

BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

In the Matter of the )
) DOCKET NO. UT-003013
)
Continued Costing and Pricing of ) FORTY-FIRST SUPPLEMENTAL
Unbundled Network Elements, ) ORDER; PART D INITIAL ORDER;
Transport, and Termination ) ESTABLISHING NONRECURRING
AND RECURRING RATES FOR UNES
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I. SYNOPSIS

1 This Initial Order proposes resolutions for issues relating to the nonrecurring and recurring costing and pricing of numerous unbundled network elements for Qwest and Verizon.

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## II. PROCEDURAL SUMMARY

2 This proceeding was opened on February 17, 2000, to address issues arising out of  
Docket Nos. UT-960369, 960370, and 960371 (“UT-960369”) (also referred to as the  
“Generic Costing and Pricing Proceeding”).<sup>1</sup> On March 16, 2000, the Commission<sup>2</sup>  
established a two-part schedule. Several other parts to this proceeding were  
subsequently established, including this Part D.

3 On January 31, 2001, the Commission entered the Thirteenth Supplemental Order  
 (“Part A Order”) addressing line sharing, operations support systems, collocation, and  
certain nonrecurring charges. On July 20, 2001, the Commission entered the Twenty-  
Third Supplemental Order (“Part A Reconsideration Order”).

4 On June 21, 2002, The Commission entered the Thirty-Second Supplemental Order  
 (“Part B Order”) addressing digital subscriber line provisioning, including line  
splitting and line sharing over fiber-fed loops, updated operational support systems  
 (“OSS”) cost recovery, loop conditioning, reciprocal compensation, including tandem  
rates and interconnection cost sharing, and the nonrecurring and recurring costs and  
rates of numerous unbundled elements. On September 23, 2002, the Commission  
entered the Thirty-Eighth Supplemental Order (“Part B Reconsideration Order”).

5 Part C proceedings regarding microwave entrance facilities have been completed.

6 Part D evidentiary hearings began on, May 6, 2002, and concluded on May 10, 2001.  
Parties filed opening and reply briefs on July 23 and August 13, 2002, respectively.

7 The Commission has scheduled Part E hearings to address updated OSS transition  
cost recovery for Qwest and Verizon beginning December 9, 2002.

8 **Parties:** The following parties of record participated in the Part D hearings: Qwest  
Corporation (“Qwest”), by Lisa Anderl and Adam Sherr, Seattle; Verizon Northwest  
Inc. (“Verizon”), by Jennifer McClellan, Richmond, Virginia; WorldCom, Inc.  
 (“WorldCom”), by Michel Singer-Nelson, Denver, CO; Covad Communications  
Company (“Covad”) by Megan Doberneck, Denver, CO; AT&T Communications of

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<sup>1</sup> See *In the Matter of the Pricing Proceeding For Interconnection, Unbundled Elements, Transport and Termination, and Resale*, Docket Nos. UT-960369 (general), UT-960370 (US WEST), and UT-960371(GTE), Order Instituting Investigations (November 20, 1996). Qwest was formerly known as US WEST. Verizon was formerly known as GTE.

<sup>2</sup> In this Order, the Washington Utilities and Transportation Commission is referred to as the “Commission.” The Federal Communications Commission is referred to as the “FCC.”

the Pacific Northwest, Inc., by Gregory J. Kopta, Seattle; and Commission Staff, by Mary Tennyson and Gregory Trautman, Assistant Attorneys General, Olympia.

### III. MEMORANDUM

#### A. PROCEDURAL BACKGROUND

9 In November 1996, the Commission issued an Order Instituting Investigation and Consolidation in Docket Nos. UT-960369, 960370, and 960371, also referred to as the Generic Costing and Pricing Proceeding. The Commission initiated that proceeding to consider cost and pricing issues that arose during the arbitration process and out of the Commission's obligations under the Telecommunications Act of 1996 ("Telecom Act" or "Act") to establish rates for unbundled network elements ("UNEs"), interconnection, transport and termination, and wholesale services.<sup>3</sup>

