

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

**In the Matter of the Petition for Arbitration of  
an Interconnection Agreement Between  
CHARTER FIBERLINK WA-CCVII, LLC.  
and QWEST CORPORATION Pursuant to 47  
U.S.C. Section 252 (b)**

**DOCKET NO. UT-083041**

**REBUTTAL TESTIMONY OF PHILIP LINSE**

**QWEST CORPORATION**

**(Disputed Issue Nos. 5, 10, 11, 13, 15, and 16)**

**NOVEMBER 17, 2008**

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1

**I. IDENTIFICATION OF WITNESS**

2

**Q. PLEASE STATE YOUR NAME, OCCUPATION AND BUSINESS**

3

**ADDRESS.**

4

A. My name is Philip Linse. My business address is the Qwest Network Reliability

5

Center located at 700 W. Mineral Avenue, Littleton Colorado. I am employed as

6

Director – Public Policy for Network. I am testifying on behalf of Qwest

7

Corporation (“Qwest”).

8

**Q. ARE YOU THE SAME PHILIP LINSE WHO FILED DIRECT TESTIMONY**

9

**IN THIS DOCKET?**

10

A. Yes.

11

**II. PURPOSE OF TESTIMONY**

12

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

13

A. The purpose of my testimony is to respond to the Charter Fiberlink WA-CCVII,

14

LLC (“Charter”) testimonies of Mr. Starkey and Mr. Gates. I first respond to

15

portions of Mr. Starkey’s testimony regarding Issue 5: Limitation of Liability.

16

Next, I reply to Mr. Gates’ testimony as it relates to the following disputed issues:

17

▪ Issue 10: Interconnection Facility Options

18

▪ Issue 11: Methods of Interconnection

19

▪ Issue 13: Transport Obligations

- 1                   ▪ Issue 15: Bill and Keep Compensation
- 2                   ▪ Issue 16: Indirect Interconnection

3                   **III. DISPUTED ISSUE NO. 5: LIMITATION OF LIABILITY**

4   **Q. IS IT LIKELY THAT A QWEST TECHNICIAN WOULD DAMAGE**  
5   **CHARTER'S FIBER THROUGH THE ACT OF INTERCONNECTING**  
6   **QWEST'S NETWORK WITH CHARTER'S NETWORK AS MR.**  
7   **STARKEY CLAIMS ON PAGE 8 OF HIS DIRECT TESTIMONY?**

8   A. No. Interconnection with Charter may take place at a Charter collocation within  
9   Qwest's central office, at a Mid-Span Meet POI where Qwest's fiber facility is met  
10   with Charter's fiber facility, or a Charter premise location where Qwest provides  
11   entrance facilities for Charter. To the extent Qwest provides entrance facilities to  
12   Charter's premise or interconnects with Charter at a collocation, Qwest and Charter  
13   would connect their networks using termination blocks and cross connects. At the  
14   time interconnection takes place, both Qwest's fiber facilities and Charter's fiber  
15   facilities should be properly terminated with the appropriate grounding. The  
16   method of connecting two networks using termination blocks and cross connects  
17   dramatically reduces the possibility of damage to the facilities used for interconnec-  
18   tion. If Qwest and Charter were to use a fiber Mid-Span Meet POI, Qwest's fiber  
19   and Charter's fiber should be spliced together using fiber facilities used solely for  
20   the purpose of interconnection. This reduces potential damage to either party's  
21   network. At the time interconnection takes place both Qwest fiber facilities and

1 Charter fiber facilities should be presented for splicing in a way that properly  
2 protects each party's network. Thus, it is very unlikely that a Qwest technician  
3 would damage Charter's fiber through the act of interconnecting Qwest's network  
4 with Charter's network.

5 **IV. DISPUTED ISSUE NO. 10: INTERCONNECTION FACILITY OPTIONS**

6 **Q. ON PAGE 13 OF HIS TESTIMONY MR. GATES STATES THAT "THE**  
7 **PARTIES HAVE AGREED THAT WHEN A TANDEM SWITCH NEARS**  
8 **EXHAUST, THERE MAY BE "TECHNICAL OR OPERATIONAL**  
9 **CONCERNS" THAT WOULD RENDER INTERCONNECTION AT THAT**  
10 **SWITCH TECHNICALLY INFEASIBLE. IF THE PARTIES AGREE**  
11 **THAT SWITCH EXHAUST WOULD RENDER INTERCONNECTION**  
12 **TECHNICALLY INFEASIBLE, SHOULD THERE BE A REQUIREMENT**  
13 **THAT SWITCH EXHAUST BE DEMONSTRATED TO THE**  
14 **COMMISSION IN EVERY INSTANCE?**

