BEFORE THE
PUBLIC SERVICE COMMISSION OF UTAH

In the Matter of the Complaint of McLeodUSA Telecommunications Services, Inc., against Qwest Corporation for Enforcement of Commission-Approved Interconnection Agreement	))))))	Docket No. 06-2249-01

DIRECT TESTIMONY

OF

MICHAEL STARKEY

On behalf of

McLeodUSA Telecommunications Services, Inc.

April 14, 2006

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. WHAT IS QSI CONSULTING, INC. AND WHAT IS YOUR POSITION WITH THE FIRM?

A. QSI Consulting, Inc. ("QSI") is a consulting firm specializing in regulated industries, econometric analysis and computer-aided modeling. I currently serve as the firm's President.

Q. PLEASE PROVIDE A SYNOPSIS OF YOUR EDUCATIONAL BACKGROUND AND RELEVANT WORK EXPERIENCE.

A. Included with this testimony as Exhibit MS – 1 is a thorough description of my educational background and relevant work experience. In brief, I have been a consultant to telecommunications providers, equipment manufacturers, government agencies and other private parties since 1996. Previous to my consulting experience, I served as the Director of Telecommunications for the Maryland Public Service Commission ("PSC") and prior to that, as the Office of Policy and Planning's Senior Policy Analyst for the Illinois Commerce Commission. I began my career as a Senior Economist at the Missouri PSC. Throughout my career I have spent a great deal of time studying telecommunications networks, including substantial time and effort aimed at developing rationale, efficient means by which competing communications carriers can interconnect their respective facilities. I have likewise analyzed the underlying economic

characteristics of communications networks and have on numerous occasions provided expert testimony regarding the costs of providing various services. Finally, I am very familiar with the negotiation, mediation and arbitration processes envisioned by Section 252 of the Telecommunications Act of 1996 and I have, since 1996, participated in dozens of negotiations and arbitrations on behalf of some of the largest, and smallest, carriers in the nation.

Q. DO YOU HAVE EXPERIENCE DIRECTLY RELEVANT TO THE ISSUES IN THIS PROCEEDING?

A. Yes, I do. Issues surrounding proper billing for power delivered to Competitive Local Exchange Carrier ("CLEC") collocation arrangements have become important to numerous QSI clients across the country over the past two years. During that time period, I have headed an internal QSI team to identify potential problems related to billing for power and address those problems via interconnection agreement ("ICA") negotiations, arbitrations and/or complaints (such as this one). In addition, I have personally negotiated ICA language relative to the issue of collocation power and have testified before state commissions as to the reasonableness of that proposed language when agreement between the parties could not be reached.

In the course of such testimony and analysis, I have reviewed numerous cost studies and other cost-related documentation related to collocation power and have traced the cost-causation and rate structure that is most properly applied to cost-recovery for an incumbent local exchange carrier's ("ILEC's") investment in collocation power infrastructure. The abovementioned collocation-specific cost analysis is combined with approximately 15 years of near-continuous experience reviewing cost studies and

proposed rates of ILECs including Qwest and every other major ILEC in the nation. Finally, with Mr. Morrison, I am currently involved on behalf of McLeodUSA in complaints similar to this one filed so far in Iowa, Washington and Arizona.

Q. ON WHOSE BEHALF WAS THIS TESTIMONY PREPARED?

A. This testimony was prepared on behalf of McLeodUSA Telecommunications Services, Inc. (hereafter "McLeodUSA").

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. My testimony will describe the *Power Measurement Amendment*[1] upon which this Complaint is based and provide the rationale supporting McLeodUSA's interpretation of the *Amendment*. I will describe how McLeodUSA's interpretation is logical given the plain language of the *Amendment*, as well as why Qwest's interpretation is inconsistent with proper cost-recovery principles required in setting collocation rates. I will also briefly address a number of arguments Qwest is likely to make in support of its position and explain why Qwest is incorrect.

