

**BEFORE THE
WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION**

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

**REBUTTAL TESTIMONY
OF
SIDNEY L. MORRISON**

On behalf of

McLeodUSA Telecommunications Services, Inc.

June 22, 2006

PUBLIC VERSION

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- Exhibit SLM-4: Qwest Technical Publication 77386
- Exhibit SLM-5: Qwest Technical Publication 77368
- Exhibit SLM-6: Qwest Response to McLeodUSA DR No. 3-26
- Exhibit SLM-7: Qwest Response to McLeodUSA DR No. 2-11
- Exhibit SLM-8: Qwest Response to McLeodUSA DR No. 3-23
- Exhibit SLM-9: Qwest Response to McLeodUSA DR No. 2-9
- Exhibit SLM-10: Qwest Response to McLeodUSA DR No. 1-5

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I. INTRODUCTION AND QUALIFICATIONS

Q. PLEASE STATE YOUR NAME, BUSINESS ADDRESS, AND OCCUPATION.

A. My name is Sidney L Morrison. My business address is 550 Sunset Lakes Boulevard SW, Sunset Beach, North Carolina 28468-4900. I am currently employed by QSI Consulting, Inc. (QSI) as a Senior Consultant and the Firm’s Chief Engineer.

Q. ARE YOU THE SAME SIDNEY MORRISON WHO FILED DIRECT TESTIMONY IN THIS PROCEEDING ON APRIL 28, 2006?

A. Yes.

Q. ON WHOSE BEHALF IS YOUR REBUTTAL TESTIMONY BEING SUBMITTED?

A. McLeodUSA Telecommunications Services, Inc. (hereafter “McLeodUSA”).

Q. WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY?

A. My rebuttal testimony addresses the response testimony of Qwest Corporation’s (“Qwest’s”) point witness on engineering issues, Curtis Ashton,¹ filed on May 12, 2006. I will also address the response testimony of Qwest witness William R. Easton,² as it relates to Qwest’s Power Reduction and Power Restoration offerings.

¹ Response Testimony of Curtis Ashton on behalf of Qwest Communications, Washington Docket No. UT-063013, June 14, 2006 (“Ashton Response”).

² Response Testimony of William R. Easton on behalf of Qwest Communications, Washington Docket No. UT-063013, June 14, 2006 (“Easton Response”).

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II. RESPONSE TO QWEST WITNESS CURTIS ASHTON

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**Q. HAVE YOU REVIEWED THE RESPONSE TESTIMONY OF QWEST WITNESS
CURTIS ASHTON?**

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A. Yes. Mr. Ashton is Qwest's point witness on central office power engineering and
design.

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**A. Qwest's testimony is inconsistent with its engineering guidelines and
Technical Publications, which, contrary to Qwest's claims, applies to
collocated CLECs**

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**Q. WHAT IS THE PRIMARY DISAGREEMENT BETWEEN YOU AND MR.
ASHTON?**

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A. Mr. Ashton testifies that Qwest sizes the shared DC power plant of the central office
(e.g., batteries, rectifiers, generators) for Qwest's equipment based on List 1 drain, while
at the same time sizing DC power plant for McLeodUSA's equipment based on CLEC
power cable orders (or a higher List 2 drain).³ I contend that DC power plant is (or
should be) sized by Qwest based on the total List 1 drain (or peak "busy hour" usage
under normal operating conditions) of all equipment powered by the DC power plant in
the central office.

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Q. IS THIS PARTICULAR DIFFERENCE OF OPINION SIGNIFICANT?

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A. Yes, very significant. The issue is significant because the DC Power Measuring
Amendment should be interpreted, and, in turn, the DC Power Plant charge should be

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³ Ashton Response, page 4, lines 9 – 19.

47 applied, by Qwest in a manner consistent with the way in which this DC power plant
48 equipment is engineered and sized within Qwest’s central offices – a point on which
49 Qwest agreed in another state.⁴ I demonstrate that Mr. Ashton’s assertion that Qwest
50 must size DC power plant for CLECs based on power cable orders is flatly false and
51 contrary to Qwest’s own engineering manuals and requirements, and therefore, Qwest’s
52 application of the Power Plant rate based on ordered power cable capacity is
53 inappropriate.

54
55 **Q. PLEASE ELABORATE ON HOW MR. ASHTON’S ASSERTION THAT QWEST**
56 **MUST SIZE DC POWER PLANT FOR CLECS BASED ON POWER CABLE**
57 **ORDERS CONFLICTS WITH QWEST’S POWER ENGINEERING MANUALS**
58 **AND REQUIREMENTS.**

59 A. Mr. Ashton’s assertion that Qwest sizes DC power plant for CLECs based on List 2
60 drain⁵ directly conflicts with the following excerpt taken verbatim from Bellcore
61 technical document “Power Systems Installation Planning” BR-790-100-652, wherein it
62 is describing the power study procedure used for sizing DC power plant: ***BEGIN

63 **CONFIDENTIAL** [REDACTED]
64 [REDACTED]
65 [REDACTED]
66 [REDACTED]

⁴ Qwest witness Robert Hubbard testified in Iowa: “Qwest’s interpretation of the overall structure and language of the DC Power Measuring Amendment is consistent with how power plants are sized and built.” Hubbard Iowa Reply Testimony, Iowa Docket FCU-06-20, p. 3, lines 12 – 14. Mr. Ashton replaced Mr. Hubbard as Qwest’s point witness on engineering issues in the companion Utah docket.

⁵ “Qwest uses the ordered amount to size the power plant capacity made available to CLECs” and “Qwest assumes that the order is based on List 2 Drain.” Ashton Response, page 4, lines 18 – 19 and 11 – 12.

67 [REDACTED] **END CONFIDENTIAL***** This language
68 shows that DC power plant is not properly sized based on List 2 drain of any power user,
69 as Mr. Ashton claims, but on List 1 drain of all equipment in the central office. There are
70 numerous additional inconsistencies between Mr. Ashton's claims and Qwest's
71 engineering manuals, Technical Publications and requirements as shown by my direct
72 testimony at pages 31 – 35.

73

74 **Q. DID MR. ASHTON ATTEMPT TO RESPOND TO THESE INCONSISTENCIES?**

75 A. Not really. Though I pointed to no fewer than 5 power engineering manuals used to size
76 and engineer DC power plant in central offices that refute Qwest's testimony, Mr.
77 Ashton's only response is that these Qwest engineering manuals do not apply to CLECs.⁶
78 However, Mr. Ashton is wrong.

79

80 **Q. DID MR. ASHTON OFFER ANY OTHER QWEST OR BELLCORE**
81 **TECHNICAL PUBLICATIONS THAT HE SAYS DOES APPLY TO CLEC**
82 **COLLOCATIONS?**

83 A. No, Mr. Ashton simply says the publications I refer to do not apply to CLEC power usage
84 in a Qwest central office. Given that the Qwest publication I rely on is dated in 2003,
85 when CLECs power consumption in a Qwest central office was a given, I find it beyond
86 belief that Qwest would not have any publication addressing sizing of DC Power Plant
87 with respect to CLEC power usage. If, as Qwest claims elsewhere, CLEC usage of DC
88 power has such an impact on Qwest that it allegedly plans for CLEC power usage

⁶ In response to McLeodUSA DR No. 2-13, Qwest states in pertinent part: "...Qwest answers that Qwest's technical publications and engineering documents reflect the requirements for engineering power plant capacity to accommodate Qwest's telecommunications equipment, but do not address planning and design of power plant capacity for CLEC equipment."

89 differently than its publications otherwise state, I cannot fathom that Qwest would not
90 have another technical publication so stating. I think the fact that Qwest has never
91 produced such a document speaks volumes about its recent claim that the publications
92 that do exist, which support the position of McLeodUSA, do not apply to CLEC power
93 impacts on power plant sizing. I think it is also important to note that Mr. Ashton's claim
94 was never made in Qwest's Iowa or Utah pre-filed testimony.

95

96 **Q. WHY DO YOU BELIEVE THAT THESE ENGINEERING GUIDELINES AND**
97 **TECHNICAL PUBLICATIONS APPLY TO COLLOCATED CLECS?**

98 A. Because Qwest's own Technical Publications say so. For instance, page 1-6 of Qwest
99 Technical Publication 77386 entitled "Interconnection and Collocation for Transport and
100 Switched Unbundled Network Elements and Finished Services" (provided as Exhibit
101 SLM-4) states:

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1.6 General Requirements

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The following publications will also apply for collocation:

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- PUB 77350, Central Office Telecommunications Equipment Installation and Removal Guidelines
- PUB 77351, Qwest Communications, Inc. Engineering Standards (three modules)
- PUB 77355, Grounding-Central Office and Remote Equipment Environment
- ***PUB 77385, Power Equipment and Engineering Standards.***

123 *Appropriate sections of the publications must be followed when*
124 *collocating equipment in a Qwest wire center.* (emphasis added)
125

126 Similarly, at page 4-4, this document states: “General requirements for power and
127 grounding installation of Physical Collocation are covered in PUB 77350 and Chapter 8
128 of PUB 77385.”

129
130 **Q. QWEST TECHNICAL PUBLICATION 77386 STATES THAT TECHNICAL**
131 **PUBLICATIONS 77350 AND 77385 APPLY TO COLLOCATION. DID YOU**
132 **POINT TO EITHER OF THESE DOCUMENTS IN YOUR DIRECT**
133 **TESTIMONY?**

134 **A.** Yes. I discussed Technical Publication 77385 at page 32 of my direct testimony.
135 Specifically I explained that Section 2 entitled “*DC Power Plants and Chargers*” of
136 Technical Publication 77385 states:

137 **2.4 Engineering Guidelines**

138 When sizing power plants, the following criteria shall be used:
139

140 **List 1** drain is used for sizing batteries and chargers; the average busy-
141 hour current at normal operating voltage should be used. Telephony List
142 1 drains are measured at 9 ccs or at 18 ccs for the first 2 hours of a
143 discharge and 6 ccs thereafter.
144

145 **List 2** drain is used for sizing feeder cables, circuit breakers, and fuses;
146 the current that is required for projected peak under worst operating
147 conditions should be used. Telephony List 2 drains are measured at 36
148 ccs at -42.75 V for a nominal -48 VDC plant.
149

150 Based on these clear statements that the technical publications contemplate collocations, I
151 think there can be no doubt that these Qwest Technical Publications and engineering
152 guidelines cited in my direct testimony (which refute Qwest’s view of power plant sizing)
153 do apply to collocated CLECs.

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Q. WOULD YOU EXPECT THESE ENGINEERING GUIDELINES TO SPECIFICALLY IDENTIFY POWER USERS WHEN DISCUSSING HOW POWER PLANT IS SIZED?

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A. No. Power plant is based on the aggregate List 1 drain of the central office, and is therefore, sized to serve *loads* and not *carriers*. It is interesting to note that these Technical Publications do not specify sizing power plant for Qwest's equipment either. Using Mr. Ashton's logic, that would mean that these publications do not apply to sizing the power plant for Qwest's equipment as well. Of course, since these guidelines address loads drawn by equipment regardless of equipment ownership, it makes perfect sense that neither Qwest nor CLECs are specifically mentioned in the publication. That merely confirms the concept that the power plant is a shared resource amongst all power users in the central office and that power is indiscriminately available to all users, and it makes not a bit of difference in sizing that plant which particular user of power is creating the load on the plant for purposes of sizing it.

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Q. IS IT A CORRECT UNDERSTANDING OF YOUR DISCUSSION ABOVE THAT YOU DISAGREE WITH MR. ASHTON'S TESTIMONY THAT QWEST'S POSITION DOES NOT VIOLATE ITS TECHNICAL MANUALS BY ALLEGEDLY SIZING POWER PLANT FOR CLECS DIFFERENTLY THAN DEFINED IN THE MANUALS (ASHTON PAGE 10, LINES 11 -17)?

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A. Yes, I disagree with Mr. Ashton on this point. I have demonstrated above that these guidelines do, in fact, apply to CLECs, so the premise of Mr. Ashton's argument is flawed. Further, Qwest has updated its manuals since CLECs began collocating in its

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178 central office, and has had ample opportunity to modify any engineering manuals to
179 reflect any changes needed in a multiple-carrier environment – but it has not – meaning
180 that changes of this type are not needed.

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182 **Q. DOES QWEST SPECIFICALLY IDENTIFY COLLOCATED CLECS**
183 **WITHIN ITS INTERNAL POWER PLANT DOCUMENTATION?**

184 A. No, and this undermines Mr. Ashton’s suggestion that the power planning guidelines
185 should single out CLECs in order for them to apply to CLECs. Qwest freely admitted
186 that it does not identify collocators in its “Common Planning Documents,” which it uses
187 to identify the need for central office power plant augments, explain why these augments
188 are necessary and estimate the cost of such augment. The following Q&A with Qwest
189 witness Hubbard makes this point clear:

190 Q. Does it surprise you that McLeod is not mentioned by name?

191 A. It doesn’t surprise me at all.

192 Q. Why not?

193 A. It just doesn’t surprise me. We don’t mention the collocators in
194 these orders.

195 Q. Does the common planning or common planning process require
196 a list of the collocators by name to be provided on the common
197 funding or common planning documents?

198 A. No, not at all.⁷

199

200 This admission is important because if Qwest does not identify collocated CLECs in the
201 common funding documents used to size power plant in a particular central office, why
202 would these collocated CLECs be identified in Qwest’s underlying engineering
203 documentation? The answer is that they wouldn’t because power plant is sized based on
204 *loads* and not *carriers*, as evidenced by Qwest’s own common funding documents.

205

⁷ Iowa transcript, pages 650 – 651.

