BEFORE THE
WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

MCLEODUSA TELECOMMUNICATIONS SERVICES, INC., Petitioner,	)	Docket No. UT-063013
v.	)	
QWEST CORPORATION, Respondent.	)	

REBUTTAL TESTIMONY

OF

MICHAEL STARKEY

On behalf of

McLeodUSA Telecommunications Services, Inc.

June 22, 2006

TABLE OF CONTENTS

EXHIBITS

I. INTRODUCTION

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS FOR THE RECORD.

A. My name is Michael Starkey. My business address is QSI Consulting, Inc., 243 Dardenne Farms Drive, Cottleville, Missouri 63304.

Q. ARE YOU THE SAME MICHAEL STARKEY WHO FILED DIRECT TESTIMONY IN THIS PROCEEDING ON APRIL 28, 2006 AND SUPPLEMENTAL DIRECT TESTIMONY ON JUNE 5, 2006?

A. Yes.

Q. WHAT IS THE PURPOSE OF YOUR SURREBUTTAL TESTIMONY?

A. I will respond to the Response Testimony filed on behalf of the Qwest Corporation (hereafter "Qwest") by Mr. William R. Easton,[1] Mr. Curtis Ashton,[2] and Ms. Teresa K. Million.[3]

II. RESPONSE TO MR. EASTON

Q. MR. EASTON RAISES A NUMBER OF ISSUES RELATED TO YOUR DIRECT TESTIMONY, CAN YOU SUMMARIZE THE POINTS YOU INTEND TO ADDRESS?

---

[1] Response Testimony of William R. Easton on behalf of Qwest Corporation, Washington Docket No. UT-063013, June 14, 2006 ("Easton Response").

[2] Response Testimony of Curtis Ashton on behalf of Qwest Corporation, Washington Docket No. UT-063013, June 14, 2006 ("Ashton Response").

[3] Response Testimony of Teresa K. Million on behalf of Qwest Corporation, Washington Docket No. UT-063013, June 14, 2006 ("Million Response").

A. Yes, they are summarized below:

1. Despite Mr. Easton's assertions to the contrary, McLeodUSA is very aware of the fact that this case focuses on specific contract language and the proper interpretation of that language (specifically the *Power Measuring Amendment*). However, the parties obviously disagree as to the proper interpretation of the language and hence, additional information necessary to discern the most reasonable interpretation is relevant and informative. Moreover, given that Qwest's own engineering documentation, its cost study supporting its rates and the real-world manner in which it provisions collocation power belie Qwest's interpretation of the *Power Measuring Amendment*, it is no wonder Mr. Easton would suggest an unreasonably narrow review.

2. Mr. Easton's assertions regarding the information McLeodUSA should have had available to it prior to signing the *Amendment* miss the mark. The fact of the matter is that the *Power Measuring Amendment* drafted by Qwest and signed by McLeodUSA does not contain the same language as the *Wholesale Products and Services* portion of Qwest's website that resulted from the industry meetings to which Mr. Easton repeatedly refers.[4] All of the Change Management Process ("CMP") meetings Mr. Easton discusses were intended to perfect the language in Qwest's wholesale catalog. However, the actual *Power Measuring Amendment* that was ultimately provided to McLeodUSA and executed by the parties includes language which is specifically different from that found in the catalog. In fact, the language to which Mr. Easton refers when discussing Allegiance Telecom[5] has been specifically removed from the *Amendment*. Most notably, the Amendment discusses the Power Usage charge generally, and even defines it to include Qwest's power plant capacity (and the actual AC usage purchased from the utility). As such, regardless of what the wholesale catalog says, or what Qwest provided to CLECs in relation to drafting the catalog information, the Amendment is very different and must be interpreted consistent with its own language.

3. Mr. Easton claims that my direct testimony constitutes an attack on the "Power Plant rate itself."[6] He is mistaken. My testimony makes no mention as to whether the Power Plant rate adopted by the Commission is reasonable or not, nor does it discuss the rate level in any detail. Instead, my direct testimony (as will my testimony below) points out that the manner by which the rate is established also dictates the manner by which it must be assessed if it is to recover the intended level of DC power plant investment. In other words, my testimony discusses only the application of the Power Plant rate, which is exactly at the heart of the debate regarding the *Power Measuring Amendment*. In this

[4] The information from Qwest's website is provided by Mr. Easton as Exhibit WRE-2. See also, Easton Response, page 3, lines 21 – 23 and page 4, lines 1 – 6 and Easton Response page 4, lines 11 – 12.

[5] See, Exhibit WRE_3.

[6] Easton Response, page 21, lines 11 – 12. See also, Easton Response, page 2, lines 22 -26. See also, Ashton Response, page 2, line 24 – page 3, line 2.

> circumstance, Qwest's Power Plant rate is developed using the amount of power plant capacity actually consumed by Qwest and its collocators, not based upon the size of power feeder cables ordered by McLeodUSA (or any other collocator). Accordingly, applying the Power Plant rate based upon the size of McLeodUSA's power feeder cables (consistent with Qwest's reading of the Amendment) results in Qwest enjoying a windfall at its collocators' expense. It likewise results in CLECs paying far more for DC power plant than Qwest does, even though both rely upon the exact same DC power plant to electrify their respective telecommunications equipment.

Q. PLEASE DESCRIBE FURTHER MR. EASTON'S POINT REGARDING THE CONTRACT LANGUAGE AND HIS BELIEF THAT IT SUPPORTS QWEST'S POSITION IN THIS PROCEEDING.

A. At page 7 of his response testimony, Mr. Easton focuses on the fact that paragraphs 2.2 and 2.2.1 of the *Power Measurement Amendment* reference a *-48 Volt DC Power Usage Charge* (singular) when describing the application of its power measuring activities. Therein, Mr. Easton places substantial weight on the fact that the *Amendment* uses the singular "Charge" rather than the plural "Charges" when describing *-48 Volt DC Power Usage.* Mr. Easton suggests that if the intention of the *Amendment* was to apply to both the *Usage* (8.1.4.1.3) and the *Power Plant* (8.1.4.1.1) charges, it would have been used in the plural. Based upon this distinction, Mr. Easton concludes that the *Amendment* "clearly" implies measured usage for one element only, i.e., the *Power Usage* element (8.1.4.1.3) and not the corresponding *Power Plant* element (8.1.4.1.1).

Q. DO YOU AGREE?

A. No, I do not. I would describe Mr. Easton's analysis above as somewhat tortured. In fact, the *Amendment* defines the very "*DC Power Usage Charge*" (singular) upon which Mr. Easton places substantial weight, as being directly tied to the power plant capacity used by the CLEC:

> The DC Power Usage Charge is for capacity of the power plant available for CLEC's use.

Hence, while Mr. Easton's erroneous interpretation relies upon the relatively obscure notion that the singularity of the term "*DC Power Usage Charge*" dictates its application (even though it is clearly meant to refer to a group of individual rate elements included at Section 8.1.4 of Exhibit A – often times a group can be refereed to in the singular if the author is addressing a single group),[7] the plain language of the *Amendment* defies this interpretation. The actual definition rendered to the "*DC Power Usage Charge*" within the *Amendment* itself would have to be ignored in order to conclude that the *Amendment* impacts only rate element 8.1.4.1.3 (*Usage*) and not 8.1.4.1.1 (*Power Plant*).

Q. BUT MR. EASTON CLAIMS AT PAGE 8 OF HIS RESPONSE TESTIMONY THAT YOUR INTERPRETATION OF SECTION 2.1 IS PROBLEMATIC FOR THREE REASONS? WOULD YOU LIKE TO RESPOND?

A. Yes. First, Mr. Easton states that "Section 2.1 of the Amendment is a general, contextual section which does not identify the rights and obligations of the parties." (page 8, lines 14 – 16). Though I fail to see how this makes a difference, even assuming for the sake of argument that Section 2.1 of the Amendment is "general" and "contextual" as Mr. Easton characterizes it, the context that it provides supports McLeodUSA's interpretation of the *Amendment*. Mr. Easton's approach seems too ready to ignore sections of the *Amendment* simply because they don't support Qwest's interpretation.

Second, Mr. Easton claims the mere mention of the DC power plant in the *Amendment* is not dispositive of this issue because Qwest makes available the "as ordered" amperage

associated with McLeodUSA's power cables. Presumably, Mr. Easton is saying that since Qwest makes the amount of power associated with McLeodUSA's power cables available to it, Section 2.1 ["The DC Power Usage Charge is for the capacity of the power plant available for CLEC's use"] Qwest is justified in assessing the power plant charge on an "as ordered" basis. There are a number of things wrong with Mr. Easton's argument in this regard. For example, I disagree that the Amendment merely "mentions" power plant capacity, instead, it defines power plant capacity and its associated rate as an element to be impacted by measuring requirements of the Amendment. Indeed, the entire purpose of the "Power Measuring Amendment" was to change the manner by which the DC power rate elements were being assessed, from an "as ordered" to an "as measured" basis. Mr. Easton's suggestion that DC power plant is mentioned in the *Amendment* only to confirm that the rate will reflect the capacity made available through the order (notice the language doesn't mention the order anywhere), simply doesn't ring true given the overarching purpose of the Amendment. Likewise, this is the first time I've heard this argument from Mr. Easton, and it strikes me not as a reasoned explanation of the intent of the language developed prior to circulating the *Amendment*, but instead, a late attempt to salvage what is otherwise a very damaging section of the contract relative to Qwest's position in this case.

Q. WHAT IS MR. EASTON'S THIRD CRITICISM REGARDING YOUR INTERPRETATION OF SECTION 2.1?

A. Mr. Easton claims that McLeodUSA's interpretation is inconsistent because Section 2.1 would require that the DC Power Measuring Amendment applied ***only*** to the Power Plant

[7] I have provided Exhibit A (the pricing appendix) as Exhibit MS-4 to this testimony.

charge – a position even McLeodUSA is not taking in this case. Mr. Easton's argument is a red herring. He is keying off an observation made by the Utah ALJ who recognized that the Amendment (in Section 2.1) is actually more clear about its requirement to apply the DC Power Plant on a measured basis, than it is an intention to apply Power Usage in the same manner (as Qwest interprets it). While I credit Mr. Easton with attempting to address an issue that is unsupportive of Qwest's position head-on, his explanation does not make sense. Qwest and McLeodUSA both agree that *Power Usage greater than 60 Amps* (rate element 8.1.4.1.3), should be assessed consistent with measured usage. That is clear from both the *Amendment* when it discusses the Power Usage category as a whole (including both Power Plant [8.1.4.1.1] and Power Usage [8.1.4.1.3]) as well as from the cost study. That is not in debate. The only question is whether the Power Plant rate element should be assessed in the same manner. And, as the Utah ALJ observed, Section 2.1 specifically defines the rates to be assessed on a measured basis to include the Power Plant rate meant to recover power plant capacity available to the CLEC.

