

**BEFORE THE
WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION**

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

**DIRECT TESTIMONY
OF
MICHAEL STARKEY**

On behalf of

McLeodUSA Telecommunications Services, Inc.

April 28, 2006

1 **I. INTRODUCTION**

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

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

5
6 **Q. WHAT IS QSI CONSULTING, INC. AND WHAT IS YOUR POSITION WITH
7 THE FIRM?**

8 A. QSI Consulting, Inc. (“QSI”) is a consulting firm specializing in regulated industries,
9 econometric analysis and computer-aided modeling. I currently serve as the firm’s
10 President.

11
12 **Q. PLEASE PROVIDE A SYNOPSIS OF YOUR EDUCATIONAL BACKGROUND
13 AND RELEVANT WORK EXPERIENCE.**

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

25 characteristics of communications networks and have on numerous occasions provided
26 expert testimony regarding the costs of providing various services. Finally, I am very
27 familiar with the negotiation, mediation and arbitration processes envisioned by Section
28 252 of the Telecommunications Act of 1996 and I have, since 1996, participated in
29 dozens of negotiations and arbitrations on behalf of some of the largest, and smallest,
30 carriers in the nation.

31

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

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

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

49 proposed rates of ILECs including Qwest and every other major ILEC in the nation.

50 Finally, with Mr. Morrison, I am currently involved on behalf of McLeodUSA in

51 complaints similar to this one filed so far in Iowa, Utah and Arizona.

52

53 **Q. ON WHOSE BEHALF WAS THIS TESTIMONY PREPARED?**

54 A. This testimony was prepared on behalf of McLeodUSA Telecommunications Services,
55 Inc. (hereafter “McLeodUSA”).

56

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

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

65

66 **II. POWER MEASUREMENT AMENDMENT**

67 **Q. PLEASE DESCRIBE THE *POWER MEASUREMENT AMENDMENT*.**

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

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 Exhibit A (hereafter “*Power Measurement Amendment*” or “*Amendment*”).

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

80
81 Paragraph 1.2 then details the primary purpose of the amendment in the following three
82 sentences:

83 Qwest will perform a maximum of four (4) readings per year on a particular
84 collocation site. Based on these readings, if CLEC is utilizing less than the
85 ordered amount of power, Qwest will reduce the monthly usage rate to CLEC’s
86 actual use. If CLEC is utilizing more than the ordered amount, Qwest will
87 increase the monthly usage rate to the CLEC’s actual use.
88

89
90 Paragraphs 2.1 through 2.3 then identify the collocation rate elements to which the
91 agreement will apply, or, in other words, the rate elements which will be reduced to
92 levels reflecting their “actual use”:

93 2.1 -48 Volt DC Power Usage and AC Usage Charges. Provide -48 volt DC
94 power to CLEC collocated equipment and [sic] is fused at one hundred twenty-
95 five percent (125%) of request. The DC Power Usage Charge is for the capacity
96 of the power plant available for CLEC’s use. The AC Usage charge is for the
97 power used by the CLEC. Both the DC Power Usage Charge and the AC Usage
98 Charge are applied on a per ampere basis.
99

100 2.2 The -48 Volt DC Power Usage Charge is specified in Exhibit A of the
101 Agreement and applies to the quantity of -48 Volt Capacity specified by the
102 CLEC in its order.
103

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 three individual rate elements as indicated below:

		Recurring Charge	Non-Recurring Charge
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	\$0.00
8.1.4.1.2	Usage Less than 60 Amps, per Ampere Ordered	\$1.57	\$0.00
8.1.4.1.3	Usage More than 60 Amps, per Ampere Used	\$3.13	\$0.00

Because both the “Power Plant” (8.1.4.1.1) and the “Power Usage” rate elements (8.1.4.1.2 and 8.1.4.1.3) 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 and

128 8.1.4.1.3 based upon the amount of power actually used, not the amount that it had
129 originally ordered (consistent with paragraph 1.2 of the *Amendment* described above).²
130 Qwest, however, does not assess the usage charges in this manner. Instead, Qwest
131 charges McLeodUSA for the “Power Plant” charge (8.1.4.1.1) based on the power
132 capacity originally ordered by McLeodUSA for its power distribution facilities (*e.g.*,
133 power cables and fuses), while billing the other DC power usage rate (8.1.4.1.3) based on
134 actual usage. In other words, despite agreeing in the *Amendment* to bill DC power usage
135 charges on an “as consumed,” basis, Qwest has decided to continue to bill one of those
136 elements (the most expensive element) on an “as ordered” basis.