II. POWER MEASUREMENT AMENDMENT

Q. PLEASE DESCRIBE THE *POWER MEASUREMENT AMENDMENT*.

A. On August 18, 2004, Qwest Corporation ("Qwest") and McLeodUSA signed an amendment revising the method by which Qwest would bill McLeodUSA for charges related to Direct Current ("DC") power that electrifies the telecommunications

[1] *DC Power Measurement Amendment to the Interconnection Agreement between Qwest Corporation and McLeodUSA Telecommunications Services, Inc.*, signed August 18, 2004, included with the Complaint as Attachment A (hereafter "*Power Measurement Amendment*" or "*Amendment*").

equipment placed in McLeodUSA collocation areas. Attachment 1 to the *Power Measurement Amendment (*entitled *"DC Power Measuring"),* provides the substantive detail related to the parties' agreement. Attachment 1 includes only five (5) paragraphs and is broken into two primary parts: *Part 1 – Monitoring* and *Part 2 – Rate Elements – All Collocation*. Paragraph 1.1 provides the technical background on which the agreement is based, *i.e.*, that DC power orders exceeding 60 amperes are generally terminated on a Power Board, rather than the Battery Distribution Fuse Board ("BDFB") used to terminate smaller orders (60 amps and below). These pieces of equipment are described in detail by Mr. Morrison in his direct testimony.

Paragraph 1.2 then details the primary purpose of the amendment in the following three sentences:

> Qwest will perform a maximum of four (4) readings per year on a particular collocation site. Based on these readings, if CLEC is utilizing less than the ordered amount of power, Qwest will reduce the monthly usage rate to CLEC's actual use. If CLEC is utilizing more than the ordered amount, Qwest will increase the monthly usage rate to the CLEC's actual use.

Paragraphs 2.1 through 2.3 then identify the collocation rate elements to which the agreement will apply, or, in other words, the rate elements which will be reduced to levels reflecting their "actual use":

> 2.1 -48 Volt DC Power Usage and AC Usage Charges. Provide -48 volt DC power to CLEC collocated equipment and [sic] is fused at one hundred twenty-five percent (125%) of request. The DC Power Usage Charge is for the capacity of the power plant available for CLEC's use. The AC Usage charge is for the power used by the CLEC. Both the DC Power Usage Charge and the AC Usage Charge are applied on a per ampere basis.
>
> 2.2 The -48 Volt DC Power Usage Charge is specified in Exhibit A of the Agreement and applies to the quantity of -48 Volt Capacity specified by the CLEC in its order.

> 2.2.1 -48 Volt DC Power Usage Charge – Applies on a per amp basis to all orders of greater than sixty (60) amps. Qwest will initially apply the -48 Volt DC Power Usage Charge from Exhibit A of the Agreement to the quantity of power ordered by the CLEC. Qwest will determine the actual usage at the power board as described in Section 1.2. There is a one (1) amp minimum charge for -48 Volt DC Power Usage.

The final paragraph (2.3) merely requires that the parties have in place an existing ICA containing collocation rates before the *Power Measurement Amendment* can be effectuated.

Q. WHAT IS THE SOURCE OF DEBATE BETWEEN QWEST AND MCLEODUSA RELATED TO THE AMENDMENT?

A. Note that paragraphs 2.2 and 2.2.1 identify within the Amendment the rate elements that are to be impacted by the Amendment. Both paragraphs identify those rate elements as "*-48 Volt DC Power Usage*" and paragraph 2.2 points the reader to Exhibit A of the parties' ICA (the pricing addendum) as the source for those rates. Section 8.1.4. of Exhibit A to the parties' ICA is entitled "*-48 Volt DC Power Usage*" and includes four individual rate elements as indicated below:

		Recurring Charge	Non-Recurring Charge
8.1.4	**-48 Volt DC Power Usage**		
8.1.4.1	- 48 Volt DC Power Usage, per Ampere, per Month		
8.1.4.1.1.1	Power Plant – Less than 60 Amps	$11.7795	$0.00
8.1.4.1.1.2	Power Plant – Equal to or Greater than 60 Amps	$7.7927	$0.00
8.1.4.2	- Power Usage		
8.1.4.2.1	Power Usage - 60 Amps or Less, per Amp	$1.95	$0.00
8.1.4.2.2	Power Usage - More than 60 Amps, per Amp	$3.89	$0.00

