BEFORE THE WASHINGTON STATE UTILITIES AND TRANSPORTATION COMMISSION

In the Matter of the Petition for)	
Arbitration of an Interconnection)	
Agreement Between)	
)	
NORTH COUNTY)	
COMMUNICATIONS CORPORATION)	
OF WASHINGTON)	DOCKET UT-093035
)	
and)	
)	
QWEST CORPORATION)	
Pursuant to 47 U.S.C. Section 252(b))	
)	

REPLY TESTIMONY

OF PHILIP LINSE

QWEST CORPORATION

DATE JUNE 17, 2010

TABLE OF CONTENTS

I.	IDENTIFICATION OF WITNESS	1
II.	PURPOSE OF TESTIMONY	1
III.	THE POSITION OF THE PARTIES	2
IV.	RESPONSE TO THE DIRECT TESTIMONY OF MR. TODD LESSER	2
V.	CONCLUSION	9

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 Qwest Network Reliability Center
5		at 700 West Mineral Avenue in Littleton, Colorado. I am employed as Director -
6		Legal Issues for Network. I am testifying on behalf of Qwest Corporation
7		("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 technical issues and associated
14		interconnection agreement ("ICA") issues raised by Mr. Todd Lesser on behalf of
15		North County Communications ("NCC"). In addition, I will explain Qwest's
16		position and how Qwest's proposed language provides NCC with the flexibility to
17		continue its use of MF signaling.

1		III. THE POSITION OF THE PARTIES
2	Q.	IN GENERAL, WHAT APPEARS TO BE NCC'S POSITION IN THIS
3		ARBITRATION?
4	A.	NCC appears to advocate its continued operation under the terms of existing
5		expired ICA. NCC also incorrectly argues that the existing expired ICA allows
6		NCC to continue its exclusive use of MF signaled interconnection trunking. My
7		testimony will focus generally on the issue of signaling while Ms. Albersheim will
8		focus on Qwest's attempt to obtain an updated modern ICA.
9	0	WHAT IS OWEST'S RESPONSE TO NCC'S POSITION IN THIS
10	ν.	
10		ARBITRATION?
11	A.	NCC argues against a new ICA that accommodates NCC's goal to continued use
12		of MF signaling in favor of an ICA that actually requires NCC to implement SS7
13		signaling. Because Qwest's arbitration position supports NCC's goal to retain MF
14		signaling, it appears as though there is no dispute over those provisions.
15		IV. RESPONSE TO THE DIRECT TESTIMONY OF MR. TODD LESSER
16	Q.	DOES NCC'S EXISTING ICA WITH QWEST ALLOW NCC TO
17		CONTINUE ITS EXCLUSIVE USE OF MF SIGNALING AS MR. LESSER
18		CONTENDS ON PAGE 4 OF HIS DIRECT TESTIMONY?
19	A.	No. As Ms. Albersheim explains in her testimony, while the ICA does allow MF
20		signaling, it also contains an implementation provision that requires the parties to
21		implement SS7 signaling within a very short time after the ICA was effective. The

existing ICA clearly reflects the condition that the parties would have the capability
 to interconnect using SS7 signaling.

3 Q. DID NCC EVER COMPLETE SS7 INTERCONNECTION?

4 A. No. They did not.

5 Q. DOES QWEST'S PROPOSED ICA REQUIRE NCC TO CONVERT TO SS7 6 SIGNALING ON ITS INTERCONNECTION TRUNKING AS MR. LESSER 7 CONTENDS ON PAGE 4 OF HIS DIRECT TESTIMONY?

8 No. In fact, contrary to NCC's position in this arbitration, Qwest's proposed ICA A. 9 does provide a provision for NCC to continue the use of MF signaling for 10 Interconnection. In fact, Qwest's proposed language is a compromise that 11 accommodates NCC's insistence on its continued use of MF interconnection 12 signaling, predicated on the use of one-way trunks for NCC's interconnection with 13 Qwest. Therefore, it is unclear what real dispute exists regarding NCC's continued 14 use of MF trunk signaling.