Q. MR. EASTON ALSO ARGUES THAT MCLEODUSA'S INTERPRETATION WOULD REQUIRE THE COMMISSION TO INTERPRET A HEADING WITHIN THE AMENDMENT AND THAT THE PARTIES' INTERCONNECTION AGREEMENT SPECIFICALLY REJECTS THE NOTION THAT HEADINGS SHOULD HAVE ANY BEARING ON PROPER INTERPRETATION.[8] DO YOU AGREE?

A. No, not at all. The "heading" to which Mr. Easton refers is actually the rate category at Section 8.1.4 of Exhibit A; the pricing amendment to the parties' interconnection

agreement. As described above, Section 8.1.4 of the pricing amendment is entitled "Power Usage" which includes 8.1.4.1 "DC Power Usage, per Ampere per Month" and includes three rate elements: Power Plant (8.1.4.1.1), Usage Less Than 60 Amps, per Ampere Ordered (8.1.4.1.2) and Usage More Than 60 Amps, per Ampere Used (8.1.4.1.3). The term "-48 Volt DC Power Usage"(and "AC Usage") is the term referred to by the *Amendment* for which measured usage should apply (see Section 2.2.1 of the *Amendment*). Since there are no other charges in Exhibit A which have the precise label of "***-48 volt*** DC Power Usage", it is reasonable to assume that this is referring to the rate grouping 8.1.4.1 "DC Power Usage", which includes both "Power Plant" and "Usage" rate elements. I should also note that in most other Qwest jurisdictions wherein the exact same *Amendment* language was signed by the Parties, this same rate grouping (entitled "DC Power Usage" in Washington, is precisely titled "***-48 volt*** DC Power Usage").

Contrary to Mr. Easton's claim, McLeodUSA is not asking the Commission to denote any special interpretive merit to Exhibit A, Section 8.1.4. Instead, McLeodUSA is simply pointing out that the *Amendment* signed between the parties identifies *-48 Volt DC Power Usage* as "specified in Exhibit A of the Agreement" as the operative rates to be impacted by the *Amendment* (*see* Sections 2.1, 2.2 and 2.2.1). The fact that this same rate category exists in Exhibit A (less the "-48 volt"), and the fact that this rate category subsumes both the *Usage* and the *Power Plant* charges consistent with the definition in Section 2.1 of the Amendment, is worth noting. At a minimum, it must be admitted that a reasonable person reviewing the *Amendment* with those facts in mind, would logically

[8] Easton Response, page 7, lines 16 – page 8, lines 8. See also, Easton Response, page 20, line 19 – page 21, line 2.

conclude that the Amendment provides for measured usage on both of the charges identified under 8.1.4.1 *DC Power Usage*.

Q. AT PAGE 7 (LINES 10 – 12) OF HIS REBUTTAL, MR. EASTON SUGGESTS THAT BECAUSE THERE IS NO RATE ASSOCIATED WITH SECTION 8.1.4.1 OF EXHIBIT A (ENTITLED *DC POWER USAGE*), IT IS NOT A SEPARATE RATE ELEMENT, AND SHOULD NOT BE READ TO HAVE ANY EFFECT ON THE LANGUAGE OF THE AMENDMENT. THIS APPEARS TO BE AN EXTENSION OF HIS ARGUMENT THAT 8.1.4 IS A "HEADING" AND IS OF NO SIGNIFICANCE, TO WHICH YOU DISAGREED. DO YOU AGREE WITH THIS ARGUMENT?

A. No. While I agree it is not a separate rate element, it certainly does have significance. Section 8.1.4 entitled Power Usage is a group of rate elements that includes three separate rates as follows (the table below is a direct extraction from Exhibit A):

Washington Exhibit A – Section 8.1.4 "Power Usage"

8.1.4	Power Usage			
	8.1.4.1	DC Power Usage, per Ampere, per Month		
		8.1.4.1.1	Power Plant	$9.34
		8.1.4.1.2	Usage Less than 60 Amps, per Ampere Ordered	$1.57
		8.1.4.1.3	Usage More than 60 Amps, per Ampere Used	$3.13

It is of utmost significance because it is the only place in Exhibit A wherein the term *DC Power Usage* identified specifically in the Amendment as the rates to be measured, can be found. At page 5 of his response testimony Mr. Easton states as follows:

> Indeed, the term "DC Power Usage Charge" appears five times in the DC Power Measuring Amendment, with an additional two references to the "power usage rate" in section 1.2. Because only one rate element has

> been explicitly identified in the Amendment, it would be inconsistent with the language of the Amendment to conclude that it applies to more than one element, especially a rate element that is never specifically mentioned in the Amendment.

Unfortunately, Mr. Easton's testimony is only partially accurate. Mr. Easton ignores the fact that the term "DC Power Usage Charge", to which he affixes much import, includes both Power Plant and Usage under Exhibit A. Note that Mr. Easton is trying to equate the term "DC Power Usage" with the rate element 8.1.4.1.3 "Usage" in Exhibit A. However, as shown in Exhibit A, these terms have distinct meanings with "Usage" being a rate element under the rate grouping "DC Power Usage" (just like the Power Plant charge 8.1.4.1.1 is) referenced in the *Amendment*. In other words, Mr. Easton attempts to convince the Commission that because the term "DC Power Usage" is used five times when describing which elements will be measured, it must conclude that only the "Usage" rate element should be measured, while ignoring the fact that the term "DC Power Usage" has a separate meaning within Exhibit A (i.e., Usage and Power Plant).

Finally, the *Amendment* speaks often of an "AC Usage Charge," which is meant to reflect "…the power used by the CLEC." Yet, nowhere in the pricing appendix to the parties' Interconnection Agreement (Exhibit A) do we find a rate element identified as "AC Usage Charge." Hence, Mr. Easton's general claim that the fact that the *Amendment* mentions the "DC Power Usage Charge" five times somehow adds credence to Qwest's interpretation of the *Amendment* is notably misplaced for numerous reasons.

Q. MR. EASTON ATTACHES SPECIAL SIGNIFICANCE TO THE FACT THAT "ONLY THE POWER USAGE RATE ELEMENTS MAKE THE DISTINCTION BETWEEN 'GREATER THAN' OR 'LESS THAN 60 AMPS'" YET "THE

APPLICABLE RATE FOR POWER PLANT CAPACITY MAKES NO SUCH DISTINCTION." (EASTON RESPONSE, PAGE 6, LINES 15 – 17). DO YOU AGREE THAT THIS DINSTINCTION SUPPORTS QWEST'S POSITION ON THIS ISSUE?

A. No.

Q. WHY NOT?

A. Because, in many states (all of which rely upon the same Amendment), Qwest does have separate rate elements for Power Plant – one for "below 60 amps" and one for "above 60 amps" – yet Qwest assesses the Power Plant rate in those states the same way as it does here in Washington. For instance, I recently testified in Utah, where McLeodUSA and Qwest are disputing this same issue, and in Utah, Qwest's Power Usage rate structure is structured as follow:

Qwest Utah DC Power Usage Rates

8.1.4	48 Volt DC Power Usage				
	8.1.4.1	-48 Volt DC Power Usage, per Ampere, per Month			
		8.1.4.1.1	Power Plant		
			8.1.4.1.1.1	Power Plant - Less Than 60 Amps	$11.7795
			8.1.4.1.1.2	Power Plant - Equal to or Greater Than 60 Amps	$7.7927
	8.1.4.2	Power Usage			
		8.1.4.2.1	Power Usage - 60 Amps or Less, per Amp		$1.95
		8.1.4.2.2	Power Usage - More than 60 Amps, per Amp		$3.89

As this table shows, Qwest, in Utah, provides two separate rate elements for both Power Plant and Power Usage, based on the 60 amp threshold found in the Power Measuring Amendment, but, as evidenced by the ongoing dispute in Utah, Qwest ignores this distinction in Utah and applies Power Plant on an "as ordered" basis just like it does here in Washington. If the fact that Qwest has only one Power Plant rate element in

Washington means that it should be assessed on an "as ordered" basis, as Mr. Easton testifies, then it would also mean that two separate Power Plant rate elements based on the Power Measuring Amendment 60 amp threshold supports applying the Power Plant rate on a measured basis. But given that this issue has no bearing on Qwest's interpretation of the Power Measuring Amendment, Mr. Easton's testimony in this regard should be given little, if any, weight.

Q. DOES QWEST HAVE MULTIPLE RATES FOR POWER PLANT – DEPENDING ON THE 60 AMP THRESHOLD - IN STATES OTHER THAN UTAH?

A. Yes. A quick review of Qwest's SGATs[9] shows that Qwest has separate Power Plant rates – depending on the 60 amp threshold found in the Power Measuring Amendment - in the following 7 additional states: Arizona, Colorado, Idaho, Nebraska, New Mexico, North Dakota, Wyoming. Further, Qwest and McLeodUSA have signed an *Amendment* in those states that includes exactly the same language as the Washington *Amendment*. Hence, Qwest provides multiple Power Plant rates in eight of its 14 states, and in a number of states, Qwest has three separate Power Plant rates (>60 amps; <60 amps; and = 60 amps). Further, Minnesota's DC power rate structure consists of only the "AC Power Usage" charge, and both Oregon and South Dakota have a DC power rate structure consisting of a single "-48Volt DC Power Usage Charge." Therefore, despite Mr. Easton's attempt to place great significance on the single Power Plant rate in Washington, the fact of the matter is that the Washington rate structure is not reflective of the rate structure Qwest has in a majority of its states, where Qwest does provide multiple DC Power Plant rates based on the threshold in the *Power Measuring Amendment*. If

[9] Available at: http://www.qwest.com/wholesale/clecs/sgatswireline.html#

anything, the fact that Qwest has multiple Power Plant rates in a majority of its states based on the same 60 amp threshold in the Power Measuring Amendment (and has admitted that its cost studies are structured the same across states), supports the notion that the Power Plant rate should be assessed on a measured basis.

Q. IS THERE OTHER INFORMATION GLEANED FROM DC POWER RATE STRUCTURES IN OTHER STATES THAT SUPPORT MCLEODUSA'S INTERPRETATION OF THE POWER MEASURING AMENDMENT?

A. Yes, there is. As noted above, in both Oregon and South Dakota, Qwest recovers its cost for both electrical usage and its power plant via one combined charge entitled "-48 volt DC Power Usage" –the precise term used in the *Power Measuring Amendment* referenced above. In both Oregon and South Dakota, Qwest and McLeodUSA have signed a *Power Measuring Amendment* with the exact same language at issue here. Further, in those states, Qwest currently bills McLeodUSA the -48 Volt DC Power Usage charge based upon measured usage. In other words, in Oregon and South Dakota, Qwest is currently billing McLeodUSA for recovery of its DC Power Plant, on a measured usage basis, consistent with the exact same *Power Measuring Amendment* that is at issue here (even though in Washington Qwest argues doing so would lead it to under-recovery).

Q. MR. EASTON SPENDS A GOOD DEAL OF HIS RESPONSE TESTIMONY DESCRIBING INFORMATION THAT MAY HAVE BEEN AVAILABLE TO MCLEODUSA PRIOR TO SIGNING THE AMENDMENT – INFORMATION THAT QWEST BELIEVES SHOULD HAVE RESOLVED ANY DIFFERENCE OF OPINION AS IT RELATES TO THE APPLICATION OF THE

AMENDMENT (e.g., EASTON RESPONSE PAGES 9 – 12). PLEASE COMMENT.