Because both the "Power Plant" (8.1.4.1.1.1 and 8.1.4.1.1.2) and the "Power Usage" rate elements (8.1.4.2.1 and 8.1.4.2.2) are encompassed by the ""*-48 Volt DC Power Usage*" charge category (8.1.4.1) described by the *Power Measurement Amendment*, McLeodUSA expected that Qwest would assess DC power usage charges for both 8.1.4.1.1.2 and 8.1.4.2.2 based upon the amount of power actually used, not the amount that it had originally ordered (consistent with paragraph 1.2 of the *Amendment* described above).[2] Qwest, however, does not assess the usage charges in this manner. Instead, Qwest charges McLeodUSA for the "Power Plant" charge (8.1.4.1.1.2) based on the power capacity originally ordered by McLeodUSA for its power distribution facilities (*e.g.*, power cables and fuses), while billing the other DC power usage rate (8.1.4.2.2) based on actual usage. In other words, despite agreeing in the *Amendment* to bill DC power usage charges on an "as consumed," basis, Qwest has decided to continue to bill one of those elements (the most expensive element) on an "as ordered" basis.

Q. CAN YOU PROVIDE AN EXAMPLE THAT WILL HELP ILLUSTRATE THE PROBLEM?

A. Yes. Assume that McLeodUSA had originally ordered a total of 180 Amps of *-48 Volt DC Power* at Collocation A. However, due to demand characteristics and other variables described in Mr. Morrison's testimony, McLeodUSA only consumes approximately 24 Amps of power within that collocation in a given month. Given the terms of the *Power Measurement Amendment*, McLeodUSA expected its monthly invoice to look similar to

[2] The DC Power Usage rate element under 8.1.4.1.2 would not be assessed on actual usage because the *Power Measurement Amendment* requires measured usage only in locations where McLeodUSA ordered more than 60 Amps of DC power.

Table 1 below, wherein all *-48 Volt DC Power Usage* rate elements are assessed based on McLeodUSA's actual (or "as consumed") usage of 24 Amps:

TABLE 1

MCLEODUSA INTERPRETATION		Recurring Charge	Actual Amerpage Used	Invoice Amount
8.1.4.1	**-48 Volt DC Power Usage**			
8.1.4.1.1	Power Plant			
8.1.4.1.1.1	Power Plant - Equal to or Greater than 60 Amps	$7.7927	24	$187.02
8.1.4.2.2	Power Usage More than 60 Amps, per Amp	$3.89	24	$93.36

Collocation A - Total *-48 Volt DC Power Usage* Charges: $280.38

However, based upon what McLeodUSA believes to be an erroneous interpretation of the *Power Measurement Amendment*, Qwest bills McLeodUSA charges consistent with Table 2 below (assuming the same Collocation A characteristics):

TABLE 2

QWEST INTERPRETATION		Recurring Charge	Actual Amerpage Used	Invoice Amount
8.1.4.1	**-48 Volt DC Power Usage**			
8.1.4.1.1	Power Plant			
8.1.4.1.1.1	Power Plant - Equal to or Greater than 60 Amps	$7.7927	180	$1,402.69
8.1.4.2.2	Power Usage More than 60 Amps, per Amp	$3.89	180	$700.20

Collocation A - Total *-48 Volt DC Power Usage* Charges: $2,102.89

Q. PLEASE DESCRIBE THE TWO EXAMPLES ABOVE.

A. Table 1 assumes that Qwest bills McLeodUSA consistent with McLeodUSA's interpretation of the *Amendment, i.e.*, Qwest assesses both *-48 Volt DC Power Usage* rate elements based upon the 24 Amps of power McLeodUSA actually consumes in the above example. In contrast, Table 2 represents the manner in which Qwest interprets the Amendment (as well as the manner in which Qwest actually bills McLeodUSA for power

today), wherein Qwest bills only rate element 8.1.4.2.2 on an "as consumed" basis (24 Amps) while continuing to bill rate element 8.1.4.1.1.2 on an "as ordered" basis (180 Amps). Note that the difference in the size of the invoice based upon these two different interpretations is dramatic:

McLeodUSA Interpretation -	Table 1:	$280.38	per month
Qwest Interpretation -	Table 2:	$2,102.89	per month
Difference (Table 1 - Table 2):		**($1,822.50)**	per month

Though the magnitude of the difference in charges for this single representative collocation is significant, when one considers that this difference applies to nearly all of McLeodUSA's collocations in Utah on a monthly basis, the importance (and urgency) of the situation becomes readily apparent. Ms. Spocogee discusses the total over-billed amount relative to this issue in her testimony.

