should rule that Level 3's attempt to change existing law on what
2 is included in section 251(b)(5) traffic should be denied. Thus, the Level 3
3 proposed language at the end of 7.3.6.2 should be rejected.
4

5 **X. DISPUTED ISSUE 10: DEFINITION OF INTERCONNECTION**
6

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

8 A. Level 3 mischaracterizes this issue as Qwest's attempt to exclude traffic from being
9 exchanged. That is not the issue at all. In fact, this is simply another version of
10 Level 3's inappropriate effort to reclassify all traffic to its benefit. Level 3 purports
11 to be offering a definition of interconnection, but it is really attempting to insert into
12 the agreement an incredibly broad definition of section 251(b)(5) traffic:
13 *"Telecommunications includes, but is not limited to Section 251(b)(5) Traffic,*
14 *which is defined as Telephone Exchange Service, Exchange Access Service,*
15 *Information Service, and Telephone Toll Service (including but not limited to*
16 *IntraLATA and InterLATA Toll) traffic and is also defined to include ISP-*
17 *Bound traffic, VoIP traffic."* This language is a clear misstatement of the FCC's
18 position. Level 3 is seeking to expand the definition of 251(b)(5) traffic to include,
19 among other things, intraLATA and interLATA toll calls. In fact, the FCC has
20 clearly and unequivocally stated that section 251(b)(5) does NOT include the
21 services Level 3 is attempting to add in its definition of "interconnection":
22

23 "We conclude that a reasonable reading of the statute is that Congress
24 intended to exclude the traffic listed in subsection (g) from the reciprocal
25 compensation requirements of subsection (b)(5). Thus, the statute does not
26 mandate reciprocal compensation for "exchange access, information access,

1 and exchange services for such access” provided to IXCs and information
2 service providers. Because we interpret subsection (g) as a carve-out
3 provision, the focus of our inquiry is on the universe of traffic that falls within
4 subsection (g) and not the universe of traffic that falls within subsection
5 (b)(5).²⁷

6 Level 3 is attempting, through a definitional sleight of hand, to convince the
7 Arizona Commission to overturn this portion of the FCC’s decision in the *ISP*
8 *Remand Order* and to fundamentally change the intercarrier compensation
9 mechanisms that have governed carrier-to-carrier relationships for years. The
10 Commission should reject Level 3’s definition of “interconnection” and its attempt
11 to obtain an interconnection definition that would include toll, access, and
12 information services in section 251(b)(5) traffic.

13
14 **XI. DISPUTED ISSUE 11: DEFINITION OF INTEREXCHANGE**
15 **CARRIER**

16
17 **Q. PLEASE DESCRIBE THE PARTIES' DISPUTE RELATING TO ISSUE 11.**
18

19 A. This issue relates to whether the Interconnection Agreement should contain the
20 definition of “Interexchange Carrier” as proposed by Qwest or use Level 3’s
21 definition.
22

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

24 A. Qwest’s definition for “Interexchange Carrier” is as follows:

25 “Interexchange Carrier” or “IXC” means a Carrier that provides *InterLATA or*
26 *IntraLATA Toll services.*

²⁷*Id.*

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

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

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

6
7 **Q. WHY DOES QWEST BELIEVE THAT ITS DEFINITION IS ACCURATE?**
8

9 A. I will state first that this is not an area of disagreement that is significant or will
10 have a profound effect on the implementation of the interconnection agreement,
11 except as discussed below. Qwest's proposed definition of "Interexchange Carrier"
12 is the current, standard language included in interconnection agreements with
13 CLECs and has been approved by every Commission in Qwest's region. An
14 interexchange carrier is an access customer that typically purchases Feature Group
15 D access trunks from Qwest to originate and terminate "interLATA and
16 intraLATA" toll calls. The terms "InterLATA and IntraLATA" have been widely
17 used and understood within the telecommunications industry. The Communications
18 Act of 1934 (as amended) contains a definition for "interLATA service"²⁸ and
19 references the term "interLATA" throughout the Act. State commissions also
20 reference intraLATA and interLATA services and refer to "toll" services ordered by
21 an IXC.

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

1

2 **Q. WHY WOULD LEVEL 3 OBJECT TO THE USE OF ‘INTERLATA AND**
3 **‘INTRALATA’ IN RELATIONSHIP TO AN IXC?**

4 A. During negotiations, Level 3 implied that in order for a toll call to be a toll call, a
5 discrete charge must be imposed. Thus, under this logic, if Level 3 did not charge
6 its customers for VNXX calls, the VNXX calls could not be categorized as toll
7 calls, could not be subject to access charges, and should be subject to reciprocal
8 compensation. Level 3’s effort to inject the “Telephone Toll Service” definition
9 appears to be a back door attempt to inject this issue into the agreement. Although
10 Qwest has little dispute between the two definitions, Qwest takes strong issue with
11 a Level 3 assertion that the “telephone toll service” definition means that VNXX is
12 not toll and has been validated by the agreement, with all of its attendant
13 implication for access charges and reciprocal compensation. Under what appears to
14 be Level 3’s theory, a carrier that offers toll but does not charge its customers for
15 any reason would thereby exempt itself from FCC or state prescribed access
16 charges. Furthermore, Level 3’s ability as a CLEC to obtain local numbers carries
17 with it the assumption (apparently false in its case) that these numbers will be used
18 to originate and/or terminate local calls. Thus, Qwest has no way to determine in
19 advance whether any particular call is really a toll call that it should be billing as
20 such. Thus, a CLEC like Level 3 that wants to rely on a definition that a toll call
21 can only be a toll call if there is a charge is enabled to create its own self-fulfilling
22 prophecy. The reference to charges is addressed to the end user customers. Toll is
23 a retail product sold to end user customers. The term toll does not address the
24 charges between carriers, exchange access. Whether or not there is a charge to a

1 retail end user customer for the toll call will not impact the tariffed obligation to pay
2 access charges.

3
4 **XII. DISPUTED ISSUE 12: DEFINITION OF "INTRALATA TOLL**
5 **TRAFFIC"**
6

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

8 A. This issue relates to whether the Interconnection Agreement should contain the
9 definition of "IntraLATA Toll" as proposed by Qwest or use Level 3's definition.
10

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

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

13 IntraLATA Toll Traffic" describes IntraLATA Traffic outside the Local
14 Calling Area.
15

16 **Q. WHAT IS LEVEL 3'S LANGUAGE PROPOSAL?**

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

18 IntraLATA Toll Traffic" describes IntraLATA Traffic that constitutes
19 Telephone Toll Service.

20 Again, the Commission will note that there is little in the way of a substantive
21 difference here. Both definitions accurately describe a type of IntraLATA toll call
22 in different ways. Neither definition will change the impact of the Agreement.
23 However, Level 3's injection of the "Telephone Toll Service" definition again
24 raises the issue of whether Level 3 believes that the inclusion of that definition
25 means that traffic between two exchanges (i.e., interexchange traffic) is exempt

1 from access charges. If so, the companies have a major dispute. The dispute can be
2 avoided by simply adopting Qwest's language, which is clear and has been widely
3 accepted in SGATs and interconnection agreements.
4

5 **XIII. DISPUTED ISSUE 9: DEFINITION OF EXCHANGE ACCESS**
6

7 **Q. PLEASE DESCRIBE THE PARTIES' DISPUTE RELATING TO ISSUE 9.**

8 A. This dispute related to Qwest's proposed definition for "Exchange Access". Qwest
9 agrees with Level 3's proposed definition that "Exchange Access" will have the
10 meaning as set forth in the Act. Where Qwest used the word "Exchange Access"
11 uniquely in Section 7 of the agreement, Qwest simply deleted the words "Exchange
12 Access" and left the remainder of the language "Intralata toll carried solely by Local
13 Exchange Carriers, (LEC IntraLATA toll)". The description of LEC IntraLATA
14 toll was not disputed by Level 3 in Section 7, thus we believe this issue is closed.
15
16

17 **XIV. DISPUTED ISSUE 14: DEFINITION OF EXCHANGE SERVICE**
18

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

20 A. This dispute relates to Level 3's deletion of the term "Exchange Service" as part of
21 its request to include "Telephone Exchange Service" in the agreement. Qwest's
22 definition for "Exchange Service" or "Extended Area Service (EAS)/Local Traffic"
23 means traffic that is originated and terminated within a LCA as determined by the
24 Commission. Qwest cannot nor should the Commission agree to strike "Exchange
25 Service" from the definitions. Exchange Service is used in paragraphs throughout

1 the agreement (most of which Level has not disputed). Qwest objects to the
2 removal of Qwest's definition for "Exchange Service" as it is used repeatedly
3 throughout the agreement and is therefore necessary.
4

5 **XV. DISPUTED ISSUE 15: DEFINITION OF 'TELEPHONE TOLL**
6 **SERVICE'**
7

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

9 A. This issue relates to Level 3's inclusion of a definition for "telephone toll service"
10 and Qwest's position that it is not necessary to include a separate definition for
11 "telephone toll service."
12

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

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

16 Telephone toll service - the term "telephone toll service" means telephone
17 service between stations in different exchange areas for which there is made a
18 separate charge not included in contracts with subscribers for exchange
19 service.
20

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

23 A. The definition that has been agreed upon by both parties for "Switched Access
24 Service" states that Switched Access is the service that an IXC orders for
25 originating and terminating 'telephone toll service.' Switched Access enables access

1 customers (IXCs) to complete end user customer requests for intrastate or interstate
2 long-distance calls. The terms and conditions for access services are in compliance
3 with the rules and regulations for telephone toll service. The definition reads as
4 follows:

5
6 "Switched Access Service" means the offering of transmission and switching
7 services to Interexchange Carriers for the purpose of the origination or
8 termination of *telephone toll service*. Switched Access Services include:
9 Feature Group A, Feature Group B, Feature Group D, 8XX access, and 900
10 access and their successors or similar Switched Access Services.

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

13 A. No. The definition is from the FCC and is not controversial. What is controversial
14 is Level 3's attempt to avoid access charges on telephone toll elsewhere in the
15 agreement. The real issue regarding this definition is Level 3's attempt to exempt
16 "telephone toll service" from access charges and instead treat this traffic as local,
17 and therefore subject to reciprocal compensation. Level 3 proposes that telephone
18 toll service be included in section 251(b)(5) traffic, traffic that is treated as local,
19 that is subject to reciprocal compensation, and not subject to access charges. As an
20 example, in the definition for "Interconnection" Level 3's language states: "Section
21 251(b)(5) traffic, which is defined as Telephone Exchange Service, Exchange
22 Access Service, Information Service, and *Telephone Toll Service (including but*
23 *not limited to intraLATA and interLATA Toll).*" While this is one of the few
24 places where Level 3 spells out that it is making a definitional attempt to include
25 toll with section 251(b)(5), Level 3 then uses the term 251(b)(5) traffic throughout
26 the agreement without mentioning the fact that it has defined it to include toll. This

1 is an inappropriate attempt to redefine categories of traffic in ways that will
2 dramatically change methods of compensation. It should not be accepted by the
3 Commission.

4

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

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

8

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

10 A. Yes, it does.

INDEX TO EXHIBITS

1
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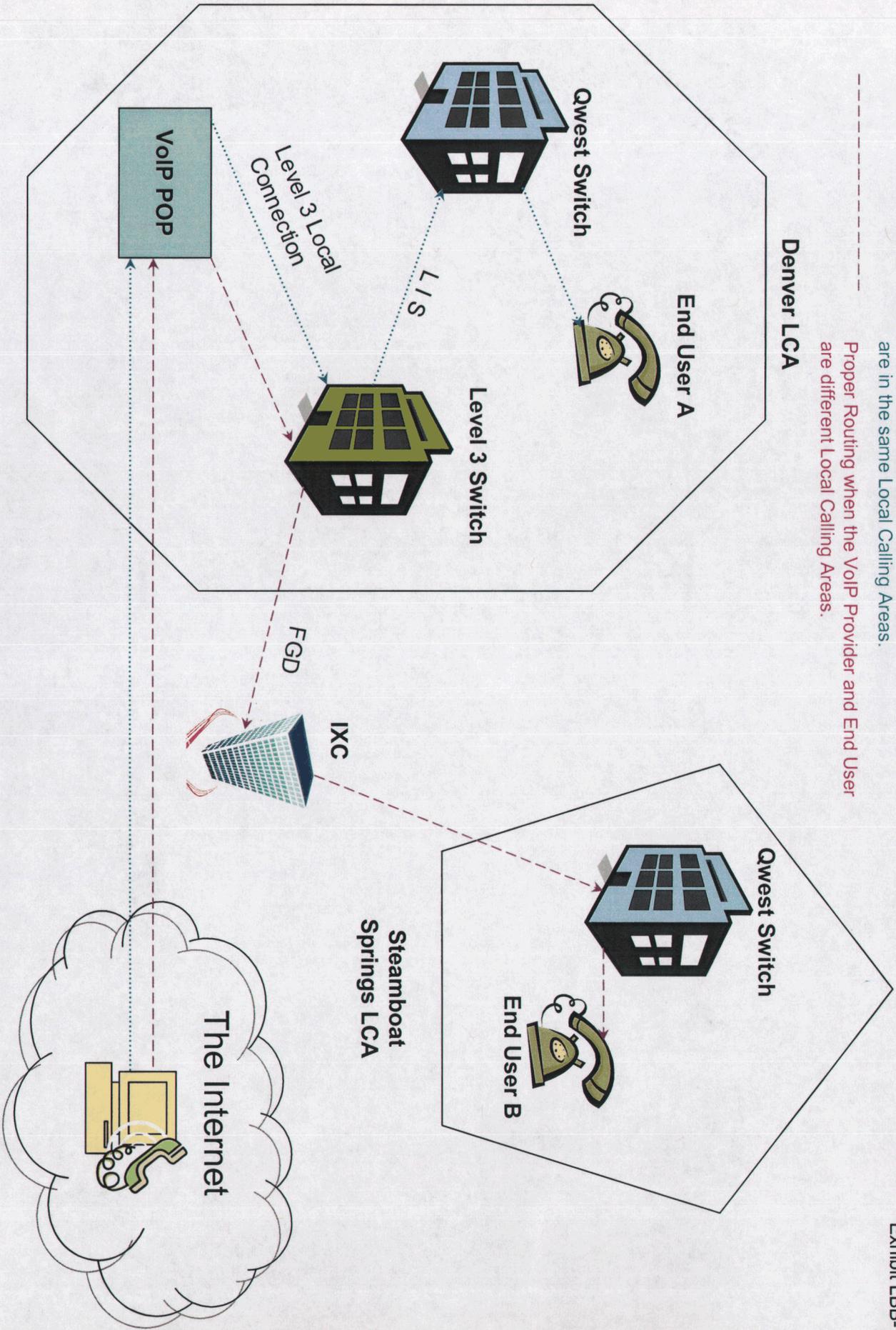
DESCRIPTION	<u>Exhibit</u>
ESP Connection	LBB-1
VoIP Routing	LBB-2
Virtual NXX.....	LBB-3

LARRY BROTHERSON EXHIBITS

Proper Routing of Valid VoIP Calls

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

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



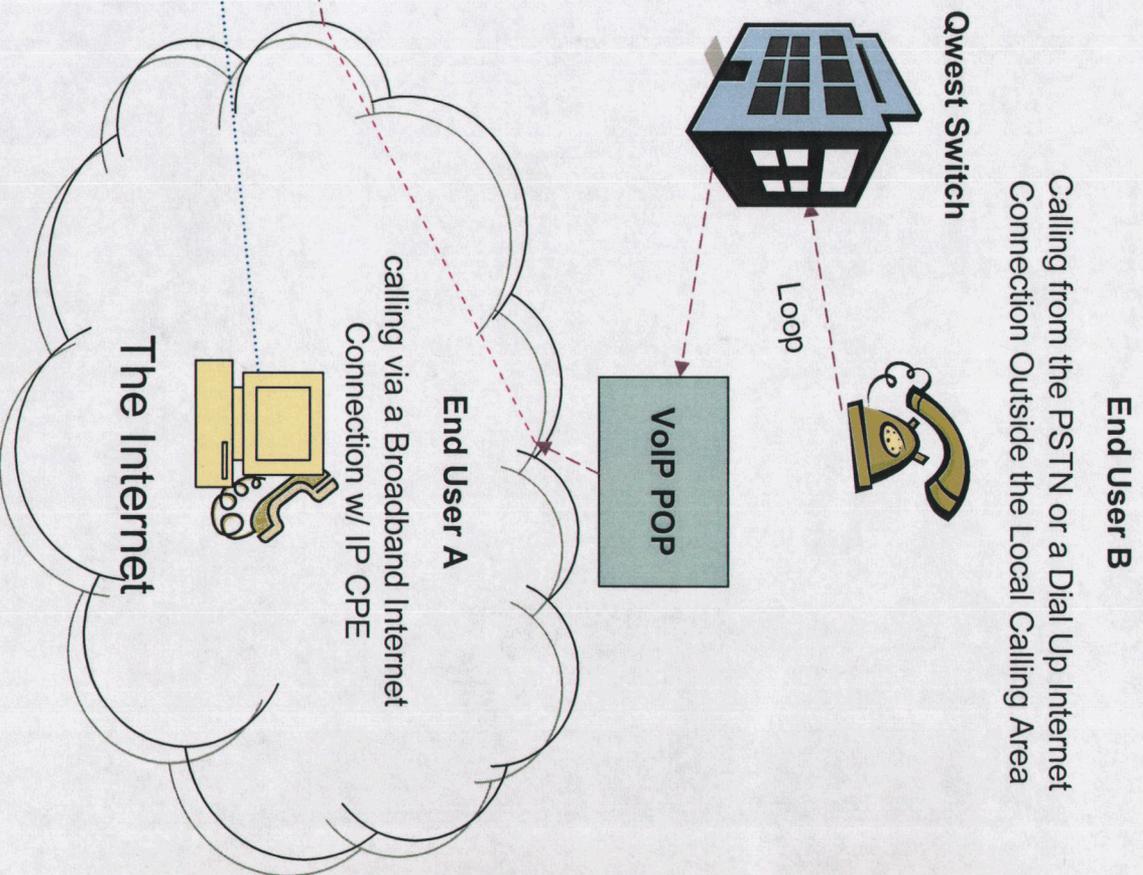
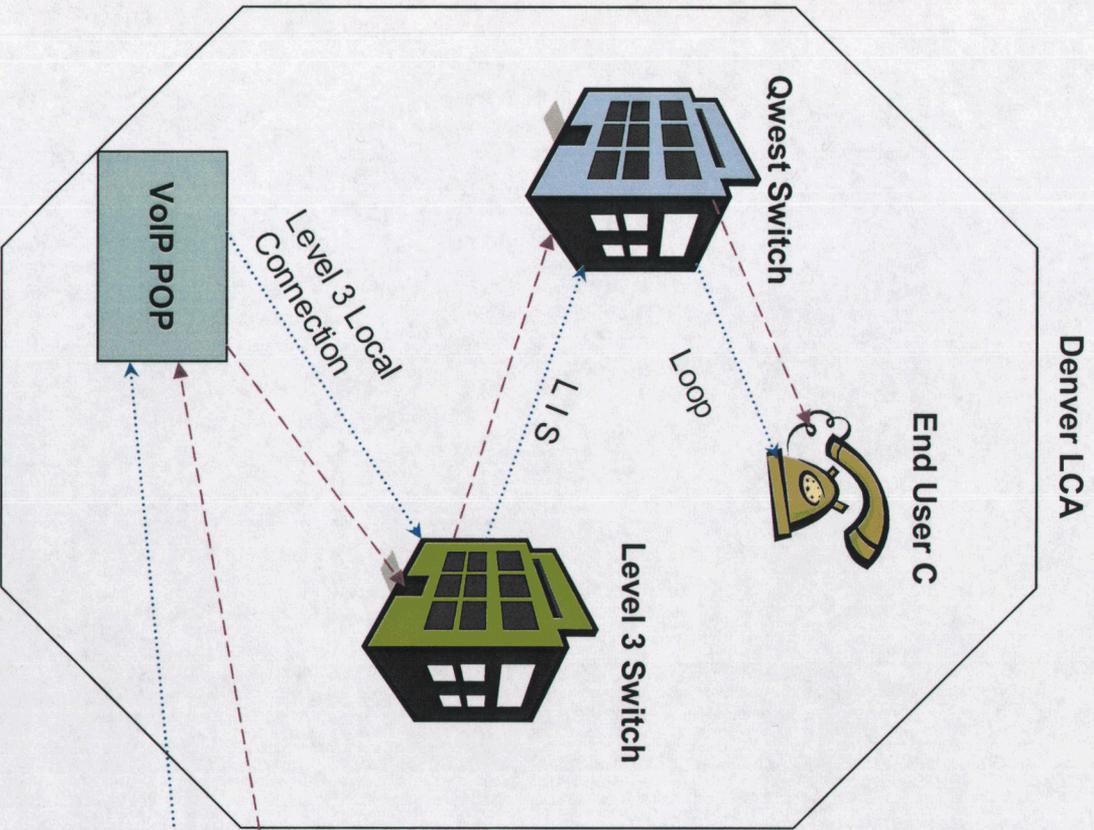
Docket Nos. T-03654A-05-0350,
T-01051B-05-0350
Qwest Corporation
Direct Testimony of Larry B. Brotherson
Exhibit LBB-1

