BEFORE THE CORPORATION COMMISSION OF THE STATE OF OKLAHOMA

**APPLICATION OF JOYCE E. DAVIDSON
DIRECTOR OF THE PUBLIC UTILITY DIVISION,
OKLAHOMA CORPORATION COMMISSION, TO
INITIATE A PROCEEDING FOR THE
IMPLEMENTATION OF THE FEDERAL
COMMUNICATIONS COMMISSION'S TRIENNIAL
REVIEW ORDER**

CAUSE NO. PUD 200300646

**PREFILED TESTIMONY
OF
LILLIE R. SIMON**

TRACK 3 - LOOPS

PREFILED TESTIMONY OF LILLIE R. SIMON

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INTRODUCTION

Q: Please state your name, business address, by whom and where you are employed and in what capacity.

A: My name is Lillie R. Simon. My business address is the Jim Thorpe Office Building, Room 500, Oklahoma City, OK. I am employed by the Public Utility Division ("Staff") of the Oklahoma Corporation Commission ("OCC" or "Commission") as a Public Utility Regulatory Analyst in the Telecom Section.

Q: Please provide a brief resume of your educational and employment background.

A: I graduated in 1995 from Southern Nazarene University with a Bachelor of Science in Sociology. I obtained my Masters in Science in Management from Southern Nazarene in 1997. In addition, I have over 24 years experience with Southwestern Bell Telephone in such positions as Design Consultant and Marketing Manager. I was also employed by the Oklahoma Water Resources Board as a Financial Analyst responsible for a portfolio of public water and/or sewer facility loans in excess of $30 million.

Q: Have you previously testified before the Commission and have your credentials been accepted.

A: Yes.

22 Q: What is the purpose of your testimony?

23 A: The purpose of my testimony is to review and analyze the FCC's Triennial
24 Review Order[1] and offer testimony concerning the portion of Track Three that
25 seeks to identify where competing carriers are not impaired without unbundled
26 high capacity loops on a customer-specific basis. My testimony discusses Staff's
27 determination of whether designated triggers are met for the appropriate levels of
28 high-capacity loops.

29

30 Q: How is your testimony organized?

31 A: My testimony is organized in line with the FCC's TRO, in six sections:

32 - Executive Summary
33 - Section I is a discussion of Enterprise Market Loops and the FCC's
34 Impairment Analysis.
35 - Section II provides Capacity-Based Impairment Findings
36 - Section III is a discussion of the Location-Specific Review, including:
37 - Self-Provisioning Trigger and
38 - Competitive Wholesale Trigger.
39 - Section IV describes State Action Under Both Triggers, and
40 - Section V is Staff's recommendation.

1 *Implementation of the Local Competition Provisions of the Telecommunications Act of 1996*, CC Docket No. 96, 98, Report and Order and Order on Remand and Further Notice of Proposed Rulemaking, (2003)(TRO).

EXECUTIVE SUMMARY

My testimony reviews and analyzes the portion of the FCC's TRO, which related to identifying where competing carriers are not impaired without unbundled high capacity loops on a customer-specific basis. My testimony discusses Staff's determination of whether designated triggers are met for the appropriate levels of high-capacity loops.

I begin my testimony by discussing Enterprise Market Loops and the FCC's Impairment Analysis. The FCC found that CLECs are not impaired with out access to unbundled OCn loops, but are impaired without access to DS1, DS3, and Dark Fiber loops.

My testimony goes on to discussion of Capacity-Based Impairment for DS1, DS3, and Dark Fiber loops. The FCC found that Dark Fiber loops and DS3 loops are not generally self-deployed due to the high investment and construction costs. There is a limitation on multiple, unbundled DS3 loops; a CLEC is limited to two DS3s to any single customer location. This is based on the findings that, as a carrier approaches customer demand for more than 2 DS3s at a particular location, it becomes economically feasible to self-deploy. The FCC did not find that self-deployment of DS1 loops is economic, again due to high investment and construction costs.

My testimony discusses each of the two triggers for analysis: the Self-Provisioning Trigger and the Competitive Wholesale Trigger. When two or more unaffiliated providers are using their own facilities at the appropriate capacity

level, a customer location can be considered to be non-impaired without access to the appropriate unbundled loop. The Self-Provisioning Trigger is used to analyze DS3 loops and Dark Fiber loops. The Competitive Wholesale Trigger is used to analyze DS1 loops and DS3 loops.

The FCC expected the State Commissions to complete the trigger reviews and determine their findings by July 2004. Staff has utilized Data Requests (DRs) issued to the ILECs and CLECs as well as DRs exchanged between the ILECs and CLECs.