10 These cost and pricing issues also arise from the Commission's obligations under Title 80 RCW to regulate telecommunications companies in the public interest, and to establish rates and charges for telecommunications services. This case is a necessary and anticipated continuation of the Generic Costing and Pricing Proceeding. The prices established in the Generic Costing and Pricing Proceeding and this case are intended for use in pending and future arbitrations, and in tariffs required pursuant to Commission orders in the consolidated interconnection and Qwest rate case proceedings.<sup>4</sup>

11 In the earlier Generic Proceeding, the Commission adopted the total element long run incremental cost ("TELRIC") methodology for setting unbundled network element ("UNE") prices. The Commission also noted that all of the parties in the case advocated the use of the TELRIC methodology as the appropriate costing analysis, and thus adopted use of TELRIC for these proceedings.<sup>5</sup> The Commission stated that the TELRIC methodology: (1) assumes the use of best available technology within the limits of existing network facilities; (2) makes realistic assumptions about capacity utilization rates, spare capacity, field conditions, and fill factors; (3) employs a forward-looking, risk-adjusted cost of capital; (4) uses economic depreciation rates for capital recovery; and (5) properly attributes indirect expenses to network elements on a cost-causative basis.

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<sup>3</sup> Pub. L. No. 104-104, 110 Stat. 56 (1996), codified at 47 U.S.C. §§ 151 *et seq.* (1996), 47 U.S.C. § 252(d).

<sup>4</sup> Order Instituting Investigations; Order of Consolidation; and Notice of Prehearing Conference, Docket Nos. UT-960369, *et al.* (November 21, 1996), at page 3.

<sup>5</sup> *In the Matter of the Pricing Proceeding for Interconnection, Unbundled Elements, Transport and Termination, and Resale*, Docket No. UT-960369 *et al.*, *Eighth Supplemental Order* (May 11, 1998) ("*Eighth Supplemental Order*"), at para. 9.

- 12 Docket No. UT-960369 involved three phases. In Phase I of that proceeding, the Commission established a cost methodology and determined the direct cost of many unbundled network elements, as well as the wholesale discount for the resale of retail services for providing certain telecommunications services.<sup>6</sup>
- 13 In Phase II, the Commission determined the mark-up that should be applied to the direct cost of unbundled network elements.<sup>7</sup> The mark-up was added to the direct cost in order to include a contribution to the common costs incurred by incumbent local exchange carriers in the price of unbundled network elements. In addition, the Phase II proceeding addressed the recovery of OSS transition costs, nonrecurring charges, collocation, and various other matters related to the costing and pricing of interconnection and unbundled network elements.
- 14 In Phase III, the Commission addressed the deaveraging of unbundled loop prices. In Part A of this proceeding, the Commission resolved issues relating to costing and pricing for three aspects of the way competitive carriers interconnect with incumbent carriers: the high frequency portion of the local loop as a new unbundled network element (line sharing); unbundled access to incumbent local exchange carriers' operations support systems; and collocation of competitors' facilities in or near incumbents' facilities.

## **B. TELECOMMUNICATIONS ACT OF 1996**

- 15 The purpose of the Act is to "provide for a pro-competitive, de-regulatory national policy framework designed to accelerate rapidly private sector deployment of advanced telecommunications and information technologies and services to all Americans by opening all telecommunications markets to competition . . ." *H.R. Conf. Rep. No. 104-458, 104th Cong., 2d Sess. 13 (1996)*. Congress envisioned that the Act's pro-competitive policies would be accomplished, in large part, by requiring incumbent local exchange companies ("ILECs"), such as Qwest and Verizon, to open their networks to competitive local exchange companies ("CLECs").
- 16 A fundamental requirement of the 1996 Act imposes on the ILECs the obligation to provide their competitors with access to unbundled network elements.<sup>8</sup> This part of the proceedings arises out of the FCC's UNE Remand Order, Third Report and Order, *In the Matter of Implementation of the Local Competition Provisions of the Telecommunications Act of 1996*, CC Docket No. 96-98. FCC 99-238 (1999). As noted by the FCC in its press release announcing the release of that order:

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<sup>6</sup> *Eighth Supplemental Order*.