Examples of VoIP Calls

Docket Nos: T-03654A-05-0350,
 T-01051B-05-0350
 Qwest Corporation
 Direct Testimony of Larry B. Brotherson
 Exhibit LBB-2

Valid VoIP Call

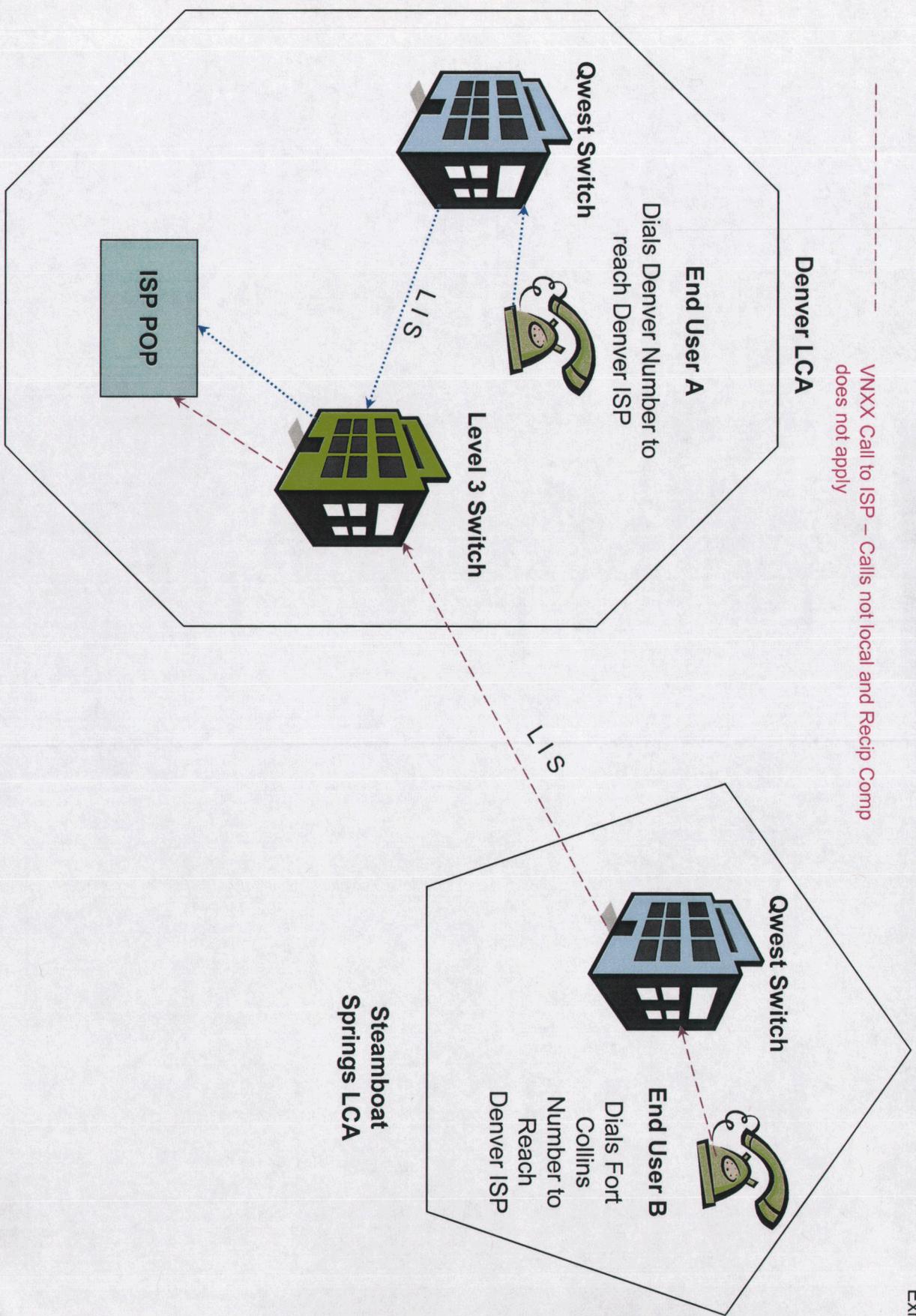
NOT a valid VoIP Call



VNXX Routing

Docket Nos: T-03654A-05-0350,
T-01051B-05-0350
Qwest Corporation
Direct Testimony of Larry B. Brotherson
Exhibit LBB-3

..... Local Call to ISP – Qwest Pays Recip Comp
----- VNXX Call to ISP – Calls not local and Recip Comp does not apply



BEFORE THE ARIZONA CORPORATION COMMISSION

IN THE MATTER OF THE PETITION OF)
LEVEL 3 COMMUNICATIONS, LLC FOR)
ARBITRATION OF AN)
INTERCONNECTION AGREEMENT WITH)
QWEST CORPORATION)
PURSUANT TO SECTION 252 (b) OF THE)
TELECOMMUNICATIONS ACT OF 1996)
STATE OF COLORADO)
COUNTY OF DENVER)

DOCKET NO. T-03654A-05-0350
T-01051B-05-0350

AFFIDAVIT OF
LARRY BROTHERSON

SS

Larry Brotherson, of lawful age being first duly sworn, depose and states:

My name is Larry Brotherson. I am Director, Wholesale Advocacy for Qwest Corporation in Denver, Colorado. I have caused to be filed written direct testimony in Docket No. **T-03654A-05-0350&T-01051B-05-0350**

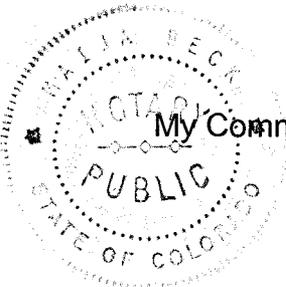
1. I hereby swear and affirm that my answers contained in the attached testimony to the questions therein propounded are true and correct to the best of my knowledge and belief.

Further affiant sayeth not.

Larry Brotherson
Larry Brotherson

SUBSCRIBED AND SWORN to before me this 7th day of July], 2005.

Maija Beck
Notary Public



My Commission Expires: May 8, 2008

BEFORE THE ARIZONA CORPORATION COMMISSION

JEFF HATCH-MILLER
Chairman
MARC SPITZER
Commissioner
WILLIAM A. MUNDELL
Commissioner
MIKE GLEASON
Commissioner
KRISTIN MAYES
Commissioner

**IN THE MATTER OF THE PETITION)
OF LEVEL 3 COMMUNICATIONS,)
LLC FOR ARBITRATION OF AN)
INTERCONNECTION AGREEMENT)
WITH QWEST CORPORATION)
PURSUANT TO SECTION 252 (b))
OF THE TELECOMMUNICATIONS)
ACT OF 1996)**

Docket No. T-03654A-05-0350

T-01051B-05-0350

DIRECT TESTIMONY OF WILLIAM R. EASTON

ON BEHALF OF

QWEST CORPORATION

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

JULY 15, 2005

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1 product offerings and projections of revenue. In October of 2001 I moved from
2 Wholesale Finance to the Wholesale Advocacy group, where I am currently
3 responsible for advocacy related to Wholesale products and services. In this role I
4 work extensively with the Product Management, Network and Costing
5 organizations.

6
7 **Q. HAVE YOU TESTIFIED PREVIOUSLY IN ARIZONA?**

8 A. Yes I have. I testified in docket numbers T-01051B-97-0689, U-3021-96-448, T-
9 02428A-03-0553, T01051B-02-0871 and T-01051B-04-0152.

10
11
12 **II. PURPOSE OF TESTIMONY**

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

14 A. The purpose of my testimony is to explain Qwest's positions, and the regulatory
15 policies underlying those positions, as they relate to certain disputed issues
16 between the parties. My testimony will show that the Qwest position on these
17 issues seeks to strike a balance between meeting the interconnection needs of
18 Level 3, while at the same time ensuring that the services, terms and conditions in
19 the agreement comply with the governing law and are technically feasible.

1 Specifically, my testimony will address the following issues from the Matrix of
2 Unresolved Issues filed by Level 3 in this arbitration:
3

- 4 ▪ Issue No. 1: Costs of Interconnection
- 5 ▪ Issue No. 22: Combining Traffic on Interconnection Trunks
- 6 ▪ Issue No. 5: Should Interconnection Terms be Incorporated by
7 Reference
- 8 ▪ Issue No. 13: Local Interconnection Service Definition
- 9 ▪ Issue No. 17: Trunk Forecasting
- 10 ▪ Issue No. 18: Jurisdictional Allocation Factors
- 11 ▪ Issue No. 21: Ordering of Interconnection Trunks
- 12 ▪ Issue No. 22: Compensation for Construction

13

14 **III. DISPUTED ISSUE NO. 1: COSTS OF INTERCONNECTION**

15 **Q. PLEASE EXPLAIN DISPUTED ISSUE NO. 1.**

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

12
13 Under the Telecommunications Act of 1996, Qwest has a duty to provide
14 interconnection with its local exchange network "on rates, terms and conditions
15 that are just, reasonable, and nondiscriminatory" and in accordance with the
16 requirements of Section 252 of the Act.¹ Section 252 of the Act in turn provides
17 that determinations by a state commission of the just and reasonable rate for the
18 interconnection shall be "based on the cost...of providing the interconnection,"

¹ 47 U.S.C. §251(c)(2)(D).

1 "nondiscriminatory" and "may include a reasonable profit."² As the FCC has
2 recognized, these provisions make clear that CLECs must compensate incumbent
3 LECs for the costs incumbent LECs incur to provide interconnection.³

4
5 Qwest has fulfilled its duty to provide interconnection by developing Local
6 Interconnection Service (LIS) for CLECs to interconnect with Qwest. LIS has
7 multiple intercarrier transport options. One option, the Mid-Span Meet POI option,
8 allows the CLEC to build to a mid-way point between the CLEC's POI/switch and a
9 Qwest tandem or end office switch. Another option is collocation, which allows a
10 CLEC to put equipment in one of Qwest's serving wire centers and interconnect at
11 that collocation. Both of these options put some cost of establishing the point of
12 interconnection on the CLEC. Qwest also provides an entrance facility option for
13 purchase for those CLECs who do not want to incur capital expense by either
14 laying fiber for a mid-span meet POI or setting up a collocation. An entrance
15 facility creates transport between a CLEC building and the nearest Qwest building
16 termed a Serving Wire Center (SWC). Once the CLEC has interconnected with
17 Qwest at the SWC, the CLEC may need to have Direct Trunk Transport and
18 multiplexing to complete calls throughout the Qwest network. There are multiple

² 47 U.S.C. §252(d)(1)

³ 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 costs associated with Qwest providing entrance facility, direct trunk transport and
2 multiplexing. These costs have been identified and discussed in cost dockets with
3 the Commission. As stated earlier, Qwest is allowed to recover costs that are just
4 and reasonable and based on the cost of providing interconnection.

5
6 It makes sense that the cost causer compensates Qwest for interconnection and
7 transport costs. If the cost causer (Level 3) does not pay, then Qwest end user
8 customers would have to bear the cost. This may reasonably result in an increase
9 to Qwest retail service rates even for customers who have no interest in surfing the
10 internet via dial-up service. Qwest's end user customers should not have to bear
11 the burden of paying for Level 3's ISP service.

12
13 With this as background, the next sections of my testimony will discuss each of the
14 disputed sub-issues (1A-1J)

15
16 **Issue No. 1A**

17
18 **Q. PLEASE DESCRIBE ISSUE NO. 1A.**

19 **A.** Issue No. 1A involves disputed language which Level 3 characterizes as having to
20 do with the right to interconnect at a single point in the LATA and obligations on
21 the respective sides of the point of interconnection. As Mr. Linse discusses in his

1 testimony, Qwest has not required Level 3 to interconnect at each end office in the
2 LATA. The real issue here is that Level 3 does not want to pay for the use of
3 Qwest's network.
4

5 **Q. WHAT IS THE LANGUAGE IN DISPUTE?**

6 A. The parties disagree about the language for Section 7.1.1 of the agreement.

7 Qwest proposes the following language:

8 7.1.1 This Section describes the Interconnection of Qwest's network and
9 CLEC's network for the purpose of exchanging Exchange Service
10 (EAS/Local traffic), IntraLATA Toll carried solely by local exchange
11 carriers and not by an IXC (IntraLATA LEC toll), ISP-Bound traffic, and
12 Jointly Provided Switched Access (InterLATA and IntraLATA) traffic.
13 Qwest will provide Interconnection at any Technically Feasible point within
14 its network. Interconnection, which Qwest currently names "Local
15 Interconnection Service" (LIS), is provided for the purpose of connecting
16 End Office Switches to End Office Switches or End Office Switches to
17 local or Access Tandem Switches for the exchange of Exchange Service
18 (EAS/Local traffic); or End Office Switches to Access Tandem Switches
19 for the exchange of IntraLATA LEC Toll or Jointly Provided Switched
20 Access traffic. Qwest Tandem Switch to CLEC Tandem Switch
21 connections will be provided where Technically Feasible. New or
22 continued Qwest local Tandem Switch to Qwest Access Tandem Switch
23 and Qwest Access Tandem Switch to Qwest Access Tandem Switch
24 connections are not required where Qwest can demonstrate that such
25 connections present a risk of Switch exhaust and that Qwest does not
26 make similar use of its network to transport the local calls of its own or any
27 Affiliate's End User Customers.
28

29 **Q. WHAT LANGUAGE DOES LEVEL 3 PROPOSE?**

30 A. Level 3 proposes the following:

1 7.1.1 This Section describes the Interconnection of Qwest's
2 network and CLEC's network for the purpose of exchanging
3 Telecommunications Including Telephone Exchange Service And
4 Exchange Access traffic. Qwest will provide Interconnection at any
5 Technically Feasible point within its network.
6

7 7.1.1.1 **Establishment of SPOI:** Qwest agrees to provide CLEC a
8 Single Point of Interconnection (SPOI) in each Local Access Transport
9 Area (LATA) for the exchange of all telecommunications traffic. The SPOI
10 may be established at any mutually agreeable location within the LATA,
11 or, at Level 3's sole option, at any technically feasible point on Qwest's
12 network. Technically feasible points include but are not limited to Qwest's
13 end offices, access tandem, and local tandem offices.
14

15 7.1.1.2 **Cost Responsibility.** Each Party is responsible for
16 constructing, maintaining, and operating all facilities on its side of the
17 SPOI, subject only to the payment of intercarrier compensation in
18 accordance with Applicable Law. In accordance with FCC Rule 51.703(b),
19 neither Party may assess any charges on the other Party for the
20 origination of any telecommunications delivered to the other Party at the
21 SPOI, except for Telephone Toll Service traffic outbound from one Party to
22 the other when the other Party is acting in the capacity of a provider of
23 Telephone Toll Service, to which originating access charges properly
24 apply.
25

26 7.1.1.3 Facilities included/transmission rates. Each SPOI to be
27 established under the terms of this Attachment shall be deemed to include
28 any and all facilities necessary for the exchange of traffic between Qwest's
29 and Level 3's respective networks within a LATA. Each Party may use an
30 Entrance Facility (EF), Expanded Interconnect Channel Termination
31 (EICT), or Mid Span Meet Point of Interconnection (POI) and/or Direct
32 Trunked Transport (DTT) at DS1, DS3, OC3 or higher transmission rates
33 as, in that Party's reasonable judgment, is appropriate in light of the actual
34 and anticipated volume of traffic to be exchanged. If one Party seeks to
35 establish a higher transmission rate facility than the other Party would
36 establish, the other Party shall nonetheless reasonably accommodate the
37 Party's decision to use higher transmission rate facilities.
38

39 7.1.1.4 Each Party Shall Charge Reciprocal Compensation for the
40 Termination of Traffic to be carried. All telecommunications of all types
41 shall be exchanged between the Parties by means of from the physical
42 facilities established at Single Point of Interconnection Per LATA onto its
Network Consistent With Section 51.703 of the FCC's Rules:

1 7.1.1.4.1 Level 3 may interconnect with Qwest at any
2 technically feasible point on Qwest's network for the exchange of
3 telecommunications traffic. Such technically feasible points include
4 but are not limited to Qwest access tandems or Qwest local
5 tandems. When CLEC is interconnected at the SPOI, separate
6 trunk groups for separate types of traffic may be established in
7 accordance with the terms hereof. No separate physical
8 interconnection facilities, as opposed to separate trunk groups
9 within SPOI facilities, shall be established except upon express
10 mutual agreement of the Parties.
11

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

13 A. With regard to the SPOI, Level 3's language is not appropriate from a network
14 standpoint. Mr. Linse's testimony discusses why the language is inappropriate and
15 details the options available to Level 3 to interconnect with Qwest. The final two
16 sections of Level 3's language have to do with cost responsibility and do not
17 belong in this section. Section 7.1 has to do with interconnection facility options,
18 not compensation. Qwest's proposals for compensation, including reciprocal
19 compensation, appear elsewhere in the interconnection agreement and will be fully
20 discussed as disputed issues later in this testimony.
21

22 **Q. LEVEL 3 ALSO OBJECTS TO QWEST'S LANGUAGE FOR SECTION 7.1.1.1**
23 **AND SECTION 7.1.1.2. ARE THESE SECTIONS RELATED TO THE ISSUES**
24 **YOU HAVE JUST DISCUSSED?**

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

1 **Issue No. 1B**

2

3 **Q. PLEASE DESCRIBE ISSUE NO. 1B.**

4 A. Issue No. 1B concerns the methods by which the parties facilitate interconnection
5 between their respective networks. This issue is addressed in the testimony of Mr.
6 Linse.