206 **B. Qwest has List 1 drain information for McLeodUSA in every instance and**
207 **Qwest's claim that it must size DC power plant to List 2 drain for CLECs**
208 **due to un-forecasted usage is false.**
209

210 **Q. MR. ASHTON CLAIMS THAT THE DIFFERENCE IN THE WAY QWEST**
211 **SIZES DC POWER PLANT FOR MCLEODUSA'S EQUIPMENT VERSUS**
212 **QWEST'S EQUIPMENT IS REASONABLE BECAUSE "QWEST DOES NOT**
213 **KNOW, AND CANNOT REASONABLY FORECAST, THE DRAW THAT CLEC**
214 **EQUIPMENT WILL TAKE, SO QWEST USES THE ORDERED AMOUNT TO**
215 **SIZE THE DC POWER PLANT CAPACITY MADE AVAILABLE TO CLECS."⁸**
216 **IS HE CORRECT?**

217 **A.** No, and this is a very important point from an engineering perspective. First of all, it is
218 misleading for Mr. Ashton to juxtapose a CLEC's order for power cable amperage with
219 an order for DC power plant capacity. Based on my conversations with McLeodUSA
220 collocation personnel, it is clear that they do not consider orders for collocation
221 distribution cable capacity as an order for power plant capacity.

222
223 **Q. WHY IS THIS ISSUE SO IMPORTANT?**

224 **A.** Qwest admits to treating CLECs differently than itself in the provisioning of power by
225 sizing power plant for its own equipment on List 1 drain, while allegedly sizing for
226 CLEC equipment based on a higher List 2 drain. Unfortunately for McLeodUSA, this
227 disparate treatment happens to result in much higher Power Plant charges. Qwest
228 attempts to justify this disparate treatment by claiming that Qwest sizes power plant for
229 CLECs based on the size of the cable order because Qwest has no idea what to expect in
230 terms of power draw. If Qwest's claims in this regard are false and Qwest does, in fact,

⁸ Ashton Response, page 4, lines 17 – 19.

231 know or could reasonably know what to expect in terms of McLeodUSA's drains, then
232 there is no basis for Qwest's disparate treatment that results in higher Power Plant
233 charges for McLeodUSA. In other words, this would expose Qwest's discriminatory
234 treatment as unsupported and unreasonable. Importantly, Qwest's own written
235 testimony, oral testimony, Qwest's engineering manuals, as well as a Technical
236 Publication written by Qwest's witness in this case, Mr. Ashton, shows that Qwest does,
237 in fact, know what to expect in this regard.

238

239 **Q. MR. ASHTON EXPLAINS THAT QWEST CANNOT SIZE POWER PLANT FOR**
240 **CLEC EQUIPMENT BASED ON LIST 1 DRAIN LIKE QWEST DOES FOR ITS**
241 **OWN EQUIPMENT⁹ BECAUSE IT DOES NOT KNOW MCLEODUSA'S LIST 1**
242 **DRAIN. IS THIS TRUE?**

243 A. No. *Qwest has sufficient information to size power plant for CLECs based on List 1*
244 *drain in every instance.*

245

246 **Q. IS THERE A SOURCE YOU CAN POINT TO THAT SUPPORTS YOUR**
247 **CONTENTION THAT QWEST HAS SUFFICIENT INFORMATION TO SIZE**
248 **POWER PLANT FOR CLECS BASED ON LIST 1 DRAIN IN EVERY**
249 **INSTANCE?**

250 A. Yes, a Qwest Technical Publication authored by Qwest witness Mr. Ashton. I have
251 attached to my testimony as Exhibit SLM-5 pertinent portions of Qwest Technical
252 Publication #77368 Issue E, dated March 2006, which states at page 4-3:

⁹ Mr. Ashton testified in Utah that "Because we happen to know the List 1 drain. In our documents, as Mr. Morrison pointed out over and over, we said we should engineer to the List 1 drain. So because we know it, we engineer to it." Utah transcript, page 315, lines 3 – 6.

253 Average heat release information is given by the vendors. If this cannot
254 be obtained, it can be estimated from List 1 (average) power drains given
255 by the equipment vendors...Sometimes the vendors will only give List 2
256 (peak) power drains. A rough estimate of List 1 drain is 30 – 40% of
257 the List 2 drain.
258

259 **Q. PLEASE EXPLAIN IN MORE DETAIL HOW QWEST COULD DETERMINE**
260 **LIST 1 DRAIN FOR MCLEODUSA IN ALL INSTANCES.**

261 A. Qwest testifies that it considers the McLeodUSA power cable order to be List 2 drain,
262 which means that Qwest has McLeodUSA's List 2 for each one of McLeodUSA's
263 collocations. And we know from Technical Publication 77368 that List 1 drain can be
264 estimated at 30-40% of List 2 drain. So, Qwest could size the power plant at 30 – 40% of
265 the McLeodUSA power cable order to size roughly at List 1 drain. For example, if
266 McLeodUSA submitted a power cable order for 175 amps, Qwest's technical publication
267 states that List 1 drain can be estimated to be between 53 – 70 Amps. If McLeodUSA
268 submitted order for a 300 amp cable, Qwest's technical publication says that List 1 drain
269 could be estimated at between 90 – 120 Amps. Hence, Mr. Ashton's claim that Qwest
270 must size power plant to List 2 drain for McLeodUSA because Qwest doesn't have the
271 List 1 drain is simply false.

272
273 **Q. ASSUMING FOR THE SAKE OF ARGUMENT THAT QWEST HAS ONLY ONE**
274 **PIECE OF INFORMATION – THE MCLEODUSA POWER CABLE ORDER – IN**
275 **ORDER TO SIZE POWER PLANT FOR MCLEODUSA. COULD QWEST**
276 **STILL SIZE POWER PLANT TO LIST 1 DRAIN FOR MCLEODUSA**
277 **EQUIPMENT BASED ON LIST 1 DRAIN?**

278 A. Yes. Again Qwest would have List 2 drain in every instance because McLeodUSA must
279 submit an order for a power cable for all of its collocations.

280

281

Q. YOU STATE ABOVE THAT MR. ASHTON AUTHORED QWEST TECHNICAL PUBLICATION 77368 WHICH EXPLAINS THE LIST 1 DRAIN ESTIMATION CALCULATION. HOW DO YOU KNOW MR. ASHTON AUTHORED THIS DOCUMENT?

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A. Because when this document was introduced as a cross-exhibit in the Utah hearings, Mr. Ashton testified that “I’m the author.”¹⁰ Qwest also acknowledged that Mr. Ashton authored this Technical Publication in response to McLeodUSA DR No. 3-21.¹¹

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289

Q. DOES ANY OTHER QWEST ENGINEERING MANUAL SHOW THAT QWEST CAN DETERMINE LIST 1 DRAIN FOR MCLEODUSA IN EVERY INSTANCE?

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A. Yes. REGN 790-100-656RG, Issue 3, May 1997, pages 3 – 4, Section 2.1 “Determining Drains” states as follows:

292

293

*****BEGIN CONFIDENTIAL**

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END CONFIDENTIAL***

301

The above excerpt, first of all, shows that Qwest can calculate List 1 drain in all instances

302

by simply dividing the List 2 drain of McLeodUSA by *****BEGIN CONFIDENTIAL**

303

END CONFIDENTIAL*** (which is consistent with the estimation calculation set

¹⁰ Utah transcript, page 317, line 3.

¹¹ McLeodUSA DR No. 3-21: “Q. Please provide a list of all Qwest Technical Publications Mr. Ashton has authored, co-authored, or were authored under his direction.” Qwest Response: “Tech Pubs 77368 and 77355, both of which are available at Qwest’s public website (qwest.com/techpub).”

304 out in Technical Publication 77368). Or, if McLeodUSA ordered a 100 amp power cable,
305 Qwest could estimate the List 1 drain at *****BEGIN CONFIDENTIAL [REDACTED] END**
306 **CONFIDENTIAL*****. In addition, this excerpt shows that despite Qwest's complaint
307 that McLeodUSA is asking Qwest to engineer for McLeodUSA though McLeodUSA
308 cannot do it for itself,¹² this excerpt shows that obtaining List 1 drain when sizing power
309 plant is an obligation of Qwest's [*****BEGIN CONFIDENTIAL [REDACTED]**
310 **[REDACTED] END CONFIDENTIAL*****]

311 Therefore, if Qwest does not have the List 1 drain information, as it claims, its own
312 engineering guidelines require Qwest to obtain it.

313

314 **Q. HAS QWEST ADMITTED UNDER CROSS EXAMINATION THAT LIST 1**
315 **DRAIN CAN BE CALCULATED FROM LIST 2 DRAIN?**

316 A. Yes. Mr. Ashton admitted this under cross examination in Utah. The following excerpt
317 from the Utah transcript demonstrates this point:¹³

318 A. "A rough estimate of List 1 drains is 30 – 40 percent of the List 2
319 drain."

320 Q. So in the rare event that the manufacturer does not provide List 1
321 drains, could Qwest develop a List 1 drain based on the List 2
322 drain using this type of a formula?

323 A. Qwest could roughly estimate a List 1 drain. As it says, roughly.
324

325 Furthermore, in the companion Iowa complaint case, Qwest witness Robert
326 Hubbard (who was replaced by Mr. Ashton in Utah) freely admitted that List 1 drain can
327 be calculated from List 2 drain. One such admission is found at page 648 of the Iowa
328 transcript, wherein Mr. Hubbard testified that, "[t]he office is designed on a total, like I
329 said, on around a List 1 drain. Basically, it's 40 to 70 percent of the List 2 drain, so it's

¹² Ashton Response, page 13, lines 7 – 9.

¹³ Utah transcript, page 318, lines 5 – 11.

330 around the List 1 drain.” Though Mr. Hubbard provided a different (and higher) List 1
331 estimation range in Iowa, the List 1 drain estimate percentage required to be used in
332 Qwest’s Technical Publications 77368 and 790-100-656RG actually defines the low end
333 of the range in Mr. Hubbard’s testimony. When asked to clarify this statement, Mr.
334 Hubbard again testified that 40-70% of List 2 drain is an approximation of List 1 drain.¹⁴
335 I have provided several additional pertinent excerpts from the Iowa transcript that makes
336 this point clear:

- 337 Q. Now, if we could go back to page 4 of your testimony, Mr.
338 Hubbard...you say “A central office power plant is sized on the total
339 requirement of every piece of equipment that has a power drain.” Do
340 you see that testimony?
341 A. I see that.
342 Q. When you use the term “drain” here, are you referring to List 1 drain,
343 List 2 drain?
344 A. What I was referring to there, I guess, is whatever power requirement,
345 not a List 1 or List 2 drain, per se, the power requirements.
346 Q. Well, if it is not List 1 drain or List 2 drain...do you mean the actual
347 measured requirement?
348 A. Well, a central office in its totality is sized closer – it’s based on – it’s
349 sized closer, I should say this, to a **List 1 drain. It’s about 40 to 70**
350 **percent, depending on the central office, of the actual List 2 drain**, so
351 it’s the requirements of the central office as a total, and like I said, it falls
352 in between 40 to 70 percent of the List 2 drain.
353 Q. I’m sorry. It falls between what percent of the List 2 drain?
354 A. I said 40 to 70.
355 Q. And when you are talking about a power plant is sized on drain, as
356 you’ve just used that term, we’re talking again about rectifiers, batteries,
357 and generators, correct?
358 A. The power plant.¹⁵
359

360 Again, at page 637, lines 3 – 7 of the Iowa transcript, Qwest witness Mr. Hubbard
361 testified: “[t]he List 1 drain is the basis for the design of the total central office, so you’ve
362 got engineering judgment in there too, which gives it between 40 to 70 percent of a List 2
363 drain, so it’s around the List 1 drain, correct.”

¹⁴ Iowa transcript, page 668, lines 11 – 17.

¹⁵ Iowa transcript, page 599, line 5 – page 600, line 12.

364

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**Q. DO YOU HAVE INFORMATION DEMONSTRATING THAT QWEST
ACTUALLY DOES HAVE IN ITS POSSESSION LIST 1 DRAIN INFORMATION
FOR MCLEODUSA AND OTHER CLECS?**

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A. Yes. Qwest developed a form to inventory the fuses and breakers in the BDFB and
Power Boards in its central office. This is known as the Form 841 “BDFB or Power
Board Panel Fuse/Breaker Assignment Record.” Qwest’s Form 841 is shown below:

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FORM 841

BDFB OR POWER BOARD PANEL FUSE/BREAKER ASSIGNMENT RECORD

Site:		CLLI:		Date:	
Address:					
Tech:			Phone/Pager:		
PBD/RR of this BDFB/PBD:				PANEL(s):	
Fdr Fuse/Brkr PBD & Position:		Fdr Fuse/Brkr Size:		Panel Load:	
Position #	Equipment & Relay Rack Fed	Fuse or Brkr Size	Mfg L-2 Drain	Mfg L-1 Drain	Actual Load
Totals					
additional panels may be placed on additional sheets					
List 2 drains are peak drains (fuses sized at 125% minimum of this; and cable sized from them too), and List 1 drains are average drains					
assigning fuses from the bottom to the top of a bay or panel (or inside to outside for horizontal panels) eases future installation and reduces cable congestion					
as needed, contact your Design Engineer for a fuse assignment (if those are tracked in your area)					
Please note if this Panel is "bussed" or "cabled" in the rear to adjacent panels (e.g., C, A2, etc.)					
information for all columns may not be available to you — some columns are for Engineering use, and some for the "field"					
Notes:					



376 This form shows that Qwest lists the specific equipment and relay rack fed by the
377 BDFB/Power Board fuse/breaker. For each piece of this equipment, Qwest lists: (1) Fuse
378 or Breaker Size, (2) Mfg L-2 Drain, (3) Mfg L-1 Drain, and (4) Actual Load. The “Mfg
379 L-1 Drain” is List 1 drain, which means that this form shows that Qwest has specific List
380 1 drain information about all equipment fed by its power boards and BDFBs.