Staff has determined there are five locations in Oklahoma where the Competitive Wholesale Trigger has been met for DS1 loops; five locations where the Self-Provisioning and/or Competitive Wholesale Trigger has been met for DS3 loops and no locations where the Self-Provisioning Trigger has been met for Dark Fiber.

SECTION I
ENTERPRISE MARKET LOOPS AND THE FCC'S IMPAIRMENT ANALYSIS

Enterprise market customers fall into the categories of large enterprise business customers demanding multiple DS3s or OCn loops, or smaller enterprise business customers demanding DS1 or, occasionally, DS3 loops. CLECs are meeting the demands of some enterprise business customers by offering packages of voice and data sold under month-to-month or short-term contracts. On the other hand, the larger enterprise business customers usually enter into long-term contracts, which guarantee a substantial revenue stream over the life of the contract. The FCC was clear that, when conducting the impairment analysis, substantial weight should be given to the cost of constructing loop facilities in relation to the ability of the provider to recover those costs over time.

Q: What was the FCC's conclusion with regard to Enterprise Market Loops?

A: The FCC found that there are CLECs that have deployed their own fiber in order to service their enterprise customers entirely over their own loop facilities. However this deployment has been primarily at the OCn-level.

There is little evidence or documentation as to the availability of alternative providers of DS1 or DS3 loops and there is a vast discrepancy between the records provided by ILECs and those provided by CLECs as to the actual deployment of loops at these lower levels. In addition, there are few alternative transmission technologies to high-capacity loops, such as fixed-wireless.

101

102 Q: Why did the FCC delegate this authority to the OCC?

103 A: The FCC recognized that, while some CLECs may have deployed high-capacity
104 loops to particular customer locations, there is insufficient information available to
105 identify exact customer locations where this deployment has occurred. Therefore,
106 it was left to OCC to verify the FCC's findings.

107

SECTION II
FCC's CAPACITY-BASED IMPAIRMENT FINDINGS

Q: Please identify and explain the capacity-based impairment findings of the FCC.

A: There are four capacity-based findings discussed in the TRO in relation to high-capacity loops:

- Dark Fiber Loops
- OCn Loops
- DS3 Loops
- DS1 Loops

NOTE: 1 OCn = 3 DS3s; 1 DS3 = 28 DS1s; 1 DS1 = DS0s or Voice Grade Loops

<u>Dark Fiber Loops</u>

Dark Fiber is "optical fiber through which no light is transmitted and no signal is carried. It is unactivated deployed fiber that is left dark....to carry a signal or serve customers." [2] The FCC found that CLECs are impaired at most locations without access to dark fiber loops, based on the high sunk costs required to deploy dark fiber to a specific location. According to the FCC, ILECs are "the largest source of intracity dark fiber nationwide as a result of their 'first-mover' fiber deployment to the majority of customer locations." [3] In most areas, the CLECs have no alternative to using the ILEC's facility.

<u>OCn Loops</u> (1 OCn = 3 DS3s = 84 DS1s = 2,016 DS0s or Voice Grade Loops)

"OCn is an optical interface designed to work with a Synchronous Optical Network (SONET). OCn transmission facilities are deployed as SONET channels

2 TRO footnote 628

130 having a bandwidth of typically 155.52 Mbps (OC3 of the equivalent capacity of 3
131 DS3s) and higher." [4] The FCC found that CLECs are not impaired without access
132 to unbundled "lit" OCn loops because the barriers can be overcome by self-
133 deployment at an OC3 or higher level, the use of unbundled dark fiber, or the use
134 of "lit" DS3s.

135 DS3 Loops (1 DS3 = 28 DS1s = 672 DS0s or Voice Grade Loops)

136 A DS3 loop is "a digital local loop having a total digital signal speed of 44.736
137 Mbps provided over various transmission media including but not limited to fiber
138 optics, coaxial cable, or radio." [5] The FCC found that CLECs are impaired on a
139 customer-specific basis without access to unbundled DS3 loops. This is largely
140 due to the CLECs' inability to recover the required costs over a reasonable
141 period because DS3 loops do not, generally, provide sufficient revenue streams
142 to justify these costs.

143 The FCC did impose a limitation on multiple, unbundled DS3 loops. A CLEC is
144 limited to two unbundled DS3s to any single customer location, based on the
145 FCC's findings that, as a carrier approaches customer demand for more than 2
146 DS3s at a particular location, it becomes economically feasible to self-deploy.

