

Stephen F. Mecham (4089)
Callister Nebeker & McCullough
Gateway Tower East Suite 900
10 East South Temple
Salt Lake City, Utah 84133
Telephone: 801 530-7300
Facsimile: 801 364-9127
Email: sfmecham@cnmlaw.com

Karen Shoresman Frame
Covad Communications Company
7901 Lowry Boulevard
Denver, Colorado 80230
Telephone: 720 670-1069
Facsimile: 720-208-3350
Email: kframe@covad.com

Attorneys for DIECA Communications, Inc., d/b/a Covad Communications Company

BEFORE THE PUBLIC SERVICE COMMISSION OF UTAH

IN THE MATTER OF THE PETITION OF)	
DIECA COMMUNICATIONS, INC., D/B/A)	
COVAD COMMUNICATIONS COMPANY,)	DOCKET NO. 04-2277-02
FOR ARBITRATION TO RESOLVE)	
ISSUES RELATING TO AN)	
INTERCONNECTION AGREEMENT)	
WITH QWEST CORPORATION)	

REBUTTAL TESTIMONY OF MICHAEL ZULEVIC

FILED ON BEHALF OF

**DIECA COMMUNICATIONS, INC., D/B/A COVAD COMMUNICATIONS
COMPANY**

Disputed Issue No. 6

NOVEMBER 12, 2004

1 **Q. MR. ZULEVIC, PLEASE IDENTIFY YOURSELF FOR THE COMMISSION.**

2 A. My name is Michael Zulevic, and I currently provide consulting services for Covad
3 Communications Company. My business address is 22801 Entwhistle Road E.,
4 Buckley, Washington 98321.

5 **Q. ARE YOU THE SAME MR. ZULEVIC WHO PREVIOUSLY FILED DIRECT**
6 **TESTIMONY IN THIS ARBITRATION CASE?**

7 A. Yes, I am.

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

9 A. The purpose of this testimony is to respond to the direct testimony filed by Qwest
10 witnesses Michael Norman on October 8, 2004, relating to Arbitration Issue No. 6
11 (Regeneration).

12 **Q. MR. NORMAN PROFESSES SOME CONFUSION AS TO COVAD'S**
13 **PROPOSAL ON THE REGENERATION ISSUE. CAN YOU CLARIFY**
14 **COVAD'S POSITION?**

15 A. Covad's position on regeneration is that Qwest must provide CLEC to CLEC cross-
16 connects with regeneration (where necessary) as a wholesale service on the same rates,
17 terms and conditions as for ILEC to CLEC cross-connects, and not as a retail tariff
18 finished service. Further, Covad believes that, from a pricing standpoint, CLEC to
19 CLEC cross-connect regeneration should be treated precisely like the pricing for ILEC
20 to CLEC regeneration. I have set out Covad's revised language on this issue below:

21 8.2.1.23.1.4 CLEC is responsible for the end-to-end service design
22 that uses ICDF Cross Connection to ensure that the resulting service
23 meets its Customer's needs. This is accomplished by CLEC using the
24 Design Layout Record (DLR) for the service connection. Depending
25 on the distance parameters of the combination, regeneration may be

26 required. Qwest shall assess charges for CLEC to CLEC
27 regeneration, if any, on the same terms and conditions, and at the
28 same rates as for ILEC to CLEC regeneration.
29

30 8.3.1.9 Channel Regeneration Charge. Required when the distance
31 from CLEC's leased physical space (for Caged or Cageless Physical
32 Collocation) or from the collocated equipment (for Virtual
33 Collocation) to the Qwest network ("ILEC to CLEC regeneration"), to
34 CLEC's non-contiguous Collocation space ("CLEC to CLEC
35 regeneration"), or to the Collocation space of another CLEC ("CLEC
36 to CLEC regeneration") is of sufficient length to require regeneration
37 based on the ANSI Standard for cable distance limitations. Channel
38 Regeneration Charges shall not apply until the Commission approves
39 a wholesale Channel Regeneration Charge. After approval of such
40 charge, Channel Regeneration Charges shall be assessed for ILEC to
41 CLEC and CLEC to CLEC regeneration on the same terms and
42 conditions, and at the same rates. If CLEC requests Channel
43 Regeneration in spite of the fact that it is not required to meet ANSI
44 standards, Qwest will provide such regeneration and CLEC will pay
45 the Channel Regeneration Charge described herein.
46