381
382 **Q. FORM 841 DOESN'T IDENTIFY EQUIPMENT BY OWNER, HOW DO YOU**
383 **KNOW CLEC EQUIPMENT IS INCLUDED ON THIS FORM?**

384 A. Because Qwest has admitted that this form would include both Qwest and CLEC
385 equipment. Due to the inconsistency between Qwest's claim that it does not have the List
386 1 drain information for CLECs and Form 841 which has slots for entries of the List 1
387 drains for all equipment, McLeodUSA issued data request number 3-26 in order to clarify
388 the matter. I have included Qwest's response to DR No. 3-26 as Exhibit SLM-6. As
389 shown in subpart (a), McLeodUSA asked Qwest “whether the Form 841 includes the
390 telecommunications equipment of both Qwest and CLECs,” to which Qwest responded,
391 “Yes. If used, it would include that equipment.”

392
393 **Q. DID QWEST EXPLAIN HOW IT GETS THE LIST 1 DRAIN INFORMATION**
394 **TO POPULATE THE FORM 841?**

395 A. Yes. In response to McLeodUSA's question as to how Qwest obtains List 1 drain for this
396 form, Qwest responded as follows: “Qwest obtains L-1 drain information shown on this
397 form by applying engineering judgment to information obtained from the manufacturer,
398 information from actual experience with the equipment, and information obtained from
399 lab testing.” In short, Qwest has admitted that it has List 1 drain information for

400 McLeodUSA and other CLEC equipment and that it obtains this information from
401 various sources.

402

403 **Q. IS THERE OTHER INFORMATION ON FORM 841 THAT IS WORTH**
404 **NOTING?**

405 A. Yes. Note that on Form 841, the only columns of data that are totaled are “Mfg L-1
406 Drain” and “Actual Load,” which means that the sum totals of these two categories are
407 important to Qwest’s engineers, while the sum totals of other columns are apparently
408 unimportant. As I explain in my testimony, Qwest engineers monitor the aggregate (or
409 sum total) power usage of the central office and size based on the aggregate (or sum total)
410 List 1 drain, and the information in the “totaled” columns would provide this information.
411 If aggregate List 2 drain (at least for CLECs) was used to size power plant, as Mr. Ashton
412 contends, one would expect that Qwest would also total the “Mfg- L-2 Drain” column.
413 The fact that Qwest does not total this column, however, suggests that this aggregate List
414 2 drain is of no engineering value to Qwest.

415

416 **Q. DO YOU HAVE OTHER INFORMATION SHOWING THAT QWEST HAS LIST**
417 **1 DRAIN INFORMATION FOR MCLEODUSA’S EQUIPMENT?**

418 A. Yes. Mr. Ashton testified in Utah that it would indeed have the List 1 drain information
419 for McLeodUSA equipment that Qwest also uses in its network.¹⁶

420

¹⁶ During cross-examination, McLeodUSA counsel asked Mr. Ashton: “So does Qwest, then, know the List 1 drains of those pieces of equipment?” Mr. Ashton responded, “Yes, we do. I don’t know them off the top of my head right now.” Utah transcript page 315, line 11 – page 316, line 1.

421 **Q. IF QWEST SIZED POWER PLANT BASED ON MCLEODUSA'S ESTIMATED**
422 **LIST 1 DRAIN, WOULD THAT PROVIDE MCLEODUSA WITH THE POWER**
423 **IT NEEDS?**

424 A. Yes. Qwest would estimate List 1 drain around 40% of List 2 drain. Mr. Ashton's
425 exhibit CA-1 shows that sizing Qwest's DC power plant at 40% of McLeodUSA's power
426 cable orders would provide McLeodUSA with the power it needs (compare 40% of
427 column 4 to column 7).¹⁷

428
429 **Q. YOU HAVE PROVIDED NUMEROUS SOURCES ABOVE SHOWING THAT**
430 **QWEST HAS LIST 1 DRAIN INFORMATION FOR MCLEODUSA AND OTHER**
431 **CLECS. HAS QWEST STATED THAT IT WOULD SIZE POWER PLANT FOR**
432 **CLECS BASED ON LIST 1 DRAIN INFORMATION IF IT HAD LIST 1 DRAIN**
433 **INFORMATION?**

434 A. Yes. Mr. Ashton testified in Utah that if Qwest had List 1 drain information for
435 McLeodUSA it would size the power plant to this List 1 drain like it does for Qwest's
436 equipment. This statement can be found at page 319 of the Utah transcript, the pertinent
437 excerpt provided below:

438 Q. I believe you also discussed with Ms. Anderl the collocation
439 application that is attached as an exhibit to Mr. Starkey's
440 surrebuttal testimony. Do you recall that discussion?

441 A. Yes.

442 Q. And I believe you were discussing the fact that nowhere on that
443 application is there a category or a question for the List 1 drain
444 of the CLEC collocated equipment; is that correct?

¹⁷ All power usage is below 40% of the capacity of the ordered power cables except one collocation TACMWAFH9, which is about *****BEGIN CONFIDENTIAL [REDACTED] END CONFIDENTIAL***** of the cable size. Given that the total power plant capacity of this central office is several thousand amps, this minute variation of about 12 amps would easily be served by the power plant and would not even register in Qwest's monitoring of the power plant. Further, the previous measurement was below the 40% general estimate by about 10%, which means that, on average, McLeodUSA would be likely drawing 40% or less for this collocation.

- 445 A. That is correct.
446 Q. Why doesn't Qwest ask for that information?
447 A. I have no idea. I didn't develop the form so I don't know.
448 Q. As a power plant engineer, is that the type of information that
449 you would want to know?
450 A. That would be nice to have.
451 Q. And if you had that information, would you design the power
452 plants to the List 1 drain of the CLEC's collocated equipment?
453 A. Yes.
454

455 And again, at page 315 of the Utah transcript, Mr. Ashton was asked, "So if you know
456 the List 1 drain of the CLEC's equipment, should you engineer the power plant to the
457 List 1 drain of the CLEC's equipment?", to which he responded, "I would agree with that
458 statement, yes."

459
460 Given the substantial information I provide showing Qwest *does* have List 1 drain
461 information for McLeod, and given Qwest's commitment to size power plant for CLECs
462 based on List 1 drain so long as it has the information, Qwest's continued insistence that
463 it must size power plant for CLECs' equipment on List 2 drain is unreasonable.

464

465 **Q. IS THE FACT THAT QWEST HAS MCLEODUSA LIST 1 DRAIN**
466 **INFORMATION AVAILABLE TO IT IMPORTANT FROM A**
467 **DISCRIMINATION STANDPOINT?**

468 A. Yes. As demonstrated by Mr. Ashton's testimony, Qwest concedes discriminating
469 against McLeodUSA and CLECs in the provisioning of collocation DC power by sizing
470 power plant for CLECs differently than how Qwest sizes power plant for itself. It
471 appears that Qwest is attempting to justify this discriminatory treatment by claiming that
472 because Qwest does not have the information available to provide DC power in a
473 nondiscriminatory fashion. But, as I have shown, Qwest does have the information

474 needed to size power plant on a nondiscriminatory basis, and, hence, there is no basis for
475 Qwest's discriminatory treatment of McLeodUSA in this regard. One of two things is
476 happening: (1) Qwest is either ignoring its own engineering manuals, the host of
477 available information to it from the collocation application, and common sense by sizing
478 its power plant at CLEC List 2 drain, or (2) Qwest is adhering to its engineering
479 guidelines, but charging CLECs as if they are sizing to a higher List 2 drain.

480

481 **C. Qwest has a significant amount of additional information available to it for**
482 **planning purposes**

483

484 **Q. MR. ASHTON CLAIMS THAT THERE IS ALSO ENGINEERING JUDGMENT**
485 **INVOLVED IN SIZING POWER PLANT. DOES QWEST HAVE OTHER**
486 **INFORMATION AVAILABLE TO IT BESIDES THE LIST 1 DRAIN IF IT IN**
487 **FACT APPLIES ENGINEERING JUDGEMENT?**

488 A. Yes. To the extent that Qwest applies engineering judgment when sizing power plant as
489 Qwest claims, this engineering judgment certainly would not lead to Qwest sizing the
490 power plant to the size of CLEC power cables, primarily because reasoned engineering
491 judgment would not call for sizing the power plant based on a power capacity that a
492 CLEC would not draw, or at best, would only draw in the rarest of circumstances, and
493 one does not engineer power plant to catastrophic events. Qwest has many years of
494 experience in designing DC power plants within central offices and knows full well to
495 expect nothing close to the full capacity of the CLEC power cables in terms of CLEC
496 usage.

497

498 **Q. WHAT OTHER INFORMATION IS AVAILABLE TO QWEST?**

499 A. As explained in my direct testimony that Qwest has a host of information at its disposal
500 to appropriately plan for the total power draw that will be demanded of the central office
501 DC power plant.¹⁸ Qwest has, among other things, the specific amount and type of
502 equipment, a CLEC's forecast of circuits by type, drain information about the equipment,
503 and actual power draw measurements. Indeed, Qwest must pre-approve all equipment
504 that gets collocated in its central offices. Mr. Ashton's repeated claim that Qwest's
505 power engineers have only one piece of data (i.e., the power cable order of the CLEC)
506 and is blind to all of this other information at Qwest's disposal when sizing DC power
507 plant is simply not correct.

508
509 **Q. MR. ASHTON PROVIDED CONFIDENTIAL EXHIBIT CA-1¹⁹ WHICH SHOWS**
510 **THE ORDERED AMPERAGE OF THE POWER CABLES SERVING**
511 **MCLEODUSA'S COLLOCATIONS IN WASHINGTON AS WELL AS THE**
512 **MEASURED USAGE FOR THESE COLLOCATIONS. DOES THIS EXHIBIT**
513 **ILLUSTRATE THE PROBLEM WITH QWEST'S PURPORTED DC POWER**
514 **PLANT ENGINEERING PRACTICES FOR CLECS AND THE MANNER IN**
515 **WHICH QWEST APPLIES THE POWER PLANT CHARGE?**

516 A. Yes. This exhibit shows that, on average, McLeodUSA's power usage is *****BEGIN**
517 **CONFIDENTIAL** █████ **END CONFIDENTIAL***** of the amperage associated with
518 McLeodUSA's order for power cables. Or, in other words, the "as ordered" amount
519 exceeds the "as consumed" amount by almost *****BEGIN CONFIDENTIAL** █████
520 █████ **END CONFIDENTIAL*****. Given Mr. Ashton's claims that Qwest

¹⁸ Morrison Direct, pages 39 – 40.

¹⁹ For clarification purposes, Mr. Ashton's testimony refers to this exhibit as Exhibit CA-1, but the exhibit is actually labeled as CA-2C. I will use CA-1 in my testimony to refer to this exhibit.

521 builds DC power plant based on CLEC power cable orders and given Qwest's Power
522 Plant rate application on "as ordered" amperage, Exhibit CA-1 shows that Qwest's
523 position will lead to significant oversizing of DC power plant facilities in the central
524 office (if in fact Qwest built its power plant to accommodate every CLEC's cable
525 distribution order) and much higher Power Plant charges for McLeodUSA and other
526 CLECs.

527 Importantly, there are both engineering reasons and business reasons for CLECs
528 ordering power cables that are capable of carrying much larger amounts of power than
529 the power they will actually consume.²⁰ And since McLeodUSA pays Qwest for these
530 power cables when ordered, Qwest is not harmed by this engineering practice.

531
532 **Q. DOES EXHIBIT CA-1 FURTHER UNDERMINE QWEST'S CLAIM THAT IT**
533 **MUST SIZE DC POWER PLANT BASED ON CLEC POWER CABLE ORDERS**
534 **BECAUSE QWEST WOULD ALLEGEDLY HAVE NO IDEA WHAT TO**
535 **EXPECT WITH REGARD TO MCLEODUSA'S POWER USAGE?**

536 A. Yes. I am representing McLeodUSA in complaints against Qwest regarding its
537 application of the Power Plant charge in Washington, as well as Arizona, Colorado, Iowa,
538 Utah and Washington. Qwest has provided exhibits similar to Washington Exhibit CA-1
539 showing "as ordered" and "as consumed" data for McLeodUSA in all of these states.
540 After reviewing this data across states, a general trend is evident. In general, I am

²⁰ This is a point that is apparently agreed to by Mr. Ashton. When Mr. Ashton adopted Mr. Hubbard's testimony in the companion Utah docket, Mr. Ashton adopted all substantive portions of Mr. Hubbard's pre-filed testimony *except* Mr. Hubbard's claim that "there is no engineering reason why McLeod could not add power cables incrementally as it adds equipment in its collocation sites." See, Rebuttal Testimony of Curtis Ashton, UT Docket 06-2249-01, page 2, explaining that he does not adopt Mr. Hubbard's testimony at page 14, lines 12 - 14. The fact that Mr. Ashton did not agree with this statement suggests that Mr. Ashton believes that there are engineering reasons why McLeod cannot add power cables incrementally.