Q. CAN YOU PLEASE SUMMARIZE THE PARTIES' DIFFERING INTERPRETATIONS OF THE AMENDMENT?

A. Yes. The difference is relatively simple. McLeodUSA believes the Amendment is clear in requiring that all rate elements included within the *-48 Volt DC Power Usage* section of Exhibit A (8.1.4), specifically rate elements 8.1.4.1.1.2 (*Power Plant*) and 8.1.4.2.2 (*Usage more than 60 Amps*), be assessed based upon measurements undertaken by Qwest to identify McLeodUSA's actual power consumption. Qwest, on the other hand, interprets the agreement as requiring that only one of those two rate elements (8.1.4.2.2) be billed based on actual, measured consumption. The other DC power usage charge

(8.1.4.1.1.2 – *Power Plant*), according to Qwest, should be billed based upon the amount of DC power capacity McLeodUSA ordered for its DC power distribution facilities.

Q. PLEASE STATE YOUR REASONS AS TO WHY YOU BELIEVE "…THE AMENDMENT IS CLEAR IN REQUIRING THAT ALL RATE ELEMENTS INCLUDED WITHIN THE "*-48 VOLT DC POWER USAGE*" SECTION OF EXHIBIT A (8.1.4.1), SPECIFICALLY RATE ELEMENTS 8.1.4.1.1.2 (*POWER PLANT*) AND 8.1.4.2.2 (*USAGE MORE THAN 60 AMPS*), BE ASSESSED BASED UPON …ACTUAL POWER CONSUMPTION."

A. Section 2.0 of the Amendment identifies the rate elements to which the measurement agreement described in Section 1.0 will apply. Paragraphs 2.1, 2.2 and 2.2.1 each identify those rate elements exclusively as *-48 Volt DC Power Usage* as specified in Exhibit A. Exhibit A includes a specific rate grouping (8.1.4.) entitled *-48 Volt DC Power Usage*. It seems obvious that this is the rate grouping alluded to in the *Amendment*. That rate grouping includes two primary rate categories: (a) *Power Plant* and (b) *Usage* (with *Usage* broken up into different rates depending upon the size of the initial order - ± 60 Amps). Nowhere within the *Amendment* does Qwest isolate one of those charges versus the other, and indicate that one of the DC power usage rate elements should be billed based upon actual consumption, while the other should be billed according to the size of McLeodUSA's power order. Indeed, because the *Amendment* references the entire rate grouping by name when describing the rate elements to which the measurement agreement applies, it seems very clear that the intention was to apply the amendment to the rates within the referenced rate group.

III. QWEST'S STRANDED INVESTMENT ARGUMENT

Q. HAS QWEST PROVIDED MCLEODUSA WITH AN EXPLANATION RELATED TO ITS INTERPRETATION OF THE *AMENDMENT*?

A. It is my understanding from testimony recently filed by Qwest in Iowa (Docket No. FCU-06-20) that Qwest's primary defense is to suggest that the *Amendment* was not meant to be interpreted consistent with McLeodUSA's position. Nonetheless, Qwest has also argued that if the *Amendment* were to be interpreted consistent with McLeodUSA's interpretation (*i.e.*, that the *Power Plant* charge be assessed on an "as consumed" basis rather than an "as ordered" basis), Qwest would purportedly be unable to recover certain power plant investment undertaken by Qwest related to McLeodUSA's original order for collocation power.

Q. IS THERE ANY VALIDITY TO QWEST'S ARGUMENT IN THIS REGARD?

A. No. It is of primary importance that the Commission first understand that Qwest's interpretation is not consistent with the plain language of the *Amendment* and hence, the rationale underlying its mis-guided interpretation is somewhat superfluous. Nonetheless, it is also important for the Commission to understand that the rationale underlying Qwest's alternative interpretation likewise has no basis in fact. That is, Qwest would <u>not</u> experience un-recovered investment were the Commission to enforce the Amendment in the manner in which it is written (i.e., requiring that all *-48 Volt DC Power Usage* charges be assessed on the number of DC Amps actually consumed by McLeodUSA).