47 **Q. DO YOU KNOW HOW THE UTAH COMMISSION HAS RESOLVED THE**
48 **PRICING OF ILEC TO CLEC REGENERATION?**

49 A. Yes. As set out in my Direct Testimony at pages 14-15 and footnote 3, this
50 Commission specifically rejected Qwest's right to charge for ILEC to CLEC
51 regeneration because Qwest never provided any evidence that regeneration would
52 actually ever be required. The Commission did, however, give Qwest the right to seek
53 recovery for regeneration expenses at some future point. From Covad's perspective and
54 according to its proposal, Qwest should not be permitted to charge for CLEC to CLEC
55 regeneration unless and until the Commission authorizes Qwest to charge for ILEC to
56 CLEC regeneration.

57 Qwest of course will argue that we're just trying to get CLEC regeneration for
58 free. The problem with that argument is that any inability to charge for regeneration is

59 strictly the fault of Qwest. It was given the opportunity to make its case as to the
60 appropriateness and amount of an ILEC-CLEC regeneration charge and failed to do so.
61 Qwest cannot pass off its failure to make its case to Covad.

62 **Q. PLEASE EXPLAIN WHY APPLICATION OF COVAD'S PROPOSAL IS FAIR**
63 **AND WILL RESULT IN EQUAL TREATMENT OF ALL CLECS.**

64 A. Just as with ILEC-CLEC cross-connect regeneration, CLEC to CLEC cross-connect
65 regeneration is a function of distance and time. It is a function of distance because as a
66 signal travels across a cable, the signal strength weakens and thus may require
67 regeneration, or boosting, to maintain the appropriate technical parameters. It is a
68 function of time because two CLECs that collocated in 1999 in contiguous or adjacent
69 space and who have a cross-connect may not require regeneration, but a cross-connect
70 between one of the 1999 collocators and a 2004 collocator several floors and linear feet
71 away may require regeneration. Note that the 2004 collocator likely will be placed in a
72 location farther away than a 1999 collocator because all of the collocation spaces near
73 the 1999 collocator were taken by other CLECs that collocated prior to the 2004
74 CLEC.

75 In the case of Qwest and the 2004 collocator, regeneration would currently be
76 provided at no charge. However, the same does not hold true if the 2004 collocator
77 wishes to cross-connect with the 1999 collocator. In the latter scenario, the 2004
78 collocator would have to pay for regeneration, which results in the 2004 collocator
79 being penalized for being later in time in the form of additional costs of which Qwest
80 and other CLECs remain free. That is an unfair, discriminatory result and should not be
81 permitted by the Commission.

82 **Q. MR. NORMAN STATES AT PAGE 9, LINES 12-13, THAT "COVAD'S**
83 **PROPOSED LANGUAGE HAS NO SUSTAINABLE BASIS IN LAW." DO YOU**
84 **AGREE WITH MR. NORMAN'S INTERPRETATION OF QWEST'S LEGAL**
85 **OBLIGATIONS?**

86 A. I do not. Qwest must perform CLEC to CLEC cross-connects as required by FCC rules.
87 Indeed, as the FCC stated in its Fourth Report and Order,

88 We find that pursuant to Section 201 that it would be unjust and
89 unreasonable for an incumbent LEC to refuse to provision cross-connects
90 between collocated competitive LECs. We also find that, in the
91 alternative, such a refusal would be unjust, unreasonable and
92 discriminatory within the meaning of Section 251(c)(6).¹
93

94 At its most fundamental, this issue is not whether Qwest must provide CLEC to
95 CLEC cross-connects (Qwest surely has to agree that it must do so), but rather whether
96 Qwest must provide regeneration for that CLEC to CLEC cross-connect in order to
97 ensure that the signal traveling from one CLEC collocation space to a different
98 collocation space maintains the appropriate specifications. I believe that law, logic and
99 technical issues dictate that Qwest is under an obligation to provide CLEC to CLEC
100 regeneration on the same terms and conditions as for ILEC to CLEC regeneration.