7

8 **Issue No. 1C**

9

10 **Q. PLEASE DESCRIBE ISSUE NO. 1C.**

11 A. Issue No. 1C concerns Section 7.2.2.1.1 of the agreement, which describes how
12 Exchange Service traffic will be terminated. Both Qwest and Level 3 agree that
13 Exchange Service (EAS/Local) traffic will be terminated as Local Interconnection
14 Service (LIS), but Qwest disagrees with the additional language that Level 3 has
15 added to this section.

16 **Q. WHAT LANGUAGE IS LEVEL 3 PROPOSING TO ADD?**

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

19 Notwithstanding references to LIS and to trunking and facilities used or
20 provisioned in association with LIS, nothing in this Agreement shall be
21 construed to require CLEC to pay Qwest for any services or facilities on
22 Qwest's side of the POI in connection with the origination of traffic from

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

5
6 **Q. WHY DOES QWEST OBJECT TO THIS LANGUAGE?**

7 A. Qwest objects to the inserted language because it deals with compensation, a
8 subject which is more appropriately addressed in Section 7.3 of the agreement. In
9 fact, Level 3 attempts to insert similar language at multiple places in the
10 interconnection agreement. Level 3's persistence does nothing to change its
11 obligations under the law. As I stated in my preface to Issue No. 1, the Act clearly
12 allows for Qwest to receive compensation for providing interconnection to CLECs.

13
14 **Issue No. 1D**

15 **Q. PLEASE EXPLAIN ISSUE NO. 1D.**

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

19
20 **Q. WHAT LANGUAGE IS QWEST PROPOSING FOR THIS SECTION?**

21 A. Qwest proposes the following language:

1 7.2.2.1.2.2 CLEC may purchase transport services from Qwest or from
2 a third party, including a third party that has leased the private line
3 transport service facility from Qwest. Such transport provides a
4 transmission path for the LIS trunk to deliver the originating Party's
5 Exchange Service EAS/Local traffic to the terminating Party's End Office
6 Switch or Tandem Switch for call termination. Transport may be
7 purchased from Qwest as Tandem Switch routed (i.e., tandem switching,
8 tandem transmission and direct trunked transport) or direct routed (i.e.,
9 direct trunked transport). This Section is not intended to alter either
10 Party's obligation under Section 251(a) of the Act.

11
12 **Q. WHAT LANGUAGE DOES LEVEL 3 PROPOSE?**

13 A. Level 3 proposes the following language:

14 7.2.2.1.2.2. CLEC may order transport services from Qwest or from a
15 third-party, including a third party that has leased the private line transport
16 service facility from Qwest for purposes of network management and
17 routing of traffic to/from the POI. Such transport provides a transmission
18 path for the LIS trunk to deliver the originating Party's Exchange Service
19 EAS/Local traffic to the terminating Party's End Office Switch or Tandem
20 Switch for call termination. This Section is not intended to alter either
21 Party's obligation under Section 251(a) of the Act or under Section 51.703
22 or 51.709 of the FCC's Rules.

23
24 **Q. WHAT IS THE DIFFERENCE BETWEEN THE TWO PROPOSALS?**

25 A. Level 3 changes the word "purchase" to "order" in the first sentence and adds the
26 words which have been underlined at the end of the sentence. Level 3 also strikes
27 the second to last sentence in Qwest's language which begins, "Tandem transport
28 may be purchased from Qwest..." Level 3 mistakenly believes that removing the
29 word "purchase" somehow relieves it of the obligation to compensate Qwest for the
30 use of its network. Level 3 acknowledges this transport is necessary, as it has not

1 objected to the sentence which states, "Such transport provides a transmission
2 path for the LIS trunk to deliver the originating Party's Exchange Service
3 EAS/Local traffic to the terminating Party's End Office Switch or Tandem Switch for
4 call termination." It has even acknowledged that it needs to order transport
5 services. What Level 3 refuses to acknowledge is that it has an obligation to
6 compensate Qwest for providing the services which allow Level 3 to serve its ISP
7 end user customers. Compensation issues do not belong in this section and will
8 be addressed fully later in the testimony.

9
10
11 **Issue No. 1E**

12 **Q. PLEASE EXPLAIN NO. 1E.**

13 **A.** Issue No. 1E concerns Section 7.2.2.1.4 of the interconnection agreement which
14 discusses direct trunked transport. Qwest has proposed the following language:

15 7.2.2.1.4 LIS ordered to a Tandem Switch will be provided as direct
16 trunked transport between the Serving Wire Center of CLEC's POI and the
17 Tandem Switch. Tandem transmission rates, as specified in Exhibit A of
18 this Agreement, will apply to the transport provided from the Tandem
19 Switch to Qwest's End Office Switch.

20
21 **Q. WHAT POSITION IS LEVEL 3 TAKING ON THIS ISSUE?**

22 **A.** Level 3 has agreed to the first sentence but has removed the last sentence, again,
23 apparently in the belief that removing any reference to rates relieves it of the

1 obligation to compensate Qwest for the use of the Qwest network to provide
2 service to Level 3's end user customers.
3

4 **Issue No. 1F**

5 **Q. PLEASE EXPLAIN ISSUE NO. 1F.**

6 A. No. 1F concerns Section 7.2.2.9.6 of the agreement which discusses Level 3's
7 ability to interconnect at tandem and end office switches. Qwest proposes the
8 following language:

9 7.2.2.9.6 The Parties shall terminate Exchange Service (EAS/Local)
10 traffic on Tandem Switches or End Office Switches. CLEC may
11 interconnect at either the Qwest local tandem or the Qwest access
12 tandem for the delivery of local exchange traffic. When CLEC is
13 interconnected at the access tandem and when there is a DS1 level of
14 traffic (512 BHCCS) over three (3) consecutive months between CLEC's
15 Switch and a Qwest End Office Switch, Qwest may request CLEC to order
16 a direct trunk group to the Qwest End Office Switch. CLEC shall comply
17 with that request unless it can demonstrate that such compliance will
18 impose upon it a material adverse economic or operations impact.
19 Furthermore, Qwest may propose to provide Interconnection facilities to
20 the local Tandem Switches or End Office Switches served by the Access
21 Tandem Switch at the same cost to CLEC as Interconnection at the
22 Access Tandem Switch. If CLEC provides a written statement of its
23 objections to a Qwest cost-equivalency proposal, Qwest may require it
24 only: (a) upon demonstrating that a failure to do so will have a material
25 adverse affect on the operation of its network and (b) upon a finding that
26 doing so will have no material adverse impact on the operation of CLEC,
27 as compared with Interconnection at such Access Tandem Switch.

28
29 **Q. WHAT LANGUAGE DOES LEVEL 3 PROPOSE?**

1 A. Level 3 proposes the following language:

2 7.2.2.9.6 When CLEC is interconnected at the access tandem and
3 when there is a DS1 level of traffic (512 BHCCS) over three (3)
4 consecutive months between CLEC's Switch and a Qwest End Office
5 Switch, Qwest may request CLEC to order a direct trunk group to the
6 Qwest End Office Switch. Notwithstanding references to Qwest's ability to
7 requests that CLECs order direct trunk groups to the Qwest end office,
8 nothing in this agreement shall e shall be construed to require CLEC to
9 pay Qwest for any services or facilities on Qwest's side of the POI in
10 connection with the origination of traffic from Qwest to CLEC; and nothing
11 herein shall be construed to require CLEC to pay for any services or
12 facilities on Qwest's side of the POI in connection with the termination of
13 traffic from CLEC by Qwest, other than reciprocal compensation payments
14 as provided in this Agreement.

15

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

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

1 **Issue No. 1G**

2 **Q. PLEASE DESCRIBE ISSUE NO. 1G.**

3 A. Issue No. 1G concerns Sections 7.3.1.1.3 and 7.3.1.1.3.1 which discuss how the
4 cost of jointly used facilities shall be shared by the parties.

5 **Q. WHAT LANGUAGE DOES QWEST PROPOSE?**

6 A. Qwest proposes the following language:

7
8 7.3.1.1.3 If the Parties elect to establish LIS two-way trunks, for
9 reciprocal exchange of Exchange Service (EAS/Local) traffic, the cost of
10 the LIS two-way facilities shall be shared among the Parties by reducing
11 the LIS two-way entrance facility (EF) rate element charges as follows:

12
13 7.3.1.1.3.1 Entrance Facilities - The provider of the LIS two-way
14 Entrance Facility (EF) will initially share the cost of the LIS two-way EF by
15 assuming an initial relative use factor (RUF) of fifty percent (50%) for a
16 minimum of one (1) quarter if the Parties have not exchanged LIS traffic
17 previously. The nominal charge to the other Party for the use of the EF,
18 as described in Exhibit A, shall be reduced by this initial relative use
19 factor. Payments by the other Party will be according to this initial relative
20 use factor for a minimum of one (1) quarter. The initial relative use factor
21 will continue for both bill reduction and payments until the Parties agree to
22 a new factor, based upon actual minutes of use data for non-ISP-bound
23 traffic to substantiate a change in that factor. If a CLEC's End User
24 Customers are assigned NPA-NXXs associated with a rate center different
25 from the rate center where the Customer is physically located, traffic that
26 does not originate and terminate within the same Qwest local calling area
27 (as approved by the Commission), regardless of the called and calling
28 NPA-NXXs, involving those Customers is referred to as "VNXX traffic".
29 For purposes of determining the RUF, the terminating carrier is
30 responsible for ISP-bound traffic and for VNXX traffic. If either Party
31 demonstrates with non-ISP-bound traffic data that actual minutes of use
32 during the first quarter justify a new relative use factor, that Party will send
33 a notice to the other Party. Once the Parties finalize a new factor, the bill
34 reductions and payments will apply going forward, from the date the
35 original notice was sent. ISP-bound traffic or traffic delivered to Enhanced
36 Service providers is interstate in nature. Qwest has never agreed to

1 exchange VNX Traffic with CLEC.
2

3 **Q. WHAT LANGUAGE DOES LEVEL 3 PROPOSE?**

4 A. Level 3 proposes the following:

5 7.3.1.1.3 Each party is solely responsible for any and all costs arising
6 from or related to establishing and maintaining the interconnection trunks
7 and facilities it uses to connect to the POI. Thus, neither party shall
8 require the other to bear any additional costs for the establishment and
9 operation of interconnection facilities that connect its network to its side of
10 the POI.

11
12 7.3.1.1.3.1 Intercarrier compensation. Intercarrier compensation for
13 traffic exchanged at the SPOI shall be in accordance with FCC Rule
14 51.703 and associated FCC rulings. For avoidance of doubt, any traffic
15 that constitutes "telecommunications" and that is not subject to switched
16 access charges, including without limitation so-called "information access"
17 traffic, shall be subject to compensation from the originating carrier to the
18 terminating carrier at the FCC-mandated capped rate (as of the effective
19 date hereof) of \$0.0007 per minute. Any dispute about the appropriate
20 intercarrier compensation applicable to any particular traffic shall be
21 resolved by reference to the FCC's rule and associated orders.
22

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

24 A. Level 3 again denies that it has an obligation to compensate Qwest for the use of
25 its network. This assertion flies in the face of the FCC's rule 51.709(b) which
26 states:

27 The rate of a carrier providing transmission facilities dedicated to the
28 transmission of traffic between two carriers' networks shall recover only
29 the costs of the proportion of that trunk capacity used by an
30 interconnecting carrier to send traffic that will terminate on the providing

1 carrier's network. Such proportions may be measured during peak
2 periods.
3
4

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

7 A. No. In previous arbitrations, Level 3 agreed to use a relative use factor to
8 apportion transport cost associated with two-way trunking, but disagreed as to the
9 type of traffic that should be included in the calculation.
10

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

14 A. Yes. Under the agreed-to provisions of the interconnection agreement, there are a
15 number of ways in which Level 3 can choose to interconnect with the Qwest
16 network. One of these options, explained in 7.1.2.3 of the agreement, is a Mid-
17 Span Meet POI. The relative use calculations which apply to an entrance facility
18 purchased from Qwest do not apply to a Mid-Span Meet Point of Interconnection.
19 As noted in Section 7.1.2.3, under this option "[e]ach Party will be responsible for
20 its portion of the build to the Mid-Span Meet POI." Thus, to the extent that Level 3
21 seeks to avoid any financial responsibility for facilities on the Qwest side of the
22 Mid-Span POI, it is free, under this agreement, to select the Mid-Span Meet POI
23 option under which both parties are obligated to construct facilities to the agreed to

1 POI and neither party is responsible for the charges associated with the facility on
2 the other party's side of the Mid-Span POI. Level 3 can also choose to provide
3 collocation, which would also not entail the purchase of an entrance facility to
4 connect with Qwest's network.

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

14
15 **Q. WHY IS IT APPROPRIATE TO EXCLUDE ISP-BOUND AND VNXX TRAFFIC**
16 **FROM THE RELATIVE USE CALCULATION?**

17 A. The FCC rule I just cited appears in Subpart H of the FCC's rules which is titled
18 "Reciprocal Compensation for Transport and Termination of Telecommunications
19 traffic". In Section 51.701(b)(1) the FCC defines "telecommunications traffic" as
20 traffic "exchanged between a LEC and a telecommunications carrier other than a
21 CMRS provider, *except for telecommunications traffic that is interstate or intrastate*

1 *exchange access, information access, or exchange services for such access.*"
2 (Italics added). In the ISP Remand Order⁴ the FCC determined that ISP bound
3 traffic (destined for a local ISP server) is information access. As such, this traffic is
4 expressly excluded from the traffic referred to in 51.709(b). Similarly, VNXX (or
5 interexchange) traffic must be excluded, for, as Mr. Brotherson makes clear in his
6 testimony, VNXX calls are not subject to the reciprocal compensation obligations
7 of 251(b)(5).

8
9 **Q. HAS THE ARIZONA COMMISSION RULED PREVIOUSLY AS TO WHETHER**
10 **ISP BOUND TRAFFIC SHOULD BE EXCLUDED FROM THE RELATIVE USE**
11 **CALCULATION?**

12 A. Yes. In a 2004 arbitration between Qwest and AT&T Communications, the
13 Commission ruled that internet related traffic should be excluded when determining
14 relative use, stating that this is the logical extension of FCC decisions.⁵

⁴ Order on Remand, *In the Matter of Implementation of the Local Competition Provisions in the Telecommunications Act of 1996, Intercarrier Compensation for ISP-Bound Traffic*, 16 FCCR 9151 (2001) ("ISP Remand Order") ¶ 42.

⁵ *In the Matter of Petition of AT&T Communications of the Mountain States, Inc. and TCG Phoenix, for Arbitration With Qwest Corporation, Inc. Pursuant to 47 U.S.C. Section 252(b)*. Docket No. T-02428A-03-0553. (Arizona Corporation Commission, December 17, 2003).

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

4 A. No. 51.703(b) applies to "telecommunications traffic." As was just discussed, ISP
5 bound traffic (traffic destined for a local ISP server) is "information access" and is
6 specifically excluded from the definition of telecommunication traffic. Clearly,
7 51.703(b) does not apply in the case of such ISP bound traffic.

8
9 **Issue No. 1H**

10
11 **Q. PLEASE EXPLAIN THE DISPUTE RELATED TO ISSUE NO. 1H.**

12 A. Issue No. 1H is the same as Issue No. 1G, except that, where 1G concerned
13 allocating the cost of a two-way entrance facility, 1H deals with allocating the cost
14 of two-way direct transport facilities.

15
16 **Q. WHAT LANGUAGE IS QWEST PROPOSING?**

17 A. Qwest is proposing the following language:

18 7.3.2.2 If the Parties elect to establish LIS two-way DTT trunks, for
19 reciprocal exchange of Exchange Service (EAS/Local) traffic the cost of
20 the LIS two-way DTT facilities shall be shared among the Parties by
21 reducing the LIS two-way DTT rate element charges as follows:

22 7.3.2.2.1 Direct Trunked Transport - The provider of the LIS two-way

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

24
25 **Q. WHAT IS LEVEL 3'S PROPOSED LANGUAGE?**

26 **A. Level 3 proposes the following language:**

27 7.3.2.2 Each party is solely responsible for any and all costs arising
28 from or related to establishing and maintaining the interconnection trunks
29 and facilities it uses to connect to the POI. Thus, neither party shall
30 require the other to bear any additional costs for the establishment and
31 operation of interconnection facilities that connect its network to its side of
32 the POI.

33 Qwest is opposed to this language for all of the reasons cited in the discussion of
34 Issue No. 1G

1 **Issue No. 11**

2 **Q. PLEASE DESCRIBE ISSUE NO. 11**

3 A. Issue No. 11 again involves compensation, in this case non-recurring charges for
4 the installation of LIS trunks. Qwest proposes the following language:

5 7.3.3.1 Installation nonrecurring charges may be assessed by the
6 provider for each LIS trunk ordered. Qwest rates are specified in Exhibit
7 A.

8 **Q. WHAT LANGUAGE DOES LEVEL 3 PROPOSE?**

9 A. Level 3 proposes the following language:

10 7.3.3.1 Neither Party may charge (and neither Party shall have an
11 obligation to pay) any installation nonrecurring charges or the like, for any
12 LIS trunk ordered for purposes of exchanging ISP-Bound Traffic, 251(b)(5)
13 Traffic, and VoIP Traffic that either Party delivers at a POI, other than the
14 intercarrier compensation rates.

15
16
17 **Q. ARE QWEST'S OBJECTIONS TO THIS LANGUAGE THE SAME AS FOR THE**
18 **OTHER INTERCONNECTION COMPENSATION ISSUES?**

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

23

24

1 **Issue No. 1J**

2 **Q. PLEASE DESCRIBE NO. 1J.**

3 A. Like Issue No. 1H, Issue No. 1J involves the assessment of non-recurring charges
4 related to LIS trunking, in this case non-recurring charges related to trunk
5 rearrangements. Qwest proposes the following language:

6 7.3.3.2 Nonrecurring charges for rearrangement may be assessed
7 by the provider for each LIS trunk rearrangement ordered, at one-half (1/2)
8 the rates specified in Exhibit A.

