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IDAHO PUBLIC
UTILITIES COMMISSION

ORIGINAL

BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION

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

Case No. QWE-T-05-11

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

Table of Contents

I.	Introduction.....	3
II.	ISSUE 1: Single Point of Interconnection Per LATA	4
II.	ISSUE 2: Combining Different Traffic Types on Interconnection Trunks	17
III.	Additional Interconnection Trunking Issues Raised by Qwest.....	27
IV.	ISSUE 3: VNXX/FX Traffic	35
V.	ISSUE 8: Definition of Call Record	40
VI.	ISSUE 20: Signaling Parameters	42

1 **II. ISSUE 1: Single Point of Interconnection Per LATA**

2 **Q. MR. LINSE STATES THAT THE REAL ISSUE IN THIS ARBITRATION**
3 **IS “WHETHER QWEST SHOULD BE REQUIRED TO PROVIDE**
4 **INTERCONNECTION WHERE IT IS NOT TECHNICALLY FEASIBLE**
5 **OR TO PROVISION/BUILD TRANSPORT FACILITIES WITHOUT**
6 **COMPENSATION FOR THE BUILDING OF SUCH TRANSPORT**
7 **FACILITIES.” IS THAT THE REAL ISSUE?**

8 **A.** No. Mr. Linse’s statement assumes that Qwest is entitled to compensation for
9 originating traffic on Qwest’s side of the POI. This is contrary to federal law.
10 Secondly, Mr. Linse mixes issues of technical feasibility and compensation. The
11 two are not linked. The rule is quite simple: no carrier may charge an
12 interconnecting LEC for originating telecommunications traffic on its side of the
13 POI. Accordingly, Qwest’s contract language throughout Section 7 which
14 requires interconnecting facilities-based LECs mirror its retail local calling area
15 distinctions should be rejected.- which it also purports to measure somehow by
16 the “physical presence” of the end user - for purposes of intercarrier architecture
17 and compensation requirements not only violate the letter and intent of the Act,
18 they simply shift enormous benefit to Qwest without any corresponding benefit to
19 the public interest. As Mr. Gates demonstrates, Qwest’s proposals on POI and
20 trunking result in a deadweight economic loss.

21 **Q: YOU SAY THAT QWEST’S CONTINUED RELIANCE UPON RETAIL**
22 **LOCAL CALLING AREA DISTINCTIONS AS DETERMINED BY THE**
23 **“PHYSICAL PRESENCE” OF THE END USER FOR PURPOSES OF**
24 **INTERCARRIER ARCHITECTURE AND COMPENSATION**

1 my costs when customers on my networks call customers on their network. But
2 that's not how interconnection works. When a Qwest customer calls a Level 3
3 customer that customer makes a call that utilizes Qwest's network until that call
4 reaches the POI where Level 3 places it on Level 3's facilities and, if it is a
5 modem call, places it on the worldwide web to any point, including the New
6 York Times web page, wherever that may "physically reside". By the same
7 token, when the Qwest end user calls the Idaho Statesman, the call rides on the
8 Qwest network until it either terminates to the end office serving the Idaho
9 Statesman (assuming that the Idaho Statesman is also Qwest's customer) or to
10 the carrier who serves the Idaho Statesman. In the latter example, Qwest would
11 hand off the call to a fellow carrier at the Single POI. That carrier would carry
12 the call over its own facilities and terminate it to the Idaho Statesman. In both
13 examples Qwest's responsibilities ended at the POI. The difference with the
14 second example is that the call terminated to a brick and mortar building
15 "physically located" in the Phoenix local calling area. So it seems like a "local"
16 call. In the previous example, it terminated into the vastness of the Internet. As
17 to the previous example, there is an intuitive appeal to the idea that such a call is
18 somehow "interexchange" because relative to the Idaho Statesman, the New
19 York Times web page is somewhere else. That's part of the challenge of the
20 Internet – distance (and time) do not matter on an IP network. Accordingly IP-
21 based carriers (including Qwest or its affiliates who offer these services – I really
22 can't tell from their webpage which it is) do not charge their end user customers
23 "long distance" charges, nor is the service offered as a "long distance" service.

1 So from a retail perspective, the service is no different than a call to the Idaho
2 Statesman. From a network perspective it is no different either. It is always a
3 locally dialed call that is handed off at the POI. The call makes no use of the
4 access network. If one accepts Qwest's reasoning, prior to the 1996 Act, Qwest
5 was not allowed to provide an "interexchange" service that crossed LATA
6 boundaries. Rather Qwest would have handed that call off to an "interexchange
7 carrier" that charged minute-sensitive rates for such carriage and received
8 "originating access" which included the subsidy given to ILECs who were
9 precluded from offering such services at that time. Along comes competition,
10 however, and now another LEC can pick up that locally dialed call and take it
11 anywhere. While a call terminating to the Internet is "interstate" for purposes of
12 jurisdiction, the FCC has stated that the call is not an "interexchange" call in the
13 traditional sense of someone pre-selecting an IXC and paying that IXC to utilize
14 the access network to carry a call. The truth of the matter is that as much as
15 Qwest would like to make calls to the Internet appear as traditional
16 "interexchange" calls, they aren't. There are no exchanges on the Internet.
17 These are locally dialed calls handed off at the POI. Level 3 does the work and
18 receives no additional compensation from Qwest's customer for providing such
19 service.

20 Second, his claims that Level 3 will not pay Qwest for using Qwest's
21 network is not true at all relative to what really happens when calls are
22 exchanged. Let me explain. When a Level 3 end user calls an end user connected
23 to Qwest's network, Level 3 would pay Qwest the costs of terminating that call.

1 For VoIP traffic that would be seven one hundredths of a penny per minute,
2 which is consistent with what the FCC stated in the ISP-Remand Order: that the
3 costs of terminating an ISP-bound or voice call were the same. Since the costs are
4 the same on Qwest's side of the network regardless of whether Qwest brings the
5 call to Level 3 at the POI or accepts a call from Level 3 at the POI, symmetrical
6 intercarrier compensation rates make sense. Moreover, to the extent the calls are
7 "IP-in the middle", or traditional interexchange calls that Level 3 would terminate
8 to Qwest over this same network, Level 3 would pay Qwest the same subsidy
9 laden rates Qwest would receive were these calls handed off over the duplicative
10 Feature Group D ("FGD") network Qwest would have Level 3 establish. So
11 either way, Qwest is paid for its use of the network.

12 **Q. ARE MR. LINSE'S CLAIMS CONTRADICTED BY QWEST'S**
13 **DISCOVERY RESPONSES?**

14 **A.** Yes. Qwest admits in response to Level 3 RFA 1 that the location of the POI does
15 not determine whether Qwest has an obligation to pay reciprocal compensation.
16 (Ducloo Exhibit 108). Interestingly Qwest qualifies this answer by stating that
17 "under Qwest's language the physical location of the called and calling parties
18 determine the nature of the compensation" but as I've stated above, from a
19 network perspective there is no difference in costs because all calls are handed off
20 between the two carriers at the POI and the FCC has already affirmed as much in
21 the ISP-Remand Order. In its response to Level 3 Request No. 2, Qwest admits
22 that its obligations to pay reciprocal compensation do not vary based upon the
23 location of Level 3's switch. Again Qwest explains away its contract proposals

1 by importing concepts of retail regulation by claiming that the location of the
2 calling and called parties have something to do with its costs. This is true only as
3 a matter of how Qwest words its contract; it bears no relationship to what actually
4 occurs on the network. (Ducloo Exhibit 109).