101 **Q. WHAT LAW AND LOGIC ARE YOU RELYING UPON?**

102 A. While I am not a lawyer, my understanding is that the FCC's Fourth Report and Order
103 makes very clear what Qwest's obligations are with respect to CLEC to CLEC cross-
104 connects and, by extension, CLEC to CLEC regeneration. In the Fourth Report and

¹ *In the Matter of Deployment of Wireline Services Offering Advanced Telecommunications Capability*, CC Docket No. 98-147, FCC 01-204, Fourth Report and Order (2001) at ¶ 59.

105 Order, the FCC reconfirmed the fact that ILECs must provision cross-connects for
106 CLECs² or, at a minimum, allow CLECs to self-provision those cross-connects. ³

107 More importantly, for purposes of resolving the regeneration dispute, the FCC
108 made clear that this legal requirement to provision CLEC cross-connects was made
109 pursuant to Section 251(c)(6) of the Act. What this means from a decisional perspective
110 is key. Section 251(c)(6) is the section of the Act that addresses collocation and which
111 affirmatively requires that ILECs permit CLECs to collocate in a central office in order
112 to interconnect with other carriers and to access UNEs. There is no doubt that ILEC to
113 CLEC cross-connects are designed specifically to meet these statutory purposes. And
114 since the FCC grounded its authority to require CLEC to CLEC cross-connects in
115 Section 251(c)(6), CLEC to CLEC cross-connects likewise are designed to fill the same
116 purposes and must have all the same attributes and properties, such as regeneration, that
117 an ILEC to CLEC cross-connect would have.

118 A fundamental fact underlying regeneration is that it is generally provided to
119 ensure that carriers can actually interconnect and access UNEs at applicable industry
120 standards. As a consequence, since CLEC to CLEC cross-connects serve the identical
121 purpose as an ILEC to CLEC cross-connect, they should be supplied with regeneration

² *Id.*

³ Interestingly, the entirety of the FCC's discussion on this issue was not whether allowing CLECs to provision cross-connects themselves relieved ILECs of the obligation to provision cross-connects for CLECs (which is what Qwest suggests) but rather addressed the fact that the FCC could not *require* ILECs to permit CLECs to self-provision CLEC to CLEC cross-connects. Regardless of whether Qwest can avoid provisioning the cross-connect itself by allowing CLECs to self-provision a cross-connect, the FCC's conclusion that Section 251 gave it the authority to require Qwest to provision CLEC to CLEC cross-connects ultimately means that any such cross-connect must be practically, realistically and technically the same as an ILEC to CLEC cross-connect. If not, then Qwest has failed to comply with the non-discrimination requirements of Section 251. In real world terms, this means that the CLEC to CLEC cross-connect must be made available on the same rates, terms and conditions as ILEC to CLEC cross-connects.

122 (just as an ILEC to CLEC cross-connect is) when necessary to ensure appropriate
123 technical signals on the same rates, terms and conditions.

124 The FCC left no room for question on this point. Because a Section 251(c)(6)
125 obligation carries with it the obligation that Qwest act in a non-discriminatory manner
126 when provisioning collocation elements such as cross-connects, Qwest cannot provide a
127 particular service, like regeneration, for one Section 251(c)(6) cross-connect (here,
128 ILEC to CLEC cross-connects) and then refuse to provide regeneration on the same
129 rates, terms and conditions for another type of Section 251(c)(6) cross-connect (here,
130 CLEC to CLEC cross-connects). To find otherwise would result in collocation,
131 interconnection and access to UNEs that is different from (i.e. inferior) to the quality of
132 the interconnection and access Qwest accords to itself and therefore would be
133 discriminatory. Moreover, since the FCC has already previously defined the
134 requirement of “equal in quality” interconnection as a requirement that Qwest design
135 interconnection facilities to meet the *same technical criteria and service standards,*
136 *including transmission standards,* that are used within the Qwest network⁴, there is no
137 legitimate or good faith reason to treat CLEC to CLEC regeneration on different rates,
138 terms and conditions than an ILEC to CLEC regeneration.