15 A. No. It is clear by Mr. Gates' statement that Charter understands the nature of  
16 switch exhaust and the technical limitations that exist when a switch is in a near  
17 exhaust condition. There is very little to disagree about when a switch has reached  
18 its capacity. As Qwest's and other CLECs' experience have improved the accuracy  
19 of network forecasting, Qwest has been able to work with interconnecting carriers  
20 to limit the impact of switch exhaust conditions. Generally, CLECs have been  
21 cooperative and understanding of these situations and have been helpful in assisting

1 Qwest in its efforts to minimize the impact of switch exhaust. Thus, it is  
2 administratively unnecessary and potentially burdensome for the Commission to  
3 become involved in evaluating whether there is switch exhaust every time it  
4 happens.

5 **V. DISPUTED ISSUE NO. 11: METHODS OF INTERCONNECTION**

6 **Q. MR. GATES CLAIMS THAT QWEST'S PROPOSED LANGUAGE LIMITS**  
7 **THE METHODS BY WHICH CHARTER MAY ESTABLISH**  
8 **INTERCONNECTION. IS HE CORRECT?**

9 A. No. As my direct testimony explains, there are several standard methods of  
10 interconnection that Qwest provides. Charter may obtain interconnection through  
11 the use of a Qwest provided Entrance Facility where Qwest builds a transmission  
12 path between Qwest's serving central office building and Charter's location.  
13 Charter may also obtain its own transport to a collocation within Qwest's central  
14 office. Finally, Charter may choose to negotiate a Mid-Span Meet POI where  
15 Charter provides or obtains facilities to a negotiated point approximately half way  
16 between the Charter point of presence within Qwest's local service area and the  
17 Qwest serving central office building. In addition, if these three methods do not  
18 meet Charter's needs, then Charter may elect to request an alternate method through  
19 the Bona Fide Request ("BFR") process. The BFR process allows for CLECs such  
20 as Charter to request technically feasible alternate methods of interconnection that  
21 are not covered by the three I have discussed.

1 **Q. HAS CHARTER SUBMITTED A BFR FOR A METHOD OF INTER-**  
2 **CONNECTION THAT IS NOT COVERED BY THE THREE METHODS**  
3 **THAT YOU HAVE DESCRIBED?**

4 A. No. I am not aware of any request from Charter for a method of interconnection  
5 that is not covered by the three methods of interconnection that I have described.

6 **Q. IS A QWEST PROVIDED ENTRANCE FACILITY DESIGNED FOR**  
7 **INTERCONNECTION WITH MULTIPLE SERVICE PROVIDERS?**

8 A. No. A Qwest provided Entrance Facility involves circuits that are dedicated for  
9 interconnection between the requesting service provider's switch and Qwest's  
10 switch. These circuits are configured using the software of the switch. A trunk is  
11 the software configuration of a circuit between two switches. A trunk has the capa-  
12 bility of establishing one voice grade communications path between two switches.  
13 A trunk group may consist of multiple trunks. Thus, a trunk group may carry many  
14 trunks that provide many voice paths between two switches. It is technically  
15 impossible to operate the same trunk or trunk groups between more than two  
16 switches. This would be analogous to providing the same mailing address for two  
17 different households. The mail carrier would not know where to deliver the mail.  
18 Likewise, Qwest's switch would not know which CLEC switch to route calls to.

19 **Q. DOES A QWEST PROVIDED ENTRANCE FACILITY RESTRICT OR**  
20 **LIMIT CHARTER FROM OBTAINING TRANSPORT FACILITIES FROM**  
21 **A THIRD PARTY THAT MAY BE USED FOR INTERCONNECTION AS**  
22 **MR. GATES CONCLUDES ON PAGE 19 LINES 7 THROUGH 9 OF HIS**

1           **DIRECT TESTIMONY?**

2    A.   No. Charter may obtain the equivalent of Qwest provided Entrance Facilities  
3           through the use of another provider. This may be accomplished through the use of  
4           its own collocation or that of another service provider's collocation. Charter may  
5           obtain transport from a third party between its collocation located at a Qwest central  
6           office and Charter's network. Additionally, Charter may build these facilities itself.  
7           Finally, Charter may use a Mid-Span Meet POI and obtain its portion of the  
8           facilities from a third party. Thus, on page 19 lines 7 through 9, Mr. Gates ignores  
9           the options available to Charter and the fact that neither Qwest nor Qwest's  
10          language restricts Charter from using a third party's facilities as a way for Charter  
11          to interconnect with Qwest.