A. Mr. Easton provides Exhibit WRE_2, which is an excerpt from Qwest's website that he suggests was available to McLeodUSA prior to signing the *Power Measuring Amendment*. According to Mr. Eason, Exhibit WRE_2 makes Qwest's intentions clear that it intended to assess Power Usage charges on an "as measured" basis, and Power Plant charges on an "as ordered" basis. While I might disagree that the website information is as clear on this point as Mr. Easton would lead us to believe, the entire issue is really irrelevant. The language in the product catalog is specifically different than the language in the *Power Measuring Amendment*. And, because the parties signed and executed the *Power Measuring Amendment*, it is that language which must be reviewed to understand the intention of the parties. Again, the *Power Measuring Amendment* defines the "DC Power Usage Charge" to which measured usage will apply, as "…the power plant available for the CLEC's use." [paragraph 2.1, emphasis added]. On the other hand, the website information to which Mr. Easton refers discusses a "-48 Volt DC Power Capacity Charge" which is never mentioned in the *Power Measuring Amendment*, nor can it be found in Exhibit A (the pricing appendix to the parties' Interconnection Agreement). Simply put, even if McLeodUSA had viewed the website information prior to signing the Amendment, it would likely have had little bearing on its interpretation of the Amendment which includes very different language.

Q. MR. EASTON POINTS THE COMMISSION TO A QUESTION AND ANSWER EXCHANGE BETWEEN QWEST AND ALLEGIANCE TELECOM WHEREIN QWEST NOTES THAT POWER PLANT CHARGES WILL NOT BE ASSESSED

RELATIVE TO THE MEASURED LEVEL OF POWER (EXHIBIT WRE_3). SHOULDN'T THIS HAVE CLEARED UP ANY DIFFERENCE OF OPINION BETWEEN THE PARTIES?

A. No. First, it is my understanding that this information was not reviewed by McLeodUSA's legal or internal cost-control teams who discussed the *Amendment* internally prior to signing it, nor has McLeodUSA (or Qwest for that matter) been able to identify anyone at McLeodUSA who saw this information prior to execution of the *Amendment*. One possible reason for this is that this information appears to have been provided to CLECs generally in October of 2003, approximately one year before McLeodUSA signed its *Power Measuring Amendment*. Nonetheless, the "Note" at the bottom of Page 1 of the document states as follows:

> Note: In cases of conflict between the changes implemented through this notification and any CLEC interconnection agreement (whether based on the Qwest SGAT or not), the rates, terms and conditions of such interconnection agreement shall prevail as between Qwest and the CLEC party.

Therefore, according to Mr. Easton's own exhibit, it is irrelevant because McLeodUSA has in place with Qwest through the *Power Measuring Amendment*, specific, agreed upon language that would supersede any terms, conditions and rates derived through the information in Mr. Easton's exhibit.

Q. CONSISTENT WITH YOUR EXPERIENCE IN PARTICIPATING IN CMP PROCESSES OR SIMILAR INDUSTRY MEETINGS, ARE THESE PROCESSES "FLUID" SUCH THAT FREQUENT CHANGES OCCUR RELATIVE TO THE TERMS AND CONDITIONS ASSOCIATED WITH THE INITIATIVES OR POTENTIAL OFFERINGS DISCUSSED THEREIN?

A. Yes, indeed, that is the entire concept behind the Change Management Process. It is not at all unlikely that information provided a year before a contract amendment is signed might provide information that was ultimately changed by Qwest in effectuating the final product. Indeed, another clear example can be found in Mr. Easton's own Exhibit WRE_3. At pages 1 and 2 of Exhibit WRE_3, Allegiance Telecom's first question asks whether it will be required to amend its interconnection agreement in order to have its power measured. Qwest responds that a contract amendment will not be necessary, but instead, the measuring process will begin automatically. Yet, Qwest ultimately decided that a *Power Measuring Amendment* would be necessary (see Exhibit WRE_2 at page 2 of 7). It is that *Power Measurement Amendment*, a document that wasn't even considered necessary in the October 2003 response to Allegiance Telecom's questions, which McLeodUSA signed and serves as the focus of this complaint.

Q. DOES YOUR TESTIMONY CONSTITUTE AN ATTACK ON THE COMMISSION'S COLLOCATION POWER RATES?

A. No, my testimony in no way critiques the existing collocation power rates, nor have I recommended that those rates be changed in any way. Instead, my testimony simply points out that Qwest's interpretation of its *Power Measuring Amendment* conflicts with the manner by which the Commission set those rate and as such, Qwest errs when it assesses its Power Plant rates on an "as ordered" as opposed to an "as consumed" basis.

Q. MR. EASTON, AT PAGE 21 OF HIS RESPONSE TESTIMONY, STATES THAT YOUR DIRECT TESTIMONY WAS NOT ONLY UNSUPPORTED WHEN YOU CLAIM THAT QWEST'S RATE DEVELOPMENT CONFLICTS WITH ITS

POSITION, BUT THAT YOU ARE ATTACKING THE RATE ITSELF, NOT ITS APPLICATION. IS HE RIGHT?

A. He is mistaken on both accounts. First, at the time I wrote my direct testimony I did not have access to Qwest's cost study supporting its Washington collocation power rates, so I was required to speak to this issue from my experience with Qwest collocation cost studies in other states where the cost studies are structured very similarly. In my supplemental direct testimony, I was able to show with Washington-specific data that the points I made in my April 28, 2006 direct testimony were indeed accurate with respect to Washington. Secondly, nowhere in my direct testimony did I question the rate level associated with Qwest's Power Plant rate (or any other rates). Hence, Mr. Easton has simply constructed a strawman when he complains that "…McLeodUSA paid the Power Plant rate at the Commission-approved ordered levels for several years before ever entering the DC Power Measuring Amendment."[10] That fact is not disputed, nor is it relevant. What is relevant is that the *Power Measuring Amendment* was specifically intended to revise the manner by which McLeodUSA would pay Qwest for collocation power based upon McLeodUSA's actual power usage. And, given that the parties disagree as to which rate elements should be impacted by the *Amendment*, it is a logical exercise to discern which rate elements can (or should) be assessed in that manner consistent with their underlying construction.

Q. BEGINNING AT PAGE 22 OF HIS REBUTTAL TESTIMONY, MR. EASTON IS CRITICAL OF YOUR DIRECT TESTIMONY WHEREIN YOU SUGGEST QWEST'S POWER REDUCTION AMENDMENT IS NOT A GOOD

[10] Easton Response, page 21, lines 13 – 15. See also, Easton Response, page 3, lines 2 – 6.

ALTERNATIVE TO THE POWER MEASURING AMENDMENT WHEN INTERPRETED IN THE PROPER FASHION. PLEASE RESPOND.

A. Mr. Easton's description of the *Power Measuring Amendment* in relation to the Power Reduction Amendment makes little sense. In essence, Mr. Easton argues that the *Power Measurement Amendment* is meant to allow McLeodUSA to reduce its power usage charges, while maintaining its initial level of power plant capacity available for its use. On the other hand, the Power Reduction Amendment, according to Mr. Easton, allows McLeodUSA to scale back its original "order" by reducing the size of its power distribution cables (i.e., feeder cables) and the size of the fuses that govern the maximum power available to its equipment (in essence, reducing the amount of power it could draw from the power plant). According to Mr. Easton, both Amendments are good options for the CLEC, depending upon the CLEC's objective (i.e., maintaining power plant capacity available for its use or relinquishing it).

Q. WHY DOES THIS MAKE LITTLE SENSE?

A. Mr. Easton's description in this part of his testimony is completely contradictory to Mr. Ashton's response testimony at page 10. Therein Mr. Ashton discusses CLEC collocation orders in the 1999 to 2000 timeframe. Mr. Ashton testifies that when CLECs were ordering collocation power in 1999 and 2000 (roughly the timeframe wherein the majority of McLeodUSA collocations in Washington were established), Qwest had little knowledge about CLEC equipment and it was receiving orders for large feeder cables (indicating to Qwest, apparently, the need for substantial power plant capacity). As such, according to Mr. Ashton, Qwest was forced to engineer its power plant facilities such that they could support the entire feeder capacity ordered by the CLECs (what Qwest

interpreted to be the CLEC's List 2 drain). Because Qwest was required to size its power plant investment relative to those orders, Mr. Ashton believes Qwest would fail to recover those investments in additional power capacity if McLeodUSA's interpretation of the *Power Measuring Amendment* was adopted given that McLeodUSA would now only be billed based upon its consumption, not on the capacity Qwest made available for its use.

Q. PLEASE DESCRIBE THE INCONSISTENCY BETWEEN MR. EASTON'S AND MR. ASHTON'S TESTIMONIES.

A. Mr. Easton in describing the Power Reduction Amendment at page 19 of his testimony describes its fundamental purpose as follows: "With the Power Reduction offering, a CLEC can reduce the amount of power capacity it has available." Likewise, consistent with the terms of the Power Reduction offering, the CLEC after reducing the size of its cables and its fuses, will be charged less associated with its power plant capacity (i.e., it will be assessed the Power Plant charge based on the new, smaller amperage associated with its reduced power delivery system – feeder cables and fuses). It is this offering that is inconsistent with Mr. Ashton's testimony.

Q. HOW IS IT INCONSISTENT WITH MR. ASHTON'S TESTIMONY?

A. If indeed Mr. Ashton is right, and Qwest is concerned that reduced Power Plant recovery relative to McLeodUSA's interpretation of the *Power Measuring Amendment* in this docket would leave Qwest without the proper opportunity to recover power plant investments made in the 1999-2000 timeframe relative to CLEC power demands, then he should have the exact same concern relative to Qwest's own Power Reduction offering as

described by Mr. Easton. In other words, McLeodUSA and other CLECs could, through the Power Reduction offering, accomplish a similar reduction in their Power Plant charges, it is just that the Power Reduction Offering would also require them to spend a large sum of money to inefficiently resize cables and fuses they have already paid to establish. Nonetheless, Qwest's recovery for DC power plant investment would be impacted in the same fashion (i.e., it would be substantially reduced). Furthermore, as discussed in detail by Mr. Morrison, Qwest has made clear that it does not augment its DC power plant relative to the size of a CLEC's order for power feeder cables (nor should it). Hence, Qwest's Power Reduction offering results in the same outcome as assessing Power Plant charges based on measured usage, except that the Power Reduction offering requires CLECs to expend thousands of dollars for unnecessary and risky work. As such, Mr. Ashton's concern relative to under-recovery due to previous engineering decisions made by Qwest is not specific to McLeodUSA's interpretation of the Power Measuring Amendment, but is equally applicable to any of Qwest's reduction amendments that it holds out in this case as an alternative McLeodUSA could choose. Of course, as Mr. Morrison explains and the facts show, Mr. Ashton's claims regarding Qwest building additional DC power plant in response to CLEC orders for feeder distribution cables are undermined by Qwest's own engineering technical publications and the history of actual power plant augmentation.