541 observing that, based on Qwest’s own measurements, Qwest could expect McLeodUSA
542 to actually consume anywhere from between about *****BEGIN CONFIDENTIAL** ██████████
543 ██████████ **END CONFIDENTIAL***** of the ordered amperage of its power cables. I
544 should note that these numbers are general across states and are specific to
545 McLeodUSA.²¹ Following Mr. Ashton’s logic, we would have to believe that Qwest
546 power engineers simply ignore this data showing “across the board” and significant
547 differences between the ordered amperage of the power cables and the power consumed
548 when sizing DC power plant and, instead, blindly add additional DC power plant
549 equipment to accommodate CLEC orders for power cables – or, in the alternative, rely on
550 power plant capacity already available and just bill McLeodUSA and other CLECs as if
551 this investment was made. Such actions on Qwest’s part would not be prudent or
552 consistent with its engineering manuals, and counsel informs me that such actions would
553 constitute unreasonable discrimination in Qwest’s provisioning of collocation. Though I
554 am not suggesting that Qwest should use this McLeodUSA data as an engineering
555 standard, I *am* saying that Qwest’s claim that it does not know what to expect with regard
556 to McLeodUSA’s power draw is not supported by the facts, as McLeodUSA’s power
557 usage data, which Qwest measures itself, will consistently fall well below the amperage
558 of the power cables (by design). This trend holds true regardless of state or central office.
559 And since telecommunications equipment consumes power in a similar manner
560 regardless of carrier, and all carriers are required to size power cables to the higher List 2

²¹ I should also note that I am not endorsing this data be used by Qwest to size DC power plant. The purpose of this data is to show that Mr. Ashton’s claim, i.e., that Qwest must size DC power plant for CLECs based on CLEC power cables orders (or List 2 drain) because it would have no idea what to expect in terms of CLEC power usage, is factually inaccurate.

561 drain based on safety standards, I would expect to see similar trends for other CLECs as
562 well as Qwest.²²

563

564 **Q. MR. ASHTON TESTIFIES THAT “A CAREFUL READING” OF YOUR**
565 **TESTIMONY SHOWS THAT MCLEODUSA ONLY PROVIDES A**
566 **DESCRIPTION OF THE EQUIPMENT MCLEODUSA WILL COLLOCATE IN**
567 **THE COLLOCATION ORDER, AND NOT INFORMATION REGARDING**
568 **POWER DRAWS (PAGE 12 LINE 25). WOULD YOU LIKE TO COMMENT?**

569 A. Yes. First, it is not my testimony that the collocation application form contains
570 information about actual McLeodUSA power *draws* as Mr. Ashton insinuates – and for
571 good reason: Qwest’s collocation application does not ask for this information. However,
572 the information that is provided regarding type and amount of equipment (including
573 model numbers)²³ as well as expected circuits supported by type, is sufficient for Qwest
574 to determine the List 1 drain as well as whether the expected load of this equipment at the
575 expected utilization would necessitate an augment in the shared DC power plant, which
576 may or may not already be nearing the augment threshold based on the total power usage
577 of all existing power users in the central office (including Qwest). And the information
578 that is available to Qwest is certainly sufficient for Qwest to determine that
579 McLeodUSA’s power usage will not come anywhere near the List 2 drain associated with
580 McLeodUSA’s power cables.

²² Qwest has to date refused to provide information on the sizes of its power cables or power draws so that these comparisons can be made. However, Qwest’s power engineering manuals require power cables to be sized based on List 2 drain and power plant to be sized based on List 1 drain regardless of the carrier served. Hence, all carriers will exhibit this same characteristic of their power cable capacity being significantly larger than their power draws.

²³ With the vendor and model number of telecommunications equipment, a host of technical specification information is available about the equipment, including, oftentimes, the List 1 drain.

581 Furthermore, as indicated in Mr. Ashton’s Confidential Exhibit CA-1, Qwest
582 obviously knows the actual power draw of McLeodUSA by collocation, and measures
583 this usage per the terms of the Power Measuring Amendment periodically. Therefore,
584 whether or not the collocation application contains actual power draw information, Qwest
585 knows this information as evidenced by Qwest’s own exhibit, and Qwest will, over time,
586 observe power usage at the busy hour for the entire central office to ensure that the
587 central office’s shared DC power plant is capable of handling this peak load.

588 At bottom, there is no conceivable way McLeodUSA’s power draw could
589 increase to a level that would even register within the context of the total List 1 drain of
590 the central office.

591
592 **Q. YOU STATE ABOVE THAT THERE IS NO CONCEIVABLE WAY**
593 **MCLEODUSA’S POWER DRAW INCREASE COULD INCREASE TO A LEVEL**
594 **THAT WOULD EVEN REGISTER WITHIN THE CONTEXT OF THE TOTAL**
595 **POWER PLANT CAPACITY OF THE CENTRAL OFFICE (AGGREGATE LIST**
596 **1 DRAIN). HOW CAN YOU BE SO SURE?**

597 A. As I explained at pages 40 – 43 of my direct testimony, McLeodUSA’s busy hour power
598 draw as well as the List 2 drain associated with its power cables is a very small portion of
599 the total power plant capacity in a Qwest central office.²⁴ Furthermore, because
600 McLeodUSA is competing for the same customers as other power users in the central
601 office, any increase in McLeodUSA’s power usage would likely be offset by a power
602 reduction of another power user, resulting in a net zero impact on the shared power plant
603 facilities.

²⁴ The comparison I made between McLeodUSA’s power cable order capacity and Qwest’s power plant was provided for illustrative purposes only, and I explain that McLeodUSA could not use the full capacity of its power cables.

604

605

Q. PLEASE ELABORATE ON THIS NET ZERO IMPACT ON THE POWER PLANT.

606

607

A. A vast majority (if not all) of the customers McLeodUSA “wins” in a particular wire

608

center would be migrating away from another carrier in the same central office (e.g.,

609

Qwest or another CLEC), who would be using the same power plant as McLeodUSA.

610

Therefore, as McLeodUSA wins a customer and experiences an increase in power usage,

611

another carrier would simultaneously experience a comparable decrease in their

612

respective power usage (and vice versa) due to the loss of that customer to McLeodUSA.

613

Again, since the power plant is a shared resource, there would be no additional power

614

draw demanded of the DC power plant and no augment necessary.

615

616

Q. MR. ASHTON CLAIMS THAT, “IN QWEST’S EXPERIENCE WITH MCLEOD, SOME OF THIS EQUIPMENT IS EQUIPMENT THAT QWEST IS NOT FAMILIAR WITH.”²⁵ WOULD YOU LIKE TO COMMENT?

617

618

619

A. Yes. Mr. Ashton provides no details regarding his claim, and therefore, I cannot address

620

his purported concerns with specificity. However, in hearings in Utah, Mr. Ashton

621

clarified his criticism by pointing to Figure 6 of my testimony, and claimed that because

622

Qwest did not use a number of pieces of equipment on that list to serve its own

623

customers, that it was unfamiliar with these pieces of equipment and would not know

624

what to expect in terms of List 1 drain. I disagree.

625

Qwest would not be unfamiliar with any equipment in its central office, as Mr.

626

Ashton claims, as evidenced by the fact that collocators list every piece of collocated

²⁵ Ashton Response, page 13, lines 2 – 3.

627 equipment on the collocation application form it submits to Qwest, as well as the Form
628 841 which shows that Qwest lists the List 1 drain for this equipment. In addition, this
629 equipment is required to be on a Qwest-approved list of equipment before it can even be
630 collocated. In fact, Section 8.4.1.5 of Qwest Washington's SGAT states that

631 CLEC shall submit a Collocation Application to order Collocation at a
632 particular Qwest Premises. A Collocation Application shall be
633 considered complete, if it contains:

634 f) Collocated equipment and technical equipment specifications
635 (Manufacturer Make, Model No., Functionality i.e., Cross
636 Connect, DLC, DSLAM, Transmission, Switch, etc., Physical
637 Dimensions, Quantity). (NOTE: Packet or circuit switching
638 equipment requires, in writing and attached to the Application,
639 how this equipment is necessary for access to UNEs or
640 Interconnection. High level equipment interface or connectivity
641 schematic for equipment that is not on the approved equipment
642 list or has not been used by CLEC for a similar purpose before,
643 must also accompany this Application. CLEC using approved
644 equipment found at
645 www.qwest.com/wholesale/pcat/collocation.html need not
646 comply with this provision);
647

648 Obviously, Qwest would be familiar with equipment that it put on its own approved
649 equipment list for collocation. If a piece of equipment is not on this approved list,
650 CLECs must provide Qwest with additional information.

651 Furthermore, just because Qwest does not use the equipment itself does not mean
652 that Qwest is unfamiliar with it or cannot easily derive a reasonable approximation or
653 actual List 1 drain requirement. As explained above in the quotes of Qwest's engineering
654 manuals, List 1 drain may be available through NEBS, from the equipment vendors,²⁶ lab
655 testing, or the estimation procedures Mr. Ashton himself discussed in his paper. Qwest
656 engineers must obtain this information for its own equipment, and there should be no less

²⁶ Mr. Ashton admitted under cross examination in Utah that List 1 drain information is available from equipment vendors. The following is the relevant excerpt from the Utah transcript (page 317, lines 11 – 16): “Q. First let me ask you do manufacturers provide List 1 drains for the equipment that they provide? A. Oftentimes it has to be extracted at the price of a pound of flesh, but usually it can be obtained, eventually.”

657 of an obligation to obtain it for the CLEC equipment since it is responsible for providing
658 CLECs non-discriminatory access to power.

659

660 **Q. DO YOU EXPECT QWEST TO PROJECT MCLEODUSA'S POWER USAGE IF**
661 **MCLEODUSA ITSELF CANNOT DO SO, AS MR. ASHTON CLAIMS AT PAGE**
662 **11 OF HIS RESPONSE TESTIMONY?**²⁷

663 A. No, this is not my testimony. I contend that Qwest has every piece of information it
664 needs to properly size its power plant for itself and CLECs. However, I do expect Qwest
665 to properly size power systems in its central office – including adhering to its own
666 engineering manuals and good engineering practices – and this would require sizing DC
667 power plant based on the aggregate List 1 drain of the central office.

668 Though I have shown that Qwest does have adequate information to size power
669 plant for McLeodUSA on List 1 drain, assuming for the sake of argument that Qwest was
670 unsure what to expect in terms of McLeodUSA's List 1 drain requirement, Qwest's own
671 Technical Publications indicate that it is Qwest's obligation to find out. Qwest could do a
672 number of things in this regard from checking with vendors, relying on
673 experience/knowledge, calling McLeodUSA, or requesting this information on its
674 collocation application form. And if there was a key piece of information that Qwest
675 needed from CLECs in order to properly size its power plant in a nondiscriminatory
676 fashion, it would only be prudent for Qwest to request this information on the CLEC
677 collocation application, along with the myriad other information the application requests
678 for the purposes of engineering the central office power system. A discussion of what
679 Qwest should do if it does not have List 1 drain information for McLeodUSA is truly

²⁷ Ashton Response, page 13, lines 7 – 9.

680 academic, however, given that Qwest does, in fact, have this information and agreed to
681 size power plant for McLeodUSA based on List 1 drain so long as Qwest had the List 1
682 drain information.

683
684 **Q. ARE YOU SAYING THAT QWEST REALLY DOESN'T NEED TO KNOW AT**
685 **THE OUTSET WHAT MCLEODUSA'S BUSINESS PLAN/FORECAST IS OR**
686 **WHEN ITS EQUIPMENT WILL BE FULLY CARDED, AS MR. ASHTON**
687 **INSINUATES?²⁸**

688 A. Yes. First, Mr. Starkey explains that McLeodUSA does indeed provide forecasts for
689 circuits to Qwest, and amends those forecasts if need be. Hence, Qwest does have a good
690 idea of McLeodUSA's business plan/forecast and when (or, maybe more appropriately,
691 if) McLeodUSA's equipment will be fully carded in the future. The idea that Qwest must
692 have detailed forecasts is simply a red herring. Because power usage of one carrier will
693 result in a decline of another carrier's power usage, the List 1 drain of the central office,
694 which accounts for all usage fluctuations arising from changes in all power users'
695 business plans and equipment utilization, is the best tool to size power plant to List 1
696 drain.

697
698 **D. McLeodUSA Is Not Over-Sizing Its Power Distribution Cables, as Mr.**
699 **Ashton claims, and, if anything, it is Qwest who is oversizing facilities within**
700 **the DC power system**
701

²⁸ Ashton Response, page 8, lines 6 – 9. See also, Ashton Response, page 5, lines 9 – 12. See also, Ashton page 11, lines 12 – 15.

702 Q. MR. ASHTON PORTRAYS MCLEODUSA'S CABLE ORDERS AS
703 "OVERSIZED."²⁹ IS THIS AN ACCURATE PORTRAYAL?

704 A. No. I explained in detail why these cable orders are not over-sized – i.e., they are sized
705 based on engineering and safety standards and ultimate demand.³⁰

706
707 Q. DOES MR. ASHTON'S TESTIMONY INDICATE THAT ANY OVERSIZING IN
708 POWER SYSTEM FACILITIES IS ATTRIBUTED TO QWEST'S – NOT
709 MCLEODUSA'S – POOR PLANNING?

710 A. Yes. At page 16 of his rebuttal testimony, Mr. Ashton testifies that since there was no
711 usage associated with McLeodUSA's collocation at the time McLeodUSA placed its
712 orders for power cables, "*Qwest had to assume* that McLeod was ordering power based
713 on their assumption that McLeod was going to serve a lot of customers and have a high
714 degree of utilization of their equipment. *This has not proven to be a correct*
715 *assumption...*"³¹

716 As discussed above, such an assumption on Qwest's part would have been a
717 critical mistake and it is hard for me to believe, based on my experience as a central
718 office engineer, that Qwest would have made such an assumption – especially given that
719 Qwest has List 1 drain information for McLeodUSA equipment as well as all the other
720 information I previously discussed for power planning purposes.

721

²⁹ Ashton Response, page 16, line 16.

³⁰ See, e.g., Morrison Direct, pages 20 – 24.

³¹ Ashton Response, page 16, lines 9 – 11. See also, Ashton Response, page 5, lines 12 – 14.

722 **Q. MR. ASHTON ALLEGES THAT YOUR TESTIMONY ABOUT CLECS SIZING**
723 **POWER CABLES TO ULTIMATE DEMAND IS TRUE BUT IRRELEVANT.**
724 **WOULD YOU LIKE TO COMMENT?**

725 A. The reason that this is relevant is that Qwest is assessing the Power Plant charge on this
726 larger power cable capacity, despite McLeodUSA's usage not coming close to this
727 capacity level.