139 **Q. YOU ALSO MENTIONED THAT THERE ARE TECHNICAL REASONS FOR**
140 **REQUIRING QWEST TO PROVIDE THE REGENERATION RATHER THAN**
141 **CLECS, AS QWEST SUGGESTS SHOULD OR COULD HAPPEN.**

142 A. Let me provide a little context here. Qwest has stated that it will make available
143 regeneration as a finished service rather than as a wholesale product subject to TELRIC

⁴ *Local Competition Order*, ¶224.

144 pricing standards and the review of this Commission. As I explained above, that would
145 violate Qwest's obligations under Section 251, and as I explained in my Direct
146 Testimony, is cost-prohibitive.

147 Qwest poses as an alternative that CLECs provide regeneration themselves,
148 either as the signal leaves the collocation of one CLEC, as it arrives at the second
149 collocation space, or at both ends of the cross-connection. Again, as I explained in my
150 Direct Testimony at pages 10 and 11, the most technologically efficient and cost-
151 effective way to regenerate a signal is via a mid-span boost, which is precisely what
152 Qwest does when regeneration is required for an ILEC to CLEC cross-connect. In fact,
153 if the cable length that will be used to provide a DS3 circuit exceeds about 600 feet,
154 which is fairly common in large multi-floor central offices, regeneration **must** be done
155 at a mid-point and cannot possibly be transmitted at a high enough level to reach the
156 other end without risking "bleed over" into adjacent cabling.

157 **Q. WHAT DO YOU MEAN WHEN YOU SAY THE SIGNAL WILL "BLEED**
158 **OVER" INTO ADJACENT CABLING?**

159 A. What I mean is that the Covad-regenerated signal would cause digital cross-talk and
160 lead to spectrum interference with the signals being transmitted over all adjacent
161 transmission cables using the same cable racking, such that the signals transmitted by
162 other carriers are completely "scrambled." In other words, the Covad-regenerated
163 signal would disrupt the communications network of those carriers, which may also
164 include Qwest. Just as there are specifications requiring regeneration over certain cable
165 lengths, there are also specifications around how high a signal level can be transmitted
166 in order to maintain the integrity of the network.

167 **Q. OBVIOUSLY REGENERATION IN THE COLLOCATION SPACE IS OFTEN**
168 **IMPOSSIBLE AND WILL LEAD TO SIGNIFICANT PROBLEMS. COULD**
169 **COVAD AVOID THESE PROBLEMS BY PROVIDING MID-SPAN**
170 **REGENERATION?**

171 **A.** It is not possible for a CLEC to provide mid-span regeneration. In the first place, it
172 would require the construction of an entirely new collocation space and the placement
173 of regeneration equipment. In other words, it would cost a CLEC at least \$23,000 just
174 in collocation costs to be able to provide mid-span regeneration and take up to 130 days
175 before such capability would be available. The time and cost associated with
176 regeneration of one, single cross-connect makes it utterly infeasible. No carrier, Qwest
177 or CLEC, can afford to waste time and capital in such a fashion.

178 Further, it is unclear to me whether a CLEC actually could provide mid-span
179 regeneration. Based on my years of experience in Qwest central offices, the mid-span
180 point could fall in a location in the central office to which CLECs do not have access
181 (i.e. a switching equipment room or an MDF or COSMIC frame). In this case, even if a
182 CLEC were inclined to do so, it would be precluded from providing its own mid-span
183 regeneration.

184 **Q. EVEN ASSUMING THAT THERE WERE NO TECHNICAL FACTORS**
185 **PRECLUDING REGENERATION WITHIN A CLEC'S EXISTING**
186 **COLLOCATION, ARE THERE COST AND TIME BARRIERS ASSOCIATED**
187 **WITH THIS SOLUTION?**

188 **A.** Yes. In order to accommodate the regeneration equipment, Covad would have to
189 augment its collocation space in order to add the equipment. Assuming contiguous

190 space is available (which may not be the case), Covad again would incur a minimum of
191 \$23,000 and it would take approximately 130 days to get the space up and running. As
192 I already stated, this is just not a realistic or feasible solution. It is also discriminatory,
193 because collocation would be available only on terms, both technical and financial, that
194 are clearly inferior to that Qwest makes available to itself.