9

10 **Q. WHAT LANGUAGE IS LEVEL 3 PROPOSING?**

11 A. Level 3 proposes the following language:

12

13 7.3.3.2 Neither Party may charge (and neither Party shall have an
14 obligation to pay) any nonrecurring charges for rearrangement assessed
15 for any LIS trunk rearrangement ordered for purposes of exchanging ISP-
16 Bound Traffic, 251(b)(5) Traffic, and VoIP Traffic that either Party delivers
17 at a POI, other than the intercarrier compensation rates.

18

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

23

1 **IV. DISPUTED ISSUE NO. 2: ALL TRAFFIC ON INTERCONNECTION TRUNKS**

2 **Q. PLEASE EXPLAIN DISPUTED ISSUE NO 2.**

3 A. Issue No. 2 concerns what types of traffic may be combined over LIS trunks and
4 whether Qwest is entitled to compensation for the interconnection trunks it
5 provides to Level 3.

6
7 **Q, WHAT LANGUAGE IS QWEST PROPOSING FOR SECTION 7.2.2.9.3?**

8 A. Qwest is proposing the following language:

9 7.2.2.9.3.1 Exchange Service (EAS/Local), ISP-Bound Traffic,
10 IntraLATA LEC Toll , VoIP traffic and Jointly Provided Switched Access
11 (InterLATA and IntraLATA Toll involving a third party IXC) may be
12 combined in a single LIS trunk group or transmitted on separate LIS trunk
13 groups.

14 7.2.2.9.3.1.1 If CLEC utilizes trunking arrangements as described
15 in Section 7.2.2.9.3.1, Exchange Service (EAS/Local) traffic shall not be
16 combined with Switched Access, not including Jointly Provided Switched
17 Access, on the same trunk group, i.e. Exchange Service (EAS/Local)
18 traffic may not be combined with Switched Access Feature Group D traffic
19 to a Qwest Access Tandem Switch and/or End Office Switch.

20 7.2.2.9.3.2 CLEC may combine originating Exchange Service
21 (EAS/Local) traffic, ISP-Bound Traffic, IntraLATA LEC Toll, VoIP Traffic
22 and Switched Access Feature Group D traffic including Jointly Provided
23 Switched Access traffic, on the same Feature Group D trunk group.

24 7.2.2.9.3.2.1 CLEC shall provide to Qwest, each quarter, Percent
25 Local Use (PLU) factor(s) that can be verified with individual call detail
26 records or the Parties may use call records or mechanized
27 jurisdictionalization using Calling Party Number (CPN) information in lieu
28 of PLU, if CPN is available. Where CLEC utilizes an affiliate's
29 Interexchange Carrier (IXC) Feature Group D trunks to deliver Exchange

1 Service (EAS/Local) traffic with interexchange Switched Access traffic to
2 Qwest, Qwest shall establish trunk group(s) to deliver Exchange Service
3 (EAS/Local), Transit, and IntraLATA LEC Toll to CLEC. Qwest will use or
4 establish a POI for such trunk group in accordance with Section 7.1.
5

6 **Q. WHAT LANGUAGE IS LEVEL 3 PROPOSING?**

7 A. Level 3 proposes the following language:

8 7.2.2.9.3.1 Where CLEC exchanges Telephone Exchange
9 Service, Exchange Access Service, Telephone Toll Service, and
10 Information Services traffic with Qwest over a single interconnection
11 network, CLEC agrees to pay Qwest, on Qwest's side of the POI, state or
12 federally tariffed rates applicable to the facilities charges for InterLATA
13 and/or InterLATA traffic in proportion to the total amount of traffic
14 exchanged over such interconnection facility. Otherwise each party
15 remains 100% responsible for the costs of its interconnection facilities on
16 its side of the POI. Thus, by way of illustration only, where 20% of such
17 traffic is interLATA (intrastate and interstate) and the remaining 80% is
18 Section 251(b)(5) Traffic, CLEC would pay Qwest an amount equal to
19 20% of the applicable tariffed transport rate that would apply to a tariffed
20 facility used solely for the exchange of such access traffic for such traffic
21 exchanged on Qwest's side of the POI over a single interconnection trunk.

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

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

1 7.2.2.9.3.2 CLEC may combine Exchange Service (EAS/Local)
2 traffic, ISP-Bound Traffic, Exchange Access (IntraLATA Toll carried solely
3 by Local Exchange Carriers), VoIP Traffic and Switched Access Feature
4 Group D traffic including Jointly Provided Switched Access traffic, on the
5 same Feature Group D trunk group or over the same interconnection trunk
6 groups as provided in Section 7.3.9.
7

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

10 A. As I noted previously, there are two issues here: 1) compensation for LIS trunking
11 on the Qwest side of the POI and; 2) what types of traffic may be combined on LIS
12 trunks. With regard to the first issue, Level 3 takes the position that, with the
13 exception of reciprocal compensation charges, it is not responsible for any
14 interconnection charges on the Qwest side of the POI. Qwest believes that it is
15 entitled to recover costs it incurs to provide interconnection to Level 3. These
16 arguments were covered at length in the discussion of Issue No. 1 and need not be
17 repeated here.
18

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

21 A. Level 3 believes it should be allowed to combine all traffic, including switched
22 access traffic, over LIS trunks. Qwest is willing to allow all traffic types, with the
23 exception of switched access traffic, to be carried over LIS trunks. Qwest requires
24 that switched access traffic be carried over Feature Group D (FGD) trunks. Qwest

1 has required this since 1984 and nothing has changed this requirement. Qwest
2 has agreed to allow all traffic types terminating to Qwest to be combined over FGD
3 trunks.

4
5 **Q. THE QWEST LANGUAGE IN SECTION 7.2.2.9.3.1 ALLOWS JOINTLY**
6 **PROVIDED SWITCHED ACCESS TO BE CARRIED OVER LIS TRUNKS. WHAT**
7 **IS THE INTENT OF ALLOWING JOINTLY PROVIDED SWITCHED ACCESS**
8 **TRAFFIC TO BE CARRIED OVER LIS TRUNKS?**

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

17
18 **Q. IS QWEST REQUIRED TO COMBINE SWITCHED ACCESS ON LIS TRUNKS?**

19 A. No. Qwest has no obligation to permit Level 3 to commingle switched access
20 traffic with other types of traffic on the interconnection trunks created under the
21 Agreement. In fact, Qwest is required to provide interconnection for the exchange

1 of switched access traffic in the same manner that it provided interconnection for
2 such traffic prior to passage of the Act. Section 251(g) of the Act specifically
3 provides:

4 On and after February 8, 1996, each local exchange carrier, to the extent
5 that it provides wireline services, shall provide exchange access,
6 information access, and exchange services for such access to
7 interexchange carriers and information service providers in accordance
8 with the same equal access and nondiscriminatory *interconnection*
9 *restrictions and obligations* (including receipt of compensation) that apply
10 to such carrier on the date immediately preceding February 8, 1996, under
11 any court order, consent decree, or regulation or policy of the
12 Commission, until such restrictions and obligations are explicitly
13 superseded by regulations prescribed by the Commission after February
14 8, 1996.
15
16

17 (Emphasis added). As the FCC has stated, “[p]ursuant to Section 251(g), LECs
18 must continue to offer tariffed interstate access services just as they did prior to the
19 enactment of the 1996 Act.”⁶
20

21 Nothing in the Act or the FCC’s regulations give Level 3 the right to mix switched
22 access traffic with local traffic over the local interconnection trunks between its
23 network and Qwest’s established pursuant to Section 251(c)(2) of the Act. The Act
24 and the FCC’s regulations interpreting the Act speak to, “interconnection at any
25 technically feasible point within the incumbent LEC’s network,”⁷ but this instruction

⁶ *Local Competition Order*, ¶1034.

⁷ 47 C.F.R. § 51.305(a)(2).

1 clearly does not apply to traffic carried by Level 3 between LATAs. Any other
2 interpretation would undermine Qwest's switched access tariffs.

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

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

12
13 **Q. ARE THERE OTHER PROBLEMS WITH THE LEVEL 3 PROPOSAL?**

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

17
18 **Q. WHAT ARE THE BILLING ISSUES THE LEVEL 3 PROPOSAL PRESENTS?**

19 A. Today, IXCs are required to route all interLATA switched access traffic and
20 intraLATA switched access traffic over FGD. Qwest's mechanized billing systems
21 are able to use the actual traffic information recorded by its end office switch from

1 the FGD trunks, allowing Qwest to accurately and efficiently produce switched
2 access bills. The Level 3 proposal, on the other hand, would rely on factors, not
3 recordings of actual traffic information, and would not allow Qwest to use its
4 existing mechanized billing processes. In fact, implementing the Level 3 proposal
5 would require investment and significant reworking of Qwest systems and
6 processes, forcing Qwest to expend significant resources to meet the special
7 needs of one carrier.

8
9 **Q. WHAT ARE THE PROBLEMS RELATED TO THE EXCHANGE OF SWITCHED**
10 **ACCESS RECORDS YOU MENTIONED EARLIER?**

11 A. The undisputed language in Section 7.2.2.4 of the agreement requires the parties
12 to use industry standards developed to handle the provisioning and billing of Jointly
13 Provided Switched Access. Under these standards, Qwest is required to provide
14 industry standard jointly provided switched access records to LECs, WSPs and
15 CLECs when Qwest transports and switches jointly provided switched access
16 traffic. Today these records are produced mechanically, using the information
17 recorded on the FGD trunks. Level 3's use of billing factors would not allow Qwest
18 to provide the industry standard records to the terminating LEC, WSPs or CLEC
19 carriers. If Qwest does not record this traffic as FGD, neither Qwest nor the
20 collaborating LEC, CLEC or WSP can bill the IXC who originated the call. In
21 addition, if one of these IXC calls that Level 3 is requesting to route over LIS were

1 routed on to another CLEC, ILEC or WSP, Qwest could potentially get billed for
2 switched access or reciprocal compensation for a call that really originated with an
3 IXC, as Qwest would be unable to provide the appropriate JSPA record to the
4 CLEC, ILEC or WSP.

5
6 **Q. IS QWEST IN A POSITION TO AGREE TO A PROPOSAL THAT WILL IMPACT**
7 **OTHER LECS AND CLECS?**

8 A. No. Even if Qwest were willing to agree to use factors for the traffic it terminates,
9 Qwest cannot agree to a proposal that will impact all ILECs and CLECs that today
10 rely on Qwest to provide them with a jointly provided switched access record.
11 Without the switched access records they are receiving today, these companies,
12 too, would have to change their systems and processes for billing their portion of
13 switched access to the IXC.

14
15 **Q. HOW DO YOU RESPOND TO LEVEL 3'S ARGUMENTS THAT COMBINING**
16 **ALL TRAFFIC OVER A SINGLE TRUNK GROUP IS MORE EFFICIENT?**

17 A. Qwest has offered Level 3 an approach which will allow the network efficiencies
18 that Level 3 is seeking. Qwest's proposed language for Section 7.2.2.9.3.2 offers
19 Level 3 the capability to combine all traffic over a FGD trunk group. Combining all
20 of the traffic over FGD not only allows for the efficiencies Level 3 claims to need, it
21 also allows for mechanized billing of the appropriate tariffed rates and the ability to

1 produce the necessary jointly provided switched access records. There is simply
2 no reason to grapple with the difficulties inherent in Level 3's proposal when a
3 workable solution to combining all traffic on a single trunk group already exists.
4

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

7 A. No. All CLECs interconnected with Qwest have Interconnection Agreements that
8 either provide for the segregation of traffic onto separate trunk groups or the
9 combining of terminating traffic onto a FGD trunk group. There is simply no valid
10 reason to give Level 3 special treatment.
11

12 **V. DISPUTED ISSUE NO. 5: SHOULD INTERCONNECTION TERMS BE**
13 **INCORPORATED BY REFERENCE**

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

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

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

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

14
15 **VI. DISPUTED ISSUE NO. 13: LOCAL INTERCONNECTION SERVICE**

16 **DEFINITION**

17 **Q. PLEASE DESCRIBE ISSUE NO. 13.**

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

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

3 A. Qwest proposes the following definition:

4 "Local Interconnection Service or "LIS" Entrance Facility" is a DS1 or DS3
5 facility that extends from CLEC's Switch location or Point of
6 Interconnection (POI) to the Qwest Serving Wire Center. An Entrance
7 Facility may not extend beyond the area served by the Qwest Serving
8 Wire Center.
9

10 **Q. WHAT IS LEVEL 3'S DEFINITION**

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

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

13 A. Level 3 claims that the Qwest definition shifts the cost of Qwest's network to Level
14 3.

15 **Q. DO YOU AGREE?**

16 A. No. The definition of "Local Interconnection Service or 'LIS' Entrance Facility" is
17 nothing more than a definition of the facility that connects Qwest's network to Level
18 3's network. The definition does not contain any language that determines who
19 bears the cost of this facility. Level 3 provides no legitimate reason for rejecting
20 this definition. Level 3's concern about the allocation of the costs of
21 interconnection is addressed in Issue No. 1G. As I explained in the discussion of
22 Issue No. 1G, Level 3 has the option of using a Mid-Span Meet point or collocation

1 for interconnection rather than an entrance facility, an option that would allow it to
2 avoid compensating Qwest for an entrance facility on the Qwest side of the POI.
3

4 **VII. DISPUTED ISSUE NO. 17: TRUNK FORECASTING**

5 **Q. PLEASE EXPLAIN ISSUE NO 17.**

6 A. Issue No. 17 has to do with Section 7.2.2.8 of the agreement which discusses LIS
7 forecasting. Level 3 and Qwest have been unable to reach agreement on the LIS
8 forecasting language. Specifically, the parties disagree on the language for
9 Sections 7.2.2.8.4 and 7.2.2.8.5.

10 **Q. WHAT LANGUAGE IS QWEST PROPOSING?**

11 A. Qwest is proposing the following language:

12 7.2.2.8.4 The Parties agree that trunk forecasts are non-binding and
13 are based on the information available to each respective Party at the time
14 the forecasts are prepared. Unforecasted trunk demands, if any, by one
15 Party will be accommodated by the other Party as soon as practicable
16 based on facility availability. Switch capacity growth requiring the addition
17 of new switching modules may require six (6) months to order and install.

18
19 7.2.2.8.5 In the event of a dispute regarding forecast quantities, where
20 in each of the preceding eighteen (18) months, trunks required is less than
21 fifty percent (50%) of forecast, Qwest will make capacity available in
22 accordance with the lower forecast.

1 **Q. WHAT LANGUAGE IS LEVEL 3 PROPOSING FOR THESE SECTIONS?**

2 A. Level 3 proposes the following language for Section 7.2.2.8.4:

3
4 7.2.2.8.4 The forecast will identify trunking requirements for a
5 two (2) year period. From the semi-annual close date as outlined in the
6 forecast cycle, the receiving Party will have one (1) month to determine
7 network needs and place vendor orders which may require a six (6) month
8 interval to complete the network build. For ordering information see
9 Section 7.4. See also Section 7.2.2.8.6

10

11 Level 3's proposal does not have a Section 7.2.2.8.5.

12

13 **Q. HAS QWEST CHANGED ITS PROPOSED LANGUAGE IN THE COURSE OF**
14 **THE NEGOTIATIONS?**

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

19

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

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

23

24 **Q. WHY DOES QWEST FEEL THAT THE LANGUAGE IS NECESSARY?**

1 A. LIS forecasting serves the interest of both parties by helping to ensure that
2 adequate capacity is made available to allow for the exchange of traffic between
3 the parties. As a result, it is important that the interconnection agreement detail
4 how the forecasts are developed and utilized.
5

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

9 A. In many instances, making capacity available at forecasted levels will require
10 Qwest to construct new facilities and thereby incur substantial expense. Once a
11 CLEC submits its forecast, however, it has no obligation to order interconnection
12 trunks consistent with its forecast. This could leave Qwest in the unacceptable
13 position of having incurred cost to build new facilities, which then lay underutilized,
14 or worse, dormant or dark. To avoid this situation, Qwest reserves the right to
15 adjust the forecast downward based on the relationship between ordered trunks
16 and forecasted trunks in previous months. This provides the appropriate incentive
17 to the forecasting party and allows Qwest to avoid making needless investments.

18

1 **VIII. DISPUTED ISSUE NO. 18: JURISDICTIONAL ALLOCATION FACTORS**

2 **Q. PLEASE EXPLAIN ISSUE NO. 18.**

3 A. Issue No. 18 concerns jurisdictional allocation factors for billing purposes. Level
4 3's proposed language introduces several new jurisdictional allocation factors
5 which Qwest opposes.

6
7 **Q. WHAT LANGUAGE IS QWEST PROPOSING FOR SECTION 7.3.9?**

8 A. Qwest is proposing the following language:

9
10 7.3.9 To the extent a Party combines Exchange Service (EAS/Local),
11 IntraLATA LEC Toll, and Jointly Provided Switched Access (InterLATA
12 and IntraLATA calls exchanged with a third party IXC) traffic on a single
13 LIS trunk group, the originating Party, at the terminating Party's request
14 will declare quarterly PLU(s). Such PLUs will be verifiable with either call
15 summary records utilizing Calling Party Number information for
16 jurisdictionalization or call detail samples. The terminating Party should
17 apportion per minute of use (MOU) charges appropriately.

18
19
20 **Q. UNDER THE QWEST PROPOSED LANGUAGE, HOW IS THE PLU USED?**

21 A. The PLU is used to apportion billing for traffic that does not contain a calling party
22 number and therefore, cannot be jurisdictionalized based on a comparison of the
23 calling and called parties' numbers. The PLU would be applied to the bucket of
24 these "unidentified" calls to determine what percent should be billed at the local
25 rate.

1 **Q. WHAT LANGUAGE IS LEVEL 3 PROPOSING?**

2 **A. Level 3 proposes the following:**

3 7.3.9 To the extent a Party combines Section 251(b)(5) Traffic and
4 Jointly Provided Switched Access (InterLATA and IntraLATA calls
5 exchanged with a third party IXC) traffic on a single trunk group, the
6 originating Party, at the terminating Party's request will declare monthly
7 PLU(s) PIU(s), and PIPU(s), collectively "Jurisdictional Factors." Such
8 Jurisdictional Factors will be verifiable with either call summary records
9 utilizing Call Record information for jurisdictionalization or call detail
10 samples. The terminating Party should apportion per minute of use
11 (MOU) charges appropriately.

12 7.3.9.1 The Jurisdictional Factors - PLU, PIU and PIPU - are
13 defined as follows:

14
15 7.3.9.1.1 PIPU – Percent IP Usage: This factor represents the traffic
16 that is IP Enabled as a percentage of ALL traffic. CLEC has introduced
17 this factor to identify IP-Enabled Services traffic for billing purposes to
18 Qwest on an interim basis until an industry standard is implemented. IP-
19 Enabled traffic includes all IP-TDM and TDM to IP traffic that is exchanged
20 directly between the parties.