728 I have detailed many legitimate reasons why McLeodUSA and CLECs order
729 power cables that are much larger than their actual usage is (or may ever be). As such,
730 Qwest's implication that McLeodUSA orders power cables based on List 2 drain and
731 then expects Qwest to make this List 2 drain available to McLeodUSA is misleading.
732 What McLeodUSA actually does is order power cables for ultimate demand based on
733 engineering and safety requirements. Qwest has produced nothing to date that shows
734 McLeodUSA or another CLEC expects its order for the distribution cable size is the same
735 as an order for DC power plant "capacity." And for Qwest's rationale for sizing power
736 plant for CLECs based on List 2 drain to make sense, all CLECs would need to draw the
737 List 2 drain associated with their power cables at the same time, and, assuming the Qwest
738 is monitoring its power plant correctly, this would not happen.

739
740 **Q. SHOULD QWEST BE INDIFFERENT IF MCLEODUSA ORDERS A 175 AMP**
741 **CABLE VERSUS A 250 AMP CABLE, FOR EXAMPLE?**

742 A. Yes, Qwest should be indifferent both in terms of power plant investment and cost
743 recovery. Regarding cost recovery, Mr. Starkey explains that the power distribution
744 investment and installation costs are recovered through a separate set of nonrecurring and
745 recurring charges, with higher charges for larger cables. Hence, McLeodUSA's power

746 cables – regardless of size – are “bought and paid for” by McLeodUSA through separate
747 charges and it should make no difference to Qwest what size of cables Qwest orders

748 Regarding power plant investment, Qwest should be indifferent because
749 regardless of the size of the cable (e.g., 175 or 250 amp) order, Qwest will use the busy
750 hour usage for the entire CO, including the power delivered over those cables to the
751 McLeodUSA collocation, to size the power plant. Therefore, if McLeodUSA ordered a
752 175 amp cable to one collocation and a 250 amp cable to another collocation in the same
753 CO, but only draws 40 amps over each cable at the busy hour/busy day, Qwest would
754 size the power plant to accommodate the 40 amps in both instances.

755

756 **Q. DOES THE FACT THAT THERE WAS NO USAGE TO TAKE INTO ACCOUNT**
757 **WHEN MCLEODUSA ORIGINALLY ORDERED ITS POWER CABLES MEAN**
758 **THAT QWEST SHOULD HAVE BUILT ITS DC POWER PLANT TO**
759 **ACCOMMODATE THE AMPERAGE ASSOCIATED WITH MCLEODUSA’S**
760 **POWER ORDER?³²**

761 A. No. Indeed, the fact that there was no usage associated with McLeodUSA’s order for a
762 175 amp power cable, for instance, exposes the folly of Qwest building 175 amps of DC
763 power plant to accommodate this power cable order. A more appropriate way in which to
764 address this situation – and the way Qwest’s engineering manuals require this situation to
765 be handled, as well as the manner in which Qwest admittedly sizes DC power plant for its
766 own equipment – is for Qwest to monitor the total List 1 drain of the central office and
767 ensure that its DC power plant can accommodate this peak usage level. Following
768 Qwest’s logic, McLeodUSA could order power cables (which it would pay for through

³² Ashton Response, page 10, lines 5 – 9.

769 separate nonrecurring and recurring charges), never draw 1 Amp of power, but Qwest
770 would purportedly³³ build 175 amps of DC power plant capacity and would definitely
771 begin billing McLeodUSA \$1,634.50 (175 x \$9.34) in monthly charges associated with
772 the Power Plant charge.

773

774 **E. McLeodUSA Is Not Attempting To Avoid Paying For DC Power Plant That**
775 **Was Built By Qwest for McLeodUSA's Use**

776

777 **Q. IS MCLEODUSA ATTEMPTING TO AVOID PAYING FOR DC POWER PLANT**
778 **CAPACITY MADE AVAILABLE TO IT BY QWEST, AS MR. ASHTON**
779 **CLAIMS?**

780 A. No. The following excerpt from Mr. Ashton's response testimony summarizes the major
781 flaws in Mr. Ashton's reasoning:

782 McLeod seems to want to have the originally ordered amount of power
783 still available to them but to reduce their Power Plant charges so that
784 they pay for much less capacity than is available to them.³⁴
785

786 Since the term "originally ordered amount of power" is actually the "originally ordered
787 amount of power [*associated with power cables*]," this excerpt shows that Mr. Ashton's
788 testimony and his assertion related to stranded investment is based on the flawed premise
789 that McLeodUSA (or other CLEC) power cable orders trigger Qwest investment in DC
790 power plant (or, in other words, Qwest sizes DC power plant for CLECs based on List 2
791 drain). I have thoroughly explained that this is not the case and such a view is
792 contradictory to Qwest's own engineering Technical Publications. Moreover, Mr.

³³ I use the word "purportedly" here because if Qwest is adhering to its engineering guidelines, it would not build 175 amps of power plant capacity.

³⁴ Ashton Response, page 15, lines 1 – 4.

793 Ashton's position rests on the flawed assumption that Qwest somehow "partitions" (or
794 dedicates) certain capacity within its DC power plant to accommodate McLeodUSA's
795 equipment, individually. This is simply not the case. Rather, the DC power plant is
796 shared by all powered equipment in the office, and Qwest does not, and should not,
797 implement such a DC power plant "partitioning" to serve McLeodUSA, Qwest, or any
798 other power user.

799

800 **Q. DOES MCLEODUSA ORDER POWER PLANT CAPACITY FROM QWEST AS**
801 **MR. ASHTON STATES?³⁵**

802 A. No. These are orders for power cables, not power plant capacity.

803

804 **Q. HAS QWEST ADMITTED THAT THE CLEC DOES NOT REQUEST A**
805 **CERTAIN AMOUNT OF DC POWER PLANT CAPACITY, AS QWEST**
806 **CLAIMS?**

807 A. Yes. When discussing the collocation application and the information that is requested
808 on that form, Qwest witness Mr. Hubbard testified in Iowa, "I would agree that there is
809 nowhere on here to show that Qwest will provide a capacity to McLeod. What we size is
810 to what they've ordered."³⁶ What this means is that McLeodUSA doesn't request and
811 Qwest doesn't provide specific power plant capacity, as Qwest claims in this case.

812

813 **Q. MR. ASHTON TESTIFIES AT PAGE 9 (LINES 1 – 14) OF HIS RESPONSE**
814 **TESTIMONY THAT DC POWER PLANT IS NOT CONSUMED IN THE SAME**
815 **WAY POWER ITSELF IS CONSUMED. IS HIS TESTIMONY HELPFUL?**

³⁵ Ashton Response, page 6, line 23 – page 7, line 5.

³⁶ Iowa transcript, page 626, lines 2 – 4.

816 A. No. Mr. Ashton’s testimony essentially states the obvious when he explains that power
817 plant consists of pieces of equipment that are not “consumed” like a unit of power
818 (Ashton Response, page 9, lines 5 – 7). In fact, I explained the pieces of equipment in the
819 power plant in my direct testimony.

820

821 **Q. WHAT DO YOU THINK IS THE POINT OF MR. ASHTON’S TESTIMONY IN**
822 **THIS REGARD?**

823 A. Mr. Ashton is apparently attempting to distinguish between the pieces of equipment that
824 convert AC power to DC power from the actual power converted by the power plant in
825 order to support Qwest’s differing application of the rates for each. But this attempt falls
826 short. As I explained in my direct testimony, power plant is sized (and costs are incurred)
827 based on busy hour *usage* for the entire central office. So, the capacity of the power plant
828 (or the amount of the power plant equipment) is defined by the usage of all users, and as
829 Mr. Starkey explains, each carrier should reasonably pay for its proportionate share of the
830 costs incurred to construct that power plant to serve that busy hour draw. Or, in other
831 words, given that usage drives investment in shared power plant equipment, Qwest
832 should recover that investment based on the respective share of each CLEC’s usage that
833 draws from that power plant investment – or the capacity used to convert the DC power
834 each carrier uses. Mr. Starkey addresses cost recovery and cost causation issues in his
835 testimony.

836

837 **Q. IS THERE ANOTHER PROBLEM WITH THIS PORTION OF MR. ASHTON’S**
838 **TESTIMONY?**

839 A. Yes. It highlights yet another inconsistency in Qwest’s testimony. At page 9, lines 7 – 8,
840 Mr. Ashton agrees with me that “power plant capacity is shared among the several users
841 of power in a central office...” Then at page 9, lines 10 – 13, Mr. Ashton states that,
842 “[f]or any particular power user, the question is whether there is sufficient capacity in the
843 power plant available to convert and deliver the electric current its telecommunications
844 equipment will eventually consume.” If the power plant is sized for all power users, as
845 Mr. Ashton admits, then “the question” is *not* whether there is sufficient capacity to serve
846 “any particular power user”, but whether there is sufficient capacity to serve all power
847 users in the central office. By focusing on a “particular power user”, Mr. Ashton implies
848 that power plant is reserved or dedicated for a particular power user – which is simply not
849 true.

850 Furthermore, Mr. Ashton’s testimony is problematic in that he suggests that
851 power plant is sized based on the current the carrier’s equipment “will eventually
852 consume.” This is another example of where Mr. Ashton confuses the sizing of power
853 plant, which is sized on the estimated current that all carriers’ equipment will consume at
854 the busy hour, with power distribution, which *is* sized based on the current that carriers’
855 may or may not eventually consume.

856

857 **F. Mr. Ashton’s disaster scenario wherein all CLECs need the List 2 drain**
858 **associated with their power cables Is Extremely Far-Fetched and Does Not**
859 **Support Qwest’s Notion of Sizing DC power plant based on the amperage of**
860 **CLEC power cable orders**

861

862 **Q. MR. ASHTON DISCUSSES A “LIST 2 EVENT” (ASHTON RESPONSE, PAGE 6,**
863 **LINE 4). IS MR. ASHTON’S DESCRIPTION OF A LIST 2 EVENT**
864 **MISLEADING?**

865 A. No. What Mr. Ashton describes is a situation wherein all power sources to the central
866 office have been cut and all equipment loses power. Mr. Ashton implies that in this
867 situation, the power draw associated with turn-up (once AC power is restored) results in a
868 simultaneous List 2 drain event for all carries except Qwest – or a situation where CLECs
869 will draw the amount of power associated with the maximum capacity of their power
870 cables all at the same time. However, Qwest’s example is not based in reality because it
871 has been unable to provide an example of a situation where this has actually happened –
872 and for good reason: it has likely never happened if Qwest is properly monitoring the
873 power plant in its central office.

874

875 **Q. MR. ASHTON, AT PAGES 5 AND 6 OF HIS REBUTTAL TESTIMONY,**
876 **PROVIDES A DISASTER SCENARIO WHEREIN ALL CLECS WOULD NEED**
877 **LIST 2 DRAIN POWER PLANT CAPACITY AT THE SAME TIME. WOULD**
878 **YOU LIKE TO RESPOND?**

879 A. Yes. Mr. Ashton’s very extreme example is far-fetched and suggests that Qwest must
880 engineer its central office DC power plant to accommodate any conceivable situation –
881 which is simply not the case. Mr. Ashton assumes that Qwest has a complete power
882 failure within a central office and that the batteries are fully discharged, leading to a total
883 power loss in the central office.³⁷ This would mean that, for whatever reason, Qwest
884 chose not to (or was unable to) keep the backup AC generation unit operating,³⁸ and the
885 commercial power was not restored before the batteries fully discharged. However, Mr.
886 Ashton provides no reason why Qwest’s backup AC generation would not be used, even

³⁷ Ashton Response, page 5, lines 19 – 20.

³⁸ Mr. Ashton testifies, “[f]or a time, a diesel engine would be supplying additional backup power for the batteries.” However, Mr. Ashton never explains why the diesel engine would only be used “for a time” when it could conceivably be used indefinitely, and would certainly be used by Qwest until commercial AC power is restored.

887 though the backup generation (i.e., a diesel engine) could power the telecommunications
888 equipment throughout a central office so long as Qwest poured diesel fuel into it
889 (regardless of when the commercial AC power was restored). This assumption is
890 especially unreasonable when one considers that Qwest would be testing its backup AC
891 generation engine on at least a monthly basis to ensure that it would work properly when
892 called upon to power the central office load. Simply put, backup generation is used by
893 Qwest to avoid the situation Mr. Ashton describes.

894

895 **Q. IS IT REASONABLE TO ASSUME THAT A BACKUP GENERATOR COULD**
896 **NOT BE REFUELED, AS MR. ASHTON’S EXAMPLE DOES?**³⁹

897 A. No. This highlights the unreasonableness of a complete power failure in Qwest’s central
898 offices. Qwest acknowledges that, on average, a backup generator has sufficient fuel to
899 power the central office load for 27 hours.⁴⁰ And the fuel tank could be refueled as many
900 times as necessary to continue powering the central office until commercial AC is
901 restored.

902

903 **Q. IF WE ASSUME FOR THE SAKE OF ARGUMENT THAT THE CENTRAL**
904 **OFFICE POWER DID LOSE BOTH COMMERCIAL AND BACKUP AC**
905 **GENERATION AND ALL EQUIPMENT LOST POWER. WOULD ALL CLECS**
906 **DRAW LIST 2 DRAIN ASSOCIATED WITH THEIR POWER CABLES AT**
907 **START UP?**

908 A. No. Even if we assume for the sake of argument that this disaster scenario actually
909 happened, Qwest would stagger the restarting of equipment in the central office such that

³⁹ Ashton Response, page 5, lines 22 – 23.

⁴⁰ Source: Qwest response to McLeodUSA Dr No. 3-28(c).