15 Q. IS QWEST AWARE OF SIGNIFICANT TRAFFIC THAT NCC ROUTES 16 TO QWEST'S END USERS?

A. No. However, the limitations associated with MF prohibit the transmission of
calling party information on local calls. Thus, Qwest would be blind to any NCC
originated local calls that NCC routes to Qwest through another service provider
(i.e. transit provider) using MF signaling. Qwest can not be sure that there is not a

significant volume of traffic from NCC destined to Qwest end users unless NCC
 appropriately implements SS7.

3 Q. NCC'S WITNESS STATES THAT "QWEST ASSERTS THAT THEY 4 DON'T HAVE THE ABILITY TO TRACK THE USAGE" WITH MF 5 SIGNALING. CAN YOU PLEASE RESPOND?

6 A. Yes. NCC's witness misrepresents Qwest's position. MF signaling does allow 7 Qwest to manually track overall usage, and Qwest has not argued to the contrary. 8 However, MF signaling has significant limitations, and those limitations include the inability to accurately segregate traffic on a jurisdictional basis or otherwise. This 9 10 is important because the lack of calling party information or a bare measurement of 11 overall minutes does not provide a basis for billing. Billing and the billed party's 12 validation reflects the jurisdictional nature of the traffic, e.g., interstate, intrastate, 13 local and transit. Qwest's tracking associated with MF signaled trunks does not 14 separately identify traffic that would allow for bill validation or generate 15 appropriate billing.

Q. ON PAGE 4 OF HIS DIRECT TESTIMONY MR. LESSER STATES THAT IF QWEST WERE UNABLE TO TRACK MF USAGE THAT WOULD MEAN THAT QWEST WAS, FOR DECADES, BILLING CUSTOMERS WITHOUT TRACKING USAGE. IS THIS CORRECT?

A. No, of course not. Mr. Lesser misrepresents the history and configuration of the
network. As I also explain in my direct testimony, prior to the Act, MF signaled

Docket No. UT-093035 Rebuttal Testimony of Philip Linse Exhibit PL-3T June 17, 2010 Page 5

1 trunking was engineered to provide information specific to the type of traffic such 2 as long distance, Operator Services, or Directory Assistance. Such trunking was dedicated for the specific purpose for which it was designed. This made the 3 4 recording and validation of traffic fairly straight forward. Because trunks were 5 segregated by traffic type, validating records required little more than counting the 6 total number of minutes on each trunk and comparing this total with that of the 7 originating switch¹ record. Additionally, local/Extended Area of Service ("EAS") traffic was typically exchanged without worry of MF signaling limitations due to 8 9 the lack of agreements for compensation of such traffic – in other words, local/EAS 10 traffic was exchanged on a bill and keep basis; and, because the carriers exchanging 11 the traffic were both incumbents, and traffic was believed to be roughly in balance 12 due to the customer base of each carrier, it was not necessary to create billing 13 records. After the Act, competitive carriers began the process of agreeing upon 14 rates for the exchange of local traffic. However, the combination of different types 15 of traffic on the same trunk - local, transit, non-transit and possibly long distance – 16 created a need for a more advanced signaling and traffic recording system. SS7 17 signaling was the available advanced signaling system that assisted with traffic 18 recording and providing more information on local calls that MF signaling simply 19 does not provide.

¹ Originating switch; in the context used here is the first switching point in the LATA.

Q. ON PAGE 4 OF HIS DIRECT TESTIMONY, MR. LESSER CLAIMS THAT NCC'S CONVERSION TO SS7 WOULD REQUIRE NCC TO SCRAP ITS ENTIRE NETWORK. DO YOU AGREE?

4 A. No. Mr. Lesser's claim exaggerates the impact that converting to SS7 would have 5 on NCC's network. NCC operates Nortel DMS-100 switches exclusively within the Public Switched Network ("PSTN").² Qwest and other large local exchange 6 7 carriers (LECs) such as AT&T and Verizon also operate these same switch models that number in the hundreds or even thousands. Qwest installed the first of several 8 9 hundred Nortel digital switches in 1985 while NCC appears to have installed its 10 first DMS-100 in 1997³. Contrary to what could be concluded from Mr. Lesser's 11 testimony, both these other LECs and Qwest have performed conversions from MF signaling to SS7 signaling⁴ well before 1997 without having to "scrap" their 12 13 switches, let alone their entire networks. These conversions were often made using 14 the same trunks as were used as MF signaled trunks. Thus, there was no need to 15 "scrap" their transport networks. Mr. Lesser clearly overstates the impact of NCC's 16 implementation of SS7 in its network.