12          In fact, Qwest proposed language for section 7.2.2.1.2.2 allows a CLEC to purchase  
13          transport services from a third party, including a third party that has leased the  
14          private line transport service facility from Qwest.

15    **Q.   DOES QWEST BECOME INVOLVED IN CHARTER'S OR OTHER**  
16          **CLEC'S LEASE OF THIRD PARTY TRANSPORT FACILITIES THAT**  
17          **MAY BE USED TO FACILITATE INTERCONNECTION?**

18    A.   No. Qwest is not a party to the agreements between CLECs such as Charter and  
19          third parties. Although Qwest is not involved, Qwest may need information in  
20          order to arrange for interconnection between Qwest and Charter using a third  
21          party's facilities. Qwest would need to know the location of the third party's



1 facility and authorization to use the facility for interconnection between Qwest and  
2 Charter.

3 **Q. TO WHAT EXTENT DO CLECS USE FACILITIES OF OTHER SERVICE**  
4 **PROVIDERS FOR INTERCONNECTION WITH QWEST?**

5 A. In the state of Washington at least 7 service providers use the facilities of at least 8  
6 other service providers to interconnect with Qwest. Thus, Mr. Gates' claim that  
7 Qwest's proposed language prohibits Charter from using other service providers'  
8 facilities is wrong. It is clear that Qwest's proposed language allows for the use of  
9 third party facilities for interconnection with Qwest.

10 **Q. DOES CHARTER USE THE FACILITIES OF A THIRD PARTY SERVICE**  
11 **PROVIDER IN WASHINGTON?**

12 A. Yes. Charter interconnects with Qwest through the use of a third party.  
13 Confidential exhibit PL-8 is a letter of authorization provided to Qwest by a third  
14 party which allows Charter to use that third party's facilities to interconnect  
15 Charter's network with Qwest's network.

16 **Q. ON PAGE 25 OF HIS DIRECT TESTIMONY MR. GATES CLAIMS THAT**  
17 **QWEST MAY FORCE CLECS TO DUPLICATE QWEST'S NETWORK.**  
18 **DOES QWEST'S PROPOSED LANGUAGE REQUIRE CLECS SUCH AS**  
19 **CHARTER TO DUPLICATE QWEST'S NETWORK?**

20 A. No. Qwest's language specifically allows one POI per LATA if it is technically  
21 feasible. The duplication of Qwest's network is not a requirement of Qwest's

1 proposed language nor does Qwest force CLECs like Charter to duplicate Qwest's  
2 network as Mr. Gates suggests.

3 **Q. DOES QWEST UNILATERALLY REQUIRE CHARTER TO ESTABLISH**  
4 **MULTIPLE POIS AS MR. GATES CLAIMS ON PAGE 26 OF HIS DIRECT**  
5 **TESTIMONY?**

6 A. No. Qwest has no such requirement. In fact, the second sentence of Qwest's  
7 proposed language for Section 7.1.2 states:

8 CLEC shall establish at least one (1) physical Point of Interconnection in  
9 Qwest territory in each LATA CLEC has local End User Customers.  
10

11 **Q. DOES QWEST REQUIRE MULTIPLE POIS AS MR. GATES CLAIMS ON**  
12 **PAGE 25 OF HIS DIRECT TESTIMONY?**

13 A. No. As I have explained above, Qwest offers interconnection to Charter from a  
14 single location within Qwest's service territory and has developed multiple  
15 interconnection methods that may be used.