21
22 7.3.9.1.2 PIU – Percent Interstate Usage: This factor represents the
23 end-to-end circuit switched traffic (*i.e.* TDM-IP-TDM) that is interstate for
24 services that are billed at tariffed rates on a per Minute Of Use (MOU)
25 basis as a percentage of all end-to-end circuit switched traffic, *i.e.* all
26 interstate traffic after IP-Enabled traffic has been excluded. This factor
27 does not include IP-Enabled Services Traffic.

28
29 7.3.9.1.3 PLU – Percent 251(b)(5) Usage: This factor represents the
30 end-to-end circuit switched 251(b)(5) traffic as a percentage of all end-to-
31 end circuit switched intrastate traffic. This factor distinguishes traffic that
32 is rated as "local" (*i.e.* "Section 251(b)(5) traffic") from Intrastate toll traffic.
33 This factor does not include IP-Enabled Services traffic.

34
35 7.3.9.2 Unless otherwise agreed to by the parties: (1) factors
36 will be calculated and exchanged on a monthly basis. Percentages will be
37 calculated to two decimal places (for example 22.34%); (2) each party will
38 calculate factors for all traffic that they originate and exchanged directly
39 with the other Party; and (3) the party responsible for collecting data will

1 collect all traffic data, including but not limited to Call Detail Records (this
2 includes CPN), from each trunk group in the state over which the parties
3 exchange traffic during each study period. The parties will calculate the
4 factors defined in Section 7.9.1, above, as follows:

5
6 7.3.9.2.1 PIPU: The PIPU is calculated by dividing the total IP-
7 Enabled Services MOU by the total MOU. The PIPU is calculated on a
8 statewide basis.

9
10 7.3.9.2.1.1 Upon ILEC request, CLEC will provide a PIPU factor for all
11 minutes of usage exchanged directly between the Parties over the
12 Interconnection Trunk Groups in each state. CLEC will provide separate
13 PIPU factors for CLEC Terminating IP-enabled Traffic and CLEC
14 Originating IP-enabled Traffic, which terms are defined in Sections
15 7.8.4.3.1.1 and 7.8.4.3.1.2, respectively, below. Accordingly, the PIPU
16 factor is based upon CLEC's actual and verifiable Call Detail Records of
17 IP-originated traffic

18
19 7.3.9.3 Exchange of Data:

20
21 7.3.9.3.1 The party responsible for billing will provide the PIPU, PLU
22 and PIU factors to the non-collecting party on or before the 15th of each
23 month, via email (or other method as mutually agreed between the
24 parties), to designated points of contact within each company.

25
26 7.3.9.4 Maintenance of Records

27
28 7.3.9.4.1 Each company will maintain traffic data on a readily
29 available basis for a minimum period of one year (or however long as
30 required by state and federal regulations) after the end of the month for
31 which such data was collected for audit purposes.

32
33 7.3.9.5 Audits

34 7.3.9.5.1 Each company will have the ability to audit the other
35 company's traffic factors up to a maximum of twice per year. A party
36 seeking audit must provide notice of their intent to audit and include
37 specific dates, amounts and other detail necessary for the party receiving
38 the request to process the audit. Notice must be provided in writing and
39 postmarked as mailed to the audited party within one year after the end of
40 each month(s) for which they seek audit.

1 7.3.9.5.2 The audited party must provide in a mutually
2 agreeable electronic format traffic data for the months requested
3 according to Section 7.3.9.5.1 above.
4

5 7.3.9.6 True-Up

6 In addition to rights of audit, the Parties agree that where a factor is found
7 to be in error by more than 2%, they will automatically true up the factors
8 and pay or remit the resulting amounts to correct such errors.
9

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

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

1 records which are relied upon by CLECs and LECs who terminate jointly provided
2 switched access traffic.
3
4

5 **IX. DISPUTED ISSUE NO. 21: ORDERING OF INTERCONNECTION TRUNKS**
6

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

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

10 **Q. WHAT LANGUAGE IS LEVEL 3 PROPOSING?**

11 A. Level 3 is proposing to insert the following language into Section 7.4:

12 7.4.1.1 Nothing in this Section 7.4 shall be construed to in any way
13 affect the Parties' respective obligations to pay each other for any
14 activities or functions under this Agreement. All references in this Section
15 7.4 to 'ordering' shall be construed to refer only to the administrative
16 processes needed to establish interconnection and trunking arrangements
17 and shall have no effect on either Party's financial obligations to the other.
18

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

20 A. In addition to the fact that Qwest disagrees with Level 3's contention that it has no
21 financial obligation on Qwest's side of the POI, Level 3's language is misplaced.

22 Section 7.4 of the agreement has to do with the ordering of local interconnection

1 service and does not address allocation of responsibility for the cost of
2 interconnection.

3
4 Level 3's proposed Section 7.4.1.1 only underscores why its position on allocation
5 of the costs of interconnection is wrong. The fact that Level 3 requests (or orders)
6 facilities on Qwest's side of the network demonstrates that the interconnection is
7 done for Level 3's benefit. Level 3 makes requests for Qwest facilities on Qwest's
8 side of the point of interconnection so that Level 3 can serve its own ISP
9 customers.

10
11 Section 7.4.1.1 is simply unnecessary. The Commission will determine who pays
12 the costs of interconnection in the Sections of the Agreement that are related to
13 Issue No. 1. Accordingly, since nothing in Section 7.4 requires Level 3 to pay
14 interconnection costs, Level 3's proposed Section 7.4.1.1 should be rejected.

15
16
17 **X. DISPUTED ISSUE NO. 22: COMPENSATION FOR SPECIAL CONSTRUCTION**

18 **Q. PLEASE EXPLAIN ISSUE NO. 22.**

19 A. Issue No. 22 has to do with construction charges and whether Level 3 is
20 responsible for charges related to special construction that it requests on the

1 Qwest side of the POI. Level 3 proposes to insert language stating that it has no
2 obligation for construction on the Qwest side of the POI.

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

4 A. Level 3 proposes to insert the following language:

5 19.1.1. Nothing in this Section 19 shall be construed in any way
6 affect the Parties' respective obligations to pay each other for any
7 activities or functions under this Agreement. All references in this Section
8 19 to construction charges be construed to refer only to those Level 3
9 requests for construction that are outside the scope of what is needed to
10 establish interconnection and trunking arrangements and shall have no
11 effect on either Party's financial obligations to the other.
12

13 **Q. WHY IS QWEST OPPOSED TO THIS LANGUAGE?**

14 A. Level 3's proposed language again underscores the unreasonableness of Level 3's
15 position that it should not have to pay any of the interconnection costs Qwest
16 incurs on its side of the point of interconnection. When Level 3 requests that
17 Qwest build additional facilities for network interconnection, these costs are
18 incurred to benefit Level 3 and Level 3's ISP end user customers. If Level 3 and its
19 ISP end user customers are benefiting by the additional cost for building facilities,
20 Qwest should not bear that cost. Under the Act, Qwest is entitled to just and
21 reasonable compensation for the costs it incurs.

22
23

1 As to the types of traffic that can be carried on interconnection trunk groups, Qwest
2 has attempted to be responsive to Level 3's desire to combine traffic on trunk
3 groups. Qwest is willing to allow all traffic types, with the exception of switched
4 access traffic, to be carried over LIS trunks. Because of billing issues, systems
5 issues and Qwest's obligation to provide jointly provided switched access records
6 to other ILECs, CLECs and WSPs, Qwest requires that switched access traffic be
7 carried over Feature Group trunks. This is entirely consistent with Section 251(g)
8 of the Act which requires that Qwest provide interconnection for the exchange of
9 switched access traffic in the same manner that it provided for such traffic prior to
10 the passage of the Act. Nonetheless, Qwest has attempted to accommodate Level
11 3's desire for network efficiencies by agreeing to let Level 3 combine all of its traffic
12 over Feature Group D trunks. This solution achieves the efficiencies sought by
13 Level 3 while at the same time allowing Qwest to continue to use its existing billing
14 systems and processes. For these reasons, Level 3's proposed combining of
15 traffic on LIS trunks should be rejected.

16
17 **Q. DOES THIS CONCLUDE YOUR TESTIMONY?**

18 **A. Yes it does.**

19

⁹ 47 U.S.C. §252(d)(1)

BEFORE THE ARIZONA CORPORATION COMMISSION

IN THE MATTER OF THE PETITION OF)
LEVEL 3 COMMUNICATIONS, LLC FOR)
ARBITRATION OF AN)
INTERCONNECTION AGREEMENT WITH)
QWEST CORPORATION)
PURSUANT TO SECTION 252 (b) OF THE)
TELECOMMUNICATIONS ACT OF 1996)
STATE OF WASHINGTON)
COUNTY OF KING)

DOCKET NO. T-03654A-05-0350
T-01051B-05-0350

AFFIDAVIT OF
WILLIAM R. EASTON

: SS

William R. Easton, of lawful age being first duly sworn, depose and states:

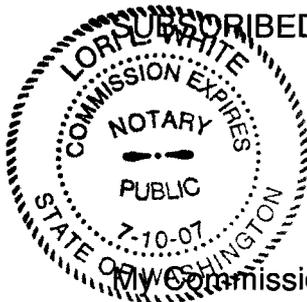
1. My name is William R. Easton. I am Director – Wholesale Advocacy for Qwest Corporation in Seattle, Washington. I have caused to be filed written direct testimony in Docket No. T-03654A-05-0350, T-01051B-05-0350.
2. I hereby swear and affirm that my answers contained in the attached testimony to the questions therein propounded are true and correct to the best of my knowledge and belief.

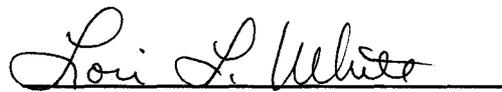
Further affiant sayeth not.



William R. Easton

SUBSCRIBED AND SWORN to before me this 11th day of July, 2005.





Notary Public

My Commission Expires: 7/10/07

BEFORE THE ARIZONA CORPORATION COMMISSION

JEFF HATCH-MILLER

Chairman

MARC SPITZER

Commissioner

WILLIAM A. MUNDELL

Commissioner

MIKE GLEASON

Commissioner

KRISTIN MAYES

Commissioner

**IN THE MATTER OF THE PETITION)
OF LEVEL 3 COMMUNICATIONS, LLC)
FOR ARBITRATION OF AN)
INTERCONNECTION AGREEMENT)
WITH QWEST CORPORATION)
PURSUANT TO SECTION 252 (b) OF)
THE TELECOMMUNICATIONS ACT)
OF 1996)**

**Docket No. T-03654A-05-0350
T-01051B-05-0350**

DIRECT TESTIMONY OF PHILIP LINSE

ON BEHALF OF

QWEST CORPORATION

(Disputed Issue Nos. 1, 2, 6, 8, AND 20)

JULY 15, 2005

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1 **I. IDENTIFICATION OF WITNESS**

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

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

8 **Q. PLEASE GIVE A BRIEF BACKGROUND OF YOUR EDUCATIONAL AND**
9 **TELEPHONE COMPANY EXPERIENCE.**

10 A. I received a Bachelors degree from the University of Northern Iowa in 1994. I began my
11 career in the telephone communications industry in 1995 when I joined the engineering
12 department of CDI Telecommunications in Missoula, Montana. In 1998, I accepted a
13 position with Pacific Bell as a Technology Planner with responsibility for analyzing
14 network capacity. In 2000, I accepted a position with U S WEST as a Manager, Tactical
15 Planning. In 2001, I was promoted to a staff position in Technical Regulatory
16 Interconnection Planning for Qwest. In this position, I developed network strategies for
17 interconnection of unbundled Switching, Signaling System 7 (“SS7”) and other switching-
18 related products. My responsibilities also included the development of network strategies
19 based on the evaluation of new technologies. I was one of the network organization’s
20 subject matter experts. In 2003, I was promoted to my current position as Director of
21 Technical Regulatory in the Network organization. Since my promotion in 2003, the

1 Technical Regulatory group has been realigned and is now part of the Policy organization.
2 In addition to my oversight responsibilities of Qwest's network regulatory interconnection
3 and switching requirements for sections 251 and 252 of the Telecommunications Act of
4 1996, I also develop and direct the implementation of network policies. In addition to
5 these internal functions, I also represent Qwest in industry technical standards setting
6 groups such as the FCC's Network Reliability and Interoperability Council ("NRIC") and
7 the Network Interconnection Interoperability Forum ("NIIF").

8 II. PURPOSE OF TESTIMONY

9 Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

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

- 16 ■ Issue 1: Costs of Interconnection
- 17 ■ Issue 2: Combining Traffic on Interconnection Trunks
- 18 ■ Issue 6: AMA and Switch Technology
- 19 ■ Issue 8: Definition of Call Record

1 ▪ Issue 20: Signaling Parameters

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

5 **III. DISPUTED ISSUE NO. 1: COSTS OF INTERCONNECTION**

6 **Issue No. 1A**

7 **Q. PLEASE EXPLAIN DISPUTED ISSUE NO. 1A.**

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

19 **Q. WHAT LANGUAGE DOES QWEST PROPOSE?**

20 A. Qwest proposes the following language:

1 7.1.1 This Section describes the Interconnection of Qwest's network and
2 CLEC's network for the purpose of exchanging Exchange Service (EAS/Local traffic),
3 Exchange Access (IntraLATA Toll carried solely by local exchange carriers), ISP-Bound
4 traffic, and Jointly Provided Switched Access (InterLATA and IntraLATA) traffic.
5 Qwest will provide Interconnection at any Technically Feasible point within its network.
6 Interconnection, which Qwest currently names "Local Interconnection Service" (LIS), is
7 provided for the purpose of connecting End Office Switches to End Office Switches or
8 End Office Switches to local or Access Tandem Switches for the exchange of Exchange
9 Service (EAS/Local traffic); or End Office Switches to Access Tandem Switches for the
10 exchange of Exchange Access (IntraLATA Toll carried solely by local exchange carriers)
11 or Jointly Provided Switched Access traffic. Qwest Tandem Switch to CLEC Tandem
12 Switch connections will be provided where Technically Feasible. New or continued
13 Qwest local Tandem Switch to Qwest Access Tandem Switch and Qwest Access Tandem
14 Switch to Qwest Access Tandem Switch connections are not required where Qwest can
15 demonstrate that such connections present a risk of Switch exhaust and that Qwest does
16 not make similar use of its network to transport the local calls of its own or any
17 Affiliate's End User Customers.

18 7.1.1.1 CLEC agrees to allow Qwest to conduct operational verification audits of
19 those network elements controlled by CLEC and to work cooperatively with Qwest to
20 conduct an operational verification audit of any other provider that CLEC used to
21 originate, route and transport VoIP traffic that is delivered to Qwest, as well as to make
22 available any supporting documentation and records in order to ensure CLEC's
23 compliance with the obligations set forth in the VoIP definition and elsewhere in this
24 Agreement. Qwest shall have the right to redefine this traffic as Switched Access in the
25 event of an "operational verification audit failure". An "operational verification audit
26 failure" is defined as: (a) Qwest's inability to conduct a post-provisioning operational
27 verification audit due to insufficient cooperation by CLEC or CLEC's other providers, or
28 (b) a determination by Qwest in a post-provisioning operational verification audit that the
29 CLEC or CLEC's end users are not originating in a manner consistent with the
30 obligations set forth in the VoIP definition and elsewhere in this Agreement.

31 7.1.1.2 Prior to using Local Interconnection Service trunks to terminate VoIP
32 traffic, CLEC certifies that the (a) types of equipment VoIP end users will use are
33 consistent with the origination of VoIP as defined in this Agreement; and (b) types of
34 configurations that VoIP end users will use to originate calls using IP technology are
35 consistent with the VoIP configuration as defined in this Agreement.

36
37 **Q. WHAT LANGUAGE DOES LEVEL 3 PROPOSE?**

38 **A. Level 3 proposes the following:**

1 7.1.1 This Section describes the Interconnection of Qwest's network and
2 CLEC's network for the purpose of exchanging Telecommunications Including
3 Telephone Exchange Service And Exchange Access traffic. Qwest will provide
4 Interconnection at any Technically Feasible point within its network.

5 7.1.1.1 **Establishment of SPOI:** Qwest agrees to provide CLEC a Single Point of
6 Interconnection (SPOI) in each Local Access Transport Area (LATA) for the exchange of
7 all telecommunications traffic. The SPOI may be established at any mutually agreeable
8 location within the LATA, or, at Level 3's sole option, at any technically feasible point
9 on Qwest's network. Technically feasible points include but are not limited to Qwest's
10 end offices, access tandem, and local tandem offices.

11 7.1.1.2 **Cost Responsibility.** Each Party is responsible for constructing,
12 maintaining, and operating all facilities on its side of the SPOI, subject only to the
13 payment of intercarrier compensation in accordance with Applicable Law. In accordance
14 with FCC Rule 51.703(b), neither Party may assess any charges on the other Party for the
15 origination of any telecommunications delivered to the other Party at the SPOI, except for
16 Telephone Toll Service traffic outbound from one Party to the other when the other Party
17 is acting in the capacity of a provider of Telephone Toll Service, to which originating
18 access charges properly apply.

19 7.1.1.3 Facilities included/transmission rates. Each SPOI to be established under
20 the terms of this Attachment shall be deemed to include any and all facilities necessary
21 for the exchange of traffic between Qwest's and Level 3's respective networks within a
22 LATA. Each Party may use an Entrance Facility (EF), Expanded Interconnect Channel
23 Termination (EICT), or Mid Span Meet Point of Interconnection (POI) and/or Direct
24 Trunked Transport (DTT) at DS1, DS3 , OC3 or higher transmission rates as, in that
25 Party's reasonable judgment, is appropriate in light of the actual and anticipated volume
26 of traffic to be exchanged. If one Party seeks to establish a higher transmission rate
27 facility than the other Party would establish, the other Party shall nonetheless reasonably
28 accommodate the Party's decision to use higher transmission rate facilities.

29 7.1.1.4 Each Party Shall Charge Reciprocal Compensation for the Termination of
30 Traffic to be carried. All telecommunications of all types shall be exchanged between the
31 Parties by means of from the physical facilities established at Single Point of
32 Interconnection Per LATA onto its Network Consistent With Section 51.703 of the
33 FCC's Rules:

34 7.1.1.4.1 Level 3 may interconnect with Qwest at any technically feasible point on
35 Qwest's network for the exchange of telecommunications traffic. Such technically
36 feasible points include but are not limited to Qwest access tandems or Qwest local
37 tandems. When CLEC is interconnected at the SPOI. separate trunk groups for separate
38 types of traffic may be established in accordance with the terms hereof. No separate

1 physical interconnection facilities, as opposed to separate trunk groups within SPOI
2 facilities, shall be established except upon express mutual agreement of the Parties.