Q. PLEASE ELABORATE ON YOUR POINT THAT QWEST'S POWER REDUCTION OFFERING AND ASSESSING POWER PLANT CHARGES ON A MEASURED BASIS RESULT IN THE SAME OUTCOME.

A. The following hypothetical examples will help illustrate this point. If we assume that a CLEC originally ordered 200 amp power cable, the CLEC's usage is 50 amps, and the power plant capacity of the Qwest central office is 5000 amps. Under this scenario Qwest assesses CLEC the Power Plant rate ($9.34) on the power cable order (200 amps) for a total monthly Power Plant charge of $1,868 (I will refer to this as Scenario 1). Now, if we assume that the CLEC decides to use the Power Reduction Offering to reduce its power cables closer to its usage (say, 75 amp cables), the following would occur (I will refer to this as Scenario 2): (1) CLEC would incur several thousands of dollars in Power Reduction Charges; (2) Qwest would begin billing CLEC on 75 amps (the new cable/breaker size) or $700.50 per month, (3) CLEC usage remains at 50 amps, and (4) Qwest would have 5000 amps of DC power plant capacity. Now if we assume under Scenario 3 that instead of the Power Reduction Offering, Qwest began billing CLEC Power Plant charge on measured usage, the following would occur: (1) Qwest would begin billing CLEC on 50 amps (the usage) or $467 per month, (2) CLEC usage remains at 50 amps, and (3) Qwest would have 5000 amps of power plant capacity. These three scenarios can be summarized as follows:

Impact of Power Reduction Offering Vs. Measured Billing			
Assumptions	**Scenario 1**	**Scenario 2**	**Scenario 3**
CLEC power cable order	200 amps	75 amps	200 amps
CLEC usage	50 amps	50 amps	50 amps
Qwest power plant capacity	5,000 amps	5,000 amps	5,000 amps
Qwest Power Plant rate	$9.34	$9.34	$9.34
Rearrangement Costs to CLEC	$0.00	Thousands of $$$	$0.00
Monthly DC Power Plant Costs	**$1,868**	**$700.50**	**$467**

As the above table shows, the ultimate outcomes of both Scenarios 2 and 3 is a significant reduction in monthly billing for the Power Plant rate. However, under the Power Reduction offering (Scenario 2), to achieve this result the CLEC was forced to

incur thousands of dollars in rearrangement fees to reduce its power cable amperage, while under Scenario 3, these charges were not required, yet the billing was reduced nevertheless (indeed, it was reduced to the actual usage as required by the Power Measuring Amendment, instead of a smaller ordered amperage). Importantly, this table shows that Qwest did not do anything to the capacity of its DC power plant. According to Qwest, it needs to build CLEC power plant to the ordered level because it makes that amount of capacity available which would go un-recovered if Power Plant is billed on a measured basis, yet as shown above, the Power Reduction offering would result in the same 5,000 amp power plant capacity with a lower Power Plant billing – just as in the case of measured billing – the only difference being the thousands of dollars in charges CLEC had to incur in unnecessary work to achieve the result. This work is unnecessary because the costs arise from Qwest rearranging power cables that McLeodUSA has already bought and paid for through separate recurring and non-recurring charges.

Q. IF MCLEODUSA COULD ACCOMPLISH SIMILAR REDUCTIONS IN ITS POWER PLANT CHARGES BY CHOOSING THE POWER REDUCTION AMENDMENT, WHY NOT JUST SIGN THAT AMENDMENT?

A. There are two primary problems with Qwest's Power Reduction offering in this regard. First, as described in detail by Mr. Morrison, power feeder cables and fuses should be sized to a carrier's List 2 drain for safety purposes. As such, the sizing of those "delivery" assets has no direct correlation to the amount of power plant capacity the carrier will require, and sizing them smaller than required by engineering standards would lead to significant safety and reliability concerns. And as shown in the above example, this would still result in overcharges (albeit, to a lesser degree than Qwest's "as

ordered" billing) to CLEC, i.e., the CLEC would be billed for 75 amps instead of 50amps. Therefore, Qwest's Power Reduction offering which allows the CLEC to reduce its Power Plant charges to a level consistent with a reduced feeder cable and fuse size is still insufficient because it fails to recognize that even this reduced sizing for cables and fuses will relate to substantially more power plant charges than the CLEC should reasonably bear. Under this offering the CLEC will still pay for a substantially exaggerated number of Amps related to its actual power plant usage.

Second, the Power Reduction offering would require McLeodUSA to resize cables and fuses for which it has already paid Qwest substantial fees to put in place. And, there is no engineering or compelling economic reason to alter those delivery facilities simply to achieve an economic result (i.e., reduced charges for Power Plant and Power Usage) that is more efficiently (and equitably) achieved through a more reasoned application of Qwest's Power Plant and Power Usage rate elements (a result achieved by a proper reading of the *Power Measuring Amendment*).

Q. PLEASE ELABORATE ON YOUR POINT THAT MCLEODUSA HAS ALREADY PAID QWEST "SUBSTANTIAL FEES" ASSOCIATED WITH ITS POWER FEEDER CABLES AND THE PLACEMENT OF ITS FUSES.

A. When McLeodUSA originally established its physical collocation arrangements within Qwest's Washington central offices, it was assessed non-recurring charges associated with its DC power feeds and likewise pays a monthly fee associated with those feeds. For example, in a situation wherein McLeodUSA orders a 300 Amp power feed, it pays Qwest a non-recurring charge equal to $16,502.98 and pays a monthly rate equal to

$24.32 (see Section 8.4.2.6 of Exhibit A, and as indicated in Section 8.4.2.7, charges are more for additional feeds). Those charges, according to Qwest's cost study, fully compensate Qwest for the feeder cables themselves, and the engineering and provisioning labor that went into placing those cables (and this is in addition to the space construction charges McLeodUSA paid between $40,000 and $50,000 to construct its collocation cage). The NRC related to these cables was a substantial investment on McLeodUSA's part and McLeodUSA is reluctant to re-engineer those facilities just so it can pay lower Power Plant charges, especially when Qwest's application of Power Plant charges in direct relation to the size of its feeder cables has been misplaced since the beginning, and correcting for that improper application would derive the same outcome. It is for this reason that the *Power Measuring Amendment* when first presented to McLeodUSA appeared to be a substantial improvement in Qwest's overall collocation power offering. Using McLeodUSA's interpretation, the *Power Measuring Amendment* finally recognized that the sizing of McLeodUSA's power feeder cables has no correlation to the amount of DC power plant it will use, and as such, the *Amendment* broke the erroneous correlation between "ordered" power and consumed power that Qwest had previously indoctrinated in its misapplication of both power usage and power plant rates.

Q. AT PAGES 24 – 25 OF HIS REBUTTAL TESTIMONY, MR EASTON DISCUSSES THE TESTIMONY OF QWEST'S CLEC AFFILIATE QCC (QWEST COMMUNICATIONS CORPORATION) FILED IN ILLINOIS. THEREIN HE PROVIDES SEVERAL REASONS THAT PURPORTEDLY DISTINGUISH THIS CASE FROM THE CASE IN ILLINOIS. ARE THE REASONS HE PROVIDES CONVINCING?

A. No. At the bottom line, Qwest's CLEC affiliate in Illinois is attempting to protect the current process whereby SBC/AT&T-Illinois (the ILEC) is required to assess charges for all DC power components (including power plant) on a measured basis. In doing so, it is clear that Qwest's CLEC affiliate understands the importance of an economically rationale collocation power rate structure, despite the fact that its ILEC affiliate in this case is attempting to maintain a non-measured structure for at least its power plant component. Nonetheless, I address each of Mr. Easton's individual points below:

> First, Mr. Easton claims that SBC/AT&T Illinois' proposal "is really a re-fusing proposal, not a power reduction offer."[11] Though this is a distinction without a difference, Mr. Easton's labeling is not overly accurate. Qwest's Power Reduction offering involves re-fusing, just like in Illinois. Take for example, Qwest's description of the Power Reduction Charge at Section 3.2.2 of the Qwest-proposed DC Power Reduction Amendment Attachment 1 (DC Power Reduction Procedure). This defines the Power Reduction Charge as including "costs associated with reducing the fuse/breaker size." Further, both the Illinois and Washington proposals involve *reducing* the size of fuse/breaker – a fuse/breaker that is already installed, paid for, and serving CLEC equipment. And, as Mr. Morrison explained at pages 59 – 62 of his direct testimony, QCC's witness Ms. Hunnicutt-Bishara expressed operational concerns related to reducing fuse/breaker sizes similar to the concerns Mr. Morrison described in his direct testimony. For the same reason, Mr. Easton's criticism at page 24, lines 15 - 16 is misplaced, as Ms. Hunnicutt-Bishara's stated concerns relate to "low fusing amperage" and associated overload potential, generally, not specifically to a 200% fusing limitation, as Mr. Easton implies.
>
> Second, Mr. Easton states that SBC/AT&T Illinois' re-fusing proposal is mandatory, unlike Qwest's Power Reduction offering which is a voluntary offering.[12] Again, this issue is really irrelevant. In Illinois Qwest's affiliate, QCC, is expressing concerns regarding the outcome of the Illinois proposal, and the correct comparison would be the outcome of the Washington offering. Obviously, the CLEC would not be re-fusing and lowering the amperage of its power distribution facilities if it were not purchasing Qwest's Power Reduction Offering. Though Mr. Easton is correct that Qwest's Power Reduction is not mandatory, Qwest is holding that offering out as the only manner by which CLECs can reduce their power plant costs which are significantly larger than the power they actually consume (and the costs Qwest incurs to provide the power). This is especially egregious when McLeodUSA has already signed the Power Measuring Agreement that provides a different, and more rationale outcome.

[11] Easton Response page 25, line 1.

[12] Easton Response, page 25, lines 3.

Third, Mr. Easton states that "the SBC Illinois proposal would require frequent mandatory re-fusing as usage levels change."[13] However, I fail to see how this departs from Qwest Washington's Power Reduction Offering given that Mr. Easton's own testimony shows that the outcome of the Power Reduction and Power Restoration offerings would be for CLECs to frequently change (both increase and decrease) the size of its power distribution facilities as usage levels change.

Fourth, Mr. Easton's claim that Ms. Hunnicutt-Bishara's legal concern is grounded solely in Illinois-specific rules[14] is wrong. She testified that such an outcome would likely not be in compliance with National Fire Protection Association (NFPA) 70-2005, Article 215.3. Obviously, it would be as important for Qwest to adhere to fire protection standards in Washington as it would be for SBC/AT&T in Illinois.