<sup>7</sup> *In the Matter of the Pricing Proceeding for Interconnection, Unbundled Elements, Transport and Termination, and Resale*, Docket No. UT-960369 et al., *Seventeenth Supplemental Order* (August 30, 1999) ("*Seventeenth Supplemental Order*").

<sup>8</sup> Docket No. UT-003013, *Thirteenth Supplemental Order*, at para. 86.

This FCC decision removes a major uncertainty surrounding the unbundling obligations of the Telecommunications Act of 1996 and is expected to accelerate the development of competitive choices in local services for consumers. Unbundling allows competitors to lease portions of the incumbent's network to provide telecommunications services.

17 Today's order adopts a standard for determining whether incumbents must unbundle a network element. Applying the revised standard, the Commission reaffirmed that incumbents must provide unbundled access to six of the original seven network elements that it required to be unbundled in the original order in 1996:

- (1) loops, including loops used to provide high-capacity and advanced telecommunications services;
- (2) network interface devices;
- (3) local circuit switching (except for larger customers in major urban markets);
- (4) dedicated and shared transport;
- (5) signaling and call-related databases; and,
- (6) operations support systems.

*FCC Report No. CC 99-41, September 15, 1999.*

### **C. COMMISSION AND FCC ORDERS, AND PARTIES' BRIEFS**

18 Attached as Appendix A is a compilation of key Commission and FCC orders that are cited in this Order. Included in the compilation is an official citation to each Order and the name by which the Order is commonly referred in this Order. Citations to these orders also appear in footnotes throughout this Order. Parties filed opening and reply briefs. In this Order, a party's opening brief is simply referred to as a "brief." A reply brief is referred to as such.

### **D. TELECOMMUNICATIONS ACRONYMS**

19 Attached as Appendix B is a compilation of telecommunications acronyms frequently mentioned in this Order and their corresponding expanded names. Each expanded name and corresponding acronym (in parentheses) should appear in the text of the Order where first mentioned.

**E. ADMISSION OF BENCH REQUEST RESPONSES AND RECORD REQUISITIONS**

20 All responses to bench requests are admitted into the record. Additionally, we grant Commission Staff's motion that the response to Record Requisition No. 2503, dated May 20, 2002, be admitted.

**F. ISSUES BEFORE THE COMMISSION**

**1. QWEST'S NONRECURRING COSTS ("NRC")**

**a. Overview of Qwest's NRC Model**

21 Qwest sponsored the enhanced nonrecurring cost model ("ENRC") in Part D for calculating its nonrecurring costs.<sup>9</sup> Qwest's process of developing nonrecurring costs starts with input from subject matter experts ("SMEs") -- typically engineers or product managers -- concerning the types of tasks and activities that are necessary to establish a service or to provide a UNE. After the SMEs identify the necessary tasks, they provide an estimate of the time needed to perform each task and the probability that the task will be performed. Qwest claims that the SMEs provide these estimates using forward-looking assumptions based on their extensive experience with the tasks and activities associated with the service or network element being studied.<sup>10</sup> *Qwest Brief, at pages 6-7.*

22 The time and probability estimates developed by SMEs are then multiplied by the appropriate labor rate purportedly to yield the direct nonrecurring cost associated with each activity. Qwest then applies expense factors to the direct nonrecurring cost calculations to provide the TELRIC for each UNE and interconnection service. Finally, Qwest applies the direct and common loading factors of 19.62 percent and 4.05 percent, respectively, which were previously approved by the Commission.<sup>11</sup> *Qwest Brief, at pages 6-7.*

23 Other than adjustment made to comply with previous Commission orders, Qwest claims that ENRC contains inputs based on Qwest's current experience in processing orders and provisioning network plant. Thus, according to Qwest, its studies do not model theoretical provisioning methods based on future hypothetical technologies or networks that are not deployed in Qwest's territory. However, Qwest states that these studies do include changes anticipated by SMEs in processing and provisioning, in addition to adjustment for expected increases in mechanization due to the further

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<sup>9</sup> Nonrecurring costs are the one-time costs associated with establishing a service of providing a UNE.

<sup>10</sup> Exhibit No. T-2020, at page 16.