5 **Q. MR. LINSE CLAIMS AT PAGE 6 OF HIS TESTIMONY THAT THE**
6 **SINGLE POI IS NOT THE FINANICAL DEMARCATION POINT.**

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

9 As Mr. Easton's testimony explains, the POI is not the financial
10 demarcation point between Level 3 and Qwest. Level 3 also incorrectly
11 defines its POI as a point that is physically located on Qwest's network. In
12 addition Level 3's proposed language is inconsistent and attempts to
13 extend Qwest's interconnection responsibility to any point on the Qwest
14 network to a point not even within Qwest's serving territory. (Linse
15 Direct, Idaho, page 7, lines 13-18) [sic]

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

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

25 Second, Mr. Linse states that Level 3 incorrectly defines the POI as a
26 point that is physically located on Qwest's network. This raises factual questions
27 about how parties interconnect and some legal questions that I'm sure Level 3's

1 lawyers find interesting. I'll deal with the facts and only point to what might be a
2 legal explanation for Mr. Linse's statement. The single POI is an interface
3 between the Qwest network and the Level 3 network. At the physical, network
4 level, Level 3 typically brings fiber optic strands to the single POI, which is
5 usually located within a Qwest tandem office. There the strands terminate to fiber
6 optic termination equipment, which connect to add / drop multiplexers and other
7 equipment that allow Level 3's network to communicate directly with Qwest's
8 network. Qwest, for its part, typically connects DS-1 or DS-3 copper coaxial and
9 other cabling to Level 3's facilities in collocation space Level 3 purchases from
10 Qwest. While there may be other arrangements, none that Level 3 uses are so
11 atypical as to raise the question of whether Level 3 has connected "on" or
12 "within" Qwest's network. It really depends upon how you look at it, but
13 common sense tells me that Qwest's distinction is largely semantic: Level 3's
14 single POI is equally a point **on** the Qwest network as it is **within** the Qwest
15 network.

16 Another possible explanation for Mr. Linse's statement that Level 3 had
17 incorrectly defined its POI as "on" Qwest's network might be a point that Mr.
18 Gates has provided regarding the concept of relative use of facilities (RUF).
19 Backing up just slightly, RUF is the concept that applies to entrance facilities that
20 Level 3 might purchase from Qwest which are dedicated to the exclusive use of
21 the two carriers. So, if Mr. Linse bases his claim upon a world view that
22 (incorrectly) sees RUF as an exception to the single POI rule, his statement might
23 have a basis. As Mr. Gates explains at page 42 of his direct testimony, RUF arises

1 from and applies only to entrance facilities dedicated to the transmission of traffic
2 *between* an ILEC's network and the CLEC's network. In other words, where a
3 CLEC obtained an entrance facility from the ILEC to connect to the CLEC's
4 switch, the effect of this rule (which remains embodied in 47 CFR § 51.709(b))
5 was to reduce the ILEC's charges for the entrance facility based on what
6 proportion of the traffic going over it was ILEC-originated, as opposed to CLEC-
7 originated. As Mr. Gates indicates, the FCC's *Triennial Review Remand Order*,
8 however, relieved ILECs from obligations to provide entrance facilities — at least
9 not at TELRIC-based rates — for these purposes. But even here, Mr. Linse's
10 claim about “on” or “within” doesn't follow because the FCC's determination
11 suggests therefore, that interconnection must occur "on" the ILEC's network and
12 not “within” it as one can no longer unbundle entrance facility elements “within”
13 the ILEC network. This seems logical. Therefore, Level 3 is not responsible for
14 the costs “within” Qwest's network.

15 **Q. DOES THE LEVEL 3 LANGUAGE PROPOSE THAT THERE IS NO**
16 **DEMARICATION POINT BETWEEN THE NETWORKS AS MR. LINSE**
17 **SUGGESTS?**

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

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

1 ends.”) again confirms that the POI would be the financial, legal and technical
2 boundary between the two parties’ networks. Taken together and examined
3 against the background, common usage and practice within the
4 telecommunications industry these definitions make very clear that financial, legal
5 and technical responsibility for each company’s network ends at the POI. So Mr.
6 Linse’s claims that Level 3’s contract provisions require Qwest to extend its
7 interconnection obligations to anywhere, including outside of Qwest’s serving
8 territory make no sense.

9 **Q. NEVERTHELESS MR. LINSE IMPLIES AT PAGES 9 AND 10 OF HIS**
10 **TESTIMONY THAT THE LEVEL 3 LANGUAGE MAY OBLIGATE**
11 **QWEST TO EXCHANGE TRAFFIC WHERE IT IS NOT TECHNICALLY**
12 **FEASIBLE TO DO SO. IS THIS TRUE?**

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

22 To the extent Mr. Linse is concerned that “switched access” traffic will be
23 routed to local only tandems, there are two responses. The first is technical:

1 transmission facilities and equipment that reaches into the Qwest network at POIs
2 Level 3 has established. Qwest customers benefit from Level 3 building these
3 facilities in many ways, not the least of which is obtaining access to one of the
4 world's largest Internet backbone.

5 **Q. MR. LINSE STATES THAT LEVEL 3 LANGUAGE FOR PARAGRAPH**
6 **7.1.2 "METHODS OF INTERCONNECTION" IS INAPPROPRIATE.**
7 **WOULD YOU AGREE?**

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

14 **Q. ARE THERE PROBLEMS WITH THE QWEST CONTRACT**
15 **LANGUAGE FOR PARAGRAPH 7.1.2?**

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

1 **II. ISSUE 2: Combining Different Traffic Types on Interconnection Trunks**

2 **Q. WHAT IS LEVEL 3'S POSITION ON THIS ISSUE?**

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

8 **Q. WHAT IS QWEST'S POSITION?**

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

16 **Q. WHY ARE MR. LINSE'S CLAIMS THAT LEVEL 3 MUST ESTABLISH**
17 **FGD TRUNKING INCORRECT?**

18 A. There is no issue as to whether traffic subject to different rating schemes can be
19 exchanged over a single network. Though Qwest refuses to admit this in Idaho
20 (Level 3's Motion to Compel is pending), Qwest admitted this in other states
21 (such as Iowa) and I would expect the same answer in Idaho (Ducloo Exhibit
22 110). Mr. Linse readily concedes as much at page 28 of his testimony when he

1 states that Qwest can route local traffic over the same trunks as Qwest currently
2 routes “switched access” or “interexchange” or “FGD” traffic today. The
3 converse is equally as true. Thus, regardless of whether a small amount of
4 “locally” rated traffic rides over FGD trunks (as with AT&T and others) or a
5 small amount of “switched access” or “long distance” traffic rides over
6 interconnection trunks (as Level 3 has accomplished with Verizon, SBC, and
7 BellSouth) the billing concerns are the same: either way there is a concern that the
8 CLEC terminating traffic to the ILEC or the ILEC terminating the traffic to the
9 CLEC will over-report the lower rated traffic. Or looked at from the perspective
10 that Qwest addresses, the party receiving the traffic will be concerned about
11 ensuring that the traffic subject to the highest compensation rates will be reported
12 at the most “accurate” levels.

13 All telecommunications traffic, regardless of what compensation billing
14 systems later apply to it – whether those systems “mechanically” record the traffic
15 or whether the parties sample traffic streams and apply billing factors – can be
16 exchanged over Level 3’s existing, well-engineered network today without the
17 need for any additional billing systems or personnel. Rather, as the parties today
18 routinely exchange billing information and factors related to intraLATA toll, ISP-
19 bound and other forms of traffic that occasionally appear on these trunks, there
20 would not be any additional cost to Qwest for the parties to do the same and
21 include “interstate” circuit switched (*i.e.* IP in the middle) and VoIP traffic within
22 that calculation. Moreover, Qwest has no systems in place today, nor could it
23 reasonably develop systems capable of determining the actual physical location of

1 any end user. Thus, FGD trunks are irrelevant to rating any call. There is no
2 certainty that the end users are physically located in the rate center associated
3 with the switch associated with the calling and called NPA-NXX codes.
4 Accordingly, Mr. Linse's objections to Level 3's Section 7.2.2.9.3.1 are
5 unfounded.

