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IDAHO PUBLIC  
UTILITIES COMMISSION

CASE NO. QWE-T-02-11

IDAHO TELEPHONE ASSOCIATION,  
CITIZENS TELECOMMUNICATIONS  
COMPANY OF IDAHO, CENTURY TEL OF  
IDAHO, CENTURY TEL OF THE GEM  
STATE, POTLATCH TELEPHONE COMPANY  
and ILLUMINET, INC.

Complainants

vs.

QWEST COMMUNICATIONS, INC.,

Respondent.

**Direct Testimony of  
F. Wayne Lafferty  
on Behalf of**

**Citizens Telecommunications Company of Idaho  
Electric Lightwave  
Idaho Telephone Association  
Illuminet, Inc.**

**September 27, 2002**

1           A.     **IDENTIFICATION AND QUALIFICATION OF WITNESS**

2     Q.     WHAT IS YOUR NAME AND BUSINESS ADDRESS?

3     A.     My name is F. Wayne Lafferty and my business address is 2940 Cedar Ridge Drive,  
4           McKinney, Texas 75070.

5     Q.     BY WHOM ARE YOU EMPLOYED AND IN WHAT POSITION?

6     A.     I am the principal and owner of LKAM Consulting Services, a company that provides  
7           regulatory and legislative policy, technical, and strategic advice to telecommunications  
8           firms.

9     Q.     MR. LAFFERTY, ON WHOSE BEHALF ARE YOU APPEARING IN THIS  
10           PROCEEDING?

11    A.     My testimony is presented on behalf of Citizens Telecommunications Company of Idaho  
12           ("CTC-ID"), Electric Lightwave Incorporated ("ELI"), the Idaho Telephone Association  
13           ("ITA") and Illuminet Inc. ("Illuminet") (collectively known as "Complainants").<sup>1</sup> These  
14           companies represent incumbent and competitive providers of telecommunications  
15           services and their SS7 service provider agent in Idaho.

16    Q.     PLEASE PROVIDE YOUR BACKGROUND AND EXPERIENCE?

17    A.     I have been employed in the telecommunications industry for the past seventeen years. I  
18           was involved with the development of the 1996 Telecommunications Act ("1996 Act")  
19           and the subsequent implementation activities at both the federal and state levels. Before

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<sup>1</sup> CTC-ID, ELI and the ITA will be collectively referred to as the "LEC Complainants."

1 starting LKAM Consulting Services, I was a member of the executive leadership team at  
2 Citizens Communications responsible for all regulatory and government affairs policies,  
3 programs and operations. My responsibilities included developing, supporting and  
4 implementing all state and federal tariffs, cost studies, interconnection agreements and  
5 associated compliance activities for both Citizens' incumbent and competitive operations  
6 in over twenty states. I was also the company's chief policy witness before regulatory  
7 agencies. Prior to working for Citizens, I held a series of positions of increasing  
8 responsibility in the regulatory organization with several GTE Corporation affiliates (now  
9 part of Verizon Communications).

10  
11 I have provided testimony on public policy and technical issues in several states including  
12 Idaho as well as before the United States Congress. I am a graduate of Duke University  
13 with an undergraduate degree in economics and a Masters degree in Business  
14 Administration.

15  
16 **B. PURPOSE OF TESTIMONY**

17 Q. MR. LAFFERTY, WHAT IS THE PURPOSE OF YOUR TESTIMONY?

18 A. My testimony is intended to provide the Commission with information and comment on  
19 the public policy and technical concerns the Complainants have with the SS7 message  
20 signaling charges in Qwest Corporation's ("Qwest") Southern Idaho Access Service  
21 Catalog ("Catalog"). In doing so, I will show that the Qwest Catalog represents a  
22 significant shift in public policy in Idaho and suffers from technological and economic

1 flaws. It is anti-competitive and is likely to slow down the current rate of development of  
2 the competitive local exchange service market in Idaho.

3  
4 **C. SUMMARY OF TESTIMONY**

5 Q. PLEASE PROVIDE A SUMMARY OF YOUR TESTIMONY.

6 A. The issue in this case is actually quite simple. Qwest should not be allowed to  
7 unilaterally change long-standing regulatory policy and industry practices in the state of  
8 Idaho. The complainants believe the implementation of the new SS7 message signaling  
9 charges in Qwest's Southern Idaho Access Catalog is flawed from regulatory and public  
10 policy, economic, and technical perspectives, and the new charges should be eliminated  
11 or at a minimum modified significantly. Qwest should not be allowed to change public  
12 policy in the state of Idaho (or anywhere else) without providing the Commission an  
13 opportunity to properly investigate the implications of the changes. Since Qwest added  
14 the new SS7 signaling charges to its Catalog, which is regulated under Title 62, the  
15 Commission was precluded from reviewing these rates when filed. Thus, Qwest's actions  
16 gave the Complainants no option but to file this formal complaint.

17  
18 The changes to Qwest's Catalog inappropriately charge (directly or indirectly) many  
19 companies, like the Complainants, for SS7 message signaling associated with the  
20 transport and termination of local calls to which the terms of interconnection agreements  
21 ("ICAs"), Commission policies and industry practices should continue to apply, not  
22 Qwest's Catalog. Qwest should not use its Catalog for levying SS7 message signaling

1 charges associated with non-exchange access calls regardless of whether the carrier uses a  
2 third-party SS7 signaling provider. For traffic exchanged between Qwest and LECs,  
3 Qwest's SS7 signaling rate should be applicable only to those signaling messages  
4 associated with Qwest's termination of intrastate switched access traffic originated by the  
5 LECs, and not to: (1) local/EAS traffic; (2) intraMTA wireless traffic; (3) intraLATA toll  
6 traffic originated by Qwest and terminated to LECs; and (4) jointly-provided exchange  
7 access services. Thus, only a small percentage of the total intrastate traffic exchanged  
8 with LECS should appropriately be subject to the SS7 message signaling charges. For  
9 example, for ELI the percentage is 2.4%.

10  
11 In addition to violating existing Commission policies and the terms of some of its ICAs,  
12 Qwest's SS7 message signaling charges are discriminatory and will likely impede the  
13 continued development of competition. The new SS7 charges shift costs from Qwest's  
14 toll provider customers to non-toll provider customers like Citizens, ELI and the ITA  
15 members that are often Qwest's direct competitors with no attempt to match the cost  
16 recovery mechanism with the actual cost causer. In many cases the cost causer for the  
17 SS7 signaling messages is the customer of a third party IXC or Qwest itself. However,  
18 Qwest is assessing these charges on other LECs. ELI, for example, estimates that its  
19 costs will be increased by approximately \$176,000 per year as a result of Qwest's  
20 misapplication of its Catalog. However, the off-setting switched access rate reductions  
21 implemented by Qwest flow all of the alleged "revenue neutral" rate reductions to  
22 customers of Qwest's intrastate switched access service (mainly large IXCs) which are in

1 many cases the actual cost causers.

2  
3 To remedy this situation the Commission should direct Qwest to reimburse carriers, or  
4 their agents, and “true-up” any charges wrongly assessed since the SS7 message signaling  
5 charges in the Catalog were initially applied by Qwest and to revise its tariffs and  
6 processes accordingly on a going-forward basis.

7  
8 **D. BACKGROUND**

9 Q. MR. LAFFERTY, PLEASE PROVIDE THE COMMISSION WITH SOME  
10 BACKGROUND OF SS7 SIGNALING.

11 A. Common Channel Signaling (“CCS”), including CCS using the SS7 protocol, is a method  
12 for exchanging call setup and call control information between switches via a network of  
13 signaling links – such signaling is commonly referred to as “out-of-band.” The out-of-  
14 band messages are used to report circuit seizure and transport address information,  
15 answer supervision, circuit release, etc. SS7 messages between two signaling points may  
16 be routed over signaling links directly connecting the two points (e.g., between Qwest and  
17 an interconnected LEC) or via one or more intermediate signaling points that relay the  
18 signaling messages (e.g., between Qwest, a third party signaling provider and a distant  
19 LEC). In switching systems where SS7 is used for call connection signaling, these out-  
20 of-band signaling messages replace Multifrequency (MF) and other “inband” signaling  
21 mechanisms previously used for call setup.