<sup>11</sup> Exhibit No. T-2020, at page 13.



development of OSS interfaces, that will be implemented within 12-18 months.<sup>12</sup>  
*Qwest Brief, at page 7; Qwest Reply Brief, at page 3.*

24 WorldCom argues that Qwest has not adhered to TELRIC principles in its studies for three reasons. First, Qwest allegedly did not apply a forward-looking analysis in its cost studies. WorldCom finds particular fault with Qwest for utilizing model inputs based on current experience with its existing OSS. Second, WorldCom maintains that Qwest's model inputs are based on inefficient operations and excessive time to perform activities. Third, WorldCom claims that Qwest inappropriately relies on SMEs instead of verifiable time and motion studies. *WorldCom Brief at pages 8-9.*

25 Qwest generally attributes WorldCom's criticism to a fundamental difference in approaches to costing and pricing principles. Qwest states that it has proposed forward-looking prices based on its real world experience of maintaining a network and providing CLECs with UNEs and interconnection, and characterizes WorldCom's arguments as being based on unrealistic assumptions with the sole purpose of driving down prices to a level that would deny Qwest's legitimate full recovery of costs. Qwest argues that its reliance on actual experience does not mean that Qwest's studies produce estimates reflecting embedded costs. *Qwest Reply Brief at page 1.* Rather, Qwest claims that it has used its actual experience only as a basis for cost estimates. Qwest insists that its model is forward-looking because it includes process and system improvements that will be implemented in the next 12-18 months. *Qwest Reply Brief, at page 3.*

#### **b. Flow-Through/Fallout Rates**

26 WorldCom believes that Qwest's NRC study reflects the embedded cost of providing interconnection and UNEs based on a legacy OSS, not the most efficient forward-looking OSS required by TELRIC principles because it assumes excessive fallout and manual intervention in the ordering and provisioning process. WorldCom argues that Qwest has failed to provide evidence that it has utilized basic quality improvement procedures to reduce fallout.<sup>13</sup> *WorldCom Brief, at page 12.* This assertion is based in large part on comments attributed to Elizabeth Ham, a Southwestern Bell (SBC) employee, who described how SBC improved its EASE (Easy Access Sales Environment) OSS to 99% flow through capability.<sup>14</sup> WorldCom claims that SBC's

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<sup>12</sup> TR at 4140-43.

<sup>13</sup> The term "fallout" is used to define an event as an error in mechanized flow-through processing. WorldCom provides illustrative examples in its Opening Brief, at pages 10-11.

<sup>14</sup> "Our consumer EASE product permits a 99% flow through of all service orders that are entered by all residential or customer retail operations. We would expect the same flow through from a trained CLEC service rep." Exhibit No. 2202, at pages 14-15. Ms. Ham's comments were made during an Operations Support Systems Forum convened by the FCC Common Carrier Bureau on May 28 and 29, 1997.

experience demonstrates the type of flow through that can be achieved via currently available technology and processes.

- 27 As a remedy WorldCom proposes a fallout rate of 2%. WorldCom's witness Morrison states that a 2% fallout rate is reasonable to expect from a progressive company focused on process improvements to reflect forward looking quality and cost efficiencies.<sup>15</sup> WorldCom states that several other state commissions have agreed with its proposal and have required ILECs to modify their NRCs to incorporate a 2% fallout factor.<sup>16</sup> *WorldCom Brief, at pages 10-13.*
- 28 Qwest states that WorldCom mischaracterizes SBC's testimony regarding flow through because the 99 percent flow-through rate achieved by SBC applied only to orders for residential resale and simple business services.<sup>17</sup> Qwest maintains that this rate is comparable to Qwest's own assumptions regarding similar orders.<sup>18</sup> Thus, Qwest suggests that the Commission reject WorldCom's 2% fallout rate as proposed. *Qwest Brief, at page 13.*
- 29 According to WorldCom, Qwest's proposed inclusion of multiple fallout work item times in the calculation of NRCs is flawed because it provides no incentive for improvement, it accepts multiple quality failures as a standard business practice, and it guarantees the ongoing acceptance of abnormally high NRCs because of excessive manual intervention. *WorldCom Brief, at page 12.* WorldCom argues that an efficient OSS virtually eliminates the requirement for manual intervention in the ordering and provisioning process. Consequently, WorldCom suggests that its proposed 2% fallout factor should be applied once to the entire end-to-end provisioning process.
- 30 Furthermore, WorldCom claims that Qwest's application of multiple fallout factors improperly compounds the amount of manual intervention that is required to fulfill an order. To demonstrate its point WorldCom's witness, Sidney Morrison, discussed an example where two parties that agree that a 10% fallout rate is acceptable in provisioning a network element. The first party applies 10% to 100 provisioning orders with 10 work steps each and creates 100 additional expense work item computations. The second party applies a 10% fallout rate once to provisioning the network element, which results in only 10 expense work item computations. WorldCom believes that the former methodology is inefficient because the cost for 100 additional work item computations would greatly exceed the cost of 10 expense work item computations.<sup>19</sup> *WorldCom Brief, at pages 10-13.*