Q. CAN YOU PLEASE SUMMARIZE WHAT YOU UNDERSTAND TO BE QWEST'S ARGUMENT IN THIS REGARD?

A. As I understand it, Qwest's argument can be explained as follows (using the hypothetical – Collocation A – discussed above):

Qwest "Stranded Investment" Argument

1. Because McLeodUSA originally ordered 180 Amps to be delivered to its collocation space, Qwest was required to construct the power infrastructure (i.e., Power Plant) necessary to accommodate those 180 Amps (whether McLeodUSA actually used them or not).

2. As such, some amount of infrastructure investment (whether it be new investment or existing investment) can be traced to McLeodUSA's original order of 180 Amps, and

3. were McLeodUSA now able to pay only for the 24 Amps it actually uses, Qwest would be unable to recover the investments it made to accommodate McLeodUSA's original request (180 Amps).

Q. DOES THIS ARGUMENT HAVE MERIT?

A. No. There are three important facts that fatally undercut the validity of this argument:

1. The entire Qwest Central Office ("CO") shares the same underlying Power Plant infrastructure for purposes of receiving -48 volt DC power. CLECs and Qwest share common DC Power Plant facilities (batteries, rectifiers, power boards, etc.). Accordingly, there are no Power Plant investments specific to McLeodUSA, regardless of the size of its original order.

2. Power Plant infrastructure is sized according to actual -48 volt DC power usage spread across the entire CO (in sufficient capacity to accommodate the requirements of the entire office during the busy hour when the power load of the central office is at its peak). Therefore, an order for power from an individual CLEC, or even groups of CLECs, does not generate additional investments in Power Plant facilities. In other words, McLeodUSA's original order of 180 Amps did not require Qwest to invest in Power Plant infrastructure and, hence, there is no investment that is specific to the McLeodUSA order.

3. Power Plant facilities are sized across the common power requirements of the entire office, on a busy-hour basis, based upon the actual power consumption in the office (not orders for power placed either by Qwest engineers or CLEC engineers). Thus, it is the actual power consumption contributed by McLeodUSA's equipment (in combination with the usage of all other equipment in the office) that is critical in sizing Qwest's power plant, not the size of the power order. As such, Power Plant costs are incremental to the overall level of power usage, not the size of an order (a fact perfectly consistent with

McLeodUSA's interpretation of the *Amendment* and directly contrary to Qwest's interpretation).

Q. ARE YOU SUPPLYING THE ENGINEERING EXPERTISE INVOLVED IN YOUR THREE FACTUAL POINTS IDENTIFIED ABOVE?

A. No, Mr. Sidney Morrison, QSI's Chief Engineer, is also filing direct testimony in this proceeding. Mr. Morrison's testimony establishes the expert opinion and factual foundation related to the three points above. I use Mr. Morrison's engineering analysis for purposes of drawing conclusions related to the reasonableness of Qwest's interpretation of the Amendment and also the economic validity of its "stranded investment" argument.

Q. PLEASE DESCRIBE YOUR RESPONSE TO QWEST'S "STRANDED INVESTMENT" ARGUMENT IN MORE DETAIL.

A. As Mr. Morrison describes in his testimony, power engineers design a central office Power Plant based upon the forecasted power requirements (or power draw) of the entire CO. Power engineers then build the initial Power Plant to accommodate those forecasted needs and likewise monitor existing power usage across the office to gauge the need for any augmentation that may be required. When the power requirements of the central office begin to exceed a given "target" capacity constraint of the existing power plant equipment, augmentation options are studied and if augmentation is required, additional equipment is added.

Q. WHY IS THAT IMPORTANT FROM AN ECONOMIC (I.E., COST CAUSATION) PERSPECTIVE?

A. Because the central office Power Plant is designed and managed relative to the power usage requirements of the entire CO, the initial design and subsequent augmentations are relatively blind to the individual orders of any single collocator. Therefore, from a "cost causation" perspective, even if McLeodUSA ordered a total capacity of 180 Amps, but used only 24 Amps (as in the above example), it is highly unlikely that McLeodUSA's original order caused Qwest to undertake any investment related to its power plant. This is true for two reasons. First, because power monitoring generally focuses on the actual power usage (not power orders) in the office, it is only the 24 Amps relative to McLeodUSA's actual usage that would be noted in any augmentation analysis – and it is this 24 Amps that might drive incremental investment (though it is highly unlikely). Second, because McLeodUSA's original order (180 Amps) and its actual usage (24 Amps) are such a small component of the office-wide power requirement, Qwest's existing power plant would need to be very near its capacity target for any McLeodUSA-specific usage to have caused any augmentation activity. Accordingly, there is little chance that Qwest incurred any incremental investment relative to McLeodUSA's original power order that Qwest would be unable to recover if Qwest billed McLeodUSA on an "as consumed" basis for both DC power usage elements.