Fifth, and perhaps most importantly, Mr. Easton's point with regard to the Illinois rate structure being a combined rate structure (and hence wildly different from Qwest's rate structure) is misplaced[15]

Q. WHY ARE MR. EASTON'S CONCERNS ABOUT THE COMBINED NATURE OF ILLINOIS' RATE STRUCTURE MISPLACED?

A. Though Mr. Easton largely makes this point in passing, it is an important point for the Commission to understand. Mr. Easton appears to argue that because the rates for collocation power in Illinois are combined (i.e., electrical usage and power plant elements are recovered in a single rate), QCC's comments in Illinois aren't overly applicable here. Though Mr. Easton is right about the first part (i.e., those components are combined in the Illinois structure), he is wrong about the applicability of such a rate structure in this case – the point is specifically relevant here. In Illinois, SBC/AT&T-Illinois is required to assess the combined rate (both usage and power plant) on a measured basis, and that is exactly the structure QCC is attempting to protect via its testimony in Illinois, even though its ILEC affiliate in this case is attempting to argue that such a structure which

[13] Easton Response, page 25, lines 4 – 5.
[14] Easton Response, page 25, lines 11 – 13.

assesses Power Plant charges on a measured basis is not valid. Indeed, that QCC's position is consistent with McLeodUSA's is evident from the argument made in its post-hearing brief to the Illinois Commerce Commission, wherein QCC argued that "it is beyond reasonable dispute that, under AT&T's proposal, QCC will pay for power it is not actually consuming."[16] It is equally beyond reasonable dispute that, under Qwest's interpretation here, McLeodUSA will pay for power plant it is not actually consuming. It is just as outrageous in Washington as QCC found it to be in Illinois.

III. RESPONSE TO MR. ASHTON

Q. AT PAGE 10 OF HIS RESPONSE TESTIMONY MR. ASHTON CONTENDS THAT QWEST CANNOT EFFECTIVELY ENGINEER ITS POWER PLANT TO ACCOMMODATE A LIST 1 DRAIN FOR CLECS (LIKE IT DOES ITS OWN EQUIPMENT) BECAUSE QWEST DOESN'T HAVE THE REQUISITE INFORMATION. DO YOU AGREE?

A. No. While Mr. Morrison will address the majority of Ashton's testimony in this regard, I would like to address one specific issue: Qwest's own collocation application belies Mr. Ashton's testimony. McLeodUSA's position is that Qwest should engineer DC power plant for CLECs in exactly the same fashion it engineers DC power plant for its own equipment. That is, Qwest should review the telecommunications equipment that will be powered by the power plant in the central office, evaluate the List 1 Drain associated with that equipment and ensure that DC power plant capacity is available to meet that List 1 Drain of the central office. Mr. Ashton's testimony attempts to indicate that Qwest

[15] Easton Response, page 25, lines 5 – 8.

cannot undertake such a non-discriminatory approach because it doesn't know enough about the CLEC collocated equipment. Yet, not only does Mr. Morrison explain that Qwest knows the List 1 drain for McLeodUSA in all instances, but the collocation application Qwest requires CLECs to populate when ordering collocation space contradicts his position.

Q. HOW DOES THE COLLOCATION APPLICATION CONTRADICT MR. ASHTON'S TESTIMONY?

A. I have attached Exhibit MS-5 to my testimony, which is a copy of Qwest's collocation application as taken from Qwest's website.[17] Therein, Qwest requires the CLEC to provide substantial information not only about the types and quantity of equipment it will place in its collocation (Section II.F) – by manufacturer and model number – but also the forecasted circuits the equipment is expected to support (Section III.B). Likewise, McLeodUSA is expected to (and does) inform Qwest when its forecasted circuit counts change (either upward or downward). The following diagram is excerpted directly from Qwest's collocation application as an example of the information CLECs are required to provide:

[16] QCC Initial Post-Hearing Brief, p. 6.

[17] http://www.qwest.com/wholesale/downloads/2006/060306/DNLD_New_Change_Augment_Application_V20.xls

B. CIRCUIT/ICDF COLLOCATION LEG QUANTITY (enter desired quantities)

			UNEs (See Note 6)	Common Area Splitter (See Note 4)	In-Site Splitter (See Note 5)	Common Area Splitter Collocation (Converted DS0 UNEs - Notes 4 & 6)	In-Site Splitter Collocation (Converted DS0 UNEs - Notes 5 & 6)	Finished Services - Leased Private Lines	Administrative Facilities (See Note 14)	ICDF Collocation (See Note 7)	Total Requested Circuits	Total Required Circuit Legs/Fiber Strands	Minimum Increments
1.	Existing/Available Inventory	POTS									0	0	1
		POTS (Splitter)									0	0	100
		DS0									0	0	Note 3
		DS1									0	0	1
		DS3									0	0	1
		Fiber (See Note 10)									0	0	6
2.	New/Augment/ Reduction	POTS									0	0	1
		POTS (Splitter)									0	0	100
		DS0									0	0	Note 3
		DS1									0	0	1
		DS3									0	0	1
		Fiber (See Note 10)									0	0	6
3.	Net Circuit and Leg Counts	POTS							0		0	0	
		POTS (Splitter)		0	0						0	0	
		DS0	0							0	0	0	
		DS1	0					0		0	0	0	
		DS3	0					0		0	0	0	
		Fiber	0							0	0	0	

Q. DOES MCLEODUSA HAVE AN INDEPENDENT INCENTIVE TO ENSURE THAT ITS FORECASTED CIRCUIT COUNTS ARE ACCURATE?

A. Yes, because this information is used not only to provide Qwest a forecasted load related to McLeodUSA's equipment, it also serves as the means by which Qwest provides cross-connect facilities to McLeodUSA's equipment. In other words, if McLeodUSA fails to properly forecast its anticipated DS0, DS1 and DS3 needs in the table above, it will not have the cross-connects available between its own facilities and the Qwest network needed to activate the required circuits (and it wouldn't be able to service its customers).

Q. AT PAGE 13 OF HIS RESPONSE, MR. ASHTON RESPONDS TO MR. MORRISON'S DIRECT TESTIMONY RELATING TO COMMENTS QWEST

MADE IN IOWA. DO YOU HAVE ANYTHING TO ADD IN RESPONSE TO MR. ASHTON?

A. Yes, I do. Mr. Ashton states as follows at page 13 of his response testimony:

> It is my understanding that what the Qwest witness, Mr. Hubbard, meant by that statement is that the larger the [CLEC power] order, the closer or more likely Qwest would be to augment its power plant. However, the more important point here is that any CLEC order for power entitles Qwest to charge its Commission-approved TELRIC rates. My understanding of these rates is that they do not necessarily relate to Qwest's real world experience, and that Qwest is not required to demonstrate that it actually constructed any power plant in response to an order for it to be entitled to charge those rates.

Unfortunately, Mr. Ashton, in describing his understanding of Qwest's collocation power rates, is only partially accurate. Most disturbing is his erroneous contention that Qwest's collocation rates "do not necessarily relate to Qwest's real world experience" in engineering central office power plant. As I discussed earlier, while TELRIC often has been maligned by incumbent carriers as being overly hypothetical and theoretical, the fact of the matter is that a proper TELRIC study should rely upon the engineering guidelines of the company in question, the study simply assumes that the Company is acting in an efficient manner when employing those guidelines (as a company in a more competitive market would be required to do). And, indeed, that is the case with Qwest's collocation power charges at issue in this proceeding.

Q. ARE YOU SAYING THAT QWEST'S COST STUDY ASSUMES THAT QWEST SIZES POWER PLANT THE SAME WAY IT DOES IN THE "REAL WORLD" – i.e., BASED ON POWER CONSUMPTION?

A. Yes. Qwest's cost study supporting its Power Plant rate assumes batteries, rectifies and other DC power plant equipment are sized precisely as Qwest would engineer those

facilities in the real world. Further, the cost study assumes that the entire DC power plant is available equally both to Qwest and collocators – i.e., it is a completely "shared-use" facility - just as Qwest does in the real world. Indeed, in presenting its cost model, Qwest stressed the importance of the model's ability to mimic real world engineering and situations specific to Washington. For example, Qwest's supporting documentation for its cost study states as follows:

> [Qwest's] CM [Collocation Model] is based on proper economic costing principles and TELRIC concepts. The two most important costing principles are cost causality (i.e. the accurate attribution of costs to the factors that cause those costs to be incurred) and ***realism (i.e. realistic assumptions on network engineering design and field conditions)***.[18]

Given this background, Mr. Ashton's attempt (like Ms. Million's attempt) to distance Qwest's real-world engineering guidelines and practices (described by Mr. Morrison) from the development of its collocation rates falls short.

Q. ISN'T MR. ASHTON SIMPLY ARGUING THAT QWEST DOESN'T NECESSARILY HAVE TO INVEST IN ADDITIONAL POWER PLANT EQUIPMENT RELATIVE TO A PARTICULAR CLEC'S COLLOCATION ORDER BEFORE IT CAN LEGITIMATELY ASSESS ITS COLLOCATION POWER RATES?

A. Perhaps, and if so, he is correct. TELRIC studies generally, and Qwest's study in this case, recover costs related to investments made to provide services (or elements) generally. In this example, Qwest's Collocation Model assumes that regardless of who uses the available capacity of the power plant (whether newly installed or not), that party

[18] Collocation Model (CM) Users Manual, Version 1, July 2000 (Market Services and Economic Analysis Organization), page 5. emphasis added.

will bear its proportional cost of the power plant output it consumes (assuming it pays the resultant rates relative to the amount of power it consumes – not as Qwest currently assesses those charges based upon orders). As such, Mr. Ashton is right (even though his point contradicts Qwest's position in this case), i.e., individual CLEC orders are ignored by the cost study because they have no economic bearing on the manner by which Qwest incurs power plant costs, and as such, assessing power plant rates based upon the size of those orders is an inconsistent application of the resultant rate.

Q. MR. ASHTON (AT PAGE 21, LINE 18 – PAGE 22, LINE 5) FINDS "CURIOUSLY ABSENT" IN YOUR WASHINGTON TESTMONY SOME TESTIMONY YOU FILED IN IOWA REGARDING HOW QWEST INCURS COSTS FOR VARIOUS COMPONENTS OF THE CENTRAL OFFICE POWER SYSTEM. IS THERE A SPECIFIC REASON YOU DID NOT INCLUDE THIS EXACT TESTIMONY IN WASHINGTON TESTIMONY?

A. Actually, the testimony to which Mr. Ashton refers *is* incorporated in my Washington testimony (albeit in different words). My testimony to which Mr. Ashton refers simply explains the key difference between power *distribution* and power *plant* in terms of cost causation, and why billing the Power Plant charge on the amperage associated with a power cable order is inappropriate (the same position I have taken here in Washington). Just so that there is no ambiguity on this issue, I have provided the Iowa testimony to which Mr. Ashton refers (this testimony begins in my Iowa rebuttal testimony):

> **Q. OBVIOUSLY, YOU BELIEVE THAT QWEST'S POWER PLANT COSTS INCREASE RELATIVE TO THE AMOUNT OF POWER ULTIMATELY CONSUMED BY MCLEODUSA (NOT CONSISTENT WITH THE SIZE OF**

MCLEODUSA'S ORIGINAL ORDER). WHAT IS THE BASIS FOR YOUR BELIEF?