910 not all equipment comes online at once and any power draw surges associated with restart
911 is spread over time. Qwest would accomplish this by pulling breakers or fuses such that
912 not all equipment in the central office turns up at the same time. The point being, that
913 there will be no situation where the power plant of a central office will need to provide
914 List 2 drain of all CLECs' power cables in the central office at the same time, and
915 therefore, there is no need to size power plant to the capacity Qwest claims it does (i.e.,
916 List 2 drain of CLEC power cables).

917

918 **Q. HAS QWEST BEEN ABLE TO PROVIDE A REAL WORLD EXAMPLE OF A**
919 **CENTRAL OFFICE TOTALLY LOSING POWER IN WASHINGTON AND**
920 **CLECS NEEDING LIST 2 DRAIN AT THE SAME TIME, AS MR. ASHTON'S**
921 **DISASTER SCENARIO ASSUMES?**

922 A. No. McLeodUSA asked for any examples of these occurrences in Washington in DR No.
923 11, and Qwest responded that there were no Washington examples. I have attached
924 Qwest's response to McLeodUSA DR. No. 11 as Exhibit SLM-7 to this testimony.
925 Qwest was also unable to provide an example of any type of simultaneous List 2 drain
926 event in Iowa either. In response to Iowa Chairperson Norris' question "In Iowa plants,
927 have you ever experienced a List 2 drain by everyone all at once?", Qwest's response was
928 as follows:

929 In the Iowa plants? No, I'm not – I really don't know the answer to that
930 question. I mean if you look at BellSouth with the Hurricane Katrina,
931 they had catastrophic events I believe in about 12 central offices, so it
932 does happen.⁴¹
933

⁴¹ Iowa transcript, page 64, lines 9 – 16.

934 Hence, while Qwest claims that it sizes power plant for CLECs based on a disaster
935 scenario, it has been unable to provide even one example of it occurring in Qwest central
936 offices. And if Qwest is managing power in its central office correctly, it won't happen.

937

938 **Q. IS QWEST'S REFERENCE TO HURRICANE KATRINA TELLING?**

939 A. Yes. The only example that Qwest has been able to provide anywhere that supposedly
940 supports its sizing of power plant to CLEC power cable orders is Hurricane Katrina,
941 wherein according to Qwest, "BellSouth...had catastrophic events...in about 12 central
942 offices." First of all, Qwest did not provide any evidence that these BellSouth central
943 offices completely lost power – which is the only way in which Qwest's disaster scenario
944 could play out. In fact, BellSouth's own Hurricane Katrina recovery website indicates
945 that at the time of Hurricane Katrina "the company reported that 180 of its central office
946 locations are currently running on generator due to a loss of commercial power in
947 affected areas.⁴² Since these offices switched to backup power sources and did not
948 completely lose power, they are not comparable to Qwest's hypothetical disaster
949 scenario. Further, even if these central offices lost all power, BellSouth would manage
950 turn up so that power surges did not occur to over-tax the power plant. Qwest's sole
951 example boils down to Qwest insisting that it must size power plant for CLECs based on
952 a higher List 2 drain because of the remote possibility of a 100 year or 500 year weather
953 event. Not only is this unnecessary and wasteful from an engineering perspective, but
954 even when one of those events occur, like in the case of Hurricane Katrina, the ILEC
955 would manage the situation such that power is not completely lost, or ensure that
956 simultaneous List 2 drain does not occur at start up.

⁴² <http://www.bellsouth.com/residential/employee5.html>

957

958

**Q. MR. ASHTON EXPLAINS AT PAGE 6, FOOTNOTE 1 THAT QWEST'S
EQUIPMENT RESTORES POWER IN STAGES AFTER A POWER OUTAGE,
AND THEREFORE ITS EQUIPMENT DOES NOT EXPERIENCE THE
SIMULTANEOUS LIST 2 DRAIN EVENT DESCRIBED IN MR. ASHTON'S
TESTIMONY. DOES MCLEODUSA EQUIPMENT RESTART IN STAGES
LIKE QWEST'S EQUIPMENT DOES?**

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A. Yes, it does. The power usage characteristics of telecommunications equipment are the same regardless of the carrier that is using the equipment. As mentioned above, Mr. Ashton admitted that McLeodUSA uses at least some of the same equipment as Qwest uses. In these cases, power would turn up on the McLeodUSA equipment in the exact same way it does for Qwest.

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970

**Q. MR. ASHTON CLAIMS THAT YOU RECOGNIZE THE REALITY OF THE
NEED FOR QWEST TO SIZE DC POWER PLANT FOR CLECS BASED ON
LIST 2 DRAIN.⁴³ IS THIS A FAIR CHARACTERIZATION OF YOUR
TESTIMONY?**

971

972

973

974

A. No, it is not. Mr. Ashton refers to my direct testimony at lines 242 – 251, where I explain that two identical pieces of equipment, serving the same number of customers, could have different power draws. This is simply an illustrative example of how telecommunications equipment consumes power – whether that equipment is Qwest's equipment or McLeodUSA's equipment. Mr. Ashton tries to imply that this variation in power consumption is unique to CLEC equipment, which is not true. McLeodUSA's and

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979

⁴³ Ashton Response, page 4, lines 21 – 23. See also, Ashton Response, page 13, lines 9 – 11.

980 Qwest's telecommunications equipment consumes power in the same manner, and to the
981 extent that there is a need to size DC power plant for CLECs' equipment due to these
982 fluctuations (as Qwest claims), the same would hold true for Qwest's own equipment –
983 yet, Qwest readily admits that it sizes DC power plant based on List 1 drain for its own
984 equipment. This further highlights the discriminatory nature of Qwest's proposal. That
985 is, though Qwest and McLeodUSA's equipment consumes power in the same manner,
986 McLeodUSA faces disproportionately higher power charges than does Qwest due to
987 Qwest's application of the Power Plant charge on the "as ordered" capacity of
988 McLeodUSA's power cables.

989
990 **Q. MR. ASHTON TESTIFIES THAT "MY EXPERIENCE WORKING WITH**
991 **VARIOUS CLECS TELLS ME MANY CLECS EXPECT QWEST TO PROVIDE**
992 **POWER PLANT CAPACITY AT THAT LEVEL [OF POWER CAPACITY IN**
993 **ITS POWER FEEDS]."⁴⁴ DID MR. ASHTON SUPPORT THIS STATEMENT**
994 **WITH ANY EXAMPLES OF CLEC POWER DRAW REACHING THE**
995 **CAPACITY OF THEIR POWER CABLES OR COMPLAINTS WHERE CLECS**
996 **ALLEGED THAT QWEST DID NOT PROVIDE THE AMOUNT OF POWER**
997 **THEY ORDERED?**

998 A. No. In fact, McLeodUSA requested information from Qwest regarding a similar
999 statement made by Mr. Ashton in the Utah hearings (DR No. 3-23), but Qwest was
1000 unable to provide any examples. I have provided Qwest's response to DR No. 3-23 as
1001 Exhibit SLM-8 to this testimony. Most pertinent to my point above is subpart (f) where
1002 McLeodUSA asked Qwest whether CLECs had complained that "Qwest could not

⁴⁴ Ashton Response, page 5, lines 1 – 5.

1003 provide the List 2 drain associated with the full capacity of the collocator's power
1004 distribution cables at a time the collocator needed to draw the full List 2 drain" and
1005 Qwest responded, "No."

1006

1007 **Q. MR. ASHTON SPEAKS TO "LEGAL AND REGULATORY REASONS QWEST**
1008 **MAKES POWER PLANT AVAILABLE TO CLECS BASED ON THEIR POWER**
1009 **ORDERS" (PAGE 10, LINES 17 – 19, SEE ALSO PAGE 11, LINE 11). WOULD**
1010 **YOU LIKE TO COMMENT?**

1011 A. I, like Mr. Ashton, am not an attorney, but you don't need to be an attorney to identify the
1012 flaws in Mr. Ashton's non-legal opinion of Qwest's legal and regulatory obligations.

1013

1014 **Q. BEFORE ADDRESSING THE FLAWS IN MR. ASHTON'S REASONING, HAS**
1015 **HE ALREADY ADMITTED THAT HE KNOWS OF NO LEGAL**
1016 **REQUIREMENT THAT QWEST PROVIDE CLECS WITH LIST 2 DRAIN?**

1017 A. Yes. Consider the following excerpt from Mr. Ashton's cross examination in Utah:

1018 Q. Okay. Well, that was what I was going to ask is whether you were aware
1019 of or what the source of any requirement was that you're aware of that
1020 Qwest make power available to the List 2 drain of CLECS' collocated
1021 equipment?

1022 A. I don't know of a legal requirement...⁴⁵

1023

1024 **Q. PLEASE ELABORATE ON THE FLAWS IN MR. ASHTON'S REASONING**
1025 **THAT QWEST HAS LEGAL AND REGULATORY OBLIGATIONS TO**
1026 **PROVIDE CLECS WITH LIST 2 DRAIN.**

1027 A. I have explained above that there is no way that CLECs would draw the rated amperages
1028 of their power cables all at the same time, Qwest's sole "disaster scenario"

⁴⁵ Utah transcript, page 320, lines 4 – 9.

1029 notwithstanding. Qwest cannot have legal or regulatory consequences associated with
1030 something that won't happen. Furthermore, assuming for the sake of argument that the
1031 sole "disaster scenario" provided by Qwest would result in simultaneous List 2 drain for
1032 all CLECs and Qwest was unable to provide it, I am advised by counsel that in such a
1033 scenario involving a disaster such as Katrina, Qwest would be entitled to invoke the
1034 "force majeure" clause of the Interconnection Agreement that would fully excuse its non-
1035 performance.

1036
1037 **Q. DO YOU HAVE INFORMATION THAT SHOWS THAT BELLSOUTH WOULD**
1038 **CERTAINLY PURSUE A FORCE MAJUERE EXEMPTION IF A**
1039 **COLLOCATED CLEC FILED A COMPLAINT AGAINST BELLSOUTH FOR A**
1040 **POWER PROBLEM DURING HURRICANE KATRINA OR SIMILAR (LESS**
1041 **DRASTIC) EVENT?**

1042 A. Yes. BellSouth's disaster recovery homepage defines a disaster as:

1043 A disaster is defined for this purpose as a major emergency, an abnormal service
1044 condition. This condition could be natural or man-made, causing or having the
1045 potential to cause widespread damage to life, property and/or telecommunication
1046 services. Examples include but are not limited to, earthquake, tornado, hurricane,
1047 flood, fire, winter storm, nuclear/chemical accident or explosion.

1048

1049

1050 **G. Qwest Is Backing Away From Its Argument That CLEC Orders for Power**
1051 **Cables Cause Qwest To Invest in DC Power Plant, Presumably Because This**
1052 **Argument Has Been Shown To be False**

1053

1054 **Q. MR. ASHTON CLARIFIED QWEST'S TESTIMONY FROM IOWA WHEREIN**
1055 **QWEST CLAIMED THAT A MCLEODUSA ORDER FOR A 175 AMP POWER**

1056 **CABLE WOULD “DEFINITELY” RESULT IN QWEST AUGMENTING ITS DC**
1057 **POWER PLANT. WOULD YOU LIKE TO RESPOND?**

1058 A. Yes. The Qwest testimony from Iowa to which I referred in my direct is provided below:

1059 When McLeod submits orders asking for large amounts of power such as
1060 425 amps, 300 amps, 225 amps, or even 175 amps, this will definitely
1061 trigger a power plant capacity growth job.⁴⁶

1062 As you can tell, despite Ashton’s testimony that what Qwest really “meant by that
1063 statement is that the larger the order, the closer or more likely Qwest would be to
1064 augment its power plant[,]”⁴⁷ that is not what Qwest’s Iowa testimony stated. Qwest’s
1065 use of the word “definitely” leaves no room for interpretation in my judgment.
1066

1067 Moreover, Qwest’s after-the-fact explanation in Washington about what it meant
1068 in Iowa does not support Qwest’s claim that DC power plant augments/investment are
1069 incremental to McLeodUSA orders for power cables. Rather, it really shows that the
1070 only way in which a McLeodUSA order for power cable will trigger a DC power plant
1071 augment is if the existing busy hour usage of all power users in the office is so close to
1072 the peak capacity of the office’s power plant, that when combined with the List 1 drain of
1073 the office, the McLeodUSA *usage* would exceed the existing capacity of the power plant.
1074 In this case, McLeodUSA just happened to be “the next in line” to request power from a
1075 shared resource that was already exhausted through the power draw of other carriers’
1076 equipment. Mr. Starkey explains that McLeodUSA is not the “cost causer” in this
1077 instance because the need for DC power plant investment is not incremental to
1078 McLeodUSA’s order.

1079

⁴⁶ Hubbard Rebuttal Testimony, Iowa Utilities Board Docket No. FCU-06-20, page 8, lines 12 – 14.

⁴⁷ Ashton Response, page 13, lines 20 – 22.

1080 Q. IS THERE A REASON WHY MR. ASHTON FOUND IT NECESSARY TO
1081 CLARIFY QWEST'S IOWA TESTIMONY?

1082 A. Yes. The evidence in Iowa did not support Qwest's claim that a CLEC power cable order
1083 would trigger a DC Power Plant growth job. As McLeodUSA demonstrated, Qwest's
1084 own exhibits in Iowa showed that numerous McLeodUSA orders for power cables of 175
1085 amps and greater triggered no DC power plant investment or augmentation on Qwest's
1086 part. This is evident where Qwest's witness testified on cross-examination as follows:⁴⁸

1087 Q. I think that gets us through all seven jobs listed on the front page
1088 of RJH-3, Mr. Hubbard, and we have identified one of those that
1089 your exhibits show involve the additional – addition of capacity
1090 in response to a McLeod job, correct, that being Mason City
1091 522?