Q. HAVE YOU BEEN ABLE TO CONFIRM WHETHER QWEST HAS AUGMENTED ITS DC POWER PLANT IN RESPONSE TO A CLEC'S COLLOCATION ORDER FOR DC POWER?

A. No. Though Qwest has provided in response to McLeodUSA's discovery question 004S1, job numbers wherein it believes it was required to supplement its power plant in direct response to a McLeodUSA collocation power request, the information provided by

Qwest is not overly informative. Qwest provides only the job number and location of the request, it doesn't provide any additional information that would allow us to evaluate the state of the power plant prior to, or subsequent to, the McLeodUSA request. Indeed, Qwest provided similar information in response to McLeodUSA data requests in Iowa in response to generally the same requests. However, after further review (and more detailed information ultimately provided by Qwest with its testimony), it became clear that the power plant augmentations highlighted by Qwest were actually being driven either by (a) older, outdated power equipment already overtaxed by existing usage (primarily Qwest usage) or (b) prior Qwest service orders being held until additional power resources could be made available. In other words, it was clear that the power augmentation activities were necessary regardless of whether McLeodUSA had placed an order for additional power or not, and, perhaps most importantly, the need to augment had nothing to do with the size of the McLeodUSA order, as nearly any need for additional power capacity would have triggered an augmentation in most of the circumstances identified by Qwest. To summarize, neither the information provided by Qwest in discovery in this docket, nor additional information provided in Iowa, support Qwest's assertion that the size of a McLeodUSA power order drives incremental power plant investment (instead, it is clear that increased power usage from all power consumers – Qwest included - drives additional investment in power capacity).

Q. DO YOU HAVE EXPERIENCE WITH ILEC COST STUDIES THAT MODEL POWER PLANT COSTS AND DEVELOP POWER PLANT-SPECIFIC RATES?

A. Yes, and I have never seen an ILEC cost study that attributes investment in Power Plant specifically to a collocator as Qwest's "stranded investment" argument would suggest.

Nor would such an attribution be reasonable. Rather, given that power plant facilities are shared by telecommunications equipment housed throughout the entire CO (even Qwest's own equipment), costs generated by those Power Plant facilities should be (and generally are) recovered based upon an individual consumer's relative use of those facilities (in this case, the number of Amps consumed by each party). To the extent Qwest assesses (or has in the past assessed) the Power Plant charge based on the number of Amps included in a CLEC's original order for power (as opposed to its actual usage), Qwest's application would be contrary to cost causative requirements inherent in the FCC's Total Element Long Run Incremental Cost ("TELRIC") rules. In other words, under Qwests' interpretation of the *Power Measurement Amendment*, CLECs in general, and McLeodUSA in particular, are and have been paying far more than their "fair share" of Qwest's power plant costs.

Q. HAS QWEST PROVIDED TO MCLEODUSA A COPY OF ITS UTAH COLLOCATION COST STUDY SUPPORTING ITS POWER PLANT AND POWER USAGE RATES THAT ARE AT ISSUE INTHIS PROCEDDING?

A. No, it is my understanding that Qwest has objected to providing its cost study claiming that the study would fail to provide any meaningful information pertinent to this proceeding.

Q. WHY IS THE COST STUDY MEANINGFUL?

A. If the Qwest's cost study confirms my previous experience, such that it models power plant costs relative to the capacity used by various power consumers (including Qwest), and not relative to the size of a given collocator's order, this will be additional evidence

showing that Qwest's interpretation is inconsistent with its own economic analysis relative to power capacity cost causation. It will also show that under Qwest's existing interpretation of the Power Measurement Amendment, Qwest is charging itself (and indirectly its end users using its retail services) less than it charges McLeodUSA for the same cost input – DC power plant. To the extent that Qwest is over-recovering DC power plant costs from McLeodUSA by virtue of charging McLeodUSA a disproportionate share of the cost of DC power plant (because it bases those charges on the size of the McLeodUSA order, and not relative to its actual power usage), then Qwest is paying less per amp used than is McLeodUSA. This disparate treatment puts McLeodUSA at a competitive disadvantage since it must recover significantly higher DC power plant costs than Qwest has to recover from its own customers.