1 When employing in-band signaling, interconnected switches exchange call setup  
2 supervisory signals (e.g., on-hook and off-hook status signals) as well as addressing  
3 information (e.g., calling and called party telephone numbers) using equipment and  
4 software wholly resident in each switch. When employing SS7 signaling, this same call  
5 setup function is accomplished in a distributed manner using equipment and software  
6 contained in the switches as well as in centralized signaling nodes that may serve a large  
7 number of switches (i.e., signal transfer points). Without the SS7 messages a call could  
8 not be completed in the manner expected by customers. Thus, though SS7 messages may  
9 utilize separate network components, these messages are an inseparable part of the call.

10  
11 Qwest's SS7 network is a multi-functional signaling network. A single set of SS7  
12 signaling links carry the SS7 setup messages for several jurisdictionally distinct types of  
13 end user calls (e.g., interstate, intrastate interLATA, intrastate intraLATA, local).  
14 However, Qwest's new Catalog does not provide a method for distinguishing between  
15 these jurisdictionally different SS7 messages.

16  
17 Q. HOW HAS THE FCC ADDRESSED THE MATTER OF SS7 CHARGES?

18 A. On an interstate basis, the FCC issued a ruling that permitted carriers to break out SS7  
19 costs from other switching and transport costs that taken together make up the rates for  
20 switched access. However, the FCC clearly intended the separate SS7 per call charges to

1 be “assessed on *IXCs* for all calls handed off to the *IXC*’s point of presence (POP).”<sup>2</sup> In  
2 addition, the FCC made it clear that ILECs doing such unbundling could only do so after  
3 preparing their measurement and billing systems to produce accurate and accountable  
4 bills.<sup>3</sup> As I will discuss in further detail later in my testimony, Qwest’s billing systems  
5 have not been prepared to differentiate between jurisdictionally different types of traffic.  
6

7 Q. DO THE COMPLAINANT’S OBJECT TO QWEST’S UNBUNDLING OF SS7  
8 MESSAGE SIGNALING COSTS IN ITS FCC TARIFF?

9 A. Not in principle. As Qwest has argued in other proceedings, SS7 costs vary primarily  
10 with the number of messages rather than the duration of the messages. Therefore,  
11 removing the costs from per-minute access charges and substituting a per-message charge  
12 may more closely track cost causation in the interstate environment. But this assumes  
13 that the tariff change is truly cost based, revenue neutral and implemented in accordance  
14 with existing regulatory policies and industry practices.  
15

16 Q. IS QWEST’S INTERSTATE TARIFF “COST BASED AND REVENUE NEUTRAL”?

17 A. I doubt that it is. Qwest did not actually file any cost studies to support its FCC tariff  
18 rates. Instead it relied on Ameritech’s cost filings to support its position. This is an  
19 interesting position for Qwest to take insofar as it has often claimed that each of its own

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<sup>2</sup> First Report and Order in the Matter of Access Charge Reform, 12 FCC Rcd 15982, 16042 (para. 138)(1997)

<sup>3</sup> Id. at para. 253 (“...we will permit incumbent LECs to adopt unbundled signaling rate structures at their discretion and acquire the appropriate measuring equipment as needed to implement such a plan.”)

1 operating areas is unique as to costs because of local differences such as population  
2 density or varying average loop length. In Idaho, Qwest's average loop length is likely to  
3 be significantly higher and the population density in its markets significantly lower, than  
4 for Ameritech in Illinois. Coat-tailing on Ameritech's cost support is certainly a  
5 departure from this perspective. It is noteworthy that Qwest did not reveal to the FCC  
6 that it intended to assess these new (per message) SS7 charges on carriers to whom the  
7 off-setting (per minute) access charge reductions were not available (e.g., LECs with  
8 whom Qwest exchanged non-access traffic). The FCC approved Qwest's new interstate  
9 rate elements to more accurately reflect the per-call manner in which costs are incurred.  
10 However, the FCC gave no indication that it was considering a significant public policy  
11 change to shift cost recovery to Qwest's competitors. Given the care to which the FCC  
12 has thoroughly investigated the recent public policy changes associated with the  
13 implementation of the 1996 Act, I believe the FCC would have made reference in its  
14 order if it thought Qwest's tariff changes would shift significant cost from interstate toll  
15 providers to CLECs and ILECs. It is also important to note that many other carriers do  
16 not support the manner in which the interstate tariffs have been implemented by Qwest.

17  
18 Q. ARE THE CIRCUMSTANCES INVOLVED WITH QWEST'S SOUTHERN IDAHO  
19 INTRASTATE SS7 ACCESS CATALOG THE SAME AS THOSE ADDRESSED BY  
20 THE FCC IN THE MATTER OF THE INTERSTATE SS7 TARIFF?

21 A. No. Qwest, with the Catalog at issue in this Docket, has moved an interstate "unbundled"  
22 access tariff structure into the intrastate intraLATA services (intraLATA toll and

1 local/EAS) domain. However, this domain is more complex than that of interstate  
2 switched access. IntraLATA traffic contains distinct sub-classifications of local/EAS, toll  
3 calls exchanged between Qwest and other local carriers, and jointly-provided exchange  
4 access that must be taken into consideration, for the majority of this traffic is not subject  
5 to access charges. Of these three sub-classifications, only a portion of intraLATA toll,  
6 when properly handled, is an appropriate candidate for application of Qwest's proposed  
7 access rate structure.

8  
9 In addition, Qwest asserts that the new SS7 message signaling rates in its Idaho Catalog  
10 are revenue neutral because the amount of revenue raised by the per-message rates is  
11 offset by the revenue decrease in per-minute switched access rates. As discussed further  
12 below, I believe that Qwest's assertion may be wrong, because Qwest did not account  
13 properly for the significant increase in revenues it would receive associated with its  
14 assessment of SS7 charges on *non-access* traffic exchanged with LECs. Such traffic had  
15 never before been subject to *any* access charges (prior to Qwest's misapplication of its  
16 Catalog charges) and is not subject to *any* per-minute switched access rates (decreased or  
17 otherwise). Qwest dismisses the fact that its Catalog charges LECs the new SS7 rate  
18 elements on local/EAS, incoming intraLATA toll calls from Qwest's end user customers  
19 and on jointly-provided exchange access calls (where it appears Qwest also charges the  
20 IXC).

21  
22 Q. DOES THE INTERCONNECTION RELATIONSHIP BETWEEN ELI AND QWEST

1 ALSO ADDRESS THESE TYPES OF INTRASTATE CALLS?

2 A. Yes. Pursuant to FCC and Idaho Commission rules implemented under the 1996 Act,  
3 ELI has negotiated an ICA with Qwest for the exchange of traffic.<sup>4</sup> Sections 251 and 252  
4 of the 1996 Act mandate that the Commission approved ICA, not Qwest's Access  
5 Catalog, govern the exchange of calls between ELI and Qwest. Since the SS7 message is  
6 required for a call to be routed and completed properly, the interconnection treatment of  
7 the SS7 message must follow the terms of the parties' negotiated ICA. Thus, Qwest  
8 should not be allowed to unilaterally alter its existing ICA with ELI by indirectly  
9 imposing its access catalog on traditional interconnection traffic by carving out one  
10 component of a call. Qwest's approach effectively increases the cost of providing  
11 facilities-based local exchange service for the benefit of Qwest, Qwest's IXC customers  
12 and large volume toll customers. The end result is higher costs for Qwest's competitors  
13 (and their customers) that further reduce the advancement of local exchange service  
14 competition in conflict with this Commission's public policy goals.

15  
16 Q. WHAT IS THE RELATIONSHIP BETWEEN THE LEC COMPLAINANTS AND  
17 QWEST?

18 A. CTC-ID and the ITA members are independent incumbent local exchange carriers  
19 ("ILECs") operating in the state of Idaho in many cases contiguous to Qwest's operating

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<sup>4</sup> Several references to the Local Interconnection Agreement Between US West Communications Inc. and Electric Lightwave Incorporated for Idaho will be used in this testimony to help illustrate the implications of Qwest's new SS7 message signaling charges for CLECs.