6 **Q. WHAT IS THE PROBLEM WITH ORDERING FGD TRUNK GROUPS**
7 **TO EACH POI?**

8 A. Almost all of Level 3's traffic is locally dialed traffic. In other words, Level 3
9 picks up and delivers all traffic to POIs located within the LATAs in which the
10 traffic originates from Qwest's customers or in which Level 3 brings it for
11 termination to Qwest customers. Level 3 offers no retail interexchange services.
12 Accordingly, end users have no reason to dial 1+ to reach Level 3's services.
13 Thus, Level 3 has, and will have, very little traffic that utilizes traditional "access"
14 networks such that any separate trunking, much less FGD trunks, which merely
15 provide additional call recording functionalities, are necessary. So, it makes no
16 sense for Level 3 to order separate FGD trunks for a small amount of access
17 traffic. To the extent that 1+ dialed traffic must be exchanged with third party
18 "interexchange carriers" Level 3 and Qwest have "meet point" trunk groups in
19 place that provide that functionality.

20 **Q. WHY DOES LEVEL 3 WANT TO PUT ALL OF THE TRAFFIC ON**
21 **INTERCONNECTION TRUNKS RATHER THAN FGD TRUNKS AS**
22 **QWEST IS PROPOSING?**

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

14 **Q. WHAT IS QWEST'S OBJECTION TO THE USE OF**
15 **INTERCONNECTION TRUNKS FOR ALL TRAFFIC TYPES?**

16 A. Qwest's objections boil down to an issue of access billing. Qwest is afraid that
17 they won't receive their fair due for access charges on long distance calls.
18 Historically they have billed access charges on FGD trunks. What they are
19 proposing is for all traffic to go down FGD trunks so they can individually bill for
20 the small number of access calls that go to and from Level 3. These FGD trunks
21 would also unnecessarily tie up additional trunk ports on access and end office
22 switches throughout Qwest's network. These circuits are sold in increments far
23 beyond Level 3's existing needs, which results in additional unnecessary costs.

1 **Q. QWEST RAISES AN ISSUE OF BILLING JOINTLY PROVIDED**
2 **SWITCHED ACCESS CALLS IF THE PLU/PIU METHODOLOGY IS**
3 **ADOPTED. HOW DOES LEVEL 3 PROPOSE TO HANDLE THIS**
4 **ISSUE?**

5 A. Both Mr. Linse and Mr. Easton raise this issue in their testimony (pages 35 and 31
6 respectively). They both claim that traffic cannot be combined on interconnection
7 trunks because billing records cannot be created for third parties for jointly
8 provided switched access. However, Level 3 has already agreed to provision
9 separate Meet Point Trunks to handle jointly provided switched access traffic
10 according to the terms mutually agreeable to Qwest in the most current round of
11 interconnection negotiations leading up to this arbitration. Accordingly, any
12 claims even remotely related to problems about such billing (or routing) are
13 unfounded.

14 **Q. ARE MEET POINT TRUNKS COMMONLY USED FOR JOINTLY**
15 **PROVIDED SWITCHED ACCESS TRAFFIC?**

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

1 **Q. HAS LEVEL 3 AGREED TO PROVISION MEET POINT TRUNKS AT**
2 **QWEST TANDEM SWITCHES?**

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

6 **Q. WILL MEET POINT TRUNKING HANDLE THE PROBLEM RAISED BY**
7 **MR. LINSE AND MR. EASTON?**

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

12 **Q. IS THIS THE WAY THAT JOINTLY PROVIDED SWITCHED ACCESS**
13 **TRAFFIC IS HANDLED IN THE SBC, VERIZON AND BELL SOUTH**
14 **REGIONS?**

15 A. Yes it is.

16 **Q. IS THERE A RELATED ISSUE WITH SS7 CALL SET UP MESSAGES?**

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

21 **Q. WHAT IS LEVEL 3'S POSITION ON THIS ISSUE?**

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

8 **Q. WHAT IS QWEST'S POSITION ON THIS ISSUE?**

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

13 **Q. DOES THIS ISSUE HAVE ANYTHING TO DO WITH SS7 AS AN**
14 **UNBUNDLED NETWORK ELEMENT?**

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

20 **Q. WHAT IS THE SS7 NETWORK AND WHAT ARE SS7 QUAD LINKS?**

21 A. The SS7 network is the part of the PSTN that allows switches and databases to
22 communicate with each other. Its main function is for call set up, but it is also
23 used for database look up such as required by 800 service. SS7 quad links are the

1 data links that connect two SS7 networks. Without these links, neither Qwest nor
2 Level 3 could complete calls to the other company's network. Figure 1 (Attached
3 here to as Exhibit 111, p.1) shows a set of Quad Links connecting Level 3
4 Signaling Transfer Points (STPs) and Qwest STPs with the associated
5 Interconnection Trunk Groups. Figure 2 (Attached here to as Exhibit 111, p.2)
6 shows the SS7 Quad links and the associated signaling and transport paths for
7 "Local" traffic over Interconnection Trunk Groups. Figure 3 (Attached here to as
8 Exhibit 111, p.3) shows Quad Links and the associated signaling and transport
9 paths for IntraLATA Toll traffic. Figure 4 (Attached here to as Exhibit 111, p. 4)
10 shows Quad Links and the associated signaling and transport paths for InterLATA
11 Toll traffic.

12 **Q. WHAT EFFICIENCIES WOULD BE OBTAINED BY COMBINING**
13 **LOCAL AND TOLL SS7 MESSAGES ON ONE SET OF QUAD LINKS?**

14 A. Using the same quad links for both local and toll call set up messages will save
15 both Qwest and Level 3 transmission links and ports on their SS7 switches. Since
16 transmission links and SS7 ports are provisioned in a redundant manner for
17 additional reliability, the Qwest proposal will waste a significant number of
18 transmission links and ports on both networks, doubling the links and ports that
19 are needed. Figure 5 (Attached here to as Exhibit 111, p. 5) shows the Level 3
20 Configuration that requires only one set of Quad Links between the companies.
21 Figure 6 (Attached here to as Exhibit 111, p. 6) shows the Qwest proposal that
22 would require a duplicate set of Quad links, wasting network resources.

1 **Q. IS IT POSSIBLE FOR QWEST TO IMPLEMENT THE SHARING OF**
2 **LINKS BETWEEN LOCAL AND TOLL TRAFFIC?**

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

15 **Q. IF THE COMMISSION DECIDES THAT LOCAL AND TOLL**
16 **MESSAGES CAN SHARE COMMON QUAD LINKS, SHOULD ACCESS**
17 **CHARGES APPLY TO ALL OF THE MESSAGES AS QWEST**
18 **SUGGESTS?**

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

1 **Q. WHAT DOES Qwest SAY ABOUT THE USE OF SS7 QUAD LINKS FOR**
2 **LOCAL AND IP TRAFFIC?**

3 A. Qwest in other states has made the very troubling statement that SS7 quad links
4 that are used for local traffic cannot be used for IP traffic. Nowhere in the
5 network today are SS7 messages segregated into IP messages and non-IP
6 messages. To segment these messages would require the proliferation of SS7
7 Quad links throughout the industry. A ruling in favor of this Qwest proposal
8 could disrupt call flow among many companies, forcing whole network
9 architectures to change.