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

4 A. As Mr. Easton's testimony explains, the POI is not the financial demarcation point between
5 Level 3 and Qwest. Level 3 also incorrectly define its POI as a point that is physically
6 located on Qwest's network. In addition Level 3's proposed language is inconsistent and
7 attempts to extend Qwest's interconnection responsibility to any point on the Qwest
8 network to a point not even within Qwest's serving territory. Level 3's proposed language
9 would impose a requirement on Qwest to accept traffic where there are technical
10 limitations and requires higher transmission rates than may be necessary or justified. Qwest
11 also disputes the portions of Level 3's proposed language in Issue No. 1A as they apply or
12 support other issues in dispute. The testimony of Mr. Brotherson will address the portions
13 of Issue No.1A that concern Voice over Internet Protocol ("VoIP").

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

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

1 **Q. WHAT IS SINGLE POINT OF INTERCONNECTION?**

2 A. A SPOI is a physical demarcation point where Level 3 and Qwest can exchange traffic
3 originating from or destined for multiple Qwest end offices within a LATA utilizing Qwest
4 provided transport facilities between Level 3's network and Qwest's network. This allows
5 Level 3 the benefit of serving customers that are located in different Qwest exchanges
6 without having to build its own transport facilities to each exchange where Level 3 wishes
7 to provide local service. As my testimony will explain when addressing issue 1B, there are
8 multiple methods of interconnection that would allow Level 3 to establish these transport
9 facilities between Qwest and Level 3's SPOI.

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

12 A. No. While a POI may be located within a Qwest office, interconnection is accomplished by
13 means of cross-connections between components of Qwest's network and components of
14 the interconnecting CLEC's network. These cross-connections are the physical
15 demarcation point between the networks and facilitate the exchange of traffic between two
16 separate networks. Level 3's language incorrectly and inappropriately suggests that it has
17 the right to establish a POI that is directly connected to Qwest's equipment. What Level 3
18 is requesting, in actuality, is integration into Qwest's network, and not interconnection with
19 Qwest's network. Level 3's proposal prevents Qwest from retaining sole responsibility for
20 the management, control, and performance of its own network and is contrary to the intent

1 of the Act¹. It is Qwest's position that interconnection is appropriately obtained by
2 establishing a demarcation point (or POI) between Qwest's network and Level 3's network.

3 **Q. WHAT IS A DEMARCATION POINT?**

4 A. A demarcation point is a point where the facilities of two networks meet. This allows each
5 network operator to maintain and control the performance of its respective network without
6 potential adverse impacts that may be created by the other network operator's network
7 operation. Such demarcation points can include such locations as a main distribution
8 frame². The demarcation point between Qwest and CLECs including Level 3 is its POI.
9 Without a demarcation point where the two networks can meet, neither Qwest nor Level 3
10 may be assured the ability to maintain or control the performance of its network.

11 **Q. ARE THERE OPTIONS AVAILABLE TO LEVEL 3 FOR ESTABLISHING A**
12 **DEMARCATON POINT/POI?**

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

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

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

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

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

7 **Q. HOW DOES LEVEL 3'S PROPOSED LANGUAGE OBLIGATE QWEST TO**
8 **ACCEPT TRAFFIC WHERE IT IS NOT TECHNICALLY FEASIBLE?**

9 A. Level 3's proposed language obligates Qwest to accept telecommunications traffic of all
10 types through Level 3's SPOI at any technically feasible point. All types of
11 telecommunications traffic includes toll type traffic. Level 3 then defines the technically
12 feasible points to include Qwest's access tandems and local tandems. Qwest's network
13 currently consists of a combination of access tandems, for the routing of toll traffic, and
14 local tandems, for the routing of local traffic. Qwest's local tandem architecture, however,
15 does not have the capability of routing toll traffic. Qwest's local tandems do not have the
16 connections to end offices and other carriers that would allow for the appropriate routing of
17 traffic that is not local to the end offices that subtend each local tandem. To achieve that
18 capability would require a substantial modification of Qwest's current network, which is
19 not an obligation under the Act. Level 3's proposed language attempts to redefine technical
20 feasible locations of interconnection that are not technically feasible, ignoring the current
21 architectures and their limitations.

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

3 A. Yes. To facilitate the connection between Level 3's POI and Qwest's network typically
4 requires Qwest to provision or build transport facilities to Level 3 for the sole purpose of
5 Level 3's interconnection with Qwest. Level 3's decision to interconnect with Qwest is a
6 decision made solely by Level 3.

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

9 A. No. Level 3's language proposes that each party provide higher transmission rates upon the
10 request of the other party. This would force the placement or the augmentation of facilities
11 to Qwest's existing network. Again, this is a redefinition of Qwest's obligation and a
12 modification of its existing architectures and network's capabilities. The argument for
13 adequate facilities to deliver higher transmission rates as proposed by Level 3 would
14 promote inefficient use of the network. It is inappropriate and unreasonable to expect the
15 upgrading of facilities or the adding of unnecessary capacity to the network when the
16 network demand for such capacity is possibly not justified.

17 **Q. WHAT PORTIONS OF ISSUE NO. 1A ARE ADDRESSED BY OTHER ISSUES IN**
18 **THIS ARBITRATION?**

19 A. Level 3's language at 7.1.1.1, 7.1.1.2 and 7.1.1.4.1 suggests that Level 3 be allowed to
20 route switched access traffic over interconnection trunks. This language implicates Issue

1 No. 2 and as described in my testimony for Issue No. 2, Qwest objects to Level 3's
2 language.

3 **Issue No. 1B**

4 **Q. PLEASE EXPLAIN DISPUTED ISSUE NO. 1B.**

5 A. Issue 1B involves disputed language which Level 3 incorrectly proposes methods of
6 establishing its POI that are actually methods of interconnection.

7 **Q. WHAT LANGUAGE DOES QWEST PROPOSE?**

8 A. Qwest proposes the following:

9 **7.1.2 Methods of Interconnection**

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

20 **Q. WHAT LANGUAGE DOES LEVEL 3 PROPOSE?**

21 A. Level 3 proposes the following:

22 **7.1.2 Methods of Interconnection**

23 CLEC may establish a POI through: (1) a collocation site established by CLEC at a
24 Qwest wire center, (2) a collocation site established by a third party at Qwest wire center,
25 or (3) transport (and entrance facilities where applicable).

1 CLEC shall establish one POI at any technically feasible point on Qwest's network
2 within each LATA in which CLEC desires to exchange traffic directly with Qwest by any
3 of the following methods:

- 4 1. a collocation site established by CLEC at a Qwest Wire Center,
- 5 2. a collocation site established by a third party at Qwest Wire Center, or;
- 6 3. transport (and entrance facilities where applicable) ordered and purchased
7 by CLEC from Qwest; or,
- 8 4. Fiber meet point.

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

- 11 1. a collocation site established by CLEC at a Qwest Wire Center,
- 12 2. a collocation site established by a third party at Qwest Wire Center,
- 13 3. transport (and entrance facilities where applicable) ordered and purchased
14 by CLEC from Qwest at the applicable Qwest intrastate access rates and
15 charges; or,
- 16 4. Fiber meet point.

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

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

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

24 A. As I have explained above, a POI is the physical demarcation point to which Level 3 may
25 have Qwest provision/build transport facilities between Level 3's network and Qwest's

1 network. This demarcation point/POI allows separation of responsibility for the respective
2 network operators to maintain and control the performance of each network.
3 Interconnection, on the other hand, is the actual establishment of the transport connection
4 between Level 3's POI and Qwest's network.

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

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

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

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

1 "Negotiated Mid-Span Meet POI facilities" is an option where Level 3 extends its own
2 facilities to a negotiated point approximately half way between the Level 3 SPOI and
3 Qwest's wire center building. With this arrangement, Level 3 builds its portion of the
4 transport facilities while Qwest builds its portion of its transport facilities to an agreeable
5 location for interconnection at the midpoint between Level 3's POI and Qwest's network.
6 This allows Level 3 and Qwest to equally share in the cost of building the transport
7 required for Level 3 to interconnect with Qwest.

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

14 **Q. PLEASE SUMMARIZE WHAT THESE OPTIONS PROVIDE?**

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

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

3 A. On occasion, yes. For example, if Level 3 wishes to establish its POI in a particular Qwest
4 exchange in which Level 3 does not wish to interconnect, then Direct Trunked Transport
5 would be required to connect Level 3's POI to the Qwest switch it did wish to interconnect.

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

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

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

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

3 A. Qwest provides Local Interconnect Service ("LIS") using these facility arrangements.
4 Qwest will provision LIS to Level 3 using the facility arrangement that Level 3 finds best
5 fits its needs.

6 **Q. WHAT IS LIS?**

7 A. LIS is a bundled trunk-side service providing switching and transport for the mutual
8 exchange of traffic that originates and terminates within a Qwest Local Calling Area
9 (LCA) or an Extended Area Service (EAS) boundary. LIS provides the logical connections
10 that are necessary for the exchange of traffic and are established over the physical facility
11 arrangement that is chosen by Level 3 to connect Level 3's POI with Qwest's network.

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

13 A. LIS is provisioned by using transport facilities and logical trunk connections. Switches are
14 equipped with interfaces so that they may be connected to one another. The facility options
15 my testimony describes above are the facility options Level 3 may use to connect its
16 switches with Qwest's switches. Logical trunk connections then must be created over these
17 facilities in order for telecommunications traffic to flow between the switches. Both Qwest
18 and Level 3 must coordinate the creation of these trunks during the provisioning of LIS.
19 Each trunk that is created between switches allows a voice conversation to take place
20 between the switches. Each switch must have a trunk connection for a call to route to the
21 other switch. Based on the coordinated provisioning of LIS, each switch is programmed to

1 know which trunk to route the call across using the subscriber's dialed digits as directions.
2 The switch would then route the call to the predetermined trunk that connects the two
3 switches for completion of the call. The trunk allows the subscriber to create a connection
4 between switches to complete a call.

5 **Q. WHAT TRUNKING OPTIONS ARE THERE FOR LIS?**

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

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

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

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

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

6 **Q. WHAT ARE THE BENEFITS OF SPOP?**

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

10 **Q. ARE THERE LIMITATIONS TO SPOP?**

11 A. Yes. Not all local carriers, Interexchange Carriers ("IXCs") or Qwest end offices have
12 connections with each Qwest access tandem. Therefore, separate connections to each
13 access tandem may be required to the extent there is more than one access tandem in a
14 LATA. In addition, and as I explain in issue 1F, it may be necessary for Level 3 to
15 establish trunking, where traffic volumes justify, directly to local tandem switches or end
16 office switches.

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

19 A. No. Level 3 must only interconnect its POI to an access tandem where Level 3's traffic is
20 destined for a local carrier, IXC or Qwest end office that subtends that access tandem. For

1 example, the Phoenix LATA has two access tandems. One of the access tandems generally
2 serves Northern and Western portions of the Phoenix LATA and the other access tandem
3 generally serves Southern and Eastern portions of the Phoenix LATA. If Level 3 has
4 traffic destined only to local carriers, IXC's or Qwest end offices that subtend the access
5 tandem that serve the Northern and Western portions of the Phoenix LATA then only
6 interconnection to that access tandem is required.

7 **Q. HOW ARE THE COST'S SHARED TO CREATE INTERCONNECTION**
8 **BETWEEN LEVEL 3 AND QWEST?**

9 A. As the testimony of Mr. Easton explains, a relative use factor is applied to apportion the
10 cost of the facilities used for interconnection between the parties.

11 **Q. WHY SHOULD QWEST'S LANGUAGE BE ADOPTED?**

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

16 **Issue No. 1F**

17 **Q. PLEASE EXPLAIN DISPUTED ISSUE NO. 1F.**

18 A. Level 3 removes the language describing how Level 3 may interconnect at Qwest's local
19 and access tandem switches. Level 3 also removes the requirement for Level 3 to establish
20 trunking as requested by Qwest where traffic volumes justify alternate trunking. My

1 testimony will explain why this language is important from a technical perspective. In
2 addition, Level 3 again inappropriately inserts the disclaimer that it should not have to pay
3 for the use of the Qwest network. The testimony of Mr. Easton will explain that Level 3's
4 language not only ignores Level 3's obligations under the law, but is also clearly misplaced
5 in a section describing the technical aspects of interconnection.

6 **Q. WHAT LANGUAGE IS QWEST PROPOSING?**

7 A. Qwest proposes the following:

8 7.2.2.9.6 The Parties shall terminate Exchange Service (EAS/Local) traffic on
9 Tandem Switches or End Office Switches. CLEC may interconnect at either the Qwest
10 local tandem or the Qwest access tandem for the delivery of local exchange traffic.
11 When CLEC is interconnected at the access tandem and when there is a DS1 level of
12 traffic (512 BHCCS) over three (3) consecutive months between CLEC's Switch and a
13 Qwest End Office Switch, Qwest may request CLEC to order a direct trunk group to the
14 Qwest End Office Switch. CLEC shall comply with that request unless it can
15 demonstrate that such compliance will impose upon it a material adverse economic or
16 operations impact. Furthermore, Qwest may propose to provide Interconnection facilities
17 to the local Tandem Switches or End Office Switches served by the Access Tandem
18 Switch at the same cost to CLEC as Interconnection at the Access Tandem Switch. If
19 CLEC provides a written statement of its objections to a Qwest cost-equivalency
20 proposal, Qwest may require it only: (a) upon demonstrating that a failure to do so will
21 have a material adverse affect on the operation of its network and (b) upon a finding that
22 doing so will have no material adverse impact on the operation of CLEC, as compared
23 with Interconnection at such Access Tandem Switch.

24 **Q. WHAT LANGUAGE IS LEVEL 3 PROPOSING?**

25 A. Level 3 proposes the following:

26 7.2.2.9.6 When CLEC is interconnected at the access tandem and when there is a
27 DS1 level of traffic (512 BHCCS) over three (3) consecutive months between CLEC's
28 Switch and a Qwest End Office Switch, Qwest may request CLEC to order a direct trunk
29 group to the Qwest End Office Switch. Notwithstanding references to Qwest's ability to
30 requests that CLECs order direct trunk groups to the Qwest end office, nothing in this

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

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

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

17 **Q. ARE THERE ANY OTHER METHODS BY WHICH LEVEL 3 MAY TERMINATE**
18 **TRAFFIC?**

19 A. No. By removing the language that allows for the exchange of Local/EAS traffic to Qwest
20 tandems, Level 3 implies that there are other locations that Level 3 may terminate traffic to
21 in Qwest's network. There are no other methods for Qwest to terminate Local/EAS traffic
22 than through Qwest's tandems and end offices.

1 **Q. ARE THERE OTHER TERMINATION POINTS IN THE PUBLIC SWITCHED**
2 **TELEPHONE NETWORK (“PSTN”) THAT OPERATE DIFFERENTLY THAN AN**
3 **END OFFICE OR A TANDEM?**

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

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

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

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

16 A. It is important to identify the function of switches where local traffic terminates so that
17 there is no confusion as to the network switching functions to which the Interconnection
18 Agreement (“ICA”) applies. Without this language, Level 3 may seek interconnection
19 utilizing a function that the Qwest network is not capable of providing. It is important that
20 the contract identify the type of traffic and the function of the switches where that traffic

1 will be accepted so that this is clear to both parties. Qwest's language provides this clarity.
2 Level 3's language does not.

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

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

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

16 A. No. Direct trunking will typically save Level 3 money because with it Level 3 would avoid
17 tandem switching costs. However, if the result is an economic burden, Qwest's language
18 provides a mechanism for Level 3 to avoid the burden.

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

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

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

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

13 **Q. WHAT IS THE 512 BHCCS?**

14 A. 512 BHCCS or 512 Busy Hour Centum Call Seconds is the measure of usage capacity of a
15 DS1 trunk during the busiest hour of the day. Usage is measured Centum Call Seconds
16 ("CCS") or one hundred call seconds. A line or trunk that is in use for one hour, or sixty
17 minutes, is being used for 3600 seconds, or 36 hundred call seconds, or 36 CCS. As stated
18 in Newton's Telecom Dictionary: "One hundred call seconds or one hundred seconds of
19 telephone conversation. One hour of telephone traffic is equal to 36 ccs
20 (60*60=3600/100=36) which is equal to one erlang." Newton's Telecom Dictionary,
21 Volume 17 at 131 (February 2001). 512 BHCCs is essentially equivalent to a DS1 worth

1 of usage. Telecommunications switch ports typically are provisioned in increments of DS1
2 capacity. It is generally recognized by the industry as the traffic threshold that indicates a
3 sufficiently high volume of traffic that would warrant the provisioning of alternative, direct
4 trunking arrangements.

5 **Q. WHAT IS THE 512 BHCCS RULE?**

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

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

11 A. Qwest's language establishes a threshold that facilitates efficient interconnection between
12 Qwest and all CLEC switches. The threshold allows Qwest to manage traffic through
13 tandem switches when traffic volumes justify a direct connection with a specific end office.
14 As can be seen in Exhibits PL1 & PL2, as CLEC traffic that is destined for a Qwest end
15 office reaches or exceeds 512 BHCCS or a DS1's capacity it becomes logical to direct
16 trunk to that end office. This creates network efficiencies by eliminating the need to
17 provide additional switching through the tandem.

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

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

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

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

10 **IV. DISPUTED ISSUE NO. 2: ALL TRAFFIC ON**
11 **INTERCONNECTION TRUNKS**

12 **Q. PLEASE EXPLAIN DISPUTED ISSUE NO. 2.**

13 A. Issue 2 concerns the types of traffic that may be combined over LIS trunks and whether
14 Qwest is entitled to compensation for the interconnection trunks it provides to Level 3.
15 The testimony of Mr. Easton will address the compensation issue while my testimony will
16 address the network and technical issues.

17 **Q. WHAT LANGUAGE IS QWEST PROPOSING?**

18 A. Qwest is proposing the following language:

19 7.2.2.9.3.1 Exchange Service (EAS/Local), ISP-Bound Traffic, IntraLATA LEC Toll,
20 VoIP traffic and Jointly Provided Switched Access (InterLATA and IntraLATA Toll
21 involving a third party IXC) may be combined in a single LIS trunk group or transmitted
22 on separate LIS trunk groups.

1 7.2.2.9.3.1.1 If CLEC utilizes trunking arrangements as described in Section
2 7.2.2.9.3.1, Exchange Service (EAS/Local) traffic shall not be combined with Switched
3 Access, not including Jointly Provided Switched Access, on the same trunk group, i.e.
4 Exchange Service (EAS/Local) traffic may not be combined with Switched Access
5 Feature Group D traffic to a Qwest Access Tandem Switch and/or End Office Switch.

6 7.2.2.9.3.2 CLEC may combine originating Exchange Service (EAS/Local) traffic,
7 ISP-Bound Traffic, IntraLATA LEC Toll, VoIP Traffic and Switched Access Feature
8 Group D traffic including Jointly Provided Switched Access traffic, on the same Feature
9 Group D trunk group.