1 territory.<sup>5</sup> ELI is a competitive local exchange carrier (“CLEC”) competing with Qwest  
2 in certain of Qwest’s Idaho markets. ELI and Qwest have formalized their relationship in  
3 the Local Interconnection Agreement Between U S West Communications, Inc. and  
4 Electric Lightwave, Inc. for Idaho (“ELI-Qwest ICA”). The efficient exchange of calls  
5 (including the SS7 messages used to set up, route and complete the calls) has required  
6 these LECs to interconnect their networks with Qwest. In the case of Qwest’s SS7  
7 message signaling charges, the LEC Complainants are among the ultimate payers.  
8

9 Q. WHAT IS THE RELATIONSHIP BETWEEN CERTAIN OF THE LECs AND  
10 ILLUMINET?

11 A. Many LECs have entered into a contract with a third party provider, such as Illuminet, to  
12 serve as their agent with respect to SS7 signaling services contemplated under the ICA  
13 with Qwest. This relationship has assisted them in providing local exchange service and,  
14 in some cases, choice to Idaho consumers as encouraged by this Commission. They  
15 established this relationship in order to secure outside expertise and for economic  
16 efficiencies in several states including Idaho. Qwest has always been aware of this  
17 relationship between various LECs and Illuminet and Qwest was certainly aware of this  
18 relationship at the time it filed its SS7 message signaling tariff. In fact, Qwest required  
19 carriers to submit an LOA to establish the Illuminet agency relationship in the first place.  
20 A sample of that LOA is attached to this testimony as Exhibit 201.

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<sup>5</sup> In addition to being ILECs, several of the ITA members also have CLEC subsidiaries or operations in Idaho.

1  
2 It is interesting to note that one of the LEC complainants, ELI, is one of the primary  
3 facilities based competitive providers in Idaho, and yet Qwest has proposed a tariff that it  
4 knows will increase signaling costs to ELI's SS7 third party provider, Illuminet, that it is  
5 then obligated to pass such increased costs on to ELI. ELI believes that as its agent,  
6 Illuminet stands in the shoes of ELI for SS7 message signaling pursuant to the ICA and  
7 that Qwest should be precluded from applying the SS7 signaling messages in the Catalog  
8 to ELI (through Illuminet) in a manner that will increase charges to ELI that has never  
9 been contemplated in their ICA. ELI believes that this application of the Catalog by  
10 Qwest is anti-competitive as it unreasonably and unnecessarily impacts ELI, its largest  
11 competitor in the Southern Idaho telephony market.  
12

13 **E. REGULATORY AND PUBLIC POLICY ISSUES**

14 Q. MR. LAFFERTY, IS IT APPROPRIATE FOR QWEST TO APPLY ITS INTERSTATE  
15 SS7 MESSAGE SIGNALING TARIFF TO THE INTRASTATE JURISDICTION?

16 A. No. First, it is important to note that some of the Complainants are not convinced that  
17 Qwest's interstate SS7 Access Catalog accurately reflects the FCC's intent in its access  
18 reform decisions. However, given the existing interstate tariff, Qwest appears to be  
19 bootstrapping its current Southern Idaho Access Catalog onto its federal CCS tariff. This  
20 bootstrap methodology suffers from a number of regulatory and public policy flaws. As a  
21 result of public policy at the federal and state level, the interLATA and intraLATA  
22 compensation regimes are distinct and unique. The uniqueness varies across the United

1 States and therefore has been left to the jurisdiction of state regulators who are familiar  
2 with local needs and what would best serve the public interest.

3  
4 Qwest has ignored the relevant federal and state jurisdictional differences between  
5 interstate toll traffic, which is a single category of traffic, and intrastate traffic in general,  
6 which includes the categories of intraLATA toll, local/EAS, intraMTA wireless and  
7 jointly-provided exchange access. Qwest is attempting to achieve improper parallel  
8 regulatory and public policy treatment. The FCC recognized this very point wherein it  
9 declared in its Order addressing access charge reform: “The rules at issue here implement  
10 a different section of the Act – Section 201 – and they concern *interstate* charges only.”<sup>6</sup>

11 This representation by the FCC is clearly based on its desire to make explicit the implicit  
12 costs that historically have been buried in the cost and rates for interstate telecom-  
13 munications and to do so on a revenue neutral basis. Based on this information, there is  
14 no standing regulatory or public policy basis for the Commission to allow Qwest’s Idaho  
15 intrastate SS7 message signaling rates to continue.

16  
17 Q. HAVE THE FCC AND STATE REGULATORS ESTABLISHED SEPARATE  
18 MECHANISMS FOR QWEST’S COST RECOVERY AND RATE MAKING?

19 A. Yes. In many cases the same equipment investment and related expenses benefit both  
20 interstate services and intrastate services. After consulting with the states through the

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<sup>6</sup> In The Matter of Access Charge Reform, Price Cap Performance Review for Local Exchange Carriers, Transport Rate Structure and Pricing and End User Common Line Charges, CC Docket Nos: 96-262, 94-1, 91-213, and 95-72, First Report and Order, 12 FCC Rcd. 15982, 15988 (released 6/18/97).

1 joint board process, the FCC established cost allocation mechanisms to allocate  
2 investment and expenses between the interstate and intrastate jurisdiction. These  
3 mechanisms are outlined in Part 36 of the FCC's rules. SS7 investment and expense for  
4 all ILECs, including Qwest, is allocated under Part 36 between the interstate and  
5 intrastate jurisdiction.<sup>7</sup>

6  
7 Regulators then oversee the recovery of these costs by various federal and state products  
8 offered by Qwest (or any other ILEC). In the case of the federal jurisdiction, the main  
9 products are interstate access services. For Qwest the FCC has implemented a price cap  
10 mechanism to set the prices charged to its customers for interstate access services,  
11 including switched access rates and SS7 signaling, if unbundled. For many years, most  
12 states, including Idaho, followed traditional rate of return rate making where Qwest (or  
13 any other ILEC) filed a general rate case to establish its rates for local services, enhanced  
14 services (e.g., calling features) and intrastate toll and access rates. In a rate case, rates to  
15 recover all prudent investment and expenses allocated to the state jurisdiction, including a  
16 portion of SS7 facilities and costs, were established by the state regulatory agency.  
17 Intrastate cost recovery for any specific item, such as the SS7 network, would have  
18 traditionally been spread over any number of services including basic local rates. Since  
19 SS7 messages are a critical component of a local call, it would make sense for a portion

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<sup>7</sup> Though some variations occur, SS7 expenses are booked mainly to USOA Part 32 accounts 6530, Network Expense, or 6540, Access Expense, which is either directly assigned to the state or interstate jurisdictions or allocated based on the assignment of the underlying investments. SS7 investment is booked mainly to accounts 2212, Digital Switching, and 2232, Transmission, which are

1 of the costs related to SS7 message signaling to be built into basic local rates or other  
2 intrastate services, such as Caller ID which rely on SS7 signaling, either directly or via  
3 residual pricing.

4  
5 In recent years many states, including Idaho, have moved towards incentive forms of  
6 regulation which provide more pricing flexibility. One of the objectives of the pricing  
7 flexibility inherent in incentive regulation is to try and more accurately match cost  
8 recovery with cost causation. As discussed below, Qwest's implementation of its Catalog  
9 appears to be moving away from this objective.

10  
11 Q PLEASE EXPLAIN HOW QWEST'S SS7 SIGNALING CHARGES VIOLATE  
12 COMMISSION POLICIES.

13 A. Perhaps the simplest way is to use the application of the SS7 charges to EAS traffic as an  
14 example. My understanding is that the Commission greatly expanded Idaho EAS regions  
15 during the past few years. When it did so, it raised local exchange rates for Qwest and the  
16 other involved ILECs in order to allow them to recover the cost of handling this EAS  
17 traffic. However, the Commission continued the application of its "bill and keep" policy  
18 for the exchange of EAS calls between ILECs. Stated another way, the Commission  
19 made a policy decision that these calls should be repriced to provide end users unlimited  
20 usage at a flat rate, and that "bill and keep" should continue as the compensation  
21 mechanism between ILECs for EAS calls. Presumably the Commission had good reasons

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allocated to the interstate and state jurisdictions based on dial equipment minutes or some other measure

1 for determining that this change was in the public interest.

2  
3 Q. HOW DO QWEST'S NEW PRICES FOR SS7 MESSAGE SIGNALING VIOLATE  
4 THIS POLICY?