A. Like Mr. Morrison, I think it is important to break Qwest's central office power system into the three distinct components detailed below in order to distinguish between the manner by which Qwest incurs cost relative to each (note that Qwest also recognizes these three categories as it has structured its rates accordingly).

	Category	**Qwest Rate Element(s)**	**Rate Level**
1.	Power Delivery	DC Power Cable(s) (8.4.2.5 & 8.4.2.7[19])	Various depending upon required Amperage
2.	Power Plant	8.1.4.1.1	$12.17 per Amp
3.	Power Usage	8.1.4.1.3	$4.37 per Amp

As Mr. Morrison has explained, there is no debate as to the cost causative nature of the DC power cables that connect McLeodUSA to the central office power plant (*i.e.*, Power Distribution/Delivery facilities). It is a simple, physical fact that the actual size of the power cable (and relative cost of the cable) grows as the amperage to be accommodated by the cable is increased. Hence, the larger the power cables ordered by McLeodUSA, then subsequently, the more cost Qwest will incur in filling the order for DC power distribution cables. As such, costs related to power cables constituting the power distribution/delivery system should (and are) assessed based upon the size of the cables ordered by McLeodUSA (measured in amps).

Q. WHY THEN, IS THE SAME NOT TRUE FOR EITHER POWER PLANT AND/OR POWER USAGE COSTS?

A. McLeodUSA's original order sizing the cables between its collocation arrangement and the central office power plant (*i.e.*, the power distribution/delivery system) has no direct bearing on the amount of power, or the capacity of the available power plant McLeodUSA will actually consume. As Mr. Morrison discusses

[19] When a carrier purchases a Physical Collocation arrangement from Qwest, Qwest's rates include 1-60 Amp power feed. Rate elements 8.4.2.5 and 8.4.2.7 allow the collocator to order either smaller or larger DC Power Feeds based upon their needs.

in detail in his testimony, there are a number of very good engineering reasons why a company like McLeodUSA may order very large DC power cables capable of carrying substantial amperage, yet only consume amperage at levels substantially below the capacity of those cables.

Q. HOW DOES THIS FACT IMPACT THE COST CAUSATION RELATIONSHIP BETWEEN THE ORDER FOR POWER CABLES, AND THE AMOUNT OF POWER MCLEODUSA MAY ACTUALLY CONSUME?

A. Since there is no relationship between the size of the power cables originally ordered by McLeodUSA, and the amount of power it will actually consume (and thereby the capacity of the power plant it will consume), then there can be no reasonably construed cost causative relationship between the DC power cable order and the usage or power plant capacity afforded to McLeodUSA. Said another way, Qwest does not incur costs relative to its power plant (or power usage) at the time McLeodUSA places an order for power cables, rather, Qwest incurs power plant and power usage costs generated by McLeodUSA only when, and only to the extent, to which McLeodUSA actually draws (consumes) power. As such, those power plant and power usage costs are incremental to McLeodUSA's actually using power, rather than ordering cables capable of carrying power.

As shown by the excerpt from my Iowa rebuttal testimony, Mr. Ashton's curiosity was piqued by a non-issue.

IV. RESPONSE TO MS. MILLION

Q. HAVE YOU HAD AN OPPORTUNITY TO REVIEW THE RESPONSE TESTIMONY OF MS. TERESA K. MILLION FILED ON JUNE 14, 2006 IN THIS DOCKET?

A. Yes, I have.

Q. DO YOU HAVE ANY GENERAL OBSERVATIONS?

A. Yes, a few. The most striking thing about Ms. Million's testimony upon first reading is the number of times she uses terms like "illogical and misleading,"[20] "misleading and meaningless,"[21] and "misleading and illogical"[22] to describe my supplemental testimony. Yet, when you review the substance of her Response, it is very thin with respect to facts or data that would support her position. Instead, her testimony rests primarily on unsubstantiated opinion that conflicts with Qwest's technical documentation and the cost study. Nonetheless, she does say a number of things that require a direct response, including several statements that are wrong as a matter of fact and others that misconstrue proper cost study development and the FCC's TELRIC ("Total Element Long Run Incremental Cost") rules.

Q. PLEASE IDENTIFY THE VARIOUS STATEMENTS MADE BY MS. MILLION THAT YOU BELIEVE REQUIRE DIRECT REBUTTAL SO AS TO CORRECT THE RECORD?

A. Ms. Million begins her testimony by taking issue with statements I made regarding Qwest's willingness to provide to McLeodUSA its cost study such that I could analyze and discuss it in my direct testimony. She defends Qwest's refusal to provide the cost study by making two overarching points: (1) Qwest believed the cost study information to be irrelevant given that, in Qwest's opinion, this case is solely about contract interpretation and (2) the document was publicly available and McLeodUSA should

[20] Million Response, page 13.
[21] Million Response, page 3.
[22] *Id.*

simply have obtained it through other means rather than impose upon Qwest to provide it via discovery.[23]

The first of Ms. Million's criticism is the most troubling because it shows a lack of understanding as to McLeodUSA's overall complaint. I address that fundamental issue in the next section of my testimony. However, the second complaint (i.e., the issue of confidentiality and McLeodUSA's decision to use the discovery process to gain access to the cost study rather than simply obtaining it from the Commission) requires a response as it bears on the credibility of Ms. Million's testimony in general.

Q. PLEASE EXPLAIN YOUR SECOND POINT REGARDING THE CREDIBILITY OF MS. MILLION'S TESTIMONY.

A. As the Commission is likely aware, McLeodUSA's Washington complaint is one of several filed throughout Qwest's territory in an attempt to effectuate the *Power Measuring Amendment*.[24] When this same case was being litigated in Iowa (the first jurisdiction in which the complaint was filed), Qwest objected to providing the Iowa cost study, which is nearly identical to the Washington cost study save for state-specific data, on the following grounds:

> This request's lack of relevance to the billing dispute is compounded by the fact that <u>the information requested is extremely confidential trade secret information</u> of Qwest detailing its costs and facility configuration and capabilities, and providing that information to McLeodUSA, a direct, facilities-based competitor, would place Qwest at a competitive disadvantage.

[23] Million Response, page 3.

[24] I have provided a copy of the Power Measuring Amendment as Exhibit MS-2.

It is worth noting that the Respondent responsible for this response was Terri Million, Staff Director (a copy of Qwest's Iowa Response to McLeodUSA DR No. 3 is attached as Exhibit MS-3). The dire consequences Ms. Million described in Iowa related to Qwest divulging its "extremely confidential" cost study stands in direct conflict with her admonition here that McLeodUSA should have simply asked the Commission for it, rather than burdening Qwest.[25] The fact of the matter is that Qwest's initial position was that the information was proprietary and shouldn't be provided at all, so McLeodUSA was simply pursuing the customary channels for seeking proprietary (and other) information during a litigated proceeding (i.e., discovery). It is disingenuous for Ms. Million to criticize McLeodUSA for not realizing that the information was public and not having obtained it through some public source, given that it is Ms. Million's "about face" that led to this issue.

Q. DOES THIS ISSUE BEAR ON THE SUBSTANCE OF THIS CASE?

A. It doesn't bear directly on the proper interpretation of the Power Measuring Amendment, but it corrects the "tone" set by Ms. Million's testimony, wherein she dedicates a significant amount of testimony to attempting to portray McLeodUSA as lazy or misinformed as it relates to Qwest's cost study. It also bears on the credibility of Ms. Million's testimony, as she bases her criticism of McLeodUSA on a false premise.

Q. PLEASE DISCUSS THE MORE SUBSTANTIVE ISSUE, I.E., WHY ARE QWEST'S DC POWER COSTS RELEVANT TO THIS PROCEEDING?

[25] *Id.*

A. There are two reasons why Qwest's cost study supporting its DC Power rates are relevant and important to this proceeding. First, Ms. Million specifically, and Qwest generally, seem to have ignored the fact that McLeodUSA's complaint is two-fold; i.e., McLeodUSA complains that (a) Qwest misinterprets language agreed to by the parties as to how DC power rates should be assessed and (b) Qwest's interpretation is discriminatory in that it requires McLeodUSA to pay more for power than Qwest itself would pay (and, as such, is inconsistent with state and federal law).[26] Analysis regarding the discriminatory nature by which Qwest assesses its various rates must ultimately be rooted in proper cost recovery, and the cost study supporting those rates and identifying the intended cost-recovery mechanisms is the most instructive documentation to aid in that analysis.

Second, the *Power Measuring Amendment* is, by its very nature, a recognition on the part of Qwest that at least one of its DC Power rate elements (*8.1.4.1.3 Usage More than 60 Amps*) should be assessed differently than it had been assessed in the past. In other words, absent the need for Qwest to recognize that at least rate element 8.1.4.1.3 should be assessed on an "as measured" basis as opposed to the "as ordered" basis Qwest had used to that point, there would have been no need for Qwest to offer the *Power Measuring Amendment* in the first place. Further, given Qwest's recognition that *8.1.4.1.3* had been inappropriately applied (presumably in relation to its underlying cost structure), it is logical to assume that a difference of opinion as to the applicability of the other DC Power Rate element (*8.1.4.1.1 Power Plant*) may also be analyzed by looking to the underlying cost information upon which the rate was developed. Simply put, the

[26] See, *e.g.*, McLeodUSA's *Petition for Enforcement of Interconnection Agreement*, page 5.

manner by which costs are measured and the resultant rate is established, dictates the manner by which the rate must be applied (to ensure proper cost recovery), and the cost study is the first place you should look when questions about proper rate application arise.

Q. IN YOUR RESPONSE ABOVE, YOU INDICATE THAT THE POWER MEASURING AMENDMENT IS A RECOGNITION ON QWEST'S PART THAT AT LEAST ONE OF THE DC POWER RATES SHOULD BE APPLIED DIFFERENTLY THAN IT HAD BEEN APPLIED BY QWEST IN THE PAST. PLEASE EXPLAIN THAT POINT IN MORE DETAIL.

A. At page 4 of her Response testimony, Ms. Million states as follows:

> There is no question that the Power Plant rate has been applied to CLECs' power needs on an "as ordered" basis since it was first implemented in Washington. Indeed, Qwest's cost study clearly indicates on both the Rate Summary tab and the Detailed Summary of Results tab that Qwest requested, and the Commission approved, that the Power Plant rate would be charged according to the number of amps specified in CLECs' power feed orders. Attached as Exhibit TKM-2 is a printout of the Detailed Summary of Results for the Washington Cost Study, including the comments to each rate element. The comments to the Detailed Summary of Results are direct and clear. Qwest stated that its cost study supported a rate for power plant based on the number of amps in a CLEC's power feed order, and explained that the rate would be assessed on an "as ordered" basis.