10 **Q. WHAT SHOULD THIS COMMISSION DO WITH RESPECT TO THIS**
11 **SS7 ISSUE?**

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

15

16 **III. Additional Interconnection Trunking Issues Raised by Qwest**

17 **Q. QWEST WITNESSES STATE IN THEIR TESTIMONY THAT QWEST**
18 **SHOULD NOT BE REQUIRED TO PAY FOR INTERCONNECTION**
19 **COSTS WITHIN THE QWEST NETWORK. IS THIS AN EQUITABLE**
20 **VIEW OF INTERCONNECTION?**

21 A. No. Nine years after the Act, Qwest is still trying to treat interconnection as a
22 new form of access. After divestiture, Qwest was allowed to collect access

1 revenue from all of the IXCs, which made sense at the time as its ILEC
2 predecessor was not allowed to sell retail interexchange (for which IXCs charged
3 per minute of use charges) services outside of LATA boundaries. That has
4 changed, and now Qwest competes nationwide for the provision of service
5 packages on a nationwide basis. Mr. Gates examines some of these service
6 offerings in his testimony.

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

15 **Q. WHICH PARTY PAYS FOR INTERCONNECTION TRUNKING?**

16 A. As Mr. Gates points out and as Level 3 will prove in its briefs, the FCC, federal
17 district courts, and federal circuit courts nationwide have repeatedly confirmed
18 that each party is responsible for its costs of originating traffic to the single point
19 of interconnection per LATA. In a sense, as Mr. Gates explains, in both his direct
20 and his rebuttal testimony, the Act, for purpose of intercarrier compensation and
21 to ensure that ILEC retail offerings were not used to constrain competition,
22 established the LATA as a local calling area for interconnection purposes. This
23 means that each party pays its own costs of originating traffic to the POI. Where

1 the terminating party is also the presubscribed long distance carrier of the
2 originating ILEC customer, the call is routed via an access tandem to the access
3 network, in which case rules governing the offering of access services would
4 apply. In either case, however, the long established rule, and until the rules
5 change, the party **originating** a call is supposed to compensate the other party for
6 transport and termination applies. This means that with respect to locally dialed
7 traffic handed off at the POI – where the originating customer is not
8 presubscribed to and paying the terminating carrier an additional per minute of
9 use charge for what until after the Telecommunications Act of 1996 was the only
10 way to receive a competitive telecommunications service – and the originating
11 carrier pays the freight to get there. So the party originating traffic pays for
12 transport (trunking) in both networks. While a terminating party pays system is
13 conceivable, it is likely that regulators have stayed away from it for the very
14 simple reason that it would lead to regulatory arbitrage because the originating
15 carrier would have great incentive to shift its costs to the terminating carrier.

16 **Q. WHAT IS QWEST'S POSITION ON CHARGES FOR TRANSPORT AND**
17 **TERMINATION?**

18 A. Qwest's positions result from reverse engineering sound network principles,
19 sound technical principles, as demonstrated in my direct testimony and herein,
20 and rational economic principles as Mr. Gates demonstrates, into a system that
21 asymmetrically compensates Qwest. When traffic enters the Internet from Qwest
22 customers dialing into Level 3's network, Qwest would have Level 3 assume
23 Qwest's costs of bringing the traffic to the POI and/or receive nothing for

1 terminating this traffic. When traffic leaves Level 3's network – *i.e.* VoIP calls
2 terminating from the single POI to Qwest's network, Qwest would have Level 3
3 pay terminating access charges that exceed FCC reciprocal compensation rates by
4 several orders of magnitude. Qwest's contract proposals consistently result in the
5 competing carrier always paying much more to Qwest – whether Qwest changes
6 the rules of compensation or disguises their cost shifting via requirements that tie
7 intermodal competitors to legacy retail distinctions. While such a system might
8 continue to insulate Qwest from competitive pressures, it is neither mandated by
9 the Act, pro competitive policy, or sound principles for exchange of traffic.

10 **Q. IS THIS THE REASON THAT LEVEL 3 ADDS LANGUAGE TO THE**
11 **CONTRACT IN SEVERAL PLACES IN AN ATTEMPT TO CLARIFY**
12 **THE LIMITATIONS ON THE CHARGES QWEST CAN ASSESS TO**
13 **LEVEL 3 ON THE QWEST SIDE OF THE POI?**

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

18 Nothing in this agreement shall be construed to require CLEC to pay
19 Qwest for any services or facilities on Qwest's side of the POI in
20 connection with the origination of traffic from Qwest to CLEC; and
21 nothing herein shall be construed to require CLEC to pay for any services
22 or facilities on Qwest's side of the POI in connection with the termination
23 of traffic from CLEC by Qwest, other than reciprocal compensation
24 payments as provided in this Agreement.

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

5 **Q. IS THERE ANY TECHNOLOGICAL REASON TO ADOPT QWEST'S**
6 **POSITION THAT LEVEL 3 SHOULD PAY QWEST'S COSTS OF**
7 **ORGINATING AND TRANSPORTING TRAFFIC TO THE POI?**

8 A. Viewed from a network perspective, Qwest's propositions make no sense: there
9 can be no sound technological reason for forcing a network built around the
10 technological reality that transport and switching permit Level 3 (and Qwest
11 where it deploys IP networks) to control vast networks covering enormous
12 geographic areas with a few strategically deployed softswitches and related
13 equipment to vastly increase either the deployment of the equipment or the costs
14 of using that equipment every time it touches circuit switched networks controlled
15 by Incumbent LECs. Accordingly, Level 3's language reflects the very
16 straightforward principle: all traffic is exchanged at the single POI per LATA.
17 Each party bears its costs for getting to that point. Intercarrier compensation
18 payments would flow accordingly.

19 **Q. HAS LEVEL 3 EVER CHARGED QWEST FOR TRANSPORT WITHIN**
20 **THE LEVEL 3 NETWORK?**

21 A. No. Level 3 only charges Qwest for termination. By FCC rules, Level 3 could
22 charge Qwest for transport on Qwest originated traffic. Under FCC rules,

1 reciprocal compensation should pay for transport and termination. Level 3 does
2 not charge Qwest for transport, only for termination.

3 **Q. MR. LINSE SEEMS TO BE CONCERNED ABOUT LEVEL 3'S**
4 **LANGUAGE ALLOWING DIRECT CONNECTION TO QWEST**
5 **EQUIPMENT. IS THIS A LEGITIMATE CONCERN?**

6 A. No, it is not. Connection to any type of equipment, whether it is to a switch, a
7 multiplexer, a fiber hub or any other type of equipment, is always accomplished
8 through a connection block on some type of distribution frame. Typically, Level
9 3 comes into a Qwest office with fiber facilities that are either terminated on
10 collocated equipment or to a Qwest fiber panel. The POI or SPOI can be at either
11 of those facilities. The fiber connects to equipment that converts the optical
12 signal to an electrical signal and "demultiplexes" (*i.e.* unpacks the multiple high
13 speed signals into lower speed component increments) to DS3 or DS1 speeds (and
14 signaling parameters). On this side of the Level 3 equipment, Qwest coaxial
15 cables providing operating at those speeds are connected. The POI or SPOI may
16 be a terminal on the multiplexer, either a Qwest demultiplexer or a Level 3
17 demultiplexer. Or the POI or SPOI may be on a terminal block or distribution
18 frame at the DS3 or DS1 level somewhere in the collocation space or somewhere
19 in the Qwest office. Generally, Qwest and Level 3 engineers and technicians
20 decide where the most convenient place is for the actual, physical hand off. Mr.
21 Linse's concern is unfounded. The Level 3 equipment and Level 3's
22 interconnection with Qwest equipment is not some alien invasion that will
23 somehow pollute Qwest's network.