1092 A. That McLeod was mentioned, yes, but they were serving
1093 collocation.

1094 Q. And, again, RJH-1 lists [***BEGIN CONFIDENTIAL ■
1095 END CONFIDENTIAL***] McLeod collocations, correct?

1096 A. Correct.

1097 Q. Seventeen of which involve cable sized for 175 amps or more,
1098 correct?

1099 A. Correct.

1100 Q. And in fact that Mason City plant would have to be replaced
1101 anyway because it was 30 years old, manufacturer discontinued,
1102 and no parts were available, correct?

1103 A. Well, the growth rate that was required caused it to be replaced.
1104 Just because it was manufacturer discontinued, if the equipment
1105 was still operating normally and in good shape and didn't need
1106 to grow, then it may not have been replaced at that time.
1107

1108 As the above excerpt shows, out of the ***BEGIN CONFIDENTIAL ■ END
1109 CONFIDENTIAL*** McLeodUSA collocations in Iowa, 17 of which have 175 amp
1110 power cables or larger (up to 425 amps), Qwest only claimed that seven power plant
1111 growth jobs were attributed to McLeodUSA,⁴⁹ and even then, Qwest's witness was

⁴⁸ Iowa transcript, pages 621 – 622.

⁴⁹ The fact that Qwest only claimed seven jobs were related to McLeodUSA's power cable orders, despite McLeodUSA having seventeen collocations with power cables of 175 amps or greater

1112 forced to admit under cross-examination that six of these jobs did not even pertain to
1113 McLeodUSA and the seventh power plant job was related to old, antiquated equipment
1114 that lacked replacement parts.

1115

1116 **Q. DID QWEST EVER ATTEMPT TO REHABILITATE ITS CLAIM REGARDING**
1117 **“DEFINITELY” ADDING POWER PLANT CAPACITY FOR POWER CABLES**
1118 **OF 175 AMPS OR MORE IN IOWA LIKE IT IS ATTEMPTING TO DO HERE**
1119 **IN WASHINGTON?**

1120 A. No. This is evident in the following Q&A from Mr. Hubbard’s cross examination from
1121 the Iowa transcript (page 603, lines 5 – 14):

1122 Q. Now, in your testimony at page 8, at lines 12 through 14, you
1123 testify that “When McLeod submits orders asking for large
1124 amounts of DC power, such as 425 amps, 300 amps, 225 amps,
1125 or even 175 amps, this will definitely trigger a power plant
1126 capacity growth job. Qwest has to size the power plant based
1127 on as-ordered amount.” And that remains your testimony,
1128 correct?

1129 A. Yeah. It’s kind of irrelevant, but, yes, it does.
1130

1131 The clincher in Iowa of just how badly the actual facts disproved Qwest’s position was
1132 that Qwest argued in its brief to the Iowa Utilities Board that all this evidence that Qwest
1133 never actually augmented its power plant in response to numerous sizeable orders by
1134 McLeodUSA for large capacity distribution cables, evidence that Qwest itself had
1135 originally deemed relevant enough to include it in their direct testimony, was now
1136 “immaterial” and should be ignored by the Board.⁵⁰ In short, Qwest’s claim that CLEC
1137 power cable orders drive Qwest investment/augments in DC power plant was shown to

exposes as false Qwest’s claim that a power cable order of 175 amps or greater would “definitely”
trigger a power plant growth job.

⁵⁰ Qwest Corporation Post Hearing Brief, p. 31-32.

1138 be false in Iowa. And while Qwest attempts to rehabilitate its argument in Washington,
1139 since Qwest cannot support its claim that CLEC power cable orders trigger power plant
1140 investment, it is inappropriate for Qwest to assess charges on McLeodUSA as if it does.

1141

1142 **H. Other Issues**

1143

1144 **1. Qwest’s view on DC Power Plant sizing is not appropriate in either the**
1145 **“real world” or in a forward-looking environment**

1146

1147 **Q. ASHTON STATES THAT YOU AND MR. STARKEY “SEEM TO WANT TO**
1148 **FOCUS ON THEIR VIEW OF HOW QWEST SHOULD OR DOES ACTUALLY**
1149 **INCUR COST WITH RESPECT TO DC POWER PLANT”⁵¹ AND CLAIMS**
1150 **THAT THIS “ACTUAL COST METHODOLOGY IS BOTH IRRELEVANT TO**
1151 **THE CONTRACT DISPUTE, AND INCONSISTENT WITH TELRIC**
1152 **METHODOLOGY.”⁵² WOULD YOU LIKE TO COMMENT?**

1153 **A.** Yes. Mr. Starkey addresses TELRIC methodology issue in his testimony. However,
1154 what Mr. Ashton is claiming is that TELRIC pricing principles require Qwest to develop
1155 a power plant rate for CLECs based on ordered capacity of power cables. Not only is this
1156 not the manner in which Qwest’s cost study is structured (as explained by Mr. Starkey),
1157 but such an “as ordered” assumption in developing a power plant rate would certainly not
1158 be least-cost, efficient or forward-looking (some of the tenets of TELRIC pricing). As
1159 Qwest’s own engineering manuals demonstrate, such an assumption would model a
1160 network that *****BEGIN CONFIDENTIAL [REDACTED] END**
1161 **CONFIDENTIAL***** power plant, which would lead to power charges that significantly

⁵¹ Ashton Response, page 3, lines 10 – 12.

⁵² Ashton Response, page 3, lines 13 – 15.

1162 exceed the forward-looking costs, and artificially high rates assessed on CLECs for
1163 collocation power.

1164

1165 **Q. ARE YOU ARE SAYING THAT A PROPER TELRIC COST STUDY WOULD**
1166 **ASSUME THAT DC POWER PLANT IS SIZED BASED ON AGGREGATE**
1167 **PEAK POWER USAGE IN THE CENTRAL OFFICE?**

1168 A. Yes. While Mr. Ashton criticizes Mr. Starkey and me for focusing on the manner in
1169 which DC power plant is sized in the real world, this real world power plant sizing is the
1170 appropriate focus since a forward-looking, least-cost network would in fact size DC
1171 power plant in this manner. It simply makes no engineering or economic sense for an
1172 ILEC to expand its power plant to accommodate List 2 for each CLEC collocation order;
1173 Qwest would have so much excess power capacity in its COs that it would be absurdly
1174 inefficient. While I take no position on Qwest's collocation cost study and the rate for
1175 Power Plant that is produced by it, Mr. Starkey informs me that the cost study does,
1176 indeed, develop the Power Plant rate based on *used* amps – not *ordered* amps. This is
1177 consistent with the way in which DC power plant would be sized in the real world as well
1178 as in a forward-looking network design.

1179

1180 **Q. IF WE ASSUME FOR THE SAKE OF ARGUMENT THAT MR. ASHTON IS**
1181 **CORRECT AND QWEST ACTUALLY SIZES DC POWER PLANT BASED ON**
1182 **CLEC POWER CABLE ORDERS, WOULD THIS CHANGE YOUR OPINION**
1183 **THAT SUCH A PRACTICE IS NOT FORWARD-LOOKING?**

1184 A. Absolutely not. If Qwest were able to demonstrate that it actually sizes DC power plant
1185 based on the ordered amperage of CLEC power cables, as Mr. Ashton claims, this would

1186 show that Qwest is defying established, proper engineering practice and oversizing DC
1187 power plant in its central offices. CLECs should not be held accountable (in this case, in
1188 the form of higher DC Power Plant charges vis-à-vis Qwest) for Qwest disregarding its
1189 own engineering practices and introducing engineering *inefficiencies*. In my view, this is
1190 a textbook example of discrimination in the provisioning of bottleneck facilities by an
1191 incumbent local exchange carrier.

1192

1193 **2. Mr. Ashton’s Testimony is misleading in a number of additional respects**
1194

1195 **Q. MR. ASHTON TESTIFIES THAT YOU ARE “CONFUSED” ON THE ISSUE OF**
1196 **DECOMMISSIONING COLLOCATION SITES.⁵³ DOES HE SUPPORT HIS**
1197 **CLAIM OF ALLEGED CONFUSION?**

1198 A. No. Mr. Ashton never cites to any issue on which I am confused. In the sentence
1199 immediately following his claim of confusion, Mr. Ashton confirms that my
1200 interpretation of Qwest’s data request is correct.⁵⁴ Then, Mr. Ashton goes on to explain
1201 that since McLeodUSA’s original orders for power cables, “Qwest has experienced a
1202 reduction in the number of operating collocators, thus, a reduction in the amount of drain
1203 on an existing power plant”⁵⁵ – a point with which I have no reason to disagree. And
1204 since I don’t disagree with Mr. Ashton’s statement that Qwest’s lower power drain
1205 doesn’t impact the amount of power associated with McLeodUSA power cable order⁵⁶ or
1206 Qwest’s obligation to provide the usage associated with this order,⁵⁷ it is apparent that the

⁵³ Ashton Response, page 14, line 8.

⁵⁴ Ashton Response, page 14, lines 8 – 11.

⁵⁵ Ashton Response, page 14, lines 13 – 14.

⁵⁶ Ashton Response, page 14, lines 15 – 16.

⁵⁷ Ashton Response, page 14, lines 16 – 18. Though Mr. Ashton uses the term “capacity,” as I have demonstrated above, List 2 drain would only be needed under the most remote and extreme

1207 alleged confusion stems from my opinion that McLeodUSA is not obligated to pay the
1208 Power Plant charge based on the ordered amperage amount for power cables.⁵⁸ This is
1209 the crux of this case, and my direct and rebuttal testimonies explain in detail why I am
1210 not confused on this issue.

1211
1212 **Q. MR. ASHTON TAKES ISSUE WITH YOUR DISCUSSION OF LIST 1 DRAIN**
1213 **AND LIST 2 DRAIN WHERE YOU STATE THAT LIST 1 DRAIN**
1214 **CORRESPONDS WITH THE “AS CONSUMED” CAPACITY.⁵⁹ PLEASE**
1215 **RESPOND.**

1216 A. Elsewhere in my direct testimony (lines 660 – 661) I explained that, “List 1 drain is the
1217 average busy hour current during normal plant operation.” Therefore, my statement that
1218 List 1 drain generally corresponds to “as consumed” capacity, simply means that the “as
1219 consumed” amount represents the power consumed at the busy hour – or the level at
1220 which DC power plant such as batteries and rectifiers are sized. Mr. Ashton takes issue
1221 with my testimony because, as he states, “actual consumption will fall below List 1 drain,
1222 sometimes far below that level.”⁶⁰ I agree, however, Mr. Ashton misses the point.
1223 Again, the “as consumed” level referenced in my testimony refers to a specific power
1224 draw level, *i.e.*, the peak power consumed at the busy hour, as that specific power draw
1225 level is used to size DC power plant. This is an important point because Mr. Ashton
1226 claims that engineering DC power plant based on this “as consumed” or List 1 drain level

circumstances, and never would Qwest’s power plant need to provide the cumulative List 2 drain associated with all CLECs’ power cables at the same time assuming that Qwest is managing the power plant correctly.

⁵⁸ This is apparent because this is the only other issue raised by Mr. Ashton in this regard. Ashton Response, page 14, line 18.

⁵⁹ Ashton Response, page 12, lines 7 – 15.

⁶⁰ Ashton Response, page 12, lines 8 – 9.

1227 could lead to Qwest being unable to provide power at the levels CLECs need. However,
1228 since DC power plant is sized according to the peak consumption level of the entire
1229 central office, Mr. Ashton's concern in this regard is misplaced. And to the extent that
1230 Qwest is concerned about under-recovering its costs when sizing DC power plant based
1231 on List 1 drains and taking power measurements at times of average drain, Mr. Starkey
1232 explains how Qwest's cost study accounts for this.

1233

1234 **Q. MR. ASHTON STATES THAT QWEST CANNOT USE THE INFORMATION**
1235 **YOU PROVIDED IN DIRECT TESTIMONY REGARDING TYPICAL**
1236 **COLLOCATED EQUIPMENT AND POWER MEASUREMENTS OR RELY ON**
1237 **IT TO ENGINEER ITS DC POWER PLANT FACILITIES.⁶¹ WAS YOUR**
1238 **INTENTION FOR QWEST TO USE THIS INFORMATION FOR**
1239 **ENGINEERING DC POWER PLANT FACILITIES?**

1240 A. No. The purpose of this data was simply to show what the typical "as ordered" and "as
1241 consumed" power requirements would look like (i.e., power cable capacity will always
1242 exceed actual usage by a significant amount). But since Qwest provided more accurate
1243 information based on Qwest's power measurements of McLeodUSA's power
1244 consumption at Washington's central offices (Exhibit CA-1), this data shows that the
1245 illustrative data provided in my direct testimony actually understates the amount by
1246 which the "as ordered" amounts exceed the "as consumed" amounts.

1247

⁶¹ Ashton Response, page 16, lines 6 – 7.

1248 **Q. MR. ASHTON TESTIFIES THAT THE “ISSUE RAISED BY MCLEOD IS A**
1249 **NARROW QUESTION OF CONTRACT INTERPRETATION.”⁶² ARE YOU**
1250 **ADDRESSING MCLEODUSA’S INTERPRETATION OF THE CONTRACT**
1251 **LANGUAGE OR THE FLAWS IN QWEST’S INTERPRETATION?**

1252 A. No. Michael Starkey addresses these issues. However, I’m surprised by this statement
1253 considering that Mr. Ashton dedicates his entire testimony and exhibits in Washington
1254 (and other states) to addressing engineering issues and, to a lesser degree, proper
1255 TELRIC-based assumptions in Qwest’s collocation cost study. It is apparent that Qwest
1256 understands that examining the manner in which Qwest sizes DC power plant and the
1257 manner in which Qwest develops its Power Plant rate can put the reasonableness of the
1258 Parties’ interpretations of the contract in context.