137
138 **Q. CAN YOU PROVIDE AN EXAMPLE THAT WILL HELP ILLUSTRATE THE**
139 **PROBLEM?**

140 A. Yes. Assume that McLeodUSA had originally ordered a total of 180 Amps of *-48 Volt*
141 *DC Power* at Collocation A. However, due to demand characteristics and other variables
142 described in Mr. Morrison’s testimony, McLeodUSA only consumes approximately 24
143 Amps of power within that collocation in a given month. Given the terms of the *Power*
144 *Measurement Amendment*, McLeodUSA expected its monthly invoice to look similar to
145 Table 1 below, wherein all *-48 Volt DC Power Usage* rate elements are assessed based on
146 McLeodUSA’s actual (or “as consumed”) usage of 24 Amps:
147

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

MCLEODUSA INTERPRETATION		Recurring Charge	Actual Amperage Used	Invoice Amount
8.1.4.1	DC Power Usage, Per Ampere, Per Month			
8.1.4.1.1	Power Plant	\$9.34	24	\$224.16
8.1.4.1.3	Usage More Than 60 Amps, per Ampere Used	\$3.13	24	\$75.12

Collocation A - Total DC Power Usage Charges: \$299.28

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	Amperage Ordered	Invoice Amount
8.1.4.1	DC Power Usage, Per Ampere, Per Month			
8.1.4.1.1	Power Plant	\$9.34	180	\$1,681.20
8.1.4.1.3	Usage More Than 60 Amps, per Ampere Used	\$3.13	24	\$75.12

Collocation A - Total DC Power Usage Charges: \$1,756.32

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 8.1.4.1.2 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:	\$299.28 per month
Qwest Interpretation -	Table 2:	\$1,756.32 per month

Difference (Table 1 - Table 2): (\$1,457.04) per month

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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 Washington 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 (*Power Plant*) and 8.1.4.1.3 (*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 (8.1.4.1.3) be billed based on actual, measured consumption. The other DC power usage charge (8.1.4.1.1 – *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

190 **EXHIBIT A (8.1.4.1), SPECIFICALLY RATE ELEMENTS 8.1.4.1.1 (POWER**
191 **PLANT) AND 8.1.4.1.3 (USAGE MORE THAN 60 AMPS), BE ASSESSED BASED**
192 **UPON ...ACTUAL POWER CONSUMPTION.”**

193 A. Section 2.0 of the Amendment identifies the rate elements to which the measurement
194 agreement described in Section 1.0 will apply. Paragraphs 2.1, 2.2 and 2.2.1 each
195 identify those rate elements exclusively as *DC Power Usage* as specified in Exhibit A.
196 Exhibit A includes a specific rate grouping (8.1.4.) entitled *DC Power Usage*. It seems
197 obvious that this is the rate grouping alluded to in the *Amendment*. That rate grouping
198 includes two primary rate categories: (a) *Power Plant* and (b) *Usage* (with *Usage* broken
199 up into different rates depending upon the size of the initial order - \pm 60 Amps). Because
200 the *Amendment* references the entire rate grouping by name when describing the rate
201 elements to which the measurement agreement applies, it seems very clear that the
202 intention was to apply the amendment to the rates within the referenced rate group.

203

204 **III. QWEST’S STRANDED INVESTMENT ARGUMENT**

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

208 A. It is my understanding from testimony recently filed by Qwest in Iowa (Docket No. FCU-
209 06-20) that Qwest’s primary defense is to suggest that the *Amendment* was not meant to
210 be interpreted consistent with McLeodUSA’s position. Nonetheless, Qwest has also
211 argued that if the *Amendment* were to be interpreted consistent with McLeodUSA’s
212 interpretation (*i.e.*, that the *Power Plant* charge be assessed on an “as consumed” basis
213 rather than an “as ordered” basis), Qwest would purportedly be unable to recover certain

214 power plant investment undertaken by Qwest related to McLeodUSA's original order for
215 collocation power.