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<sup>15</sup> Exhibit No. T-2270, at pages 19-20.

<sup>16</sup> Exhibit No. T-2270, at page 20.

<sup>17</sup> See Exhibit No. T-2200, at page 11.

<sup>18</sup> See Exhibit No. T-2049, at page 6.

<sup>19</sup> Exhibit No. T-2270, at page 18.

- 31 Qwest insists that WorldCom's assumptions and assertions regarding flow through capability are inaccurate, unrealistic, and misleading because they fail to recognize that Qwest's flow through assumptions are already forward looking and reflect higher flow through percentages than Qwest currently experiences.<sup>20</sup> *Qwest Brief, at page 12*. Qwest believes that WorldCom's fallout argument simply identifies two ways that fallout rates can be applied in a study. That is, one method is to apply a fallout rate at the individual work step level, and the other is to apply the rate to the entire process. Qwest argues that WorldCom's example is misleading (i.e. comparing apples to oranges) because individual work steps and orders do not share a common denominator. Qwest states that a valid analysis would be to apply fallout rates individually to the number of minutes in each work step in each order, and compare that to applying the weighted-average fallout rate once to the total number of minutes in each order. Qwest claims that this approach places the items being compared on the same basis and allows for a meaningful analysis. *Qwest Reply Brief, at page 4*.
- 32 Qwest contends that the real issue to be addressed with regard to fallout is whether it is more appropriate to estimate an average fallout rate that is applied once to the total minutes of processing time for each order, as WorldCom claims, or to provide individual fallout rates for the work steps performed for each order. Qwest maintains that it is a better and more accurate approach to apply fallout rates individually to work steps for two reasons. First, an overall fallout rate may make for a simpler study but it ignores the fact that over time process improvements may occur in one area but may have no impact on other processes. Second, by assigning fallout probabilities at work-step levels, Qwest believes it is able to provide a more accurate estimate of the activities associated with each process or work center. Thus, it allows the Commission to evaluate the efficiencies reflected in Qwest's nonrecurring cost studies in greater detail. *Qwest Reply Brief, at page 5*.
- 33 Qwest also argues that WorldCom's allegations confuse the issue by failing to make the necessary distinction between ordering and provisioning.<sup>21</sup> *Qwest Brief, at page 12*. Qwest contends that the normal discussion of flow through is generally limited to the ordering process, not provisioning. Qwest argues that WorldCom's proposal to apply a single fallout factor through the entire end-to-end ordering and provisioning process ignores the fact that there are inherently manual processes involved in the provisioning of many products that will never be eliminated, even in a forward-looking environment. Qwest notes that after a CLEC order passes through the electronic interface it enters the same downstream systems as those used by Qwest so there is no difference in how Qwest and CLEC orders are handled. *Qwest Reply Brief, at page 6*.

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<sup>20</sup> Exhibit No. T-2049, at pages 5-6; and Exhibit No. T-2200, at pages 13-14 and 17.

<sup>21</sup> Exhibit No. T-2200, at pages 9-10.