5 A. In effect, Qwest is now unilaterally reversing the Commission's decision to price EAS  
6 service at a flat rate by reintroducing usage sensitive pricing to this service through SS7  
7 message signaling charges. Qwest's defense is that it claims the unbundled SS7 rates  
8 better reflect cost causation. However, this contention flies squarely in the face of the  
9 Commission's EAS determination, in which it concluded that other considerations were  
10 more important than using traffic sensitive prices to closely track cost causation. If the  
11 Commission accepts Qwest's argument for SS7 costs, the exact same rationale can be  
12 used to argue that all traffic sensitive EAS costs should be recovered through per message  
13 or per minute rates. This, of course, would leave us right back to the pricing regime that  
14 existed before the Commission made its EAS decisions.

15  
16 Q. DOES QWEST'S UNBUNDLING OF SS7 CHARGES FOR EAS CALLS RAISE ANY  
17 OTHER POLICY ISSUES?

18 A. Yes. SS7 unbundling leads to a double recovery of Qwest's SS7 message signaling costs  
19 for EAS and, all other things being equal, an excessive and unreasonable price for local  
20 exchange service.

21  

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of relative use.

1 Q. PLEASE EXPLAIN HOW THIS DOUBLE RECOVERY OCCURS.

2 A As I stated earlier, local exchange rates (plus any applicable EAS surcharges) are  
3 designed to recover the cost of exchanging EAS traffic between Qwest and other ILECs.  
4 This necessarily includes the associated SS7 message signaling costs for originating and  
5 terminating these calls. But now Qwest is recovering these costs yet again by charging  
6 the ILECs for them, either directly or via the other ILECs' SS7 providers. This is clearly  
7 double recovery. My understanding is that there was no corresponding local rate decrease  
8 by Qwest when the new SS7 rates were implemented.

9

10 Q. BUT DOESN'T QWEST CLAIM THAT THE INSTITUTION OF SS7 SIGNALING  
11 CHARGES WAS REVENUE NEUTRAL?

12 A. As I previously mentioned, I am extremely skeptical of this assertion because the SS7  
13 message signaling rates, and any supposed revenue neutral rate adjustments, are not based  
14 on Idaho specific, or even Qwest specific, cost studies. But even if one accepts for the  
15 sake of argument that the rate adjustment was, on the whole, revenue neutral, that does  
16 not change the fact that Qwest is double recovering its SS7 message signaling costs for  
17 EAS service between its customers and the other Idaho ILECs. If, as Qwest claims, it  
18 simultaneously lowered IXC access rates by an amount equal to one half of the double  
19 recovery, the obvious result is a clear and totally unwarranted subsidy of unregulated IXC  
20 traffic by regulated industry participants and their customers. I find this subsidy only  
21 slightly less offensive than the alternative of Qwest pocketing the undeserved windfall. I  
22 would also point out that, to the extent Qwest imputes access charges into its own toll

1 rates, it benefits indirectly from this cross subsidy.

2  
3 Q. DO THESE SAME POLICY CONSIDERATIONS APPLY TO THE OTHER TYPES  
4 OF INTRALATA CALLS YOU CONTEND SHOULD BE EXEMPT FROM THE  
5 UNBUNDLED SS7 CHARGES?

6 A. Yes. The policy considerations are similar in each case. The common thread is that  
7 Qwest is already recovering its SS7 message signaling costs through negotiated or  
8 Commission approved rates, and the imposition of a second recovery of these costs is  
9 either an undeserved windfall for Qwest or an unreasonable (and probably unlawful)  
10 implicit cross subsidy of unregulated IXCs.

11  
12 Q. WOULD YOU ELABORATE ON THE SPECIFIC ISSUES RELATED TO EACH  
13 TYPE OF INTRASTATE INTRALATA CALL?

14 A. Yes. Intrastate intraLATA calls can be broken down into toll, local and extended area  
15 service (EAS), and jointly-provided exchange access to IXC toll traffic carriers. Of these  
16 traffic categories, the only appropriate candidates for the SS7 message signaling charges  
17 Qwest has implemented in Idaho are the toll calls exchanged between Qwest and IXCs (in  
18 which cases only the IXCs should be assessed SS7 charges), and intraLATA toll calls  
19 originated by LECs and terminated to Qwest. Even then Qwest's treatment of the  
20 technical measurements, billing, and determination of proper costs and the determination  
21 of revenue neutrality must be done properly – unlike that which is presently occurring.

1 Both the other LECs and Qwest incur costs associated with their interconnection.  
 2 Similarly, both the other LECs and Qwest cause messages to be sent over their  
 3 interconnected SS7 networks. For instance, each carrier incurs 'local switching' costs  
 4 associated with the termination of calls to their end user customers; similarly, where SS7  
 5 signaling is used, each carrier incurs the cost of the messages (associated with such calls)  
 6 sent over their interconnected SS7 networks. Regardless of the technology employed  
 7 (e.g., multi-frequency, dial-pulse, SS7), the interoffice signaling associated with a  
 8 carrier's termination of such traffic is part of the call setup function for which a  
 9 terminating carrier is entitled to recover its costs. In the case of CLECs like ELI, the Act  
 10 provides for recovery by each carrier of its costs associated with the transport and  
 11 termination of calls that originate on the network of the other carrier. The ELI-Qwest  
 12 ICA addresses the recovery for calls that terminate on the other carrier's network. Thus,  
 13 as discussed below, the Catalog should not be applied to most calls between Qwest and  
 14 ELI.

15  
 16 The following chart outlines the appropriate application of Qwest's SS7 access charges.

Traffic Type	Qwest Access Charges <sup>8</sup> Apply?
Toll: LECs to Qwest	Yes
Toll: Qwest to LECs	No
Local: LECs to Qwest	No

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<sup>8</sup> For purposes of this table, Qwest's "Access Charges" include the new SS7 message signaling rates.

Local: Qwest to LECs	No
Meet-Point: LECs to Qwest	No
Meet-Point: Qwest to LECs	No

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- Regarding intraLATA toll traffic (LECs to Qwest): Qwest may bill the LECs or their agent Illuminet for terminating their toll traffic according to Qwest’s Catalog.
- Regarding intraLATA toll traffic (Qwest to LECs): Qwest may not bill the LECs or their agent Illuminet for the LECs’ termination of Qwest’s toll traffic. Under standard industry practices (and in the case of ELI, additionally the ELI-Qwest ICA), only the terminating carrier should be compensated for such traffic and the compensation should be according to the terminating party’s applicable switched access tariff. Thus, in the case of intraLATA toll calls from Qwest to the LECs, it is the LECs, not Qwest, who are owed compensation for the cost of such termination.
- Regarding Local/EAS traffic (LECs to Qwest): Qwest may not bill other ILECs or their agent Illuminet SS7 charges for Qwest’s termination of local traffic. Pursuant to long-standing commission policy, such calls between ILECs have always been handled on a “Bill and Keep” basis. In the case of ELI, Qwest has agreed, according to the ELI-Qwest ICA, to a specific reciprocal compensation rate. Any additional local compensation would require the ICA be renegotiated and approved by the Commission.<sup>9</sup> No such negotiations have been requested by Qwest. Inasmuch as

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<sup>9</sup> Section (A)3.26 of the ELI-Qwest ICA reads as follows:

1 other mechanisms governing the termination of one another's local traffic are already  
2 in place, Qwest may not attempt to recover its call setup costs for local calls through  
3 application of its SS7 access charges.