17 Q. ON PAGE 5 OF HIS DIRECT TESTIMONY MR. LESSER CLAIMS THAT

18

NCC HAS DESIGNED ITS WHOLE NETWORK ON THE EXISTING

² This conclusion is validated by NCC's disclosure of its switches in Telcordia's Local Exchange Routing Guide ("LERG").

INTERCONNECTION AGREEMENT. DO YOU AGREE WITH MR. LESSER?

- A. No. If NCC had designed its network according to the terms of the existing ICA,
 NCC would have designed its network with SS7 signaled interconnection trunking
 with Qwest.⁵ If NCC had designed its network according to the terms of the
 existing ICA, it would unlikely that this arbitration would be needed.
- Q. ON PAGE 7 OF HIS DIRECT TESTIMONY MR. LESSER CLAIMS THAT
 8 THERE IS NO REASON TO REPLACE OR MODIFY THE EXISTING

9 AGREEMENT GENERALLY OR THE SIGNALING AND BILLING 10 REQUIREMENTS SPECIFICALLY. DO YOU AGREE?

A. No. The existing ICA requires NCC to implement SS7 signaling. NCC appears to
be objecting to Qwest's proposed language under the premise that the new ICA
would require NCC to upgrade to SS7 signaling and not continue its use of MF
signaling for interconnection. To the contrary, Qwest has proposed reasonable
language that accommodates NCC's continued use of MF signaling in an updated
ICA.

⁴ Approximately 75% of Qwest's Washington switches were SS7 capable prior to 1997. Today, Qwest's switching network (including all of its DMS-100s) is entirely digital and is SS7 capable.

⁵ See section XXXIII of the parties' existing interconnection agreement.

Q. FINALLY, IS IT REALISTIC FOR A NCC TO EXPECT THAT IT WOULD NOT HAVE TO DEAL WITH TECHNOLOGY CHANGES FOR 13 YEARS AS MR. ASSUMES ON PAGE 4 OF HIS TESTIMONY?

4 A. No. Telecommunications networks are technology based and constantly evolving. 5 For example, Qwest's switching network has evolved from mechanical analog to 6 completely digital and SS7 capable. Even regulation has demanded the 7 advancement of technology in telecommunications such as Equal Access and Local 8 Number Portability. Qwest has implemented these changes and more. Since 1996 9 Qwest has filed over 400 network disclosures of planned changes to Qwest's 10 network that help advance Qwest's use of technology.

When the advancement of technology is ignored, such as with NCC's insistence upon its continued use of MF trunk signaling, customers and carriers can be impacted. Customers can be adversely impacted as the result of longer call set up times. Carriers can be adversely impacted as the result of NCC's network inefficiencies and the lack of calling party information.

Other carriers' networks can be adversely impacted because the SS7 network is designed to accommodate the inefficiency of NCC's network. As I explained in my direct testimony, increased trunk utilization occurs when the customers of other carriers call NCC's customers and the called party's line is busy. Contrary to SS7 networks, MF networks maintain the end to end connection for the duration of the busy signal. However, when MF signaling is used in combination with SS7

1		trunking, the SS7 trunking becomes inefficiently used because it must
2		accommodate the MF technology to enable call supervision and call completion.
3		The inefficient nature of NCC's MF network is then incorporated into the other
4		carrier's SS7 trunking network with every call to and from NCC's network.
5		The lack of calling party information keeps other carriers from attempting to
6		validate call jurisdiction. This can lead to network arbitrage where compensation
7		by the responsible party may be avoided. Although the use of SS7 can not
8		eliminate this totally, it does assist with all carriers' transparent use of the network.
9		V. CONCLUSION
10	Q.	DOES THIS CONCLUDE YOUR TESTIMONY?

11 A. Yes.