10 7.2.2.9.3.2.1 CLEC shall provide to Qwest, each quarter, Percent Local Use (PLU)
11 factor(s) that can be verified with individual call detail records or the Parties may use call
12 records or mechanized jurisdictionalization using Calling Party Number (CPN)
13 information in lieu of PLU, if CPN is available. Where CLEC utilizes an affiliate's
14 Interexchange Carrier (IXC) Feature Group D trunks to deliver Exchange Service
15 (EAS/Local) traffic with interexchange Switched Access traffic to Qwest, Qwest shall
16 establish trunk group(s) to deliver Exchange Service (EAS/Local), Transit, and
17 IntraLATA LEC Toll to CLEC. Qwest will use or establish a POI for such trunk group
18 in accordance with Section 7.1.

19
20 **Q. WHAT LANGUAGE IS LEVEL 3 PROPOSING?**

21 **A.** Level 3 proposes the following language:

22 7.2.2.9.3.1 Where CLEC exchanges Telephone Exchange Service, Exchange Access
23 Service, Telephone Toll Service, and Information Services traffic with Qwest over a
24 single interconnection network, CLEC agrees to pay Qwest, on Qwest's side of the POI,
25 state or federally tariffed rates applicable to the facilities charges for InterLATA and/or
26 InterLATA traffic in proportion to the total amount of traffic exchanged over such
27 interconnection facility. Otherwise each party remains 100% responsible for the costs of
28 its interconnection facilities on its side of the POI. Thus, by way of illustration only,
29 where 20% of such traffic is interLATA (intrastate and interstate) and the remaining 80%
30 is Section 251(b)(5) Traffic, CLEC would pay Qwest an amount equal to 20% of the
31 applicable tariffed transport rate that would apply to a tariffed facility used solely for the
32 exchange of such access traffic for such traffic exchanged on Qwest's side of the POI
33 over a single interconnection trunk.

34 Except as expressly provided in Section 7.3.1.1.3, each party shall bear all costs of
35 interconnection on its side of the network in accordance with 47 C.F.R. § 51.703.

1 Accordingly, unless otherwise expressly authorized according to Section 7.3.1.1.3,
2 neither Party may charge the other (and neither Party shall have an obligation to pay) any
3 recurring and/or nonrecurring fees, charges or the like (including, without limitation, any
4 transport charges), associated with the exchange of any telecommunications traffic
5 including but not limited to Section 251(b)(5) Traffic on its side of the POI.

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

11 7.2.2.9.3.2 CLEC may combine Exchange Service (EAS/Local) traffic, ISP-Bound
12 Traffic, Exchange Access (IntraLATA Toll carried solely by Local Exchange Carriers),
13 VoIP Traffic and Switched Access Feature Group D traffic including Jointly Provided
14 Switched Access traffic, on the same Feature Group D trunk group or over the same
15 interconnection trunk groups as provided in Section 7.3.9.

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

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

1 local interconnection trunking. Furthermore, Qwest's proposed language is in keeping
2 with industry practice.

3 **Q. WHAT IS SWITCHED ACCESS TRAFFIC?**

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

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

15 A. Yes.

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

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

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

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

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

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

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

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

18 **Q. WHAT METHODS DOES QWEST USE TO RECORD TRAFFIC?**

19 A. There are two methods that Qwest records traffic for intercarrier compensation. The first is
20 through a switch-based recording and the second is through a link monitoring recording

1 based on SS7 signaling. The switch-based recording uses memory in the switch to record
2 and format the information that is received by the switch. The SS7 based recording tool
3 records traffic using information provided in the SS7 signaling stream.

4 **Q. HOW ARE THESE TWO METHODS OF RECORDING TRAFFIC UTILIZED**
5 **FOR INTERCARRIER COMPENSATION?**

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

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

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

15 A. No. Prior to 1996 and the Telecom Act there was no need to record local traffic for the
16 purposes of intercarrier compensation. Before the 1996 Act local service was provided
17 exclusively by Incumbent Local Exchange Carriers ("ILEC") and was typically provided at
18 a flat rate. However, after the 1996 Act and the introduction of CLECs, reciprocal
19 compensation for local traffic became an issue. As a result, CroSS7 was developed to
20 record traffic that was exchanged between Qwest and CLECs over LIS trunks.

1 **Q. DOES CROSS7 RECORD SWITCHED ACCESS FOR BILLING PURPOSES?**

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

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

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

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

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

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

4 A. Yes.

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

7 A. Qwest's proposed language gives Level 3 this capability. Qwest's language allows Level 3
8 to route both its local and toll traffic over FGD trunking. As I described above, these
9 trunks are typically used for routing switched access traffic. Qwest has developed a
10 methodology for Level 3 to route its local traffic over these same trunks. Furthermore,
11 Qwest has also developed the ability to record this traffic so that local traffic and access
12 traffic are billed appropriately.

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

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

1 **Q. WHY SHOULD QWEST'S LANGUAGE BE ADOPTED?**

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

7 **V. DISPUTED ISSUE NO. 6: AMA SWITCH TECHNOLOGY**

8
9 **Q. PLEASE EXPLAIN DISPUTED ISSUE NO. 6.**

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

15 **Q. WHAT LANGUAGE IS QWEST PROPOSING?**

16 A. Qwest proposes the following:

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

22 **Q. WHAT LANGUAGE IS LEVEL 3 PROPOSING?**

23 A. Level 3 proposes the following

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

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

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

10 **VI. DISPUTED ISSUE NO. 8: DEFINITION OF CALL RECORD**

11
12 **Q. PLEASE EXPLAIN DISPUTED ISSUE NO. 8.**

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

21 **Q. WHAT LANGUAGE IS QWEST PROPOSING?**

22 A. Qwest proposes the following:

1 "Call Record" means a record that provides key data about individual telephone calls. It
2 includes originating telephone number, terminating telephone number, billing telephone
3 number (if different from originating or terminating number) time and date of call,
4 duration of call, long distance carrier (if applicable), and other data necessary to properly
5 rate and bill the call.
6

7 **Q. WHAT LANGUAGE IS LEVEL 3 PROPOSING?**

8 A. Level 3 proposes the following:

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

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

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

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

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

7 Level 3's language requires a "charge number" or "Originating Line Indicator" ("OLI").
8 Charge Number parameter and the Originating Line Information ("OLI") parameter are
9 optional SS7 parameters that identify the billing telephone number and class of service of a
10 call respectively. Local signaling does not require either Charge Number or OLI.³ As a
11 result, valid call records would not be created under Level 3's definition for local calls. In
12 addition, because IXCs typically strip Charge Number and OLI when terminating a call
13 through Qwest to other local service providers via Jointly Provided Switched Access,
14 terminating access records would also become invalid call records under Level 3's
15 definition.

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

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

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

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

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

18 A. No. Signaling is the only way that Qwest is capable of providing real time Charge Number
19 and OLI that would enable Level 3 to create a call record as defined by Level 3’s proposed
20 definition. I have yet to see any proposal from Level 3 that would provide Qwest with the

1 same Charge Number or OLI on all calls, both local and non-local, without the use of
2 signaling.

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

5 A. Level 3 has omitted call duration in its proposed definition of call record. It is important to
6 include call duration in a call record because intercarrier compensation is based on network
7 usage which is determined by the fundamental information provided by the call duration.
8 Because today's intercarrier compensation is usage sensitive, the lack of call duration on a
9 call record used for billing would void any record without the presence of call duration
10 information. In addition to call duration, Level 3 has also omitted the time and date call
11 information. Time and date are also important so that the call information can be
12 associated specific to each particular call that is made throughout each day. This type of
13 information is essential when trouble shooting discrepancies in billing.

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

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

19 "Charge number" The term "charge number" as Level 3 references in the definition of
20 Call Record is used as an undefined term. However, "Charge Number" has a specific

1 undisputed definition in the proposed ICA. Level 3's use of "charge number" creates the
2 potential for differing interpretations of what constitutes a charge number. It is important
3 that the definition be specific when using terms that are otherwise defined in other parts of
4 the proposed ICA.

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

11 "ANI" and "OLI" These terms are defined differently in the proposed ICA from the way
12 Level 3 has defined these terms in their proposed definition of Call Record. The
13 undisputed proposed ICA definitions of these terms are "ANI" and OLI where the "T" in
14 ANI is not Identifier and the "T" in OLI is not "Indicator" as is otherwise defined in the
15 Qwest proposed ICA and in the telecommunications industry. These terms are specifically
16 defined in this ICA to correspond with the industries definition of the SS7 parameters that
17 correspond to these terms.

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

3 A. Qwest would then be required to provide a call record specifically for Level 3 and then a
4 second call record for all other carriers with which Qwest exchanges records. This would
5 then require Qwest to implement two different processes and potentially enhance its billing
6 systems to accommodate the different call record requirements. All CLECs that follow
7 industry standard would follow one type of call record requirements and Level 3 would
8 then use an entirely new process and potential systems enhancements. This could take a
9 number of years to develop. Regardless of whether Qwest were to develop this new call
10 record and enhance the current systems to handle the changes or develop a separate manual
11 process, it will require additional capital expense based solely on Level 3's interest to
12 change the existing call record requirements that to this point all other carriers in the
13 industry follow.

14 **Q. WHY SHOULD QWEST'S DEFINITION OF CALL RECORD BE USED IN THE**
15 **ICA BETWEEN LEVEL 3 AND QWEST?**

16 A. Qwest's definition of call record should be used because it includes the fundamental
17 information that is required to create a valid call record and the flexibility to include other
18 data that that may be used to rate and bill calls for intercarrier compensation purposes. In
19 addition, Qwest uses terms that are specific enough to identify what is required while at the
20 same time remaining flexible enough to encompass all of the optional parameters that
21 Level 3 wishes to require should they eventually become industry requirements. Unlike

1 Level 3's language, Qwest's language does not include call information that would create
2 disputes over the interpretation of the terms used in the definition. Likewise, Qwest's
3 language eliminates any potential dispute as to whether the existence of call duration and
4 the time and date a call occurred are required in a valid call record. Simply put, Qwest's
5 language addresses all of Level 3's concerns, more clearly establishes the expectations of
6 both companies for the creation of a valid call record, and has the flexibility to include
7 additional call information that may be required to generate a valid call record in the future.

8 **VII. DISPUTED ISSUE NO. 20: SIGNALING PARAMETERS**

9
10 **Q. PLEASE EXPLAIN DISPUTED ISSUE NO. 20.**

11 A. The issue at dispute here is what SS7 signaling information should be required for the
12 exchange of traffic between Qwest and Level 3.

13 **Q. WHAT LANGUAGE IS QWEST PROPOSING?**

14 A. Qwest proposes the following:

15 7.3.8 Signaling Parameters: Qwest and CLEC are required to provide each other the
16 proper signaling information (e.g., originating Calling Party Number and destination
17 called party number, etc.) per 47 CFR 64.1601 to enable each Party to issue bills in a
18 complete and timely fashion. All CCS signaling parameters will be provided including
19 Calling Party Number (CPN), Originating Line Information Parameter (OLIP) on calls to
20 8XX telephone numbers, calling party category, Charge Number, etc. All privacy
21 indicators will be honored. If either Party fails to provide CPN (valid originating
22 information), and cannot substantiate technical restrictions (i.e., MF signaling) such
23 traffic will be billed as Switched Access. Traffic sent to the other Party without CPN
24 (valid originating information) will be handled in the following manner. The transit
25 provider will be responsible for only its portion of this traffic, which will not exceed
26 more than five percent (5%) of the total Exchange Service (EAS/Local) and Exchange
27 Access (IntraLATA Toll) traffic delivered to the other Party. The Switch owner will

1 provide to the other Party, upon request, information to demonstrate that Party's portion
2 of no-CPN traffic does not exceed five percent (5%) of the total traffic delivered. The
3 Parties will coordinate and exchange data as necessary to determine the cause of the CPN
4 failure and to assist its correction. All Exchange Service (EAS/Local) and IntraLATA
5 LEC Toll calls exchanged without CPN information will be billed as either Exchange
6 Service (EAS/Local) Traffic or IntraLATA LEC Toll Traffic in direct proportion to the
7 minutes of use (MOU) of calls exchanged with CPN information for the preceding
8 quarter, utilizing a PLU factor determined in accordance with Section 7.2.2.9.3.2 of this
9 Agreement.

10 7.3.8 Signaling Parameters: Qwest and CLEC are required to provide each other the
11 proper signaling information (e.g., originating Calling Party Number and destination
12 called party number, etc.) per 47 CFR 64.1601 to enable each Party to issue bills in a
13 complete and timely fashion. All CCS signaling parameters will be provided including
14 Calling Party Number (CPN), Originating Line Information Parameter (OLIP) on calls to
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18 traffic will be billed as Switched Access. Traffic sent to the other Party without CPN
19 (valid originating information) will be handled in the following manner. The transit
20 provider will be responsible for only its portion of this traffic, which will not exceed
21 more than five percent (5%) of the total Exchange Service (EAS/Local) and IntraLATA
22 LEC Toll traffic delivered to the other Party. The Switch owner will provide to the other
23 Party, upon request, information to demonstrate that Party's portion of no-CPN traffic
24 does not exceed five percent (5%) of the total traffic delivered. The Parties will
25 coordinate and exchange data as necessary to determine the cause of the CPN failure and
26 to assist its correction. All Exchange Service (EAS/Local) and IntraLATA LEC Toll
27 calls exchanged without CPN information will be billed as either Exchange Service
28 (EAS/Local) Traffic or IntraLATA LEC Toll Traffic in direct proportion to the minutes
29 of use (MOU) of calls exchanged with CPN information for the preceding quarter,
30 utilizing a PLU factor determined in accordance with Section 7.2.2.9.3.2 of this
31 Agreement.

32
33 **Q. DOES QWEST HAVE ANY MODIFICATIONS TO ITS PROPOSED LANGUAGE?**

34 **A. Yes. To clarify 7.3.8 Qwest wishes to replace the following sentence:**

35 All CCS signaling parameters will be provided including Calling Party Number (CPN),
36 Originating Line Information Parameter (OLIP) on calls to 8XX telephone numbers,
37 calling party category, Charge Number, etc.

1 With the following sentence:

2 All CCS signaling parameters will be provided including Calling Party Number (CPN),
3 Originating Line Information Parameter (OLIP), calling party category, Charge Number,
4 etc. on calls to 8XX telephone numbers.

5 The preceding changes are only intended to clarify the sentence structure.

6 **Q. WHAT LANGUAGE IS LEVEL 3 PROPOSING?**

7 A. Level 3 proposes the following:

8 7.3.8 Signaling Parameters: Qwest and CLEC are required to provide each other proper
9 signaling information (e.g., originating Calling Record Information and destination called
10 party number, etc.) to enable each Party to issue bills in a complete and timely fashion.
11 All CCS signaling parameters will be provided including Call Record Information (CRI),
12 Originating Line Information Parameter (OLIP) on calls to 8XX telephone numbers,
13 calling party category, Charge Number, etc. All privacy indicators will be honored. If
14 either Party fails to provide CRI (valid originating information), and cannot substantiate
15 technical restrictions (e.g., MF signaling, IP origination, etc.) such traffic will be billed as
16 interstate Switched Access. Transit Traffic sent to the other Party without CRI (valid
17 originating information) will be handled in the following manner. The transit provider
18 will be responsible for only its portion of this traffic, which will not exceed more than
19 five percent (5%) of the total Exchange Service (EAS/Local) and Exchange Access
20 (IntraLATA Toll) traffic delivered to the other Party. The Switch owner will provide to
21 the other Party, upon request, information to demonstrate that Party's portion of no-CRI
22 traffic does not exceed five percent (5%) of the total traffic delivered. The Parties will
23 coordinate and exchange data as necessary to determine the cause of the CRI failure and
24 to assist its correction. All Exchange Service (EAS/Local) and Exchange Access calls
25 exchanged without CRI information will be billed as either Exchange Service
26 (EAS/Local) Traffic or Exchange Access Traffic in direct proportion to the minutes of
27 use (MOU) of calls exchanged with CRI information for the preceding quarter, utilizing a
28 PLU factor determined in accordance with Section 7.2.2.9.3.2 of this Agreement.

29
30 7.3.8 Signaling Parameters: Qwest and CLEC are required to provide each other proper
31 signaling information (e.g., originating Calling Record Information and destination called
32 party number, etc.) to enable each Party to issue bills in a complete and timely fashion.
33 All CCS signaling parameters will be provided including Call Record Information (CRI),
34 Originating Line Information Parameter (OLIP) on calls to 8XX telephone numbers,
35 calling party category, Charge Number, etc. All privacy indicators will be honored. If

1 either Party fails to provide CRI (valid originating information), and cannot substantiate
2 technical restrictions (e.g., MF signaling, IP origination, etc.) such traffic will be billed as
3 interstate Switched Access. Transit Traffic sent to the other Party without CRI (valid
4 originating information) will be handled in the following manner. The transit provider
5 will be responsible for only its portion of this traffic, which will not exceed more than
6 five percent (5%) of the total Exchange Service (EAS/Local) and Exchange Access
7 (IntraLATA Toll) traffic delivered to the other Party. The Switch owner will provide to
8 the other Party, upon request, information to demonstrate that Party's portion of no-CRI
9 traffic does not exceed five percent (5%) of the total traffic delivered. The Parties will
10 coordinate and exchange data as necessary to determine the cause of the CRI failure and
11 to assist its correction. All Exchange Service (EAS/Local) and Exchange Access calls
12 exchanged without CRI information will be billed as either Exchange Service
13 (EAS/Local) Traffic or Exchange Access Traffic in direct proportion to the minutes of
14 use (MOU) of calls exchanged with CRI information for the preceding quarter, utilizing a
15 PLU factor determined in accordance with Section 7.2.2.9.3.2 of this Agreement.

16
17 **Q. WHY DOES QWEST OBJECT TO LEVEL 3'S PROPOSED LANGUAGE?**

18 A. Qwest objects to Level 3's language because it mischaracterizes *IP origination* (emphasis
19 added) as a technical limitation to providing signaling parameters. Level 3's proposed
20 language also creates an obligation to populate a signaling parameter, specifically Call
21 Record Information ("CRI"), which does not exist within the SS7 protocol. In addition,
22 Level 3 does not define CRI. To the extent Level 3's definition of CRI would use similar
23 terms as are used in Level 3's definition of Call Record, it is not at all clear that the
24 requirement to provide the CRI can be met. Level 3's proposed language also fails to
25 acknowledge that the FCC has recognized certain limitations exist that prohibit or limit the
26 delivery of specific types of signaling information. Qwest further objects to Level 3's
27 language because it inappropriately applies interstate switched access rates onto traffic that
28 is intrastate.