1 **Q. MR LINSE SUGGESTS ON PAGE 21 OF HIS TESTIMONY THAT**
2 **LEVEL 3 WILL NOT ADD DIRECT TRUNKING WHEN TRAFFIC**
3 **VOLUMES WARRANT. IS THIS CORRECT?**

4 A. No, it is not. Level 3 always operates in a manner consistent with good
5 engineering policy. Level 3 has always added direct trunks when the traffic
6 warrants. Level 3 typically adds direct trunks when traffic volumes reach 512
7 BHCCS. There may, however, be circumstances when traffic should be allowed
8 to increase beyond this point for a period of time. Level 3 may expect a decrease
9 in traffic to a particular end office, for example. Level 3 does not think that the
10 512 BHCCS rule should be applied without any consideration of business and
11 technical realities.

12 **Q. MR. LINSE SPENDS A GOOD BIT OF TIME DEFENDING THE 512**
13 **BHCCS THRESHOLD FOR ADDING DIRECT TRUNKING TO END**
14 **OFFICES. DO YOU HAVE SOME CONCERNS WITH THE 512 BHCCS**
15 **THRESHOLD?**

16 A. Yes, I do. If you do the calculation, the 512 BHCCS threshold has the CLEC
17 adding a direct trunk when the equivalent traffic will fill only 14 of the 24
18 channels in the DS1 that will be established. This represents slightly less than
19 60% utilization of the direct trunk. Qwest becomes very concerned when
20 utilization of any interconnection trunk drops below 50%. So they are having the
21 CLEC establish a direct trunk when the traffic barely reaches 60% and they want
22 to disconnect trunks when the utilization falls below 50%. A very small change

1 in business, like the loss of one customer with 20 phone lines, could cause Level
2 3's business to a particular end office to change by 10%. So the 512 BHCCS rule
3 that Qwest is promoting may be a bit too restrictive. The maximum capacity of a
4 DS1 is 864 BHCCS. A more reasonable threshold would be 75% of this level, or
5 648 BHCCS instead of 512. In some situations where business is known to be
6 quite variable, even higher thresholds should be contemplated. The Level 3
7 Language is more flexible in dealing with the unique situations that may arise.

8 **Q. DOES MR. LINSE ADMIT THAT LEVEL 3 HAS BEEN COOPERATIVE**
9 **WHEN WORKING WITH QWEST ON TRUNKING ISSUES?**

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

13 **Q. MR. LINES STATES A CONCERN THAT IF CLECS DO NOT FOLLOW**
14 **THE 512 BHCCS RULE, IT WILL EXHAUST QWEST'S TANDEM**
15 **SWITCHES. IS THIS A REAL ISSUE?**

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

1 dictate an efficient network, as well as good engineering practice that everyone
2 understands.

3 **Q. MR. LINSE SEEMS CONCERNED THAT LEVEL 3 HAS REMOVED**
4 **LANGUAGE FROM 7.2.2.9.6 THAT SPECIFIES THE TYPES OF**
5 **SWITCHES WHERE TRAFFIC IS TERMINATED. WHY IS LEVEL 3**
6 **REMOVING THE SPECIFIC SWITCH TYPE?**

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

17 **IV. ISSUE 3: VNXX/FX Traffic**

18 **Q. MR. BROTHERRSON CLAIMS THAT VNXX/FX IS COMPLETELY**
19 **DIFFERENT FROM NORMAL FX SERVICE THAT QWEST OFFERS.**
20 **WOULD YOU AGREE FROM A TECHNICAL POINT OF VIEW?**

21 A. No, I would not. VNXX and FX are essentially the same in the modern network
22 where CLECs coexist with Qwest. With both Qwest FX and Level 3 VNXX, the

1 traditional (largely pre-Act) methods, the originating and terminating phone
2 numbers are assigned to switches. Those switches also have rate centers
3 associated with them. Rate centers are geographic coordinates that carriers on
4 circuit switched networks have traditionally used to apply distance sensitive
5 charges to calls. In that sense, they are economic boundaries, not network
6 boundaries. Returning to our call flow, if the originating and terminating NPA-
7 NXX appear as "local" to each other when the call record data is later examined,
8 then the originating carrier would rate the call as "local" call and there is no toll
9 charge. It does not matter if the calling or called party is 500 yards, 2 miles, or
10 200 miles from the end office out of which the number is assigned because in
11 every instance the call is handed to Level 3 at the POI where Level 3 then carries
12 this call.

13 **Q. WHAT ARE THE MAIN ISSUES THAT SHOULD BE CONSIDERED**
14 **WHEN DECIDING THE DISPOSITION OF VNXX/FX TRAFFIC?**

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

20 **Q. WILL QWEST'S POSITION ON VNXX/FX HARM THE INTERNET?**

21 A. Yes, it will. Qwest essentially wants to charge access rates for Internet traffic.
22 This will kill competition among ISPs and will lead to higher prices for Internet

1 service. Only ISPs who collocate modem banks at every Qwest office will be
2 able to compete. This is more expensive and will drive up costs.

3 **Q. AT PAGE 55 OF HIS TESTIMONY, MR. BROTHERRSON SAYS THAT A**
4 **VNXX/FX CALL "...IS ROUTED AND TERMINATED AS ANY OTHER**
5 **TOLL CALL." IS THAT A CORRECT STATEMENT?**

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

20 VNXX/FX and 8XX services also impact the ILEC in different ways. VNXX/FX
21 service routes calls just like other local calls. There is no need to take a
22 VNXX/FX call to the access tandem, although depending upon network
23 configuration, a FX call could be routed through a local tandem. I'm not aware of

1 any ILEC claiming that VNXX/FX calls impose additional costs on their network
2 or operations. There is an additional cost associated with 8XX service calls
3 because the toll dialing pattern automatically routes the call to the access tandem.
4 At the tandem there is the additional cost associated with a database dip and
5 number conversion.

6 Level 3's service, which is provided in essentially the same manner as FX service,
7 is therefore clearly distinct from 8XX service. Customers perceive the service as
8 local and the ISPs use the service to acquire a "local presence" for their
9 customers, just like Qwest's customers who purchase FX service. (Indeed, one
10 might wonder why ILECs need to offer FX service when 8XX service is available
11 to consumers? The reason, of course, is consumer demand to which any
12 reasonable carrier wants to respond.) The Level 3 service is dialed and routed on
13 a local, as opposed to a toll basis. Like FX service, the Level 3 service does not
14 require sophisticated database dips or number conversions, and as such, does not
15 impose those additional costs on the ILEC. The Level 3 service is associated with
16 a specific exchange, and not hundreds or thousands of exchanges normally
17 associated with 800 service.

18 **Q. AT PAGE 56 OF HIS TESTMONY, MR. BROTHERRSON STATES THAT**
19 **"LEVEL 3 WANTS THE CALL ROUTED OVER THE PSTN, BUT FEELS**
20 **NO RESPONSIBILITY FOR PROVIDING THE TRANSPORT TO THE**
21 **DISTANT LOCATION." IS THAT A CORRECT STATEMENT?**

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

7 V. **ISSUE 8: Definition of Call Record**

8 Q. **WHAT IS THE ISSUE BETWEEN THE COMPANIES ON CALL**
9 **RECORDS?**

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

12 Q. **WHAT IS THE REASON THAT LEVEL 3 NEEDS ADDITIONAL**
13 **INFORMATION IN THE CALL RECORD?**

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

19 Q. **MR. LINSE MAKES A POINT OF SAYING THAT THE INFORMATION**
20 **LEVEL 3 IS REQUESTING IS NOT ALWAYS AVAILABLE AND IS NOT**
21 **REQUIRED BY CURRENT INDUSTRY STANDARDS. IS THIS TRUE?**

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

9 **Q. WILL THE QWEST LANGUAGE RESULT IN INCORRECT BILLING**
10 **OF CALLS?**

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

15 **Q. WILL OTHER CARRIERS NEED THIS INFORMATION IN THE**
16 **FUTURE?**

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

18 **Q. DOES THE QWEST LANGUAGE ON THIS ISSUE ADDRESS ALL OF**
19 **LEVEL 3'S CONCERNS AS MR. LINSE SUGGESTS?**

20 A. No it does not. Level 3 is making a specific request for language that will address
21 new industry billing problems. These problems should be addressed here and
22 now, between these companies, and not wait years before the industry advisory

1 bodies decide on changes to the guidelines. Level 3's language should be
2 adopted.