- 4 • Regarding Local/EAS traffic (Qwest to LECs): Qwest may not bill other ILECs or  
5 their agent Illuminet SS7 charges for the other ILECs' termination of local traffic.  
6 Pursuant to long-standing commission policy, such calls have always been handled on  
7 a "Bill and Keep" basis. In the case of ELI, Qwest has agreed, according to the ELI-  
8 Qwest ICA, to a specific reciprocal compensation rate. Under the ICA, it is ELI, not  
9 Qwest who is entitled to recover costs for termination of local calls from Qwest to  
10 ELI. In accordance with the Telecommunications Act, Qwest is prohibited from  
11 charging ELI for such traffic.<sup>10</sup> Inasmuch as other mechanisms governing the  
12 termination of one another's local traffic are already in place, Qwest may not attempt  
13 to recover its call setup costs for local calls through application of its SS7 message  
14 signaling charges.
- 15 • Regarding jointly-provided switched access (both directions): Qwest may not bill the  
16 LECs or their agent Illuminet for jointly-provided exchange access traffic (also  
17 referred to as "meet point billed" traffic), because Qwest has agreed, in accordance

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*"Amendment: ELI and USW may mutually agree to amend this Agreement in writing. Since it is possible that amendments to this Agreement may be needed to fully satisfy the purposes and objectives of this Agreement, the Parties agree to work cooperatively, promptly and in good faith to negotiate and implement any such additions, changes and corrections to this Agreement."*

<sup>10</sup> FCC regulations, at 47 C.F.R. § 51.703(b), provide that:

*"A LEC may not assess charges on any other telecommunications carrier for local telecommunications traffic that originates on the LEC's network."*

1 with industry standard meet point billing practice and according to the “meet point  
2 billing” arrangement in the ELI-Qwest ICA,<sup>11</sup> to bill the IXCs for their use of Qwest’s  
3 network. All of Qwest’s costs associated with the exchange of access traffic between  
4 the LECs and IXCs should be (and likely are) recovered by Qwest’s application of its  
5 Access Catalog charges (including SS7 rate elements) to the associated IXCs.  
6

7 Q. PLEASE EXPLAIN YOUR CONCERNS ABOUT THE IMPACT OF QWEST’S  
8 FILING ON LOCAL TRAFFIC.

9 A. Local and EAS traffic has historically been handled technically and economically  
10 according to either standard industry “Bill and Keep” practices for ILECs or the terms of  
11 ICAs between Qwest and CLECs.<sup>12</sup> In the case of ELI and Qwest the ELI-Qwest ICA  
12 approved by the Idaho Commission includes a reciprocal compensation rate for the  
13 exchange of local traffic which presumably includes the exchange of the necessary SS7  
14 messages without which the call could not be completed. For many CLECs, their  
15 interconnection arrangements have directed the outcome of business cases upon which  
16 CLECs relied in getting into the local exchange service market place and must not be  
17 simply abridged by Qwest filing a tariff or catalog.  
18

19 As noted above, the “Bill and Keep” arrangements traditionally followed by ILECs and

---

<sup>11</sup> See Sections (C) 3.1 and (C) 3.3 of the ELI-Qwest ICA.

<sup>12</sup> 47 U.S.C. § 251(b)(5) describes an obligation for LECs to establish reciprocal compensation arrangements for the transport and termination of telecommunications and 47 U.S.C. § 252(d)(2)(A)(I)

1 endorsed by many state regulators, including the Idaho Commission for the exchange of  
2 local/EAS calls is one area for which Qwest's Catalog is particularly onerous. "Bill and  
3 Keep" is based on the rebuttable presumption that each carrier's costs are the same (or  
4 close enough to be acceptable) and that the traffic is balanced. These balanced costs  
5 include all of the components required by the originating carrier to use the terminating  
6 carrier's network to terminate traffic destined for the customers of the terminating carrier.  
7 "Bill and Keep" is efficient, cost minimizing, and forward-looking.

8  
9 One must also note that Qwest's termination of calls originating on another carrier's  
10 network to Qwest customers completes Qwest's obligations to its customers. Qwest, in  
11 its end user charges for local/EAS service offerings, provides for the origination and  
12 *termination* of calls, not merely call origination. In the case of the new SS7 message  
13 signaling charges, it appears that Qwest is attempting to have other LECs pay, as opposed  
14 to Qwest's own end user customers to pay, some of the costs incurred in Qwest meeting  
15 this obligation. Message signaling is an integral part of a call. Without signaling, there is  
16 no call. Similarly, without a call request from a customer, there is no need for call-related  
17 signaling (the ISUP messages described in Qwest's Catalog). Thus the cost causer for the  
18 SS7 signaling associated with a local/EAS call originated by a Qwest end user customer  
19 is that customer (and thus Qwest itself), not the terminating carrier. By implementing the  
20 new SS7 message signaling charges, Qwest has shifted its signaling costs associated with

---

requires mutual recovery of the costs associated with termination of calls that originate on the network of another LECs.

1 its origination and delivery of local traffic from itself to other companies including some  
2 of its competitors, in violation of current regulations and its ICAs.

3  
4 Q. DID QWEST PROVIDE ELI AN OPPORTUNITY TO NEGOTIATE THE NEW SS7  
5 CHARGES PRIOR TO FILING THE CHANGES TO ITS ACCESS CATALOG?

6 A. No. ELI first learned about the changes and application of the access catalog to local  
7 calls after the Catalog had been implemented.

8  
9 Q. WHEN QWEST IMPLEMENTED THE SS7 ACCESS CATALOG TO BILL OTHER  
10 LECS, DIRECTLY OR VIA ILLUMINET, FOR QWEST'S SS7 SIGNALING  
11 ASSOCIATED WITH THE EXCHANGE OF LOCAL AND EAS TRAFFIC, WERE  
12 THE LEC'S COSTS OFFSET BY QWEST'S REDUCTION IN CARRIER COMMON  
13 LINE LOCAL SWITCHING OR OTHER INTRASTATE ACCESS RATES?

14 A. No. According to established policies, Qwest does not bill and the LECs do not pay *any*  
15 access charges (*i.e.*, CCL and switching, whether reduced or not) for their exchange of  
16 local and EAS traffic. Therefore the LECs did not experience any reductions in access  
17 charges for such traffic, making the SS7 message signaling charge a new, net increase in  
18 their costs.

19  
20 Q. PLEASE EXPLAIN YOUR CONCERNS ABOUT THE IMPACT OF QWEST'S SS7

1 ACCESS CATALOG ON INTRALATA TOLL TRAFFIC.

2 A. Consistent with long-standing industry practice concerning the mutual exchange of  
3 intraLATA toll traffic between LECs, the LECs operate not as co-carriers for this type of  
4 traffic, but, in effect, as LEC and IXC, with the sender of such traffic assuming the role of  
5 an IXC terminating its exchange access traffic to the other party's local network.  
6 Accordingly, LECs and Qwest have agreed to exchange such traffic and to compensate  
7 each another for the termination of such traffic according to each carrier's access tariff.  
8 Qwest's Catalog has Qwest billing the LECs for call termination (including discrete or  
9 bundled charges for signaling messages) associated with intraLATA toll access traffic  
10 sent from the LECs to Qwest. But Qwest's Catalog *also* has Qwest billing the LECs for  
11 *Qwest's origination of access traffic terminated by the LECs*, in violation of standard  
12 industry practice. The cost causer for intraLATA toll calls originated by Qwest's end  
13 user customers is clearly Qwest and its customers and not the terminating carrier.

14  
15 Q. WHEN QWEST IMPLEMENTED THE SS7 ACCESS CATALOG TO BILL THE  
16 LECS DIRECTLY OR VIA ILLUMINET FOR QWEST'S SS7 SIGNALING  
17 ASSOCIATED WITH THE LEC'S TERMINATION OF QWEST'S INTRALATA  
18 TOLL TRAFFIC, WERE THE LECS' COSTS OFFSET BY QWEST'S REDUCTION  
19 IN SWITCHED ACCESS RATES?

20 A. No. As explained above, it is the *originating* LEC, who pays access charges to the  
21 *terminating LEC* for traffic. According to established practice, Qwest does not bill and

1 the LECs do not pay *any* access charges (*i.e.*, CCL, local switching, etc., whether reduced  
2 or not) for their termination of Qwest's intraLATA toll traffic. Since, Qwest has never  
3 billed the LEC access charges for such traffic, the SS7 message signaling charge is a new,  
4 net increase in the LECs' costs.

5  
6 Q. PLEASE EXPLAIN YOUR CONCERNS ABOUT THE QWEST SS7 ACCESS  
7 CATALOG ON JOINTLY-PROVIDED EXCHANGE ACCESS SERVICES.

8 A. Jointly-provided exchange access service is one that is arrived at through a mutually  
9 acceptable agreement to do so. In these agreements the service is generally referred to as  
10 "Meet Point Billing."<sup>13</sup> Meet Point Billing ("MPB") is a revenue-sharing arrangement  
11 between two or more local exchange carriers where they jointly provide access service to  
12 access customers, *e.g.*, IXCs, under separate access tariffs. Therefore, where Qwest is  
13 following a MPB arrangement, Qwest may not assess the LECs, directly or through their  
14 agents such as Illuminet, intrastate call setup charges for SS7 signaling messages  
15 associated with the exchange of jointly-provided exchange access traffic between the  
16 LECs and the third party IXCs.