- 34 Qwest states that WorldCom's assertion that other commissions have agreed with its 2% fallout proposal is misleading. Qwest claims that the state regulatory commissions in Michigan and Connecticut approved a 2% fallout rate as an incentive so that the ILECs would make further improvements to OSSs because the local ILECs were admittedly disinclined to making improvements. According to Qwest the circumstances in place at the time these orders were issued in Michigan and Connecticut do not apply to Qwest because it has made continuous improvements to its OSS and will continue making improvements going forward.<sup>22</sup> Qwest acknowledges that the Massachusetts commission also approved a 2% fallout rate. However, Qwest claims that the Massachusetts commission clarified that this fallout rate did not apply to end-to-end ordering and provisioning, nor did it apply to all orders. Qwest concludes, thus, WorldCom's argument is not germane. *Qwest Reply at page 7.*
- 35 WorldCom concedes that Qwest's OSS are efficient stand-alone elements. However, it maintains that Qwest failed to utilize technology in its cost studies that would enable individual OSS elements to eliminate much of the duplication and manual intervention in Qwest's current procedures.<sup>23</sup> According to WorldCom, Lucent's Actiview Service Management System and OKI's SMART-MDF system are examples of forward-looking, efficient technologies currently available to streamline work processes and minimize manual intervention in the ordering and provisioning process.<sup>24</sup> WorldCom believes that Qwest should be required to assume the use of such technologies in its cost study to reflect the efficiencies that would be achieved with a forward-looking network. *WorldCom Reply Brief, at page 6.*
- 36 Qwest responds that the Commission should reject WorldCom's end-to-end flow-through proposal because the SMART-MDF does not satisfy DS1 circuit requirements and because it failed Qwest's field trials. Thus, Qwest argues it is unreasonable to utilize this technology in a cost study because it does not function properly. *Qwest Brief, at pages 11-12.*
- 37 WorldCom maintains that Qwest's field test of the SMART-MDF was over two years ago and that Qwest neglected to follow up with the manufacturer concerning modifications to the system since that time. WorldCom states that testimony and OKI's product documentation demonstrate that the SMART-MDF not only satisfies DS1 requirements, but is both available and in use today by other carriers.<sup>25</sup> *WorldCom Reply Brief, at page 7.*

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<sup>22</sup> Exhibit No. T-2201, at page 6.

<sup>23</sup> TR at 4912-13 and 4944-45.

<sup>24</sup> Exhibit No 2206 and Exhibit No. 2190.

<sup>25</sup> TR at 4908-09, 4959-61, and Exhibit No. 2190.

**c. Qwest's Work Time Estimates for Verification and Validation**

38 WorldCom proposes a number of work time estimates that are significantly lower than Qwest's original estimates. WorldCom's adjustments are based on its perception of an efficient forward-looking OSS. That is, WorldCom assumes a high degree of mechanization in the end-to-end ordering and provisioning process. WorldCom argues that in a forward-looking OSS business process environment verification and validation work items would either 1) not exist, 2) would be performed as an incidental task by the technician doing the specific manual intervention activity associated with the UNE, or 3) would be replaced by an OSS software feature. *WorldCom Brief, at page 13.* WorldCom assumes little if any manual intervention and it removes purportedly excessive work times associated with verification and validation of data from Qwest's studies.

39 Qwest contends that the 50% work time reductions proposed by WorldCom should be rejected. According to Qwest, WorldCom's witness Mr. Morrison is not credible because he does not currently perform any of the tasks about which he makes recommendations, and because his proposed adjustments are unsupported by evidence. Qwest also contends that WorldCom's proposal should be rejected for several other reasons. As discussed above, Qwest contends that the components of WorldCom's "forward-looking OSS", such as the SMART-MDF, do not function as WorldCom claims they do.<sup>26</sup> Next, Qwest argues that WorldCom's "forward-looking OSS" does not meet the standard for developing a forward-looking economic cost under the Act and the FCC rules because there is no evidence that it satisfies TELRIC's least cost requirement.<sup>27</sup> Finally, Qwest refers to Mr. Morrison's assumptions and assertions regarding flow through capability as "inaccurate, unrealistic and misleading." *Qwest Brief, at pages 11-12.*

**d. Subject Matter Experts ("SMEs")**

40 Staff disagrees with Qwest's position that its costs should be developed solely on the basis of the estimates provided by its SMEs, and that expert testimony presented by other parties is not credible because Qwest's SMEs actually perform the activities in question. Staff points out that under that line of reasoning no party could ever successfully challenge Qwest's SME testimony. Staff believes that Qwest's dismissal of WorldCom's work time adjustments as arbitrary and "not very scientific" conflicts with Qwest's evidence regarding the validity of its own SME estimates. *Staff Brief, at pages 6-7.*

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<sup>26</sup> Exhibit No. T-2182, at pages 14-15.