3 **VI. ISSUE 20: Signaling Parameters**

4 **Q. WHAT IS THE MAIN ISSUE ON SIGNALING PARAMETERS?**

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

9 **Q. MR. LINSE RAISES NUMEROUS OBJECTIONS TO LEVEL 3'S**
10 **PROPOSAL. DO YOU FIND HIS ARGUMENTS PERSUASIVE?**

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

17 **Q. WHY SHOULD THIS BE DECIDED NOW, RATHER THAN WAITING**
18 **FOR AN INDUSTRY STANDARD OR GUIDELINE?**

19 A. It is our expectation that the FCC will rule in the near future on the disposition of
20 VoIP traffic. When the FCC does rule, it would be very good for the companies
21 to have experience with a methodology of tracking the amount of VoIP traffic to

1 and from their respective networks for proper billing. The use of CRI is a good,
2 efficient way to communicate to each other when a call is VoIP based.

3 **Q. WOULD THE USE OF A CRI CODE FOR THIS PURPOSE BE A**
4 **COLOSSAL UNDERTAKING AS MR. LINSE SUGGESTS?**

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

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

11 A. Yes

CERTIFICATE OF SERVICE

I hereby certify that on the 16th day of September, 2005, I caused to be served, via the method(s) indicated below, true and correct copies of the foregoing document, upon:

Jean Jewell, Secretary
Idaho Public Utilities Commission
472 West Washington Street
P.O. Box 83720
Boise, ID 83720-0074
jjewell@puc.state.id.us

Hand Delivered
U.S. Mail
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STOEL RIVES LLP
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U.S. Mail
Fax
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Email



Idaho
Case No. QWE-T-05-11
L3C 01-001A

INTERVENOR: Level 3 Communications, LLC

REQUEST NO: 001A

The location of the POI between Qwest and Level 3 in Idaho does not determine whether Qwest has an obligation to pay reciprocal compensation to Level 3 for Level 3's transport of Qwest's traffic.

RESPONSE:

Qwest objects to this request on the basis that it calls for a legal conclusion and is therefore not an appropriate subject for discovery.

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

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

Idaho
Case No. QWE-T-05-11
L3C 01-002A

INTERVENOR: Level 3 Communications, LLC

REQUEST NO: 002A

The location of the Level 3's switch in Idaho does not determine whether Qwest has an obligation to pay reciprocal compensation to Level 3 for Level 3's transport of Qwest's traffic.

RESPONSE:

Qwest objects to this request on the basis that it calls for a legal conclusion and is therefore not an appropriate subject for discovery.

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

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

State Of Iowa

Level 3 Communications, LLC

DATA REQUEST

DATE: 07/25/2005
DOCKET NO: ARB-05-4
REQUEST NO: 02 - 138
WITNESS: Easton, Bill

REQUEST:

At page 27 of his testimony, Mr. Easton states, "Qwest has no obligation to permit Level 3 to commingle switched access traffic with other types of traffic on the interconnection trunks created under the Agreement." Please admit the following: There is no technical reason that would prohibit Qwest from combining all types of traffic, as suggested by Level 3, on the interconnection trunks. If your response is anything less than an unqualified admission, identify: (a) each fact upon which you base your response; (b) each person having knowledge of those facts; and, (c) each document that supports your response.

RESPONSE:

From a network perspective, there is no technical reason that would prohibit Qwest from combining all types of traffic on interconnection trunks. From a billing perspective, however, Qwest is unable to appropriately bill for switched access traffic carried on interconnection trunks. See Easton Direct Testimony, pages 24-32.