17  
18 Q. WOULD YOU EXPLAIN HOW THIS CONCERN IMPACTS LECS IN IDAHO?

19 A. Yes. Once again, the new message signaling charges are an effort by Qwest to end-run  
20 existing agreements. In Idaho, Qwest performs a tandem transiting function between

1 many *LEC* end office(s) and IXCs. LECs typically follow MPB guidelines, developed  
2 and maintained with extensive industry support, by the Ordering and Billing Forum  
3 (OBF).<sup>14</sup> The Multiple Exchange Carrier Access Billing (MECAB) guidelines provide  
4 detailed information regarding common data elements and intercarrier processes critical  
5 for the provision of verifiable and auditable bills in multiple provider situations. Where  
6 LECs jointly provide exchange access to IXCs and use MECAB guidelines, each party  
7 bills the IXC, and not one another, for its provision of access service. This process  
8 appropriately charges the IXC, whose customer is the real cost causer, for all expenses  
9 associated with originating and transporting the call including SS7 message signaling  
10 costs.

11  
12 Q. HOW DOES THE ELI-QWEST ICA ADDRESS TRAFFIC FROM THIRD PARTY  
13 CARRIERS AND MEET POINT BILLING?

14 A. In their ICA ELI and Qwest have agreed to a MPB arrangement whereby each separately  
15 bills the appropriate tariffed switched access rates for its portion of the access service  
16 jointly provided to IXCs. Following are excerpts from the ELI-Qwest ICA addressing  
17 traffic from third parties and MPB (the numbers represent ICA sections):

---

<sup>13</sup> In the case of ELI, the MPB arrangements have been memorialized in the ELI-Qwest ICA. Refer to Sections (C) 3.1 and (C) 3.3.

<sup>14</sup> The OBF (a group of service provider and customer participants that meets to identify, discuss, and resolve national issues concerning the ordering and billing of access services) is under the auspices of the Carrier Liaison Committee (CLC) of the Alliance for Telecommunications Industry Solutions (ATIS), formerly the Exchange Carrier Exchange Carriers Standards Association (ECSA). The Federal Communications Commission (FCC) authorized the CLC in an MO&O released January 17, 1985.

1 C)2.1.1 *Reciprocal traffic exchange addresses the exchange of traffic between*  
2 *ELI's network and USW's network. If such traffic is local, the provisions*  
3 *of this Agreement shall apply. Where either Party acts as an IntraLATA*  
4 *Toll provider, each Party shall bill the other its Tariffed Switched Access*  
5 *rates. Where either Party interconnects and delivers traffic to the other*  
6 *from third parties, each Party shall bill such third parties the appropriate*  
7 *charges pursuant to its respective Tariffs or contractual offerings for*  
8 *such third party terminations. Absent a separately negotiated agreement*  
9 *to the contrary, the Parties will directly exchange traffic between their*  
10 *respective networks without the use of third party transit providers.*  
11 {emphasis added}

12  
13 (C)2.2.3.5 *Jointly Provided Switched Access (InterLATA and IntraLATA*  
14 *presubscribed/dial around): The Parties will use industry standards*  
15 *developed to handle the provision and billing of jointly provided switched*  
16 *access (MECAB, MECOD, and the Parties' FCC and state access*  
17 *Tariffs). Each Party will bill the IXC the appropriate portion of its*  
18 *Switched Access rates.*

19  
20 (C)2.3.7 *Jointly Provided Switched Access (InterLATA and IntraLATA*  
21 *presubscribed/dial around): The applicable Switched Access rates will*  
22 *be billed by the Parties to the IXC based on MECAB guidelines and their*  
23 *respective FCC and state access Tariffs.* {emphasis added}

24  
25 (C)3.1 *Switched Access Service is defined and governed by the FCC and State*  
26 *Access Tariffs, MECAB and MECOD, and is not modified by any*  
27 *provisions of this Agreement. Both Parties agree to comply with such*  
28 *guidelines.*

29  
30 (C)3.3 *USW and ELI will each render a separate bill to the IXC, using the*  
31 *multiple bill, multiple tariff option.*

32  
33 The ELI-Qwest ICA appears to be clear that charges by Qwest to ELI for SS7 message  
34 signaling associated with the termination of third party IXC calls associated with MPB  
35 arrangements are not permitted.

1 Q. IS THERE ANY VALID REASON FOR QWEST TO CHARGE THE LECS,  
2 DIRECTLY OR VIA ILLUMINET, FOR THE SIGNALING MESSAGES  
3 EXCHANGED BETWEEN THEM AND QWEST ON MEET POINT BILLING  
4 TRAFFIC TO/FROM ACCESS CUSTOMERS?

5 A. No. Industry processes (including those memorialized in the ELI-Qwest ICA)  
6 contemplate both of the LECs involved in the MPB arrangement charging third-party  
7 IXCs for originating and terminating access according to each LEC's access tariff. Under  
8 such arrangements, *neither* LEC charges the other for such traffic.

9

10 Q. WHEN QWEST IMPLEMENTED THE SS7 ACCESS CATALOG TO CHARGE THE  
11 LECS, DIRECTLY OR VIA ILLUMINET, FOR QWEST'S SS7 SIGNALING  
12 ASSOCIATED WITH MPB TRAFFIC, WERE THE LECS' COSTS OFFSET BY  
13 QWEST'S REDUCTION IN CARRIER COMMON LINE OR LOCAL SWITCHING  
14 RATES?

15 A. No. As explained above it is the access customer (IXC) not the LECs, which pays access  
16 charges to Qwest for MPB traffic. According to established industry practice, and/or  
17 agreed-to ICA terms, Qwest does not bill and the LECs do not pay *any* access charges  
18 (*i.e.*, CCL, local switching, etc., whether reduced or not) for the exchange of MPB traffic.  
19 Since Qwest has never billed the LECs access charges for MPB traffic, the SS7 access  
20 charge, is a new, net increase in the LECs' costs. Therefore, if the Commission does not  
21 eliminate or significantly modify Qwest's Catalog, it will be endorsing a regulatory and

1 public policy regime that abridges the existing MPB practices (and ICAs) described  
2 above and set into place cross subsidies between LECs and IXCs.  
3

4 Q. PLEASE ELABORATE ON THE POTENTIAL FOR CROSS SUBSIDIES?

5 A. I am concerned that there is a potential of cross subsidization between carriers, types of  
6 calls within Qwest's Idaho operation, Qwest services and states. Qwest is applying its  
7 new message signaling rates to messages for Local/EAS calls from all LECs to Qwest, to  
8 LECs terminating Qwest-originated intraLATA toll calls and jointly-provided exchange  
9 access messages (none of which were previously associated the switched access service  
10 purchased by any LEC) from Qwest. The total charges that Qwest anticipated collecting  
11 for these messages were then offset entirely by a reduction in Qwest's intrastate Switched  
12 Access rates for End Office Switching, Carrier Common Line and Tandem Switching.  
13 This process set up an improper subsidy flow from LECs to IXCs who would receive the  
14 benefit of lower Switched Access rates. In addition, as described earlier this process  
15 could establish a subsidy from the local/EAS to the toll jurisdiction.  
16

17 Finally, by billing other LECs SS7 message signaling charges for local/EAS and  
18 intraLATA toll calls originated by Qwest, other LECs could be subsidizing Qwest's end  
19 user customer services. Qwest offers Caller ID and other CLASS features that rely on  
20 SS7 messages. Presumably Qwest included the costs of the necessary SS7 message  
21 signaling in the rates for these services. Since Qwest is now also collecting SS7 message  
22 signaling charges from other LECs, these other carriers could be subsidizing Qwest's own

1 customers. These subsidies should not be permitted by the Commission without an  
2 express intent to create such a system.

3  
4 Q. HOW MIGHT QWEST BE CREATING SUBSIDIES BETWEEN STATES?