216

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

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

226

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

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

231 Qwest "Stranded Investment" Argument

232

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

237

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

241

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

245

246 **Q. DOES THIS ARGUMENT HAVE MERIT?**

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

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

253
254 2. Power Plant infrastructure is sized according to actual -48 volt DC power
255 usage spread across the entire CO (in sufficient capacity to accommodate the
256 requirements of the entire office during the busy hour when the power load of the
257 central office is at its peak). Therefore, an order for power from an individual
258 CLEC, or even groups of CLECs, does not generate additional investments in
259 Power Plant facilities. In other words, McLeodUSA’s original order of 180
260 Amps did not require Qwest to invest in Power Plant infrastructure and, hence,
261 there is no investment that is specific to the McLeodUSA order.

262
263 3. Power Plant facilities are sized across the common power requirements of the
264 entire office, on a busy-hour basis, based upon the actual power consumption in
265 the office (not orders for power placed either by Qwest engineers or CLEC
266 engineers). Thus, it is the actual power consumption contributed by
267 McLeodUSA’s equipment (in combination with the usage of all other equipment
268 in the office) that is critical in sizing Qwest’s power plant, not the size of the
269 power order. As such, Power Plant costs are incremental to the overall level of
270 power usage, not the size of an order (a fact perfectly consistent with
271 McLeodUSA’s interpretation of the *Amendment* and directly contrary to Qwest’s
272 interpretation).

273
274 **Q. ARE YOU SUPPLYING THE ENGINEERING EXPERTISE INVOLVED IN**
275 **YOUR THREE FACTUAL POINTS IDENTIFIED ABOVE?**

276
277 A. No, Mr. Sidney Morrison, QSI’s Chief Engineer, is also filing direct testimony in this
278 proceeding. Mr. Morrison’s testimony establishes the expert opinion and factual
279 foundation related to the three points above. I use Mr. Morrison’s engineering analysis
280 for purposes of drawing conclusions related to the reasonableness of Qwest’s
281 interpretation of the Amendment and also the economic validity of its “stranded
282 investment” argument.

283

284 **Q. PLEASE DESCRIBE YOUR RESPONSE TO QWEST’S “STRANDED**
285 **INVESTMENT” ARGUMENT IN MORE DETAIL.**

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

294
295 **Q. WHY IS THAT IMPORTANT FROM AN ECONOMIC (I.E., COST**
296 **CAUSATION) PERSPECTIVE?**

297 A. Because the central office Power Plant is designed and managed relative to the power
298 usage requirements of the entire CO, the initial design and subsequent augmentations are
299 relatively blind to the individual orders of any single collocator. Therefore, from a “cost
300 causation” perspective, even if McLeodUSA ordered a total capacity of 180 Amps, but
301 used only 24 Amps (as in the above example), it is highly unlikely that McLeodUSA’s
302 original order caused Qwest to undertake any investment related to its power plant. This
303 is true for two reasons. First, because power monitoring generally focuses on the actual
304 power usage (not power orders) in the office, it is only the 24 Amps relative to
305 McLeodUSA’s actual usage that would be noted in any augmentation analysis – and it is
306 this 24 Amps that might drive incremental investment (though it is highly unlikely).
307 Second, because McLeodUSA’s original order (180 Amps) and its actual usage (24

308 Amps) are such a small component of the office-wide power requirement, Qwest's
309 existing power plant would need to be very near its capacity target for any McLeodUSA-
310 specific usage to have caused any augmentation activity. Accordingly, there is little
311 chance that Qwest incurred any incremental investment relative to McLeodUSA's
312 original power order that Qwest would be unable to recover if Qwest billed McLeodUSA
313 on an "as consumed" basis for both DC power usage elements.

314

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

318 A. No. McLeodUSA sought information related to this issue in McLeodUSA DR No. 4 to
319 Qwest Washington, issued March 23, 2006. McLeodUSA's DR #4 states as follows:

320 Please identify each circumstance to date wherein a McLeodUSA
321 collocation order required Qwest to invest in additional equipment or
322 augment existing equipment in Washington relative to the equipment
323 types listed below. Your complete response will identify the specific
324 McLeodUSA collocation order and the specific equipment required to
325 fulfill the order.