16 **VI. DISPUTED ISSUE NO. 13: TRANSPORT OBLIGATIONS**

17 **Q. ON PAGE 17 AND AGAIN ON PAGE 29 OF HIS DIRECT TESTIMONY**  
18 **MR. GATES CLAIMS THAT "CHARTER'S PROPOSAL MAKES CLEAR**  
19 **THAT QWEST HAS NO OBLIGATION TO ESTABLISH A POI WITH**  
20 **CHARTER OUTSIDE OF QWEST'S GEOGRAPHIC TERRITORY OR**  
21 **SERVICE AREA." DOES CHARTER'S LANGUAGE CONSISTENTLY**  
22 **REFLECT THIS POSITION?**

1 A. No. Charter's language at 7.1.2 that states "The parties agree that this Section 7.1.2  
2 shall not be construed as imposing any obligation upon Qwest to establish a  
3 physical point of interconnection with Charter that is outside of Qwest's geographic  
4 service area or territory." By its terms, this language is limited to Section 7.1.2 of  
5 the interconnection agreement and does not expressly apply to other sections of the  
6 interconnection agreement. Mr. Gates states "that Qwest has no obligation to  
7 establish a POI with Charter outside of Qwest's geographic territory or service  
8 area" but his statement is not reflected in all of the contract language that Charter  
9 actually proposes. For example, as I discussed in my direct testimony, Charter's  
10 proposed language for section 7.2.2.1.2.2 could be interpreted to require Qwest to  
11 provide transport for interconnection outside of Qwest's service territory.

12 **VII. DISPUTED ISSUE NO. 15: BILL AND KEEP COMPENSATION**

13 **Q. DOES CHARTER'S BILL AND KEEP PROPOSAL FOR TRANSPORT, AS**  
14 **MR. GATES EXPLAINS ON PAGE 37 OF HIS DIRECT TESTIMONY,**  
15 **ADEQUATELY COMPENSATE QWEST FOR TRANSPORT QWEST**  
16 **PROVIDES?**

17 A. No. Mr. Gates makes an unfounded and totally incorrect assumption that "since the  
18 parties expect the volume of traffic will be roughly balanced, the parties' respective  
19 costs of transporting and terminating the other party's traffic should be roughly  
20 balanced." Qwest makes transport available to Charter between Charter's POI to  
21 over 45 central office switches. Charter provides transport from its POI to its single

1 switch location. Clearly, Qwest provides substantially more transport than Charter  
2 provides and this is true notwithstanding that the amount of traffic flowing in each  
3 direction may be in rough balance. Exhibit PL-9 is an example that illustrates how  
4 much more transport is provided by Qwest than is provided by Charter.

5 **VIII. DISPUTED ISSUE NO. 16: INDIRECT INTERCONNECTION**

6 **Q. ON PAGE 53 OF HIS DIRECT TESTIMONY MR. GATES CLAIMS THAT**  
7 **CHARTER'S PROPOSED LANGUAGE ALLOWS THE PARTIES TO**  
8 **EXCHANGE LOCAL TRAFFIC INDIRECTLY. DOES CHARTER'S**  
9 **LANGUAGE PROVIDE QWEST WITH A CHOICE OF INDIRECT**  
10 **INTERCONNECTION WITH CHARTER?**

11 A. No. Charter's proposed language for section 7.1.2.7 requires Qwest to route traffic  
12 to Charter indirectly. Qwest should not be forced into an indirect connection if  
13 Qwest determines direct interconnection is the best option for Qwest's business.

14 **Q. ON PAGE 53 AND 54, MR. GATES CLAIMS THAT 240,000 MINUTES**  
15 **FOR THREE CONSECUTIVE MONTHS IS A REASONABLE**  
16 **THRESHOLD BEFORE DIRECT INTERCONNECTION MAY BE**  
17 **ALLOWED. IS THE THRESHOLD PROPOSED BY CHARTER BASED**  
18 **UPON ANY TELECOMMUNICATIONS STANDARD OF WHICH YOU**  
19 **ARE AWARE?**

20 A. No. As I explained in my direct testimony Charter's proposed benchmark does not  
21 appear in any telecommunications industry standard of which I am aware.

1 **Q. DOES CHARTER'S PROPOSED THRESHOLD PROVIDE A USABLE**  
2 **METHOD TO DETERMINE WHEN DIRECT INTERCONNECTION**  
3 **SHOULD BE IMPLEMENTED?**

4 A. No. Charter's proposed threshold appears to be an arbitrary number that Charter  
5 has developed. It does not appear to be based upon any telecommunications traffic  
6 engineering theory or industry practice for traffic engineering.