5 A. It appears from Qwest's responses to interrogatories from the complainants that neither  
6 Idaho specific costs nor actual Idaho SS7 messages were used in the development of the  
7 rates. Specifically in response to Complainant Request Number 10, Qwest responded as  
8 follows:

9 *"The SS7 access prices were set equal to those existing in*  
10 *Qwest's interstate access tariff, in order to have consistency in*  
11 *rates between the intrastate and interstate jurisdictions. Idaho-*  
12 *specific cost and demand data was not used to establish the price*  
13 *for the rate elements filed." {emphasis added}*  
14

15 Thus, it is the Complainants' understanding that Qwest developed a single set of region  
16 wide rates for its interstate tariffs and then applied these same rates in each state without  
17 taking into consideration the possibility for cost or demand differences among the states.  
18 In addition, it appears Qwest used the "Percent Interstate Usage" factors that would have  
19 been developed by Qwest's customers for determining the total number of interstate  
20 messages, possibly across several states, not Idaho specific messages. Therefore the rates  
21 in Qwest's Idaho Catalog appear to be average rates for SS7 message signaling across the  
22 entire Qwest region.

23  
24 Since factors like population density, the length of transport facilities and number of  
25 messages could cause costs to vary from state to state, it is unlikely Qwest's total SS7

1 signaling costs or SS7 signaling costs per message will be the same from state to state.  
2 By implementing common rates, Qwest could be subsidizing high cost states with lower  
3 cost states. In addition, since Qwest's SS7 signaling tariffs have not been approved in  
4 several states, Idaho could be subsidizing states where the SS7 signaling rates are not  
5 even in effect.

6  
7 Q. IS QWEST BILLING IDAHO CUSTOMERS BASED ON ACTUAL IDAHO  
8 INTRASTATE SS7 MESSAGES?

9 A. No. In response to Complainant Request Number 019 Qwest stated as follows:

10 *"Qwest records the signaling messages and applies the customer*  
11 *reported PIU to determine jurisdiction."*  
12

13 From this response, it appears each Qwest customer has provided Qwest a "Percent  
14 Interstate Usage" factor which is applied by Qwest to total SS7 messages to establish the  
15 number of intrastate messages for billing purposes. From the information provided by  
16 Qwest, it cannot be determined whether this factor is applied to total Idaho SS7 messages,  
17 total Qwest region wide SS7 messages or some other number of messages.

18  
19 As noted above the FCC made it clear that the implementation of measurement and  
20 billing systems to produce accurate and accountable bills was a prerequisite for  
21 establishing the unbundled SS7 charges. Based on the following response to  
22 Complainants' Request Number 041, it appears that Qwest has violated the FCC's order  
23 by not implementing the required systems:

24 041 – *"No. Qwest cannot provide that detail for purposes of*



1 same call in a MPB situation. Attached as Exhibit 202 are copies of Complainant  
2 Requests Numbers 004 and 007 and Qwest's responses. Based on the responses to Parts  
3 H-K/N-S of Request 004, Qwest is charging Illuminet (and ultimately Illuminet's LEC  
4 customers) the Signal Formulation, Signal Transport and Signal Switching rate elements  
5 for calls originated by an IXC's end user. However, based on Qwest's response to  
6 Request 007, each IXC connecting to Qwest's SS7 network could pay SS7 message  
7 signaling charges for the same calls.

8  
9 In the confidential portion of its response to Complainant Request Number 49 Qwest  
10 provided an aggregate amount of "calls" used to establish the amount of revenue to be  
11 generated by the new SS7 message signaling elements. Since each "call" in a MPB  
12 arrangement appears to be generating two SS7 message signaling charges – one to the  
13 LEC and a second to the IXC, it appears Qwest's rate development did not account for all  
14 the potential messages that would incur the new SS7 charge. Thus, by double charging  
15 LECs and IXCs for the same call, it does not appear the tariff implementation could be  
16 revenue neutral. Until Qwest is able to use actual Idaho messages to develop their Idaho  
17 rates and to bill their Idaho customers, the Commission cannot be assured that Qwest's  
18 tariffs are actually revenue neutral. The public interest requires that the Commission  
19 ensure Qwest does not receive a windfall from the new SS7 access rates at the expense of  
20 other carriers or Qwest's own customers.

21  
22 Q. PLEASE SUMMARIZE YOUR CONCERNS ABOUT CROSS SUBSIDIES?

1 A. It appears that there is (or at least there is a likelihood) of cross subsidies between LECs  
2 and IXCs, between LECs and Qwest's end users, between various Qwest intrastate  
3 services and between different states.

4  
5 Q. COULDN'T THE LEC COMPLAINANTS AND OTHER AFFECTED COMPANIES  
6 RECOVER SOME OF THE PAYMENTS TO QWEST BY IMPOSING SIMILAR SS7  
7 CHARGES ON THEIR SYSTEMS?

8 A. Perhaps, but this would be an instance of two wrongs not making a right. If implemented  
9 in the same manner as Qwest's charges, it would only increase the objectionable cross  
10 subsidies.

11  
12 **F. TECHNICAL ISSUES**

13 Q. MR. LAFFERTY, YOU HAVE ESTABLISHED THAT CERTAIN SS7 MESSAGES  
14 EXCHANGED BETWEEN LECS AND QWEST SHOULD NOT BE SUBJECT TO  
15 QWEST'S SS7 CHARGES. HOW COULD QWEST AVOID IMPOSING THOSE  
16 IMPROPER CHARGES?

17 A. I can think of at least two methods that could be used to shield certain signaling messages  
18 from the SS7 access charges that Qwest's Catalog would inappropriately assess:

- 19 (1) Reconfigure Qwest's billing system such that Qwest could itself assess the  
20 correct charges for SS7 signaling based on the actual jurisdiction of each  
21 call/message (thereby identifying all SS7 signaling messages that must be shielded  
22 from Qwest's SS7 signaling charges and applying the Catalog rate elements only

1 to the remaining messages); or

2 (2) Establish a new jurisdictional indicator, *e.g.*, percent *nonchargeable* usage  
3 (PNU), to be provided by interconnected carriers (*i.e.*, supplied individually by  
4 LECs, or from wholesale signaling providers) and applied to the total intrastate  
5 signaling messages exchanged between the other interconnected carriers and  
6 Qwest (thereby identifying the proportion of SS7 signaling messages that must be  
7 shielded from Qwest's SS7 access charges) – this PNU would be applied to the  
8 total messages exchanged after the (existing) PIU (percent interstate usage)  
9 jurisdictional factor is applied

10  
11 The first suggestion is most appropriate, inasmuch as it requires the party responsible for  
12 the tariffed service to accurately bill for its use. Furthermore, it appears Qwest has  
13 identified a technically feasible solution for modifying its billing systems and processed.  
14 Since the FCC clearly indicated that the production of accurate and accountable bills was  
15 a prerequisite for unbundling SS7 message charges from access rates, Qwest should  
16 implement the required modifications.

17  
18 The second suggestion (a new jurisdiction factor used to shield non-access SS7 messages  
19 from inappropriate access billing) would be acceptable only if the first suggestion was not  
20 technically feasible. Qwest regularly uses a jurisdictional factor on all access traffic (*i.e.*,  
21 Qwest's current interstate Access Tariffs and intrastate Access Catalogs require  
22 interconnecting carriers to supply a "percent interstate usage" (PIU) factor that Qwest

1 then applies to access services). Where interstate and intrastate access charges differ,  
2 Qwest's application of the interconnector's PIU permits Qwest to apportion the intrastate  
3 charges to the intrastate traffic and the interstate charges to interstate traffic. We believe  
4 that a similar mechanism for dealing with non-chargeable SS7 messages is a workable  
5 solution to Qwest's billing problem. However, since it appears Qwest faces no technical  
6 barriers to properly tracking and billing for SS7 messages, this second option should only  
7 be considered as an interim step.  
8

9 **G. RECOMMENDATIONS TO THE COMMISSION**

10 Q. MR. LAFFERTY, WHAT WOULD YOU RECOMMEND THE COMMISSION DO AT  
11 THIS TIME?

12 A. I recommend that the Commission require Qwest to cease application of its SS7 Access  
13 Catalog in its current form and refund to all carriers all revenue collected under the SS7  
14 message signaling catalog to date. In addition the Commission should specifically  
15 determine that any SS7 intrastate switched access rate element unbundling be applicable  
16 only to Qwest's termination of intrastate switched access traffic from other carriers and  
17 not to local/EAS, intraLATA toll originated by Qwest and sent to another LEC, or LECs  
18 participating in jointly-provided exchange access services. Qwest's Catalog should be  
19 modified and refiled only when Qwest is capable of billing and accounting for these  
20 messages so as (i) to apply the SS7 message signaling charges to other LECs only in the  
21 case of intrastate intraLATA toll originated by other LECs and sent to Qwest and (ii) to  
22 prevent the improper flow of subsidies from LECs to IXC's, from other LECs to Qwest's

1 own customers, between services, or between states under the guise of revenue neutrality.  
2 I have provided above two appropriate methodologies that could be used to implement  
3 such a refiled tariff.