1 **Q. WHY IS IT NOT NECESSARY TO ADDRESS VOIP ORIGINATED TRAFFIC AS**
2 **LEVEL 3 PROPOSES?**

3 A. Voice over Internet Protocol ("VoIP") uses a different protocol than is used by the
4 operators of the PSTN. Because of the different protocols, a conversion from the Internet
5 Protocol ("IP") to the Time Division Multiplex ("TDM") protocol of the PSTN is required
6 to enable a voice call to be established between an IP network and the PSTN. However,
7 the PSTN does not currently have the ability to determine if traffic was originated in IP, at
8 what point the conversion from IP to TDM takes place, or if the traffic was originated with
9 TDM protocol. As the testimony of Larry Brotherson explains, the ESP exemption allows
10 an ESP such as VoIP service providers to establish a POP within a local calling area and
11 receive service that is treated as local service. It is the FCC's ESP exemption and the
12 existence of a standard signaling protocol that eliminates the need to identify VoIP traffic
13 as a signaling requirement. Thus, industry standards have not been established that specify
14 signaling as the method to identify VoIP traffic.

15 **Q. IS IT TRUE THAT VOIP IS A TECHNICAL RESTRICTION FOR PROVIDING**
16 **CPN?**

17 A. Absolutely not. Contrary to Level 3's petition and their proposed language, there is no
18 technical limitation that would prevent Level 3 from populating CPN for VoIP originated
19 traffic. In fact, VoIP traffic is subject to all of the same limitations as any PSTN originated
20 call after the IP to TDM conversion takes place and the traffic enters the PSTN. All
21 limitations that are identified by Qwest's language apply once the traffic enters the PSTN.

1 Level 3 is attempting to make VoIP traffic more than it really is. It is just a voice call that
2 is routed and transported with a different protocol until the protocol changes at which point
3 it is like any other TDM call.

4 **Q. HAS THERE BEEN AN INDUSTRY STANDARD DEVELOPED TO ADDRESS**
5 **VOIP ORIGINATED CALLS?**

6 A. No. Level 3 wishes to address the signaling of VoIP traffic even though there has been no
7 industry standard established to address the identification of VoIP originated traffic. Until
8 such time as an industry standard is developed, the industry must use the existing standards
9 for signaling traffic through the PSTN and the well established FCC ESP exemption rules
10 that determine how the traffic from VoIP service providers is treated. Level 3 is attempting
11 to jump the gun with regard to the identification of VoIP originated traffic by putting into
12 place a signaling solution for the identification of VoIP originated traffic that benefits only
13 itself and not the needs of the industry as a whole. It has yet to be determined by industry
14 standards whether signaling is the most appropriate solution for identifying VoIP
15 originating traffic.

16 **Q. HOW DOES LEVEL 3'S PROPOSED LANGUAGE CREATE A SIGNALING**
17 **PARAMETER THAT DOES NOT EXIST?**

18 A. Section 7.3.8 addresses signaling parameters. Level 3 seems to be attempting to create a
19 new signaling parameter called CRI by including the reference to CRI in the list of SS7
20 signaling parameters. There is no such signaling parameter as CRI that exists in the SS7
21 protocol. Level 3's proposed language, however, attempts to prematurely redefine

1 signaling that occurs between two networks and changes the meaning and intent of the
2 language to encompass all call record information that might exist within signaling
3 protocols.

4 **Q. WHAT WOULD BE INVOLVED IN THE CREATION OF A NEW SIGNALING**
5 **PARAMETER?**

6 A. The creation of a new signaling parameter would be a colossal undertaking. The industry
7 would first have to come to agreement on the definition of the parameter. Once the
8 parameter was defined by the industry then all vendors and carriers that use the SS7
9 protocol in their equipment and network would have to incorporate the new protocol
10 parameter. This would have to occur for all existing and new signaling equipment. This
11 would include modification to practically every switch in the United States and would also
12 impact other countries to the same extent that SS7 is used outside of the United States.
13 This could take years to implement and tens of millions of dollars. In addition, some
14 carriers may not utilize the parameter and others may expect to be compensated for
15 transporting the additional data.

16 **Q. DOES LEVEL 3 DEFINE CRI?**

17 A. No. One of the problems Qwest has with CRI is that Level 3 does not define the term in its
18 proposed contract language. Since Level 3 does not define CRI, its meaning in the ICA
19 would then be left open for dispute.

1 **Q. WHAT PROBLEMS WOULD ARISE IF CRI WERE TO BE DEFINED BY THE**
2 **SAME INFORMATION THAT IS USED BY LEVEL 3 TO DEFINE CALL**
3 **RECORD?**

4 A. The same problems that arise in issue No. 8 would arise here. In addition, call records and
5 signaling serve different functions. Call signaling is real time data that is used to set up and
6 release calls across the PSTN. Call records are generated using post call processing and are
7 used for the purposes of billing. Although call records may include some signaling related
8 information, call records include information that is not provided within the signaling
9 stream such as date, time, and call duration that are captured outside the signaling stream.
10 Level 3 has made section 7.3.8 more confusing and more cumbersome to manage by
11 inserting call record information that may not exist in the signaling protocol.

12 **Q. WHAT PROBLEMS DOES QWEST SEE IF LEVEL 3 WERE TO DEFINE ONLY**
13 **THE SIGNALING PARAMETERS AS ARE USED IN LEVEL 3'S DEFINITION**
14 **OF CALL RECORD?**

15 A. While Level 3 identifies several signaling parameters in its definition, there is only one call
16 parameter that could always have a substantial impact on the creation of a call record. This
17 is the Calling Party Number ("CPN") parameter. The CPN parameter is the number of the
18 party that places a call i.e. the "from" number. Level 3's language inserts signaling
19 parameters that may or may not be present thus making a call record that would otherwise
20 be valid for billing purposes invalid. Based on Level 3's definition of call record, a call
21 that is missing signaling information which would normally contain enough information to

1 create a call record would be classified as a no-CRI by Level 3. For example, if a local call
2 is routed to Level 3 with the called party number and the calling party number present in
3 the signaling stream, under Level 3's language, this local call would be defined as a no-
4 CRI call because according to Level 3's language it lacks either a Charge Number or the
5 Originating Line Indicator. Typically, local calls are not signaled with Charge Number or
6 OLI. It is for these reasons that Level 3's language will lead to disputes over what
7 signaling information is necessary for billing.

8 **Q. IS RATING NO-CPN TRAFFIC BASED ON "INTERSTATE SWITCHED**
9 **ACCESS RATES" APPROPRIATE AS PROPOSED BY LEVEL 3?**

10 A. No. Qwest opposes Level 3's proposal to route interstate switched access over LIS trunks
11 as my testimony explains for issue 2. Therefore, interstate switched access charges would
12 not be appropriately applied to No-CPN traffic.

13 **Q. WHY IS QWEST'S LANGUAGE MORE APPROPRIATE?**

14 A. Qwest's language uses terms that are clearly defined by the contract and the industry.
15 Qwest language provides clear expectations for the signaling of traffic between the parties'
16 networks.

17 **VIII. SUMMARY/CONCLUSION**

1 **Q. PLEASE SUMMARIZE YOUR TESTIMONY.**

2 A. Although complex at times, the issues of my testimony revolve around three issues: 1)
3 Level 3's ability to establish a SPOI in a LATA; and 2) the types of traffic that may be
4 combined on interconnection trunks; and 3) the call information that should be required in
5 a call record.

6 Although, Level 3's ability to establish a SPOI is more about compensation for providing
7 interconnection facilities, the FCC contemplated the logistics for interconnecting two
8 networks when it required LECs to provide interconnection. It recognized that each carrier
9 must be able to retain responsibility for the management, control, and performance of its
10 network. The FCC also acknowledges that networks had interconnected prior to the
11 Telecommunications Act of 1996. In support of its recognition of maintaining network
12 reliability and interoperability, and the existence of network interconnections, the FCC
13 acknowledged certain logical methods to interconnect networks such as cross connect
14 points and main distribution frames as technically feasible points of interconnection.
15 Qwest provides such technical feasible points for the purpose of interconnection with
16 Qwest's network. However, Level 3's proposed language attempts to forgo these well
17 established arrangements nor for technical reasons, but in an attempt to avoid the cost of
18 interconnection.

19 As to the types of traffic that can be carried on interconnection trunk groups, Qwest has
20 attempted to be responsive to Level 3's desire to combine traffic on trunk groups. Qwest is
21 willing to allow all traffic types, with the exception of switched access traffic, to be carried

1 over LIS trunks. The law is also clear about interexchange traffic and the requirement for
2 Qwest to provide switched access services to IXCs for such interexchange traffic. Because
3 of billing issues, systems issues and Qwest's obligation to provide jointly provided
4 switched access records to other ILECs and CLECs, Qwest requires that switched access
5 traffic be carried over Feature Group trunks. This is entirely consistent with Section 251(g)
6 of the Act which requires that Qwest provide interconnection for the exchange of switched
7 access traffic in the same manner that it provided for such traffic prior to the passage of the
8 Act. Nonetheless, Qwest has attempted to accommodate Level 3's desire for network
9 efficiencies by agreeing to let Level 3 combine all of its traffic over Feature Group D
10 trunks. This solution achieves the efficiencies sought by Level 3 while at the same time
11 allowing Qwest to continue to use its existing billing systems and processes. For these
12 reasons, Level 3's proposed combining of traffic on LIS trunks should be rejected.

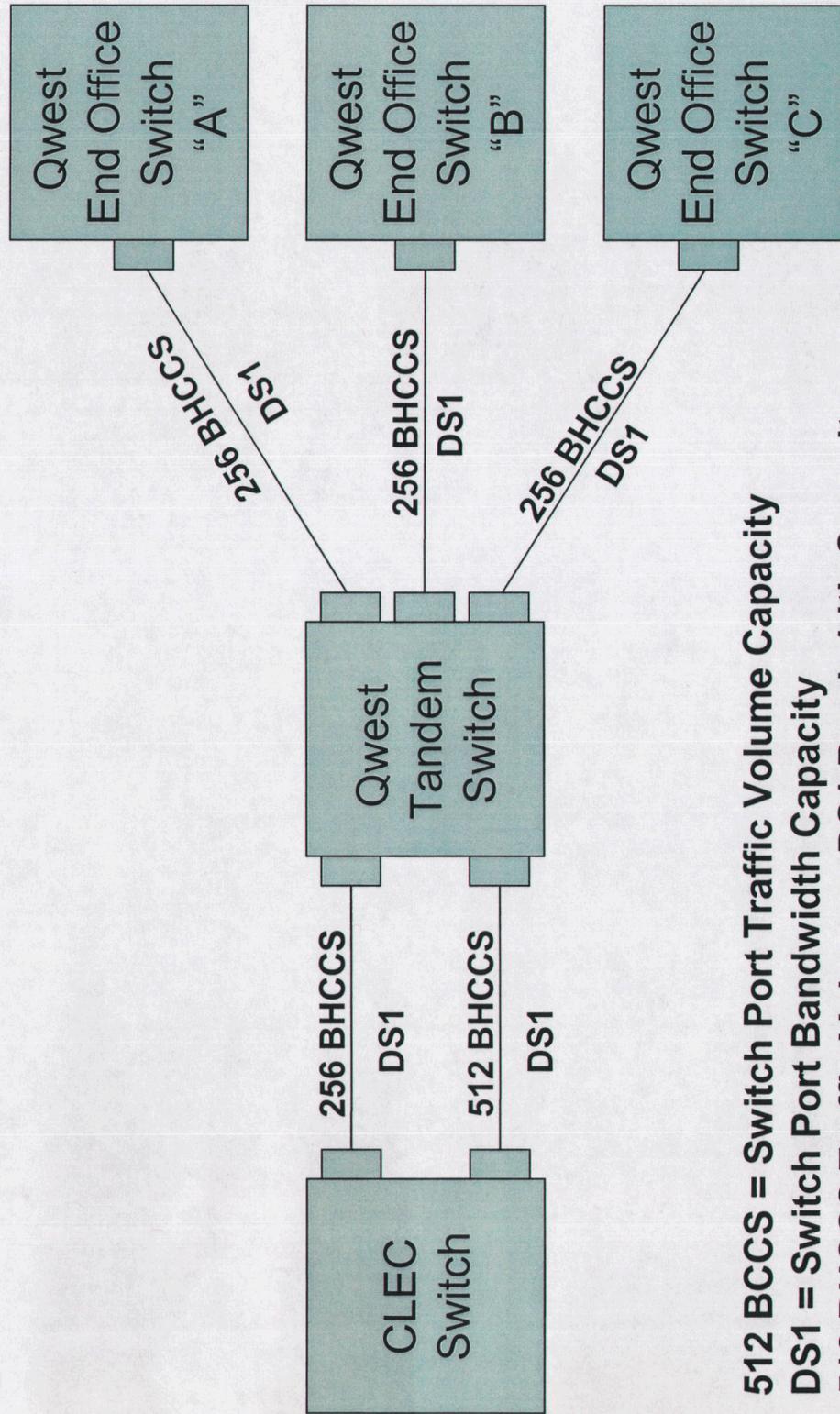
13 Finally, a call record must include certain fundamental information to create a record for
14 billing purposes. Although there are some technical limitations in some cases that prohibit
15 the identification of the origination of a call, Level 3 attempts to go beyond the
16 fundamental information and create requirements for a call record that may not legitimately
17 be provided. Qwest's definition provides for all of the fundamental information needed in
18 a call record and at the same time provides the flexibility to accept additional information
19 to create a call record which may be used for billing. Level 3 goes beyond what is
20 recognized by the industry and then inappropriately places financial penalties for
21 non-compliance.

1 Q. Q. DOES THIS CONCLUDE YOUR TESTIMONY?

2 A. Yes it does.

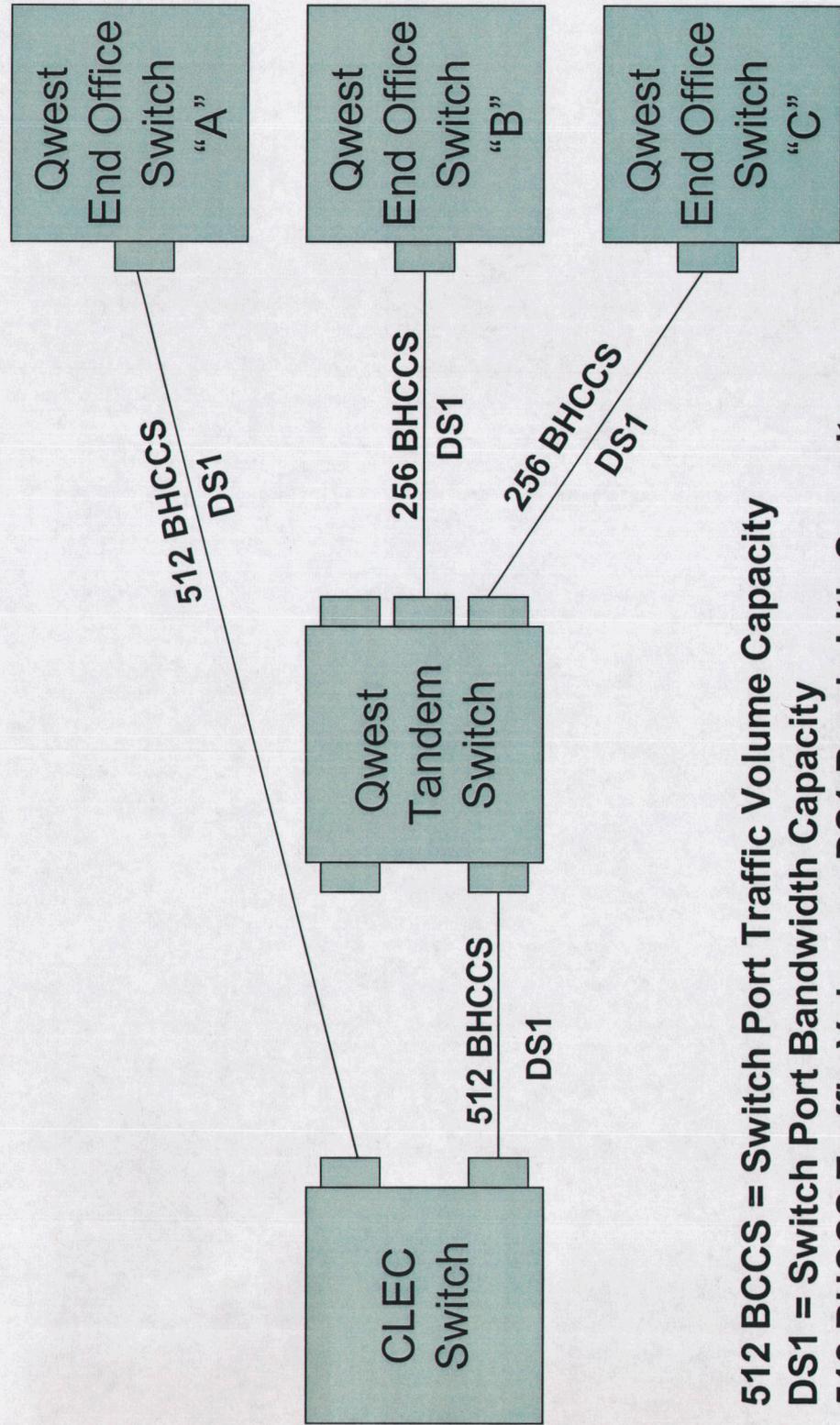
PHILIP A. LINSE EXHIBITS

SPOP Traffic Volume Spread Across All End Offices Is Less Than The Capacity Of A Single Switch Port



512 BHCCS = Switch Port Traffic Volume Capacity
 DS1 = Switch Port Bandwidth Capacity
 512 BHCCS Traffic Volume = DS1 Bandwidth Capacity

SPOP Traffic Volume To End Office "A" Is At Or Exceeds The Capacity Of A Single Switch Port (512 BHCCS Rule)



512 BHCCS = Switch Port Traffic Volume Capacity
DS1 = Switch Port Bandwidth Capacity
512 BHCCS Traffic Volume = DS1 Bandwidth Capacity

BEFORE THE ARIZONA CORPORATION COMMISSION

IN THE MATTER OF THE PETITION OF)
LEVEL 3 COMMUNICATIONS, LLC FOR)
ARBITRATION OF AN)
INTERCONNECTION AGREEMENT WITH)
QWEST CORPORATION)
PURSUANT TO SECTION 252 (b) OF THE)
TELECOMMUNICATIONS ACT OF 1996)

DOCKET NO. T-03654A-05-0350
T-01051B-05-0350

STATE OF COLORADO)
COUNTY OF ARAPAHOE)

AFFIDAVIT OF
PHILIP LINSE

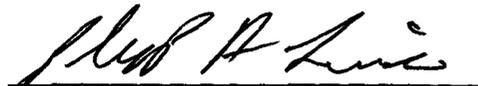
: SS

Philip Linse, of lawful age being first duly sworn, depose and states:

My name is Philip Linse. I am Director for Qwest Corporation in Littleton Colorado. I have caused to be filed written Direct testimony in Docket No. T-03654A-05-0350 T-01051B-05-0350.

- 1. I hereby swear and affirm that my answers contained in the attached testimony to the questions therein propounded are true and correct to the best of my knowledge and belief.

Further affiant sayeth not.


Philip A. Linse

SUBSCRIBED AND SWORN to before me this 15 day of July, 2005.


Notary Public

My Commission Expires: 4/5/08