BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

In the Matter of the Continued	**)**	
Costing and Pricing of	**)**	**Docket No. UT-003013**
Unbundled Network Elements	**)**	
And Transport and Termination	**)**	
		Part A
_____)		

Rebuttal Testimony

of

Robert J. Hubbard

August 4, 2000

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I.IDENTIFICATION OF WITNESS

PLEASE STATE YOUR NAME, EMPLOYER AND BUSINESS ADDRESS.

My name is Robert J. Hubbard. I am employed by Qwest Corporation (formerly known as U S WEST), as a Member of Technical Staff. My business address is 700 West Mineral, Littleton, Colorado 80102**.**

ARE YOU THE SAME ROBERT J. HUBBARD WHO FILED RESPONSIVE TESTIMONY IN THIS DOCKET?

Yes.

WHAT IS THE PURPOSE OF YOUR TESTIMONY?

The purpose of my testimony is to reply to the rebuttal testimony of Michael Zulevic and John Klick. Specifically, Mr. Zulevic's and Mr. Klick's testimony includes several incorrect assumptions about the process for installing splitters and tie cables and the costs involved in this type of collocation. I explain why these assumptions are wrong. On the other hand, my testimony also expresses agreement with some aspects of their responsive testimony.

II. DISCUSSION OF ISSUES

Q. IN DISCUSSING THE COSTS ASSOCIATED WITH SPLITTER

COLLOCATION, MR. ZULEVIC AND MR. KLICK TESTIFY THAT THE COSTS SHOULD BE BASED ON THE ASSUMPTION THAT ONLY MAIN DISTRIBUTION FRAMES ("MDFs"), NOT COSMIC FRAMES, WILL BE USED IN CENTRAL OFFICES. IS IT PROPER TO ASSUME THAT U S WEST WILL USE ONLY MDFs?

A. No.

Q. PLEASE EXPLAIN WHY MR. ZULEVIC AND MR. KLICK ARE INCORRECT IN ASSUMING THAT U S WEST WILL USE ONLY MDFs AND WILL NOT USE COSMIC FRAMES.

A. Mr. Zulevic states his "understanding" that MDF architectures are the most efficient architectures for a forward-looking network (Zulevic Rebuttal at 6). There are at least two problems with this assumption on his part. First, Mr. Zulevic and Mr. Klick are improperly focusing on a hypothetical central office instead of the actual central offices that U S WEST has in place in Washington today. As Mr. Thompson explains in his testimony, the proper focus for costing purposes is on the U S WEST central offices that exist today in Washington and on the costs of changing those offices to accommodate line sharing. If we were to assume the use of truly forward-looking central offices, as Mr. Zulevic and Mr. Klick suggest, then there would not be any opportunity for line sharing at all. In

particular, the cable network that terminates within a central office that is truly forward-looking would be all-fiber and would not include any copper. That would be the case because fiber cable can transport increased volumes of traffic in less space than traditional copper cable paths. As a result, line sharing would not be possible. However, in the real world - - in U S WEST's central offices as they exist today - - the cable network is not all-fiber, line sharing is possible, and the costs that U S WEST incurs to accommodate line sharing are dependent upon the existing configurations and features of each central office. These real-world central offices include both MDFs and COSMIC frames. U S WEST has been using MDFs in its central offices for decades and has been using COSMIC frames for the past 25 years. COSMIC frames, however similar to the MDF's, utilize the short jumper concept to provide a cross connect point in a digital environment. Second, Mr. Zulevic and Mr. Klick are incorrect that the use of COSMIC frames results in inefficiencies. Because they are smaller than MDFs, COSMIC frames allow U S WEST to save space and, in turn, money in its central offices. These frames allow for single-sided jumper operations as contrasted with MDFs that utilize the traditional double-sided arrangement. The space that U S WEST saves through the use of COSMIC frames reduces, for example, the building costs that U S WEST incurs. Without these frames, U S WEST's overall operational costs would be higher. Accordingly, Mr. Zulevic and Mr. Klick are incorrect in contending that U S WEST's use of COSMIC frames increases the costs of line

sharing.

Q. DOES THE EIGHTH CIRCUIT RULING UPHOLD THE BELIEF THAT A FORWARD LOOKING CENTRAL OFFICE IS NECESSARY IN DEVELOPING A MODEL FOR COST RECOVERY?

A. No. It is my understanding, from reviewing the Eighth Circuit decision (No 96-3321, Filed: July 18, 2000) that an ILEC can recover cost from an actual design in a central office and not on a hypothetical central office design. In this light, I believe that Mr. Zulevic and Mr. Klick are wrong in their assumption that Qwest must model a hypothetical central office. Therefore, Qwest uses assumptions, based on real data, and not some fantasy central office design.

Q. MR. ZULEVIC STATES IN HIS RESPONSE TESTIMONY (PAGE 7) THAT THE USE OF AN INTERMEDIATE FRAME IS NOT REQUIRED. DO YOU AGREE WITH THIS STATEMENT?

A. No. Both Mr. Zulevic and Mr. Klick assume that a 100 pair tie cable will be placed from the splitter location to the MDF or COSMIC frame for voice and then one for voice and data, and also, a 100 pair tie cable from the splitter to the collocation area to carry data. But what they fail to mention is that in a 96 line splitter, there are 12, 25-pair cables that must be connected into the back of the splitter. In this arrangement, there are 4 cables that carry data, and 4 cables that

carry voice, and then 4 cables that carry voice and data. These 12 cables must "physically" connect to the three, 100-pair tie cables that connect to the collocation area and the MDF or COSMIC frame. Therefore, either an IDF or ICDF is "physically" needed to make the transition from the cables that plug into the splitter to the tie cables.

Q. MR. ZULEVIC STATES ON PAGE 9 OF HIS RESPONSE TESTIMONY THAT THE AMOUNT OF WORK REQUIRED TO INSTALL A SPLITTER IS MINIMAL. WILL YOU RESPOND TO THIS ALLIGATION?

A. Yes. As stated in my Response Testimony on page 8, all of the steps required to install a splitter are a lot more time consuming than the minimal amount that Mr. Zulevic states. Also, on line 20 and 21, page 9, of Mr. Zulevic's testimony, he states that the splitters would be purchased fully equipped with line cards, so no additional line card installation is required. What he fails to mention, again, is that the line cards that are ordered with the splitters, that are shipped fully equipped, are individually wrapped for protection and have to be unwrapped and then placed in the splitter. Even though this does not require a great deal of time, it is yet, another example, of the understatement of time by Mr. Zulevic to install a splitter.

III. CONCLUSION

Q. DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY?

A. Yes.