Q. HAS QWEST ALSO OFFERED MCLEODUSA A SEPARATE ICA AMENDMENT THAT WOULD ALLOW MCLEODUSA TO RE-CONFIGURE ITS POWER DISTRIBUTION FACILITIES SO AS TO REDUCE ITS POWER CAPACITY AND THEREBY REDUCE ITS POWER COSTS?

A. Yes, my understanding is that Qwest has offered to McLeodUSA an additional ICA amendment entitled *DC Power Reduction Amendment to the Interconnection Agreement between Qwest Corporation and McLeodUSA Telecommunications Services, Inc.* (hereafter "*Power Reduction Amendment*"). In general terms the *Power Reduction Amendment* would allow McLeodUSA to request changes to its existing power distribution systems in its Qwest collocation arrangements, for purposes of reducing the power capacity available to those systems. According to Qwest, this would allow McLeodUSA to reduce the "ordered capacity" associated with its collocation power

arrangements and, thus, when Qwest assesses the Power Plant rate (8.1.4.1.1.2) – on an "as ordered" basis – to McLeodUSA's new, lower "as ordered" power capacity, McLeodUSA would experience lower DC power costs.

Q. IS THIS A GOOD ALTERNATIVE TO THE *POWER MEASUREMENT AMENDMENT*?

A. No, for reasons I will describe below, it is not. However, before I do that, it is important to point out that McLeodUSA is not searching for an alternative to the *Power Measurement Amendment* it has already signed with Qwest. McLeodUSA is asking that the Commission order Qwest to implement the *Power Measurement Amendment* correctly. If Qwest were required to implement the *Power Measurement Amendment* correctly, McLeodUSA would pay for DC power in a way that is reasonable and non-discriminatory (any excessive rate-level issues aside).

Q. WHY IS THE *POWER REDUCTION AMENDMENT* NOT A GOOD ALTERNATIVE TO THE *POWER MEASUREMENT AMENDMENT*?

A. Mr. Morrison describes in detail in his testimony, an important distinction between the *Power Plant* and *Power Distribution* components of a CO-based power system. In general terms, the *Power Plant* facilities (*e.g.*, batteries, rectifiers, generators) are shared by all power users in the CO, while *Power Distribution* facilities (*e.g.*, cables from the power board to the collocation arrangement, fuses) are generally dedicated to a single collocator. Qwest's *Power Reduction Amendment* would allow McLeodUSA to reduce only the voltage capability of its various *Power Distribution* facilities, many of which McLeodUSA has already paid for via non-recurring charges or continues to pay for via

monthly charges paid in addition to the *-48 Volt DC Power Usage* charges mentioned above. As such, the *Power Reduction Amendment* would require McLeodUSA to incur large re-arrangement fees to re-arrange *Power Distribution* facilities that it does not necessarily want to change (see Mr. Morrison's testimony discussing a number of engineering reasons why the *Power Distribution* facilities should be sized substantially larger than an average rate of consumption). Further, McLeodUSA would incur these fees and make these changes just so to reach a result which is significantly less attractive, and less reasonable, than the terms of the *Power Measurement Amendment* which it has already signed. For instance, Qwest's so-called solution still would not assess all DC power usage charges on an "as consumed" basis as the Amendment requires. Further, this outcome does not resolve the inherent inconsistency in Qwest's position with cost causation principles and the manner in which DC power plant is engineered. Simply put, the most economically-rational way to sell (and buy) DC power (*Power Plant*) in a CO is on an "as consumed" amperage basis, regardless of the size of the power distribution cables a power user ordered to serve its equipment. McLeodUSA has signed an amendment that provides it that right and there is no good economic or engineering reason why it should sign the far less reasonable *Power Reduction Amendment.*

Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

A. Yes, it does.