- 326 a. Rectifiers
327 b. Power monitors
328 c. Battery Distribution Fuse Bays (BDFB)
329 d. Power Boards
330 e. Batteries
331 f. Generator or Alternators
332 g. Fuel tanks
333

334 Qwest objected to this request on April 6, 2006 as follows: "Qwest objects to this request
335 on the grounds that it is unduly burdensome and would require Qwest to perform a
336 manual, labor intensive special study in order to answer." While Qwest has refused to
337 provide the requested information in Washington, it did indeed provide information
338 responsive to this same request in Iowa, and after reviewing that information (and more

339 detailed information ultimately provided by Qwest with its Iowa testimony), it became
340 clear that the power plant augmentations highlighted by Qwest were actually being
341 driven either by (a) older, outdated power equipment already overtaxed by existing usage
342 (primarily Qwest usage) or (b) prior Qwest service orders being held until additional
343 power resources could be made available. In other words, it was clear that the power
344 augmentation activities were necessary regardless of whether McLeodUSA had placed an
345 order for additional power or not, and, perhaps most importantly, the need to augment
346 had nothing to do with the size of the McLeodUSA order, as nearly any need for
347 additional power capacity would have triggered an augmentation in most of the
348 circumstances identified by Qwest. To summarize, though Qwest has refused to date to
349 provide information to substantiate its claims in Washington, the information provided in
350 Iowa belies Qwest's assertion that the size of a McLeodUSA power order drives
351 incremental power plant investment (instead, it is clear that increased power usage from
352 all power consumers – Qwest included - drives additional investment in power capacity).

353
354 **Q. DO YOU HAVE EXPERIENCE WITH ILEC COST STUDIES THAT MODEL**
355 **POWER PLANT COSTS AND DEVELOP POWER PLANT-SPECIFIC RATES?**

356 A. Yes, and I have never seen an ILEC cost study that attributes investment in Power Plant
357 specifically to a collocator as Qwest's "stranded investment" argument would suggest.
358 Nor would such an attribution be reasonable. Rather, given that power plant facilities are
359 shared by telecommunications equipment housed throughout the entire CO (even Qwest's
360 own equipment), costs generated by those Power Plant facilities should be (and generally
361 are) recovered based upon an individual consumer's relative use of those facilities (in this
362 case, the number of Amps consumed by each party). To the extent Qwest assesses (or

363 has in the past assessed) the Power Plant charge based on the number of Amps included
364 in a CLEC's original order for power (as opposed to its actual usage), Qwest's
365 application would be contrary to cost causative requirements inherent in the FCC's Total
366 Element Long Run Incremental Cost ("TELRIC") rules. In other words, under Qwest's
367 interpretation of the *Power Measurement Amendment*, CLECs in general, and
368 McLeodUSA in particular, are and have been paying far more than their "fair share" of
369 Qwest's power plant costs.

370

371 **Q. HAS QWEST PROVIDED TO MCLEODUSA A COPY OF ITS WASHINGTON**
372 **COLLOCATION COST STUDY SUPPORTING ITS POWER PLANT AND**
373 **POWER USAGE RATES THAT ARE AT ISSUE IN THIS PROCEEDING?**

374 A. No, it is my understanding that Qwest has objected to providing its cost study claiming
375 that the study would fail to provide any meaningful information pertinent to this
376 proceeding. Nonetheless, cost study information provided by Qwest in a similar case in
377 Iowa (FCU-06-20), after a successful Motion to Compel filed on behalf of McLeodUSA,
378 supports McLeodUSA's position. That information clearly shows that Qwest develops
379 its "per Amp" Power Plant charges based upon electrical consumption (i.e., Qwest
380 divides its total Power Plant investment by its anticipated production of electrical
381 amperage to arrive at per-Amp charges), not upon some amount of ordered power. While
382 analysis of the Washington-specific cost study will be necessary before meaningful
383 comparisons can be made to Qwest's Iowa information, when the rate structure and rate
384 levels in Washington are compared to those in Iowa, it seems clear that the Washington
385 cost study once produced, will likewise support McLeodUSA's position.