Ms. Million's point is that the Power Plant rate has always been assessed on an "as ordered" basis, and that the cost study itself in summarizing the rates, references its application on as "as ordered" basis. Hence, according to Ms. Million, there can be no question that the Power Plant rate must be assessed on an "as ordered" basis. In support of this argument, Ms. Million includes with her testimony Exhibit TKM-2, which is an excerpt from the Washington Collocation Cost study (excerpted from Excel tab: *A.*

Detailed Summary of Results). The following is a direct excerpt from the electronic copy of the cost study, taken from that same tab (and visible on Ms. Million's Exhibit at the top of Page 2):

Washington Interconnection Services Collocation					
Cost Element	**Investment**	**Total Direct**	**TELRIC**	**Common**	**TELRIC + Common**
	sB r1	**sB r14**	**Total Direct X (1 + 0.1962)**	**TELRIC X 0.0405**	**sB r40**
1.4 Power Usage					
1.4.1 Power Plant per Amp Ordered					
Power Plant per Amp Ordered	$480.10	$7.50	$8.9765	$0.3635	**$9.3400**
Power Usage-Less than 60 AMPS per Amp Ordered		$1.26	$1.51	$0.06	**$1.57**
Power Usage-More than 60 AMPS per Amp Ordered		$2.52	$3.01	$0.12	**$3.13**

Note that after identifying each of the three Power Usage rate elements, each one is identified as "per Amp Ordered," including "*Power Usage-More than 60 Amps*." Presumably, this means that Qwest originally intended to assess both the Power Usage and Power Plant charges on an "as ordered" basis (and indeed, that is the way Qwest assessed those rates prior to the *Power Measuring Amendment*). Yet, even Qwest admits that the *Power Measuring Amendment* was specifically intended to change the rate application for at least one of those elements (*Power Usage-More than 60 Amps*) from an "as ordered" to an "as measured" basis. This then raises an important question: If Qwest originally intended to apply both of these rate elements on an "as ordered" basis, but *intentionally* changed the application of at least one of these elements previously identified "as ordered" to an "as measured" basis, why then is Qwest so insistent that the other rate element (namely Power Plant) bearing the same instruction shouldn't have also been changed? I find it curious that Ms. Million can easily accept the fact that the Power Usage rate is now billed on an "as measured" basis (seemingly inconsistent with her Exhibit TKM-2), but strenuously objects to the notion that the Power Plant rate element

should be treated the same – when Qwest originally applied an "as ordered" designation to both of the rate elements. This inconsistency undermines Ms. Million's testimony on this topic.

Q. IS EXHIBIT TKM-2 MEANINGFUL IN PROVING THAT THE POWER PLANT RATE ELEMENT SHOULD BE ASSESSED ON AN "AS ORDERED" BASIS?

A. No. Again, the specific purpose of the *Power Measuring Amendment* was to change the manner by which Qwest would assess various power usage charges. That is not in debate. The only question that is truly in debate is: Which elements were to be changed via the *Amendment*? That question can only be answered by looking both to (a) the language of the *Power Measuring Amendment* for purposes of gauging the intention of the parties and (b) looking to the cost study to determine if such a change is appropriate given the manner by which each rate was developed. In both circumstances, the facts support McLeodUSA's interpretation wherein both the Power Usage and Power Plant rate elements should be applied on an "as measured" basis (I discuss the language included in the *Power Measuring Amendment* in more detail in response to Mr. Easton, see *supra.* Section II).

Q. MS. MILLION DISAGREES WITH YOUR ANALYSIS WHEREIN YOU CONCLUDE THAT THE COST STUDY, WHEN DEVELOPING THE POWER PLANT RATE, USES *USAGE* AS THE PRIMARY BUILDING BLOCK. PLEASE RESPOND.

A. Ms. Million states as follows at page 7:

> While I do not deny that the *label* for the divisor (1000) on tab E.1.4 Power Equipment used to calculate the cost per Amp of power plant says

> "DC Power Usage," I strongly disagree that it means that the calculation itself results in a power plant cost based on usage. Nor am I suggesting that the cost per Amp for power plant is based on "some measure of power feeder cable size or an assumption related to List 2 drain for CLEC equipment and List 1 drain for Qwest equipment." The fact is that none of these measures of power has anything to do with the way in which Qwest calculated the cost per Amp for power plant. Mr. Starkey has focused his discussion on a label in the cost study that was admittedly applied imprecisely and has ignored completely the actual logic and the calculation of cost that results in a per Amp rate for power plant based on the amount of power plant required to produce a hypothetical 1000 Amps of power capacity. That calculation has nothing to do with usage and it has nothing to do with Qwest's embedded costs associated with its power plant equipment.

Frankly, Ms. Million's response doesn't make sense. While first admitting that the cost study itself indicates that the total investment is divided by usage to arrive at what necessarily must therefore be a usage-based cost per Amp, she goes on to suggest that usage was not the basis for per-Amp costs. While Ms. Million's refusal of the obvious (i.e., that dividing by usage will produce a usage-based cost per Amp) is inappropriate on its face, she goes on to state that the divisor was not the level of the CLECs' power cable order (i.e., what I would expect to see if Qwest's position were correct), nor was it List 1 drain or List 2 drain (i.e., some level of engineered capacity). Apparently, Ms. Million is unable to apply any meaning to the 1,000 amps used to develop per amp costs, other than to suggest it was consistent with an overly hypothetical construct required by TELRIC (Total Element Long Run Incremental Cost). Following Ms. Million's argument to its logical conclusion, what she is saying is that the 1,000 amps in Qwest's cost study is completely arbitrary, or that it was not meant to reflect any engineering judgment. Were that true (which it is not), then the resultant rates would be arbitrary and without meaning as well, something that was certainly not intended by the Commission in adopting them.

Q. EXPLAIN WHY YOU BELIEVE THAT MS. MILLION'S ASSERTION REGARDING THE "HYPOTHETICAL" NATURE OF THE COST STUDY IS IN ERROR?

A. Ms. Million provides the necessary rebuttal to this point on the very next page of her testimony. Therein (page 8), she provides us the overarching architecture of the cost study (and specifically, the DC Power Usage rate development) when she admits that the cost study was built to answer the following question:

> "How much would the power plant cost on a per Amp basis if I were to model enough power equipment to produce 1000 Amps of power capacity?"

This question informs us that the model was developed using a hypothetical power plant capable of producing 1,000 amps of power usage (what Ms. Million refers to as capacity). In other words, the power plant modeled in the cost study will support a level of simultaneous electrical usage equal to 1,000 amps. That is perfectly consistent with the discussion in my Supplemental Direct Testimony and corroborates the cost study's own terminology wherein, at cell B10 (tab: E.1.4 Power Equipment), it identifies the 1,000 amps as "DC Power Usage." Ms. Million's discussion does not support Qwest's position that the Power Plant rate should be applied based upon the size of the CLEC's order for power feeder cables (a variable even Qwest admits has no direct or measurable correlation to power usage or capacity).

Q. AT PAGE 8, MS. MILLION STRESSES THAT NEITHER THE COST STUDY, NOR ANY OF ITS ASSUMPTIONS, HAVE "ANYTHING TO DO WITH THE ACTUAL ELECTRICAL CURRENT THAT ANY TELECOMMUNICATIONS

EQUIPMENT IN A CENTRAL OFFICE MIGHT CONSUME." DO YOU AGREE?

A. No, I do not. Ms. Million's complete quote is provided below:

> The point of this discussion is that none of these assumptions has anything to do with the actual electrical current that any telecommunications equipment in a central office might consume. The only "chargeable unit" being developed in Qwest's cost study is the cost of an Amp of power plant capacity, whether it is based on a hypothetical power plant configuration with 1000, 500 , or 2000 Amps of capacity.

For Ms. Million's statement to be true (and/or Qwest's cost study to be meaningful under Ms. Million's assertion), Qwest would have to build its power plant (i.e., plan and construct the size of its DC Power equipment), without any regard to the amount of usage it is required to accommodate. That is, there would have to be no linkage between the size of the power plant "capacity" to which Ms. Million refers, and the anticipated usage. Indeed, she attempts to make this very point at page 10 of her testimony when she suggests that:

> …the 1000 Amps of DC Power Usage assumed in Qwest's cost study is really an assumption about the total capacity available from a given amount of power equipment and <u>has no correlation to the actual amount of electrical current consumed by telecommunications equipment….</u> [emphasis added]

Ms. Million's contention that the capacity of the power plant is completely detached from the anticipated electrical usage it will support is simply untrue. Indeed, if Ms. Million's description of the cost study were accurate, then the cost study diverges dramatically from Qwest's own engineering practices, as embodied in Qwest Technical Publications, wherein it states that Qwest sizes its power plant equipment according to the List 1 drain (i.e., peak usage) for all equipment in the central office, and then constructs its power plant sufficient to accommodate that level of usage. Simply put, regardless of Ms.

Million's assertions to the contrary, there is a direct and meaningful correlation between electricity consumed by the telecommunications equipment in the central office, and the resultant size of the power plant (both in the real world and in the cost study). That is exactly why the cost study uses the term "usage" when identifying the 1,000 amps of power plant capacity. There is no imprecision in the cost study, as suggested by Ms. Million.

Q. IF WE ASSUME YOU ARE CORRECT AND THERE IS A DIRECT CORRELATION BETWEEN USAGE AND THE SIZE OF THE POWER PLANT, WOULD QWEST'S COST STUDY THEN MAKE SENSE AND BE CONSISTENT WITH ITS STATED ENGINEERING PRACTICES?

A. Yes, it would. It would not, however, support Qwest's position in this proceeding because it makes clear the fact that Qwest, in the cost study, divided its total power plant investment by a measure of its usage, and as such, the only logical application of the resultant rate would be to a measure of the CLEC's usage (not the size of the CLEC's power cable order). The substantial information provided by McLeodUSA showing that there ***is*** a direct correlation between power plant capacity and usage, in both the real world and in Qwest's cost studies, seriously undercuts Qwest's theory in this case, and appears to be the driving force behind Ms. Million's characterization of the cost study as overly hypothetical and completely detached from Qwest's actual operations.

Q. DO YOU AGREE WITH MS. MILLION'S ASSERTIONS REGARDING THE HYPOTHETICAL NATURE OF THE COST STUDY?

A. No. At pages 12 and 13 Ms. Million testifies as follows:

> The FCC's TELRIC rules require Qwest to develop costs on the basis of a hypothetical, forward-looking network. This means that regardless of the existing network that Qwest has in place, or the costs that it will or has incurred for that embedded network, Qwest is entitled to charge CLECs for the use of its network (including DC power) so long as it does so using TELRIC compliant rates.

With this explanation, Ms. Million attempts to convince us that the cost study does not, and indeed, should not, be based upon Qwest's own engineering guidelines (including guidelines that require DC Power Plant capacity to be based upon List 1 Drain – or peak usage). Instead, according to Ms. Million, TELRIC requires some abstract network that is so "forward looking" as to be hypothetical. She is mistaken and Qwest's own cost study refutes her testimony.