1259
1260 **Q. MR. ASHTON CLAIMS THAT YOU AND MR. STARKEY “GLOSSED OVER**
1261 **THE REAL ISSUE AND HAVE PROVIDED QUITE A BIT OF TESTIMONY**
1262 **THAT CLOUDS THE REAL REASON THAT WE ARE BEFORE THIS**
1263 **COMMISSION...[WHICH] IS TO DISCUSS THE LANGUAGE IN THE POWER**
1264 **MEASURING AMENDMENT.”⁶³ IS HE CORRECT?**

1265 A. No, he is not. First, Mr. Starkey addresses in detail in his direct and rebuttal testimony
1266 what Mr. Ashton refers to as “the real issue” – or the language in the Power Measuring
1267 Amendment.⁶⁴ Further, addressing the manner in which DC power plant is sized and the
1268 manner in which Qwest’s DC Power Plant charge is developed and structured, in addition
1269 to the specific contract language in question, is not “glossing over” any issue. Indeed, I

⁶² Ashton Response, page 2, line 11.

⁶³ Ashton Response, page 3, lines 7 – 10.

⁶⁴ See, Starkey Direct, pages 3 – 9.

1270 would submit that these issues are critical to demonstrating the unreasonableness and
1271 discriminatory nature of Qwest's application of the DC Power Plant charge on an "as
1272 ordered" basis.

1273

1274 **Q. MR. ASHTON CLAIMS THAT MCLEODUSA'S COLLOCATION POLICY**
1275 **WORKS LIKE QWEST'S COLLOCATION POLICY (ASHTON RESPONSE,**
1276 **PAGE 15, LINES 6 – 18). IS MCLEODUSA'S COLLOCATION POLICY**
1277 **RELEVANT TO THIS PROCEEDING?**

1278 A. No. Qwest's policies are at issue in this proceeding, not McLeodUSA's. Therefore, any
1279 reference by Qwest to McLeodUSA's collocation policy is irrelevant and should be given
1280 little, if any, weight by the Commission. However, to set the record straight on this issue,
1281 I submit that Mr. Ashton's comparison is flawed in a number of respects.

1282

1283 **Q. PLEASE ELABORATE ON THE FLAWS IN MR. ASHTON'S TESTIMONY ON**
1284 **THIS POINT.**

1285 A. A comparison between the two really provides no useful information because they are
1286 fundamentally different. For instance, McLeodUSA bills collocators on estimated actual
1287 usage while Qwest bills collocators on the ordered amperage of the power cables.
1288 Second, McLeodUSA has a unified power rate that covers both power plant and power
1289 usage while Qwest has separate rates for each. In this respect, the McLeodUSA approach
1290 to billing collocators for power is akin to the Illinois situation where collocators are billed
1291 a unified rate for plant capacity and usage based on the amps used, which as I discussed
1292 in my direct testimony, is what QCC strongly advocated for continuation of in the Illinois
1293 case on collocation power. Third, McLeodUSA has no collocators while Qwest has

1294 numerous collocators including McLeodUSA. Fourth, the DC Power Measuring
1295 Amendment only provides for billing on a usage basis for collocations where more than
1296 60 amps of distribution cable were originally ordered, and McLeodUSA bills the
1297 collocator based on estimated actual usage for any amount of estimated usage. And to
1298 the extent that Mr. Ashton is correct, and Qwest's Power Reduction offering mimics a
1299 collocation policy that assesses power plant charges based on usage, this only supports
1300 my observation that the real difference between assessing the Power Plant rate on
1301 measured usage and Qwest's Power Reduction Offering is the thousands of dollars in
1302 charges CLECs incur under the Power Reduction Offering.

1303

1304 **III. RESPONSE TO QWEST WITNESS WILLIAM EASTON ON**
1305 **POWER REDUCTION AND POWER RESTORATION**
1306

1307 **Q. QWEST STATES THAT "MCLEOD[USA] HAS NOT TAKEN ADVANTAGE"**
1308 **OF THE POWER REDUCTION OFFERING.⁶⁵ DO YOU OR MCLEODUSA SEE**
1309 **THE POWER REDUCTION OFFERING AS AN "ADVANTAGE?"**

1310 **A.** No. I already addressed the problems with Qwest's Power Reduction offering in my
1311 direct testimony and will not repeat those points here. Further, Mr. Easton's testimony
1312 on the Power Reduction and Power Restoration offerings, in my opinion, is irrelevant and
1313 has no bearing on how the Parties Power Measuring Amendment provides for the DC
1314 Power Plant charge to be assessed.

1315

⁶⁵ Ashton Response, page 15, lines 1 and page 16, line 13.

1316 Q. AT PAGE 18 OF HIS RESPONSE, MR. EASTON DESCRIBES THE *POWER*
1317 *REDUCTION AND POWER RESTORATION OFFERINGS*.⁶⁶ DO YOU AGREE
1318 WITH MR. EASTON'S CHARACTERIZATION OF THESE OFFERINGS?

1319 A. No. I described the fundamental shortcomings of Qwest's Power Reduction Offering at
1320 pages 55 – 62 of my direct testimony. My direct testimony explains in detail the
1321 numerous reasons why McLeodUSA has not purchased this offering, and Mr. Easton's
1322 testimony claiming that "McLeodUSA's dismissal of the Power Reduction option is not a
1323 reasonable position[,]"⁶⁷ is not supported by the facts. Mr. Easton's unsupported rhetoric
1324 aside, the Power Restoration Offering, which apparently allows a CLEC to restore
1325 originally-ordered power after reducing the originally-ordered power through the Power
1326 Reduction Offering, does nothing to allay the concerns I described in my direct
1327 testimony. Like the Power Reduction Offering, the Power Restoration Offering provides
1328 for the ability to change power *distribution* facilities, and does not address power plant at
1329 all. Further, as described throughout my direct and rebuttal testimony, a CLEC would
1330 not (and according to economic signals and engineering practices, should not) reduce the
1331 amount of capacity of its power cables or fuses/breakers. Indeed, the existence of the
1332 Power Restoration offering demonstrates the folly of such an approach of constantly
1333 resizing power distribution because it shows that the CLEC may need larger power cables
1334 and fuses/breakers in the future. McLeodUSA's dismissal of the Power Reduction is
1335 particularly reasonable given that McLeodUSA "bought and paid for" its originally-
1336 ordered power distribution cables.

⁶⁶ Though Mr. Easton is Qwest's point witness on the Power Reduction and Power Restoration offerings, Mr. Ashton briefly addresses these offerings as well.

⁶⁷ Easton Response, page 22.

1337 Furthermore, on the one hand Qwest testifies that there is no correlation between
1338 “as ordered” amounts associated with power cables and actual power usage,⁶⁸ and on the
1339 other hand, the entire premise of Qwest’s Power Reduction offering and Power
1340 Restoration Offering – and, more importantly, its interpretation of the Power Measuring
1341 Amendment – is that the Power Plant charges CLECs would face will be tied to the
1342 ordered amperages associated with power distribution cables. As such, the premise of the
1343 Power Reduction and Power Restoration Offerings, as well as Qwest’s interpretation of
1344 the Power Measuring Amendment, is flawed.

1345

1346 **Q. DOES QWEST EVEN PROVIDE THE POWER REDUCTION OFFERING VIA**
1347 **ICA AMENDMENT AS CLAIMED BY MR. EASTON AT PAGE 18, LINES 3 –**
1348 **4)?**

1349 A. I’m not really sure. Qwest’s response to McLeodUSA DR No. 2-9, provided as Exhibit
1350 SLM-9 states, in pertinent part:

1351 Qwest responds that it does not affirmatively market a stand alone
1352 agreement for Power Reduction any longer. However, if a CLEC
1353 requests such an amendment, the rates that are currently available for
1354 Power Reduction are the same rates offered to McLeodUSA in
1355 September 2004 for which Qwest does not have cost study
1356 documentation.

1357

1358 Hence, while Qwest touts the benefit of this offering as a way in which CLECs can
1359 reduce their Power Plant charges, the facts show that Qwest does not even provide this
1360 offering via a stand-alone agreement, and does not have cost support to substantiate the
1361 charges it assesses for the offering, in any event.

1362

⁶⁸ Ashton Response, page 7, lines 14 – 22. See also, Ashton Response, page 13, lines 12 – 13.

1363 Q. DO YOU DISAGREE WITH MR. EASTON’S STATEMENT THAT THESE
1364 OFFERINGS “HAVE BEEN DESIGNED TO OFFER CLECS FLEXIBILITY IN
1365 MANAGING THEIR DC POWER REQUIREMENTS”?⁶⁹

1366 A. Yes, I disagree. Regardless of the reason Qwest designed these offerings, the critical
1367 point is that they do not provide CLECs with flexibility in managing their “power
1368 requirements.” First, once McLeodUSA’s power cables are installed and paid for, it is
1369 unwise and contrary to good engineering practices to swap them out at a later date, only
1370 to install smaller power cables which may need swapped out again sometime in the future
1371 for larger power cables. Since Qwest was compensated for the installation of these
1372 cables through NRCs and continue to recover the investment in the facility through
1373 monthly charges, Qwest should not care whether McLeodUSA uses these power cables
1374 going forward and at what utilization rate McLeodUSA is using the cables. Actually, the
1375 most flexibility for CLECs to manage their power requirements is provided when they
1376 order and pay for larger power cables that can comply with engineering and safety
1377 standards and serve ultimate demand, and leave those cables in place regardless of the
1378 demand that occurs in the near-term.

1379 Additionally, while Qwest insinuates that these “options,”⁷⁰ if purchased by
1380 CLECs, would provide *Qwest* flexibility in its power plant design, this is not actually the
1381 case. Qwest has admitted that it does not remove DC power plant equipment or capacity
1382 once a CLEC reduces its power cable size via the Power Reduction Offering⁷¹ or when a

⁶⁹ Easton Response, page 19, lines 2 – 3. See also, Easton Response, page 1, line 23.

⁷⁰ “Options” is used with quotes here because based on Qwest’s responses to discovery, there is a question as to whether Qwest actually offers and provides the Power Reduction to CLECs.

⁷¹ In response to McLeodUSA DR No. 2-14(d), Qwest states: “Qwest does not reduce the amount of power plant capacity directly related to carriers resizing their power distribution arrangements.”

1383 CLEC decommissions a collocation space.⁷² Therefore, even if McLeodUSA used the
1384 Power Reduction offering to resize their power cables, Qwest would not resize its DC
1385 Power Plant in response.

1386

1387 **Q. WHY IS THIS IMPORTANT?**

1388 A. Because it begs the question: “*Why should Qwest be allowed to force CLECs to incur*
1389 *thousands of dollars in non-recurring charges to effectuate a Power Reduction offering*
1390 *when the same results can be achieved by applying the Power Plant rate on a measured*
1391 *basis?* Mr. Starkey addresses this point in detail in his rebuttal testimony and explains
1392 that since Qwest does not reduce the capacity of its power plant due to CLECs reducing
1393 power cable capacity via the Power Reduction Offering, the difference between Qwest’s
1394 Power Reduction Offering and billing Power Plant on a measured basis is the thousands
1395 of dollars of unnecessary work Qwest forces CLECs to incur under the Power Reduction
1396 Offering. And to Mr. Easton’s point on pages 23 – 24 of his response testimony that the
1397 costs involved are worth it, again, these costs are completely unnecessary and are driven
1398 by Qwest’s application of the Power Plant charge.

1399

1400 **Q. MR. EASTON TESTIFIES THAT, “IN MY VIEW, THE EXISTENCE OF THESE**
1401 **OFFERINGS MAKES IT CLEAR WHAT QWEST’S INTENT WAS WITH**
1402 **REGARD TO THE DC POWER MEASURING AMENDMENT.”⁷³ IS THIS A**
1403 **REASONABLE VIEW?**

⁷² I have provided Qwest’s Response to McLeodUSA’s DR No. 1-5 as Exhibit SLM-10, wherein Qwest states: “Qwest does not remove or reduce its Power Plant capacity based on decommissioned collocations. Qwest will reassign fuse positions for Battery Distribution Fuse Bays (“BDFB”) and Power Boards (“PBD”), based on demand.”

⁷³ Easton Response page 19, lines 20 – 22.

1404 A. No, not in my judgment. This conclusion was preceded by the following testimony from

1405 Mr. Easton:

1406 If CLECs could reduce the Power Plant charge to measured level through
1407 the DC Power Measuring Amendment, these offerings would be largely
1408 superfluous and unnecessary. The only way to reconcile the fact that the
1409 Power Reduction and Power Restoration offerings were offered to
1410 CLECs at the same time the DC Power Measuring Amendment was
1411 offered, is to conclude that those elements covered by the Power
1412 Reduction and Power Restoration offerings are not covered by the DC
1413 Power Measuring Amendment.⁷⁴
1414

1415 Mr. Easton is incorrect. As explained above, the Power Reduction and Power
1416 Restoration offerings apply to resizing power distribution facilities (i.e., power cables and
1417 fuses/breakers) and does not even apply to power plant. In fact, as I have explained
1418 above, Qwest would not resize the power plant even if McLeodUSA purchased these
1419 offerings and reduced the size of their power cables. And even if a CLEC lowered the
1420 “as ordered” amounts related to its power cables through the Power Reduction Offering,
1421 and, in turn, Qwest applied the DC Power Plant charge to the lower, “as ordered”
1422 amount, Qwest would still be applying the DC Power Plant charge on an “as ordered”
1423 amount, which is contrary to the Power Measuring Amendment. Moreover, since Power
1424 Reduction and Power Restoration are never mentioned in the Parties’ Power Measuring
1425 Amendment and McLeodUSA does not purchase these offerings, they are truly irrelevant
1426 in this context, and the Commission should refrain from attempting to discern Qwest’s
1427 intent with regard to the Power Measuring Amendment based on Qwest’s inaccurate
1428 description of these irrelevant offerings that Qwest does not provide via stand alone
1429 agreement, and that do not apply to McLeodUSA in the first instance.

1430

⁷⁴ Easton Response, page 19.

1431 **Q, DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY?**

1432 A. Yes.