386

387 **Q. WHY IS THE COST STUDY MEANINGFUL?**

388 A. If the Qwest's cost study confirms my previous experience, such that it models power
389 plant costs relative to the capacity used by various power consumers (including Qwest),
390 and not relative to the size of a given collocator's order, this will be additional evidence
391 showing that Qwest's interpretation is inconsistent with its own economic analysis
392 relative to power capacity cost causation. It will also show that under Qwest's existing
393 interpretation of the Power Measurement Amendment, Qwest is charging itself (and
394 indirectly its end users using its retail services) less than it charges McLeodUSA for the
395 same cost input – DC power plant. To the extent that Qwest is over-recovering DC
396 power plant costs from McLeodUSA by virtue of charging McLeodUSA a
397 disproportionate share of the cost of DC power plant (because it bases those charges on
398 the size of the McLeodUSA order, and not relative to its actual power usage), then Qwest
399 is paying less per amp used than is McLeodUSA. This disparate treatment puts
400 McLeodUSA at a competitive disadvantage since it must recover significantly higher DC
401 power plant costs than Qwest has to recover from its own customers.

402

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

407 A. Yes, my understanding is that Qwest has offered to McLeodUSA an additional ICA
408 amendment entitled *DC Power Reduction Amendment to the Interconnection Agreement*
409 *between Qwest Corporation and McLeodUSA Telecommunications Services, Inc.*
410 (hereafter "*Power Reduction Amendment*"). In general terms the *Power Reduction*

411 *Amendment* would allow McLeodUSA to request changes to its existing power
412 distribution systems in its Qwest collocation arrangements, for purposes of reducing the
413 power capacity available to those systems. According to Qwest, this would allow
414 McLeodUSA to reduce the “ordered capacity” associated with its collocation power
415 arrangements and, thus, when Qwest assesses the Power Plant rate (8.1.4.1.1) – on an “as
416 ordered” basis – to McLeodUSA’s new, lower “as ordered” power capacity,
417 McLeodUSA would experience lower DC power costs.

418

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

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

428

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

431 A. Mr. Morrison describes in detail in his testimony, an important distinction between the
432 *Power Plant* and *Power Distribution* components of a CO-based power system. In
433 general terms, the *Power Plant* facilities (e.g., batteries, rectifiers, generators) are shared
434 by all power users in the CO, while *Power Distribution* facilities (e.g., cables from the

435 power board to the collocation arrangement, fuses) are generally dedicated to a single
436 collocator. Qwest's *Power Reduction Amendment* would allow McLeodUSA to reduce
437 only the voltage capability of its various *Power Distribution* facilities, many of which
438 McLeodUSA has already paid for via non-recurring charges or continues to pay for via
439 monthly charges paid in addition to the *DC Power Usage* charges mentioned above. As
440 such, the *Power Reduction Amendment* would require McLeodUSA to incur large re-
441 arrangement fees to re-arrange *Power Distribution* facilities that it does not necessarily
442 want to change (see Mr. Morrison's testimony discussing a number of engineering
443 reasons why the *Power Distribution* facilities should be sized substantially larger than an
444 average rate of consumption). Further, McLeodUSA would incur these fees and make
445 these changes just so to reach a result which is significantly less attractive, and less
446 reasonable, than the terms of the *Power Measurement Amendment* which it has already
447 signed. For instance, Qwest's so-called solution still would not assess all DC power
448 usage charges on an "as consumed" basis as the Amendment requires. Further, this
449 outcome does not resolve the inherent inconsistency in Qwest's position with cost
450 causation principles and the manner in which DC power plant is engineered. Simply put,
451 the most economically-rational way to sell (and buy) DC power (*Power Plant*) in a CO is
452 on an "as consumed" amperage basis, regardless of the size of the power distribution
453 cables a power user ordered to serve its equipment. McLeodUSA has signed an
454 amendment that provides it that right and there is no good economic or engineering
455 reason why it should sign the far less reasonable *Power Reduction Amendment*.

456
457 **Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?**

458 A. Yes, it does.