147 DS1 Loops (1 DS1 = 24 DS0s or Voice Grade Loops

148 A DS1 loop is "a 1.544 Mbps first-level signal in the digital transmission
149 hierarchy. DS1 loops are provided over various transmission media and

3 TRO ¶312
4 TRO footnote 631.
5 TRO footnote 633.

150 combinations of transmission media, including but not limited to two-wire and
151 four-wire copper, fiber optics, or radio." [6] The FCC found that CLECs are
152 impaired without access to unbundled DS1 loops. It was determined that the
153 CLECs' ability to self-deploy at the DS1 level may be possible because the same
154 CLEC had already self-provisioned OCn or a 3 DS3 loop capacity at the same
155 address. In these cases, the evidence "does not support the ability to self-deploy
156 stand-alone DS1 capacity loops nor does it impact"[7] the DS1 finding of
157 impairment.

158 Because the record does not show self-deployment at the DS1 level is economic,
159 the State Commissions do not need to consider DS1 loops on a self-deployment
160 basis. The FCC found sufficient evidence of alternative providers at the DS3 and
161 higher capacity levels and, thus, believes there may be specific locations where
162 CLECs have deployed fiber and could offer their excess capacity at the DS1
163 level.

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6 TRO footnote 634
7 TRO footnote 957

SECTION III
LOCATION-SPECIFIC REVIEW CONDUCTED BY STATES APPLYING FEDERAL TRIGGERS

Q: What are the FCC's requirements for the States' location-specific review?

A: The FCC delegated to the states a "fact-finding role to identify where competing carriers are not impaired without unbundled high-capacity loops pursuant to two triggers." [8] The two triggers are identified and discussed below:

- The Self-Provisioning Trigger, which is applied to Dark Fiber and DS3, loops only.
- The Competitive Wholesale Trigger, which is applied to DS1 and DS3 loops only.

Q: How and when are these triggers applied?

A: There are distinctly different situations and methods for applying the two triggers as covered in the following testimony.

<u>SELF-PROVISIONING TRIGGER</u>:

Trigger Defined. When two or more unaffiliated CLECs are using their own self-deployed facilities and not facilities owned or controlled by one of the other providers to a particular customer location, then CLECs are not impaired without access to unbundled ILEC DS1 loops at that location. The two or more CLECs must have existing facilities in place currently serving customers over the relevant loop capacity level. If the State Commission "makes a finding of no impairment based on the application of the Self-Provisioning Trigger, it is not

8 TRO ¶328

187 necessary to separately apply the Competitive Wholesale Facilities Trigger." [9]

188 *Trigger Applied*. The self-deployed CLECs must be totally unaffiliated with each
189 other and the ILEC in addition to utilizing their own facilities and not the facilities
190 owned by another provider to the location. The exception would be in those
191 situations where the CLEC is utilizing dark fiber obtained on a long-term
192 indefeasible-right-of-use (IRU) basis.

193 *Special Considerations*. The FCC gave special consideration for Dark Fiber in
194 applying the Self-Provisioning Trigger. In those cases, the Self-Provisioning
195 Trigger is met with the presence of two or more CLECs "whether or not they are
196 offering dark fiber to other carriers to serve end-user customers to that
197 location."[10]

198 *State Analytical Flexibility*. The FCC also stressed that in applying the Self-
199 Provisioning Trigger to high-capacity loops, the best indication is actual
200 competitive deployment, meaning that the provider must be currently providing
201 service over the facility. The FCC affirmed that, in those situations where the
202 Self-Provisioning Trigger has not been met for Dark Fiber and/or DS1 loops, the
203 State Commissions must consider other factors including "evidence of alternative
204 loop deployment at that location; local engineering costs of building and utilizing
205 transmission facilities; the cost of underground or aerial laying of fiber or copper;
206 the cost of equipment needed for transmission; installation and other necessary

9 TRO ¶332.
10 TRO ¶334.

207 costs involved in setting up service; local topography such as hills and rivers;
208 availability of reasonable access to rights-of-way; building access
209 restrictions/costs; and availability/feasibility of similar quality/reliability alternative
210 transmission technologies at that particular location."[11]

211 **COMPETITIVE WHOLESALE TRIGGER**

212 *Trigger Defined*. In using the Competitive Wholesale Trigger, the State
213 Commission must determine if are two or more unaffiliated alternative providers
214 that have access to the entire premises (including each and every unit in the
215 case of a multiunit customer premises) and offer the specific type of high-
216 capacity loop over their own facilities on a wholesale basis to other carriers.

217 The FCC included, in addition to dark fiber IRUs, dark fiber obtained on a
218 lease/purchase basis, including dark fiber purchased from an ILEC on an
219 unbundled basis, if the alternative provider attached its own optronics to the fiber
220 in order to offer 'lit' fiber loops to CLECs on a wholesale basis.