<sup>27</sup> Qwest also notes that WorldCom's proposal fails to consider how the cost of implementing these "hypothetical systems" would be recovered. *Qwest Reply Brief, at pages 7-8.*

- 41 Staff alleges that the data provided by Qwest's SMEs are outdated and need to be replaced by more current studies because in many cases the estimates have remained the same for three to four years, despite recent improvements to Qwest's OSS.<sup>28</sup> Staff recommends that the Commission require Qwest to update its study, using more recent data and that Qwest be required to perform time and motion studies to validate its SME estimates.. *Staff Reply Brief, at page 6.*
- 42 WorldCom argues that Qwest failed to provide proper supporting documentation for its NRC studies. According to WorldCom, very few of the SME interview summaries or other supporting documents contain any forward-looking comments or data. WorldCom claims that generally SMEs are experts in how work is currently performed, but have limited exposure to new process designs and advanced technology. Consequently, WorldCom believes the majority of the data used to calculate the costs in Qwest's study is historic rather than forward-looking. Additionally, WorldCom argues that while the time and fallout estimates may be consistent with the SME's experience, Qwest fails to explain how the statistical accuracy of the SME estimates was validated. WorldCom notes that the Commission criticized ILEC reliance on SMEs in previous cost proceeding and in Part B of this proceeding.<sup>29</sup> WorldCom states that the cost studies presented by Qwest in Part D do not correct any of the problems previously identified by the Commission. *WorldCom Brief, at page 14-15.*
- 43 Commission Staff also argues that the SME estimates used in Qwest's studies cannot be audited, because the actual work times are not disclosed, nor are the tasks sufficiently broken down to permit a re-creation of the task in question. Staff recommends that the Commission reject Qwest's proposed nonrecurring rates on a permanent basis because the company fails to provide sufficient information regarding the actual or average times a SME takes to perform a task, and how process or equipment improvements would change that time.. As a remedy Staff suggests that Qwest's nonrecurring rates in Part D should be set on an interim basis, and that Qwest be required to perform time and motion studies to validate its SME estimates. Staff also recommends that Qwest be minimally required to update its SME estimates every two years until time and motion studies are completed. Finally, Staff recommends that Qwest also be required to use its subject matter experts to project

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<sup>28</sup> "For example, the data contained on Exhibit C-2024, pages 27-30 appear to have been collected no later than 7-20-98, the date at the top of pages 27 and 29. Qwest's nonrecurring cost study to support its rates for basic installation with cooperative testing, included in Exhibit 2065, was filed in May, 1998. Other pages within Exhibit C-2024 which contain similar dates are pages 39-42, 50, 57-58, 68, 71-71, 76-78, 89-92, 302-303, 326-330, 616, 619-620, 624, and 641." *Staff Reply Brief, at page 6, footnote 5.*

<sup>29</sup> See *In the Matter of the Pricing Proceeding for Interconnection, Unbundled Elements Transport and Termination, and Resale*, Docket No. UT-960369, 8th Supplemental Order (May 11, 1998), at para. 450-451. Also see *In the Matter of the Continued Costing and Pricing Proceeding for Interconnection, Unbundled Network Elements, Transport and Termination, and Resale*, Docket No. UT-003013, 32nd Supplemental Order (June 21, 2002), at para. 122-125.

expected productivity gains 24 months into the future to ensure that the NRC studies will be forward-looking. *Staff Reply Brief, at pages 6-7.*

44 WorldCom supports Commission Staff's arguments and further notes that Qwest did not present its SMEs as witnesses. Thus, parties and the Commission were not afforded an opportunity to cross-examine Qwest's SMEs. WorldCom recommends that the Commission order Qwest to redo its studies utilizing time and motion studies for developing work time estimates. On an interim basis, WorldCom proposes that the Commission adopt the changes recommended by WorldCom's witnesses Mr. Morrison<sup>30</sup> and Mr. Lathrop,<sup>31</sup> or order Qwest to charge zero for its NRCs at issue in this proceeding.. *WorldCom Reply Brief, at page 9.*