SS7 Quad Links

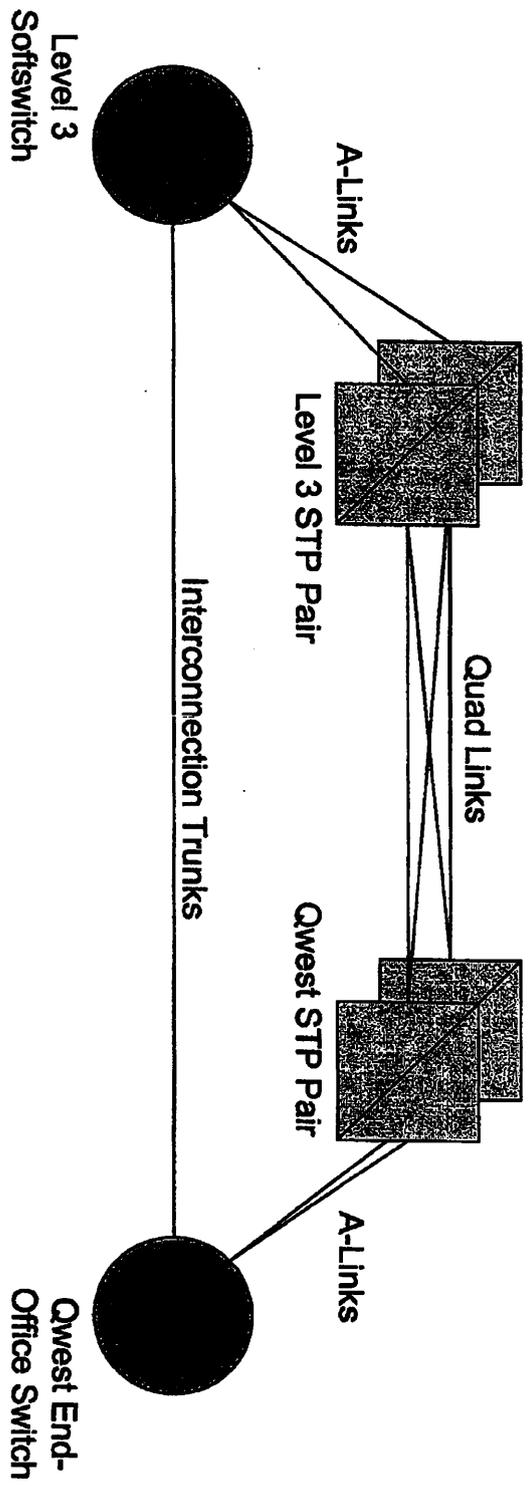


Figure 1

SS7 Signaling for local traffic

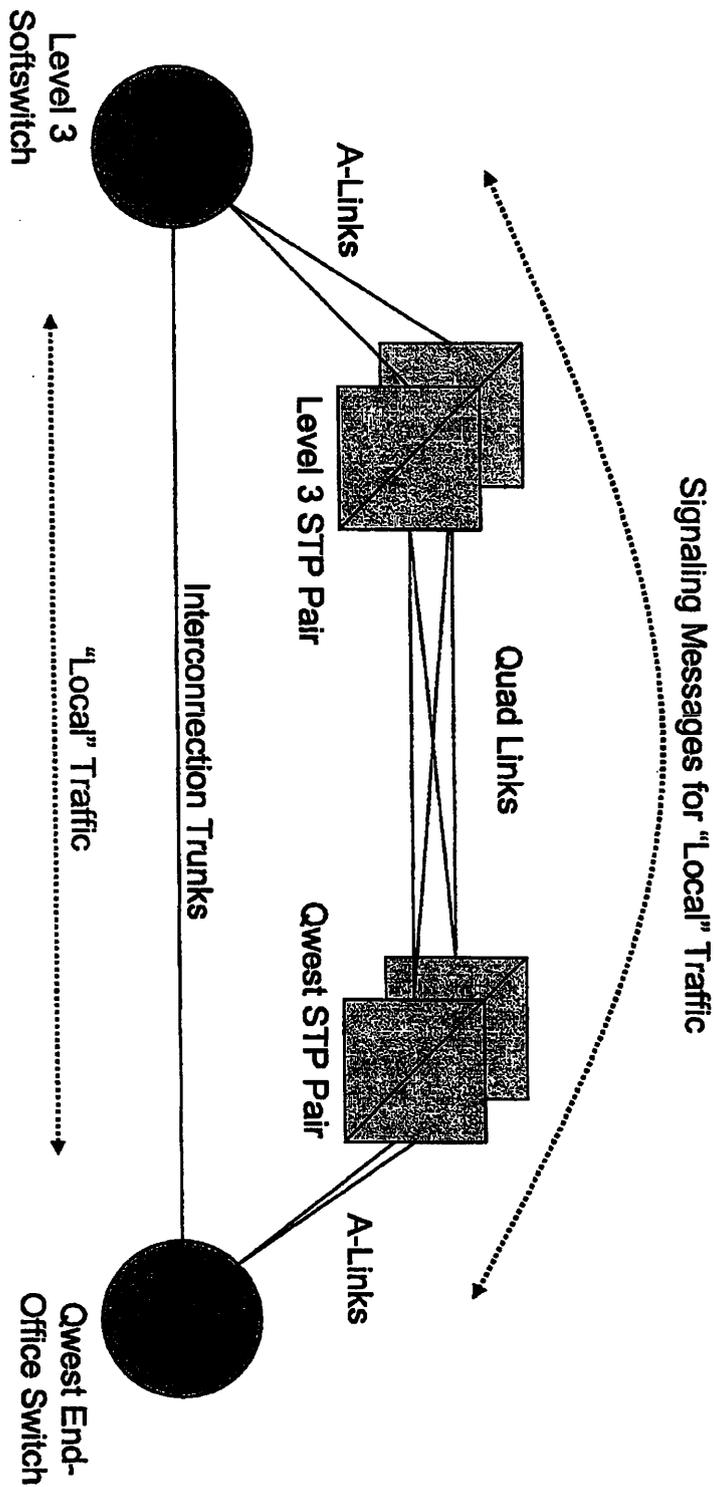


Figure 2

SS7 Signaling for IntralATA toll traffic

Signaling messages for "IntralATA Toll" Traffic

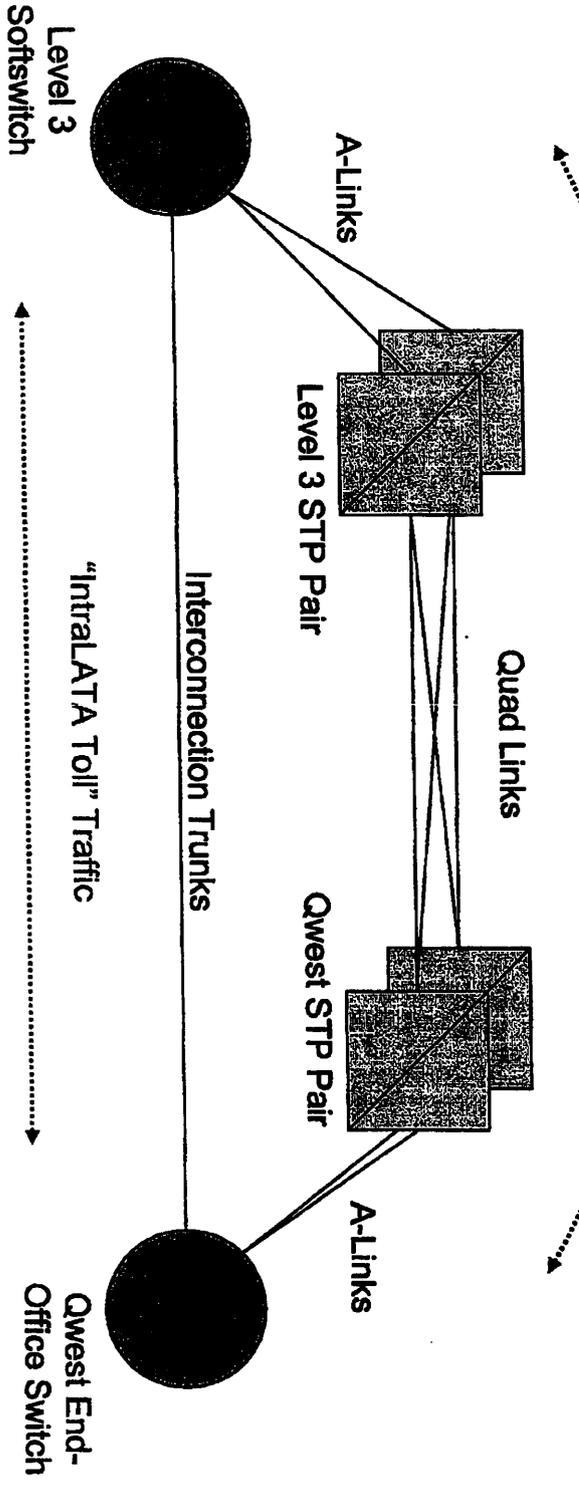