221 *Trigger Applied*. The FCC specified that State Commissions should not use
222 financial analysis when evaluating competitive wholesale providers other than the
223 reasonable expectation that the providers are "operationally capable of
224 continuing to provide wholesale loop capacity to that customer location." [12]

225

11 TRO ¶335
12 TRO ¶338

226 **SECTION IV**

227 **STATE ACTION UNDER BOTH TRIGGERS**

228 Q: What state action did the FCC expect?

229 A: The FCC expected the State Commissions to complete the trigger reviews by
230 July 2004. All unbundled DS1, DS3, and dark fibers loops are to remain available
231 to all customer locations until the State Commissions determine that the
232 unbundled loops are not necessary. State Commissions are to continue with
233 further granular reviews to identify additional and/or future customer locations
234 where the triggers are met.

235

236 Q: What has the Staff done to meet these requirements of the FCC in regard to
237 Track 3a?

238 A: Staff initially issued Data Requests (DRs) to both the ILECs and CLECs
239 requesting identification, by wire centers, of customer names, and specific
240 addresses, where the Company believed the Self-Provisioning Trigger and the
241 Competitive Wholesale Trigger had been met.

242 SWBT returned a list of approximately 351 locations where it felt both triggers
243 had been satisfied. CLECs submitted significantly fewer locations in their DR
244 responses. So, it was necessary to issue numerous DRs to both the ILECs and
245 CLECs in order to narrow down the list used for Staff's analysis and
246 recommendation.

247 Using SWBT's initial list of addresses as a base, Staff reviewed responses to its

248 DRs and responses to DRs exchanged between the CLECs and ILECs, to
249 develop a list of 29 potential addresses where there may be a finding of no
250 impairment. Once this list was developed, Staff separated the provided loops into
251 DS1, DS3, and Dark Fiber facilities and further reviewed DR responses to narrow
252 down the list to the final result. After this step, it became clear which location-
253 specific customer premises would not be impaired. (See Attachment 1)

SECTION V
STAFF RECOMMENDATION

Q: What are Staff's findings in relation to the findings of impairment?

A: Staff's findings indicate the following:

- There are five (5) locations in Oklahoma where the Competitive Wholesale Trigger for DS1 loops have been met and will not be impaired without access to unbundled DS1 loops. These locations are:
  - 101 N. Robinson, OKC
  - 1100 N. Lindsay, OKC
  - 20 N. Broadway, OKC
  - 201 Robert S. Kerr Ave, OKC
  - 101 W. Park Ave., OKC
- There are five (5) locations in Oklahoma where the Self-Provisioning Trigger and/or the Competitive Wholesale Trigger have been met for DS3 loops and will not be impaired without access to unbundled DS3 loops. These locations are:
  - 100 N. Broadway, OKC
  - 100 Park Ave., OKC
  - 201 Robert S. Kerr, OKC
  - 630 SW 7th, OKC
  - 700 N. Greenwood, Tulsa
- There are no locations in Oklahoma where the Self-Provisioning Trigger has been met for Dark Fiber.

278 Q: Do these numbers agree with the numbers determined by the ILECs and/or
279 CLECs in their testimony?

280 A: No. SWBT identified 29 specific customer locations that meet both triggers.
281 Unfortunately, SWBT's Exhibit 5 (highly sensitive confidential version) of
282 locations did not indicate which triggers they considered were met at which
283 locations. Based on SWBT's testimony filed by J. Gary Smith for Track III, Staff
284 believes that some of SWBT's findings may be facilities deployed and/or utilized
285 for interstate services and/or data transmission. If this is the case, Staff doesn't
286 believe these locations satisfy the specified triggers.

287 The number of locations reported by CLECs do not match, but are more in line
288 with, Staff's findings.

289

290 Q: Did Staff consider the potential deployment for DS3 and Dark Fiber loops as
291 discussed in paragraph 335 of the TRO?

292 A: No. Due to the ambiguous and vague DR responses received, Staff was not able
293 to perform the detailed review and analysis necessary for this procedure.

294

295 Q: How does the recent US Court of Appeals decision [13] affect your testimony?

296 A: While the recent decision vacated and remanded the TRO, it did not specifically
297 address the portion of the TRO dealing with high-capacity loops on a customer-

13 *USTA v .FC*C, No. 00-1012, Decision (D.C. Cir. March 2, 2004).

298 specific basis. Whether the States are to continue in either a decision-making
299 position or a recommendation position, I don't foresee any changes to this
300 testimony other than the ability to have the opportunity to do further review and
301 pursue potential deployment for DS3 and Dark Fiber loops.

302

303 Q: Does this conclude Staff's testimony?

304 A: Yes, it does.