7 **Q. WHAT PROBLEM DOES USING A THRESHOLD AS PROPOSED BY**  
8 **CHARTER PRESENT?**

9 A. There appears to be no engineering calculation that can specifically determine what  
10 network capacity would be required to accommodate Charter's proposed threshold.  
11 Charter's proposal does not account for telecommunications traffic patterns. As a  
12 result, Qwest would have little idea of what network capacity it would be required  
13 to have in place or if Qwest would be better served using direct trunking with  
14 Charter. For example, as an extreme illustration, imagine that Charter has 240,000  
15 customers and they all called Qwest's customers at the same time for one minute.  
16 Charter would have reached its benchmark in one minute of its three month period.  
17 Additionally, this would require 240,000 voice grade circuits between Qwest and  
18 the third party transit provider. Similarly if only 2 people used their phone for 24  
19 hours a day for 3 months the 240,000 minute threshold would be met near the 83<sup>rd</sup>  
20 day of the 3 month (90day) timeframe. This would only require 2 voice grade  
21 circuits between Qwest and a third party transit provider. Charter's benchmark may  
22 justify direct connections in the first example but may not justify direct connection

1 in the second example. Under Charter's proposed threshold, Qwest has no way to  
2 determine if Charter's proposal is reasonable or whether it could potentially risk  
3 Qwest's network reliability.

4 **Q. DOES MR. GATES OR CHARTER'S PROPOSED LANGUAGE EXPLAIN**  
5 **HOW THE PARTIES WOULD SELECT A THIRD PARTY TRANSIT**  
6 **PROVIDER FOR INDIRECT INTERCONNECTION?**

7 A. No. Neither Mr. Gates nor Charter's proposed language explain how Qwest would  
8 know what other service providers Charter has connections with. Although the  
9 Local Exchange Routing Guide ("LERG"), a telecommunications industry wide  
10 routing guide, shows that Qwest has many service providers that are interconnected  
11 with Qwest's network, the LERG does not indicate the service providers connected  
12 to Charter. In fact, the LERG currently does not show any option for Qwest to  
13 indirectly interconnect with Charter. However, even if the LERG did show a  
14 service provider with connections to Charter, Qwest would still not know if the  
15 provider was the provider Charter would use to exchange traffic with Qwest.

16 **Q. DOES THIS ALSO CREATE CONCERNS TO QWEST?**

17 A. Yes. Although Qwest has many interconnected service providers, Qwest may only  
18 have limited options to route traffic to Charter indirectly. Consequently, Charter's  
19 proposed language may subject Qwest to undesirable terms and conditions with the  
20 available third party transit providers. Conversely, for traffic originated by Charter,  
21 Charter's language may allow Charter to route traffic to Qwest using indirect  
22 connections of which Qwest is not aware and could lead to unidentifiable traffic.

1 Thus, as I also explained in my direct testimony, Charter's proposal would create  
2 opportunities for the creation of phantom traffic. Charter's proposed language does  
3 not address any of these potential problems.

4 **Q. ON PAGE 54 OF HIS DIRECT TESTIMONY MR. GATES' EXPLAINS**  
5 **THAT "ONCE A DIRECT INTERCONNECTION IS ESTABLISHED**  
6 **BETWEEN THE PARTIES, INDIRECT INTERCONNECTION MAY NO**  
7 **LONGER BE USED EXCEPT IN OVERFLOW CONDITIONS." DOES MR.**  
8 **GATES OR CHARTER'S PROPOSED LANGUAGE DEFINE OVERFLOW**  
9 **OR HOW TRAFFIC ASSOCIATED WITH INDIRECT INTERCONNEC-**  
10 **TION WOULD TERMINATE TO QWEST'S NETWORK?**

11 A. No. Qwest's network relies upon tandem switches and end office switches for  
12 terminating traffic to Qwest end users. Neither Mr. Gates nor Charter's proposed  
13 language describes how indirect traffic is expected to route into Qwest's network.  
14 Charter's proposal is not clear as to whether Charter's originated traffic would route  
15 indirectly to Qwest at Qwest's tandem switches or indirectly to Qwest's end office  
16 switches.

17 **Q. WHY IS IT IMPORTANT TO AGREE HOW THIS TRAFFIC WILL BE**  
18 **ROUTED BETWEEN THE PARTIES?**

19 A. It is important because of the impact to customers. As additional switches are  
20 included within the call path, service quality can be impacted. When more than two  
21 switches are involved, it is necessary to adjust the engineering of the circuits so that  
22 customer impact is minimized. Otherwise customers may experience higher than

1 normal call blocking. Charter's proposal does not take into account the customer  
2 service impacts it could have.

3 **IX. CONCLUSION**

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

5 A. Yes.