4

5

**H. CONCLUSION**

6

Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

7

A. Yes, it does.

**Exhibit No. 201**  
**Case Nos. QWE-T-02-11**  
**F. Wayne Lafferty**  
**Citizens, Electric Lightwave, Idaho Telephone,**  
**Illuminet**

'99 DEC 2 PM 2 26



Mailing Address:  
Electric Lightwave, Inc.  
4400 N.E. 77th Avenue  
Yakima, Washington 98662  
(360) 816-3000 Fax: (360) 816-8934

TO: U S West  
FROM: Electric Lightwave, Inc.  
DATE: December 2, 1999  
SUBJECT: Letter of Agency

Electric Lightwave, Inc. is authorizing Illuminet to conduct all negotiations and issue orders for ISUP services for the point codes listed below for all U S West LATAs.

005-007-009  
005-011-194  
218-242-202  
218-242-201  
005-015-098  
005-015-099  
218-220-201  
218-170-202  
005-011-192  
005-011-193  
005-015-096  
005-015-097  
005-007-008  
005-007-010

This letter of Agency will remain in effect until rescinded in writing by Electric Lightwave, Inc.

Sincerely,

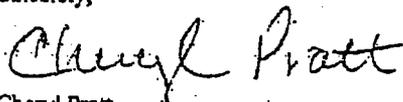
  
Cheryl Pratt  
ELI - Long Distance Network Planning

Exhibit No. 201  
Case Nos. QWE-T-02-11  
F. Lafferty, Citizens, Electric  
Lightwave, Idaho Telephone, Illuminet  
Page 1 of 1

**Exhibit No. 202**  
**Case Nos. QWE-T-02-11**  
**F. Wayne Lafferty**  
**Citizens, Electric Lightwave, Idaho Telephone,**  
**Illuminet**

Idaho  
Case No. QWE-T-02-11  
ITA, et al. 01-004

INTERVENOR: IDAHO TELEPHONE ASSOC, CITIZENS TELECOM CO OF ID, CENTURYTEL OF ID, CENTURYTEL OF THE GEM STATE, POTLATCH TELEPHONE CO and ILLUMINET, INC.

REQUEST NO: 004

Assuming an incumbent or competitive LEC utilizes Illuminet as its SS7 provider and further assuming that Illuminet connects its SS7 network with Qwest's SS7 network, identify all companies (Illuminet, originating LEC, terminating LEC, Interexchange Carrier ("IXC"), etc.) that would be billed SS7 signaling charges from Qwest's Service Catalog for the following types of end-user initiated calls. For each scenario specify the service elements and rates that would apply to each company:

- A. An EAS call originated by a LEC end user customer terminated to a Qwest end user customer;
- B. An EAS call originated by a Qwest end user customer terminated to a LEC end user customer;
- C. A local call originated by a LEC end user customer terminated to a Qwest end user customer;
- D. A local call originated by a Qwest end user customer terminated to a LEC end user customer;
- E. An intraLATA toll call originated by a LEC end user customer terminated to a Qwest end user;
- F. An intraLATA toll call originated by a Qwest end user customer terminated to a LEC end user customer;
- G. An intrastate, interLATA toll call originated by a LEC end user customer and terminated to a Qwest end user customer;
- H. An intrastate, interLATA toll call originated by an IXC's end user customer located in Qwest's service area and terminated to a LEC end user customer, utilizing facilities provided by Qwest, the IXC, and the LEC;
- I. An intrastate, interLATA toll call originated by an IXC's end user customer located in the LEC's service area and terminated to a Qwest end user customer, utilizing facilities provided by the LEC, the IXC, and Qwest;
- J. An interstate call originated by an IXC's end user customer located in a Qwest service area and terminated to a LEC end user customer, utilizing facilities provided by Qwest, the IXC, and the LEC;
- K. An interstate call originated by an IXC's end user customer located in a LEC's service area and terminated to a Qwest end user customer,

utilizing facilities provided by the LEC, the IXC, and Qwest;

- L. An intraLATA toll call originated by a LEC's end user customer (where that LEC subtends Qwest's network) and terminated to another LEC's end user customer, utilizing facilities provided by the originating LEC, Qwest and the terminating LEC;
- M. An intraLATA toll call originated by a LEC end user customer terminated to another LEC's end user (where the terminating LEC subtends Qwest's network), utilizing the facilities provided by the originating LEC, Qwest and the terminating LEC;
- N. An intraLATA toll call originated by an IXC's end user customer located in LEC's service area (where that LEC subtends Qwest network) and terminated to another LEC's end user customer, utilizing the facilities provided by the first LEC, Qwest, the IXC, and the terminating LEC;
- O. An intraLATA toll call originated by an IXC's end user customer located in a LEC's service area and terminated to another LEC's end user customer (where that terminating LEC subtends Qwest's network), utilizing the facilities provided by the first LEC, the IXC, Qwest, and the terminating LEC;
- P. An intrastate, interLATA toll call originated by an IXC's end user customer located in LEC's service area (where that LEC subtends Qwest network) and terminated to another LEC's end user customer, utilizing the facilities provided by the first LEC, Qwest, the IXC, and the terminating LEC;
- Q. An intrastate, interLATA toll call originated by an IXC's end user customer located in a LEC's service area and terminated to another LEC's end user customer (where that terminating LEC subtends Qwest's network), utilizing the facilities provided by the first LEC, the IXC, Qwest, and the terminating LEC;
- R. An interstate call originated by an IXC end user customer located in a LEC's service area (where that LEC subtends Qwest's network) and terminated to another LEC end user customer, utilizing facilities provided by the first LEC, Qwest, the IXC, and the terminating LEC; and
- S. An interstate call originated by an IXC's end user customer located in Qwest's service area and terminated to a LEC's end user customer (where the terminating LEC subtends Qwest's network), utilizing facilities provided by the first LEC, the IXC, Qwest, and the terminating LEC.

RESPONSE:

A. Qwest would bill Illuminet: Signal Formulation, ISUP, per call set up request, \$.000829; Signal Transport, ISUP, per call set up request, \$.000559; and Signal Switching, ISUP, per call set up request, \$.001162; per the Idaho Access Service Catalog or the FCC Tariff, based on Illuminet's self reported PIU.

B. See response to (A) above.

C. See response to (A) above.

D. See response to (A) above.

E. Qwest would bill Illuminet: Signal Formulation, ISUP, per call set up request, \$.000829; Signal Transport, ISUP, per call set up request, \$.000559; and Signal Switching, ISUP, per call set up request, \$.001162; per the Idaho Access Service Catalog or the FCC Tariff, based on Illuminet's self reported PIU. Insufficient information has been provided in this request to determine any further charges.

F. See response to (E) above.

G. See response to (E) above.

H. See response to (E) above.

I. See response to (E) above.

J. See response to (E) above.

K. See response to (H) above.

L. See response to (E) above.

M. See response to (E) above.

N. See response to (E) above.

O. See response to (E) above.

P. See response to (E) above.

Q. See response to (E) above.

R. See response to (E) above.

S. See response to (E) above.

Respondent: Don Lewis, Manager

Idaho  
Case No. QWE-T-02-11  
ITA, et al. 01-007

INTERVENOR: IDAHO TELEPHONE ASSOC, CITIZENS TELECOM CO OF ID, CENTURYTEL OF ID, CENTURYTEL OF THE GEM STATE, POTLATCH TELEPHONE CO and ILLUMINET, INC.

REQUEST NO: 007

Under what circumstances are SS7 signaling charges assessed to an IXC?  
Please explain which SS7 signaling charges would apply.

RESPONSE:

An IXC that has direct connection to Qwest's SS7 network would pay signaling charges for each originating and terminating call set up request that came across their linkset with Qwest. The Signal Formulation, ISUP, per call set up request; Signal Switching, ISUP, per call set up request; and Signal Transport, ISUP, per call set up request rate elements would apply.

Respondent: Don Lewis, Manager