195 **Q. MR. NORMAN STATES ON PAGE 4, LINES 14-16, THAT IN A CLEC-TO-**
196 **CLEC CONNECTION, QWEST HAS NO CONTROL OVER OR**
197 **INVOLVEMENT WITH THE FACILITIES, IS THIS TRUE?**

198 A. Absolutely not. Qwest has a great deal of control over the placement of CLECs in
199 collocation spaces within the central office. While I agree that Qwest currently
200 provisions collo requests on a first come, first served basis, Qwest reserves space for
201 itself prior to consideration of CLEC collo applications, which results in Qwest's ability
202 to dictate all of the locations that will then be available to CLECs for collocation. A
203 first come, first served policy does not overcome the space reservation and allocation
204 decisions Qwest has already made; it simply allows the CLEC to take the best of the
205 space that remains available at the time it submits its application. Consequently, before
206 collocators even enter the picture, Qwest has already made some critical decisions that
207 may result in regeneration being required by CLECs. There is nothing that a CLEC can
208 do about that.

209 **Q. WHAT ABOUT THE FACT THAT COVAD CAN DO A WALK THROUGH**
210 **AHEAD OF TIME AND REQUEST THAT IT BE PLACED IN A PARTICULAR**
211 **LOCATION IN A CENTRAL OFFICE?**

212 A. As I stated above, while Qwest provisions collocated applications on a first come, first served
213 basis and permits CLECs to do a walk through to evaluate space, these activities only
214 occur *after* Qwest has made its own space allocation and reservation decisions to most
215 effectively meet its needs. As I stated above, this right does not undo or overcome
216 decisions Qwest has *already made* with respect to where it will place its own equipment
217 and reserve space for future growth. Now, if a walk through were to result in Qwest
218 relinquishing its own currently used or reserved space to a CLEC, then I might be
219 inclined to agree with Mr. Norman's testimony. But, since that is not the case and
220 CLECs must simply select the best of Qwest's "leftovers", I fundamentally disagree
221 with Mr. Norman's suggestion that CLECs control space allocation decisions.

222 **Q. IS MR. NORMAN'S STATEMENT ON PAGE 4, LINES 16-18, THAT**
223 **"QWEST'S ABILITY TO CHARGE A MARKET RATE ENCOURAGES THE**
224 **CLEC TO INVEST IN ITS OWN FACILITIES" REALISTIC?**

225 A. No.

226 **Q. WHY NOT?**

227 A. At a minimum, Mr. Norman's statement ignores reality. Two CLECs cross-connecting
228 within a central-office are, by definition, facilities-based CLECs. In the case of Covad,
229 for example, we've already collocated the facilities that allow our network to function.
230 No further incentive is required, since we are already facilities-based. In reality, the
231 Qwest position is a barrier to investment. If CLECs are required to connect to one
232 another where regeneration is required using Qwest's proposal, it is highly unlikely that
233 other CLECs will find it economically feasible to pay Qwest for a finished service to

234 have access to the network of a competitive facility provider. This fact will make
235 facilities-based CLECs less inclined to build additional capacity into their networks.

236 **Q. HAS THE FCC CONSIDERED THE COMPETITIVE EFFECTS OF ILEC**
237 **POLICIES REGARDING CLEC-TO-CLEC CROSS-CONNECTS?**

238 A. Yes. In ruling that ILECs were required to provide central office cross-connects
239 between CLECs, despite the fact that ILECs were not required to allow CLECs to *self-*
240 *provision* these cross-connects, the FCC said that:

241 if an incumbent LEC refuses to provision cross-connects between
242 competitive LECs collocated at the incumbent's premises, the
243 incumbent would be the only LEC that could interconnect with
244 all or even any of the competitive LECs collocated at a common,
245 centralized point – the central office.⁵