Q. PLEASE EXPLAIN.

A. It is clear from discovery responses provided by Qwest in Iowa in relation to its cost study (and made available here by agreement of the parties), that Qwest's cost study assumes the use of the same DC power equipment Qwest actually employs in its network, and assumes in the cost study, that the equipment is used exactly as it would be in the field. Likewise, the model uses actual invoices and purchase order data to reflect its investment in this type of equipment. Moreover, Mr. Ashton (Qwest's point witness on engineering issues) admitted in a similar Utah proceeding that he served as the engineering subject matter expert on the cost study and personally validated the engineering assumptions used therein. Hence, while Ms. Million would like us to believe that the cost study bears no resemblance to Qwest's actual network design, her testimony is inconsistent with this other evidence from Qwest. While it is true that TELRIC cost studies may become somewhat hypothetical in employing the forward looking

requirement of TELRIC (e.g., assumptions that the network contains 100% digital switches even though analog switches still exist), no such assumptions impact Qwest's DC Power cost study. Indeed, there is no particular "forward looking" technology substitution evident at all in Qwest's DC power study that I can discern; batteries, rectifiers, re-generation equipment, etc. are all equipment used by Qwest in its actual power plant. Nonetheless, even if Ms. Million's concerns had any basis in fact (which they do not), she has the theory wrong as well. "Forward looking" assumptions required by TELRIC are best implemented by using the company's engineering documentation aimed at making its operations optimally efficient (as in this case, Qwest's technical documents discussing proper sizing of DC Power Plant do). As such, if Qwest's cost studies intentionally ignored Qwest's engineering documentation related to sizing its DC Power Plant based upon a measure of usage (i.e., List 1 Drain), as Ms. Million contends, the cost study would be a poor estimate of Qwest's TELRIC costs. Fortunately, that is not the case.

Q. CAN YOU PLEASE SUMMARIZE THE IMPORTANCE OF THE DISCUSSION ABOVE?

A. Yes. Ms. Million argues that the cost study uses a "hypothetical" 1,000 amps of capacity, and as such, the 1,000 amps provides little insight into whether the rate should be applied on an ordered or consumed basis (because she believes the cost study is simply being "imprecise" when it refers to the 1,000 amps as "usage"). However, her arguments ring hollow in light of the fact that power plant capacity is purposefully sized, according to Qwest's own technical documents, in relation to the amount of usage anticipated by the office at peak demand under normal operating conditions (List 1 drain). Hence, in this

circumstance, "capacity" and "usage" are somewhat synonymous. Though perhaps not represented by a 1:1 correlation, the fact is that were more usage anticipated in the office, additional power plant would have to be placed and, likewise, were less usage anticipated, less power plant would be placed. As such, the power plant investment is incremental to the amount of engineered usage and hence, when the cost study uses usage as the basis for calculating per-amp rates (i.e., total investment divided by usage), the process is both logical and determinative. However, in order for Qwest to realize proper cost recovery, the resultant rate must be applied to usage as I have described throughout my testimony, and not some unrelated CLEC order for power feeder cables (which even Ms. Million admits plays no role in developing the rates).

Q. MS. MILLION, AT PAGE 9 OF HER TESTIMONY, TAKES ISSUE WITH THE CHART YOU INCLUDED IN YOUR SUPPLEMENTAL TESTIMONY. PLEASE RESPOND.

A. Ms. Million's primary criticism is found at page 9 of her Response as follows:

> The following simple mathematical example will make obvious the fallacy of Mr. Starkey's analysis. If the investment in power equipment necessary to make available 1000 Amps of power plant capacity is $448,000 and that amount is divided by 1000 Amps of hypothetical capacity, then the investment per Amp is $448. Further, if, as Mr. Starkey states in his testimony, actual usage is "only about 17.93% of the capacity," then actual usage would be 179.3 Amps. It is easy to see that 179.3 Amps used times $448 per Amp equals $80,326.40, an amount that is far short of the original power plant investment of $448,000.

To borrow a term from Ms. Million, her analysis is at best "misleading." To make her example work, Ms. Million is forced to mix the concept of capacity as it relates to the power plant, with the capacity of the power feeder cables. To do so, she uses an excerpt from my testimony in a fashion that shows either a gross misunderstanding of the issue, or a willingness to obfuscate the facts. Consider the following line from her testimony:

> Further, if, as Mr. Starkey states in his testimony, actual usage is "only about 17.93% of the capacity," then actual usage would be 179.3 Amps. It is easy to see that 179.3 Amps used times $448 per Amp equals $80,326.40, an amount that is far short of the original power plant investment of $448,000.

In my testimony when I refer to usage being only 17.93% of the capacity, I am quite clearly referring to the capacity of the feeder cables (which Qwest interprets as the CLEC's power order), NOT the capacity of the power plant. In other words, on average in Washington, McLeodUSA's power usage equates to only 17.93% of the capacity of its power feeder cables, not 17.93% of the power plant capacity. As such, when Ms. Million erroneously translates this percentage into power plant usage (i.e., 179.3 Amps out of 1,000), it is no wonder that her analysis shows under recovery; because the analysis is nonsensical. In my example, the capacity of the power plant does not change, and still has 1,000 amps of available power, regardless of McLeodUSA power "order," because the available capacity is only impacted by McLeodUSA's usage. And that is the point. The size of McLeodUSA's order for power feeder cables bears no real or meaningful relationship to the capacity of Qwest's DC power plant that McLeodUSA will consume at a given point in time, and as such, should have no bearing on sizing the power plant or contributing toward recovering its costs (a point with which Qwest's technical documentation agrees). Because, as explained by Mr. Morrison, Qwest engineers the size of its DC power plant consistent with the List 1 drain for the entire central office, it is McLeodUSA's actual usage, in combination with the usage of all other central office inhabitants (including Qwest), that contributes to that List 1 drain at the central office busy hour/busy day, and dictates the size of the power plant. Therefore, because the power plant is sized based upon an estimate of usage, usage serves as the only appropriate basis upon which to recover power plant costs, because it is the only way to

ensure that each power consumer pays for that portion of the power plant capacity it uses. The cost study recognizes this point in that it divides total power plant investment by usage to arrive at per amp costs.

Q. AT PAGE 9 AND 10 OF HER RESPONSE, MS. MILLION CONTENDS THAT IT WOULD BE IMPOSSIBLE FOR QWEST TO ESTIMATE AN AVERAGE COST RELATIVE TO ITS POWER PLANT BECAUSE THE USAGE EFFECTUATED BY THE POWER PLANT FLUCTUATES AND ISN'T EASY TO PREDICT. DO YOU AGREE?

A. No, not at all. Ms. Million's point here appears to be that a cost study meant to recover power plant costs based on usage would be impossible to construct because Qwest does not know how much of the power plant's capacity will actually be used on average. Again, she is mistaken. Ms. Million's background indicates that she has substantial experience in developing telecommunications cost studies. As such, the concept of a fill factor should be familiar to her. Cost studies routinely employ fill factors wherein the actual consumption of an element does not equate to its total capacity (i.e., the element is never quite fully utilized – a very common scenario).[27] Consider the following example, wherein the capacity of an element equals 12 units, yet consumption generally averages only 10 units. In this circumstance, cost studies routinely divide the total investment for the 12 units by the 10 units that are used on average so as to ensure proper cost recovery on an average, per unit basis (illustrated below):

[27] Consider, for example, a Qwest digital switch. Obviously, Qwest's digital switches have enormous capacity that is never fully utilized (by design). Instead, some average level of usage is studied for purposes of developing per minute switching costs. The same concept applies here in a much less complicated form. If Qwest is able to derive average switch usage patterns and thereby develop average per-minute costs, it has the wherewithal to easily solve a similar problem related to its less complex power plant facilities.

Fill Factor Adjustment

a	Total Capacity	12	units
b	**Cost of Total Capacity**	**$100**	assumption
c	Average Consumption	10	units
d	Fill-Ajusted Per Unit Costs	$10	($100/10)
e	**Demand * Unit Price (Recovery)**	**$100**	(10 * $10)
e	Fill Factor	83%	(10/12)

This concept is easily applied to Qwest's power plant wherein its actual measured usage often falls below the List 1 drain by which it is sized. And, contrary to Ms. Million's testimony, I'm informed that the actual usage on the power plant is something that is tracked routinely by power engineers for purposes of managing the power plant and for purposes of analyzing the need for potential augmentation. Hence, her unsubstantiated claim that it would be "impossible" for Qwest to estimate an average cost per Amp for power plant is simply wrong.

Q. MS. MILLION ALSO TAKES ISSUE WITH YOUR TABLE INCLUDED AT PAGE 5 OF YOUR SUPPLEMENTAL TESTIMONY. SHE SUGGESTS THAT IF MCLEODUSA WERE TO HAVE ORDERED THE 500 OR SO AMPS IN THE TABLE, QWEST WOULD HAVE INCREASED THE SIZE OF ITS POWER PLANT CAPACITY TO MEET THAT ORDER AND HENCE, TOTAL POWER PLANT CAPACITY IN THE TABLE SHOULD HAVE INCREASED ACCORDINGLY. DO YOU AGREE?

A. No. Washington is the third state (Iowa and Utah being the first and second) wherein this case will go to trial and substantial testimony has been filed by both parties. Nowhere in

any of those proceedings (including this one), has Qwest provided even 1 piece of data indicating that it actually sizes its power plant capacity to accommodate the power required to fully load a CLEC's power feeder cables (i.e., consistent with what Qwest refers to as the "power order"). The information that is available in this record and the records of those other proceedings as to how Qwest sizes its power plant capacity are Qwest's technical documentation and the testimony of Mr. Ashton (and Qwest witness Mr. Hubbard before him), both of which suggest that power plant should be sized based on the List 1 drain (i.e., usage at peak demand) for the entire central office. Mr. Ashton himself, in Utah, testified that if Qwest knew the List 1 drain for McLeodUSA's equipment (information that is available to Qwest), it should use that information, and NOT the size of McLeodUSA's feeder cables, to size its power plant. As such, Ms. Million's complaint simply isn't based in fact. The truth of the matter is that Qwest does not appear to augment its power plant in relation to the CLEC's "order" relative to power feeder cables, and hence, the CLEC's order of 500 amps would not, in my table on page 5, require additional power plant capacity as long as the existing capacity (in this example 1,000 amps) was sufficient to accommodate McLeodUSA's anticipated usage (i.e., 100 amps). Therefore, my table is accurate and Ms. Million's claims to the contrary are based upon what appears to be her misunderstanding of Qwest's actual engineering practices.

Q. SHOULD THE COMMISSION BE CONCERNED THAT QWEST IS NOT PAYING ANYTHING FOR ITS OWN USAGE OF DC POWER PLANT?

A. Yes, I would think there is a significant likelihood that Qwest is substantially over recovering DC Power Plant costs to the point that it is recovering the entire cost of DC

Power plant contemplated by the cost study from CLECs, and therefore, is getting DC Power plant to serve its own customers basically for free.

Q. PLEASE EXPLAIN.

A. We know that there are multiple collocators in many Washington central offices, and we know that List 1 drain is somewhere around 40% of List 2 drain. By charging each collocator at the List 2 drain associated with its power cable order, while sizing its power plant, and therefore, incurring cost, at List 1 drain, it takes only a few orders for distribution cables from CLECs before Qwest recoups the entire cost of power plant, which necessarily means that Qwest, the largest power user in the CO, essentially gets DC Power for free.

Q. DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY?

A. Yes, it does.