Figure 3

SS7 Signaling for InterLATA traffic

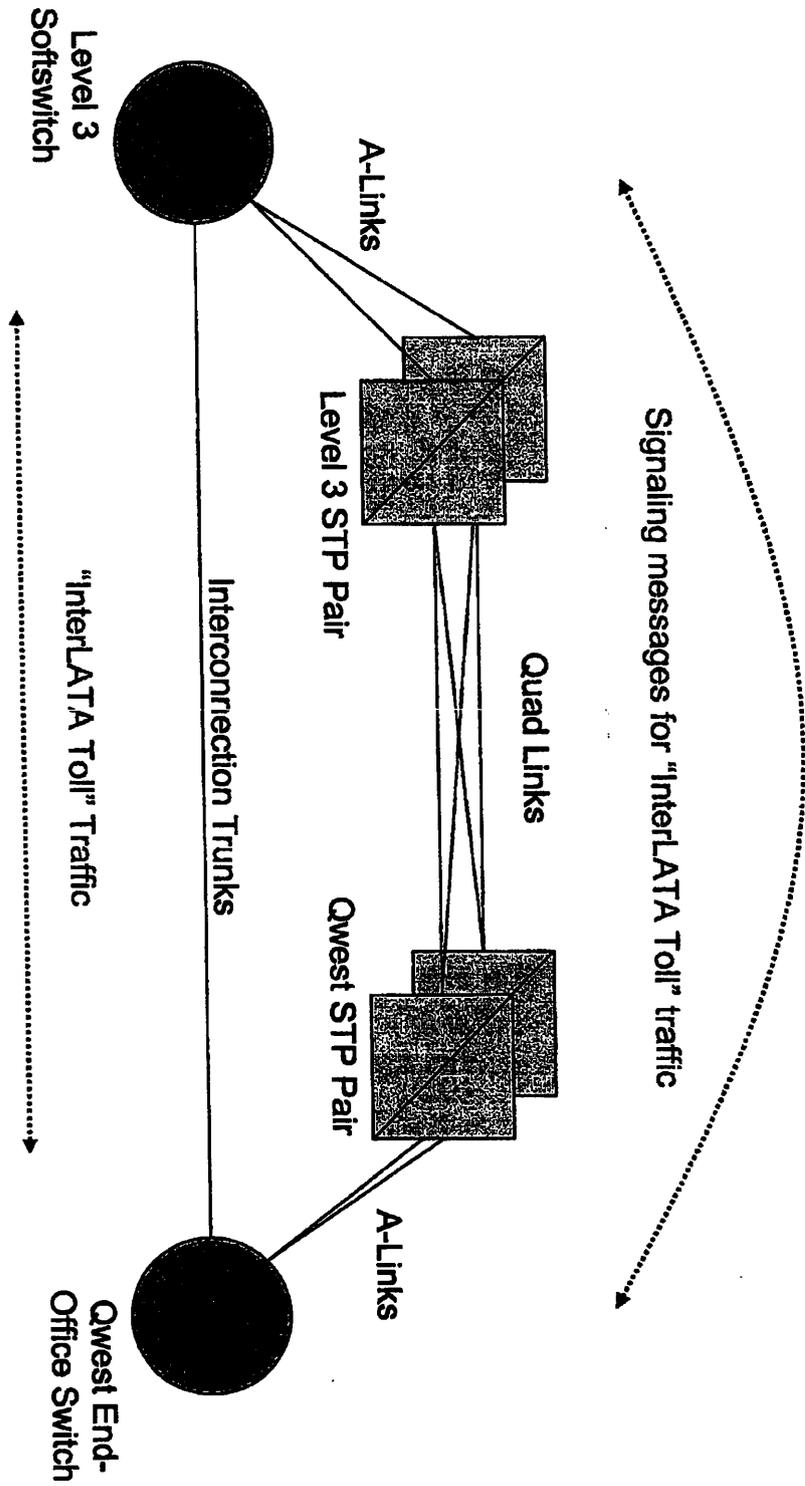


Figure 4

Level 3 Configuration

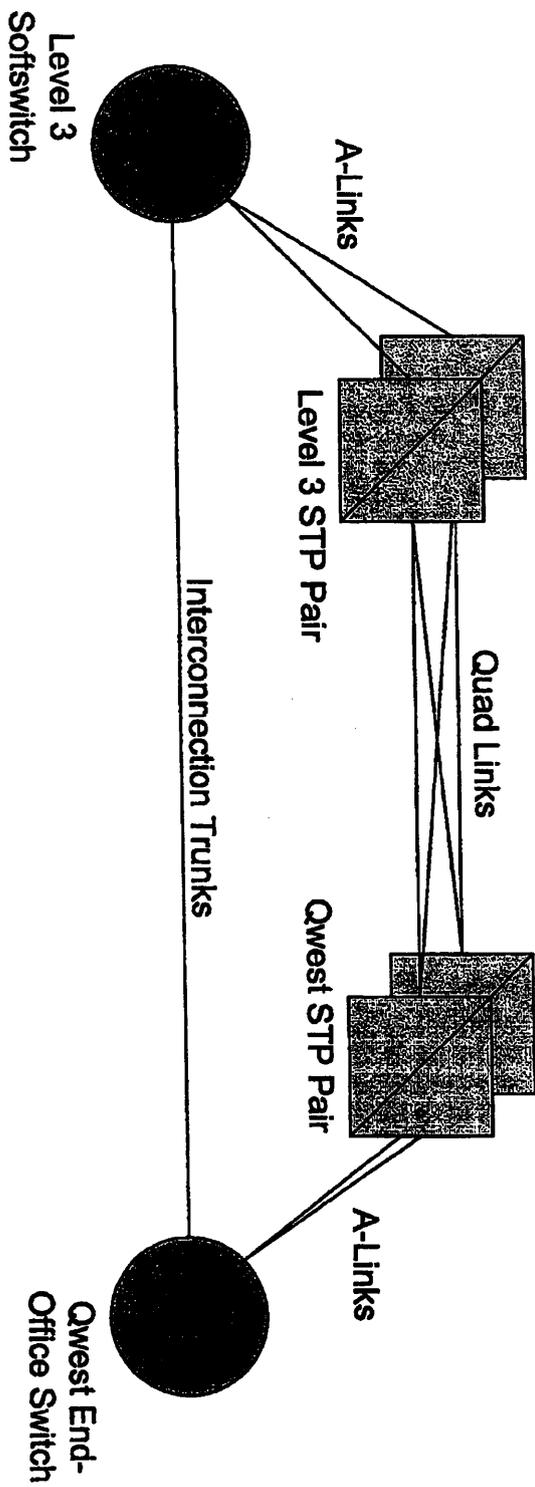


Figure 5

QWEST Configuration

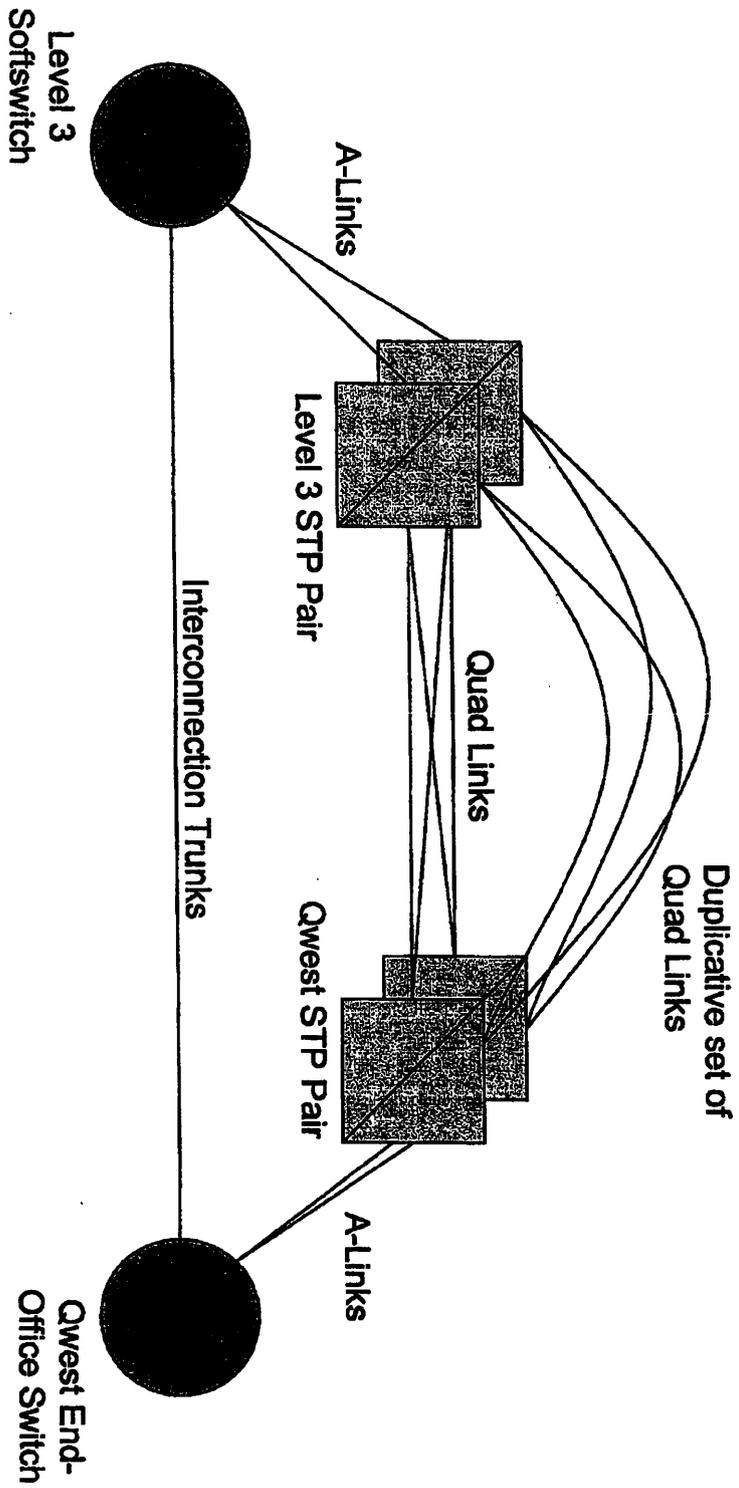


Figure 6