246 The FCC went on to explain that this would have a negative effect on the availability of
247 competitive transport options for CLECs,⁶ and that allowing central office cross-
248 connects between CLECs is essential to the development of a competitive market for
249 transport services.⁷

250 Even if CLECs have the option to self-provision a cross-connect (something the
251 ILECs opposed at the time the Fourth Report and Order was written), ILECs must allow
252 these cross-connections on non-discriminatory terms. If they do not, they create the
253 exact competitive problems the FCC intended to solve in the Fourth Report and Order.
254 For instance, if the cross-connect can only be accomplished in a way that is cost-
255 prohibitive, while cross-connection to Qwest is readily available at reasonable rates,

⁵ *Fourth Report and Order*, ¶ 63.

⁶ *Id.*

⁷ *Id.*, ¶ 65.

256 Qwest has an unfair pricing advantage over its competitors in the wholesale transport
257 market, as well as other markets, and carriers are more likely to purchase Qwest's
258 services.

259 I'll provide an example: suppose Covad had the option of aggressively
260 partnering with a voice CLEC to jointly provide a data and voice bundle to customers.
261 At the same time, Covad could partner with Qwest to provide a similar bundled service
262 through a commercial agreement. If a CLEC-to-CLEC cross-connect is available only
263 at inflated Qwest retail rates, Qwest would be the only viable partner.

264 **Q. MR. NORMAN SUGGESTS, BEGINNING ON PAGE 7, LINE 6, THAT CLECS**
265 **SHOULD ORDER A "FINISHED SERVICE" IN THE FORM OF A PRIVATE**
266 **LINE OR ACCESS SERVICE WHEN THE CLEC COLLOCATIONS ARE SO**
267 **FAR APART THAT REGENERATION IS REQUIRED. IS THIS A VIABLE**
268 **ALTERNATIVE?**

269 **A.** No, it isn't. First, Qwest makes the decisions concerning where collocation space will
270 be provided in every central office so Covad and other CLECs should not have to incur
271 additional expense as a result of Qwest's decisions. Further, ordering DS1 and DS3
272 "finished services" would significantly drive up our cost for CLEC to CLEC
273 connections. In the current Qwest Utah State SGAT, the nonrecurring price for this
274 connection is \$257.67 per circuit (DS1 or DS3 cross-connects where the connecting
275 collocations are close enough that regeneration is not required) and there is no monthly
276 recurring charge. If a DS1 were ordered from Qwest's FCC Tariff No. 1 because the
277 two collocations were so far apart as to require regeneration, the monthly recurring
278 alone would be about \$458.00 for a DS1, and about \$5,135 for a DS3. The

279 nonrecurring charges would be \$313.25 per DS1 and DS3. As you can see, this would
280 greatly drive up Covad's cost and place Covad at a competitive disadvantage, solely due
281 to Qwest's arbitrary decisions relating to placement of collocation space.

282 **Q. DOES THIS CONCLUDE YOUR TESTIMONY?**

283 A. Yes, it does.

284

1 **CERTIFICATE OF SERVICE**

2
3 This is to certify that a true and correct copy of **DIECA COMMUNICATIONS, INC.,**
4 **D/B/A COVAD COMMUNICATIONS COMPANY'S RESPONSE TESTIMONY OF**
5 **MICHAEL ZULEVIC** was mailed by U.S. Mail, postage prepaid, and electronically mailed this
6 12th day of November, 2004 to the following:

7
8 Winslow B. Waxter
9 Robert C. Brown
10 **Qwest Services Corp.**
11 1005 17th Street, Suite 200
12 Denver, CO 80209
13 Email: winslow.waxter@qwest.com
14 Robert.brown@qwest.com

15 John M. Devaney
16 **PERKINS COIE LLP**
17 607 Fourteenth Street, N.W., Suite 800
18 Washington, D.C. 20005-2011
19 Email: mhughes@perkinscoie.com

20 Ted D. Smith (3017)
21 **STOEL RIVES LLP**
22 201 South Main Street, Suite 1100
23 Salt Lake City, UT 84111
24 Email: tsmith@stoel.com
25
26