45 Qwest contends that the use of time and motion studies does not provide any material benefit in estimating work times for TELRIC studies because such studies are prohibitively expensive and produce an analysis of historic or embedded costs.<sup>32</sup> Qwest also argues that time and motion studies are not appropriate as a validation tool. *Qwest Brief, at page 15-16.*

46 **Decision:** The use of subject matter experts in support of nonrecurring cost studies has been at issue from the inception of the generic cost and pricing proceedings, but it is only recently that a complete perspective of the relative merits regarding cost study reliance on SMEs emerges. In UT-960369 – Phase I, the Commission considered various cost models proposed by the parties as part of a “generic” investigation to develop an appropriate and consistent cost methodology with which to determine the costs of providing certain telecommunications services. The Phase I cost models addressed both recurring and nonrecurring costs. The Commission expressed its concern that U S WEST (now Qwest) and GTE (now Verizon) SME work time estimates were biased upward because ILECs are the sole providers of unbundled network elements. The Commission posed the question to the parties in that proceeding: “Can the ILECs’ NRC studies be validated?”<sup>33</sup> U S WEST responded that validation of nonrecurring cost numbers may not be possible, and GTE responded indirectly by arguing that its subject matter expert testimony was valid because it was based on “actual” data.

47 The importance of validation is underscored by the Commission's discussion regarding expert testimony in the Eighth Supplemental Order. The Commission acknowledged the standard set by the U.S. Supreme Court in *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 113 S.Ct. 2786 (1993). The Supreme Court in *Daubert* focused on the methodology used by experts to arrive at their conclusions, and emphasized the responsibility of the courts to ensure that the proffered evidence is

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<sup>30</sup> Exhibit No. C-2271.

<sup>31</sup> Exhibit No. 2251 and Exhibit No. 2253.

<sup>32</sup> Exhibit No. T-2052, at page 6.

<sup>33</sup> See UT-960369, *Eighth Supplemental Order*, at para. 451-456.

valid and has been tested. The Court determined that expert opinions which have not been validated should not be considered.

48 The Commission applied the Daubert standard to the evidence in the Phase I proceeding:

The Commission is satisfied that we have met [the] proposed standard, because of our active participation in the evidentiary hearings in this proceeding. The transcript reflects pertinent and substantial cross-examination by the bench of virtually every subject matter expert who appeared in support of the cost models sponsored by the parties. The bench challenged these experts on their qualitative methodological approach to modeling, and on the qualitative assumptions, inputs, and values posited by these witnesses. We are confident that the findings we make in this Order are supported by the evidence of record and are informed by our questions of these witnesses.

*Eighth Supplemental Order, at para. 456.*

49 The use of time and motion studies as a means to validate SME testimony was not discussed in the Eighth Supplemental Order.

50 In UT-960369 – Phase II, both U S WEST and GTE resubmitted NRC studies to reflect adjustments required by the Commission. GTE requested and was granted permission to file a new NRC study.<sup>34</sup> Parties in Phase II argued that U S WEST’s and GTE’s NRC studies were not adequately supported and lacked independent verification. AT&T Communications of the Pacific Northwest, Inc., pointed out that there were several methods by which ILECs could submit NRC study assumptions to independent verification.<sup>35</sup> The Commission noted the lack of compelling evidence contrary to acceptance of U S WEST’s filing, but also required the company to make adjustments to its study. GTE was required to make adjustments to its NRC study, as well.

51 Further consideration of nonrecurring cost studies was deferred from UT-960369 – Phase III to Docket No. UT-003013. In the Thirty-Second Supplemental Order (“Part B Order”) the Commission addressed numerous problems associated with nonrecurring cost studies supported solely by anonymous SME estimates.

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<sup>34</sup> See UT-960369, *Seventeenth Supplemental Order*, at para. 427.

<sup>35</sup> *Seventeenth Supplemental Order*, at Para. 449.



- At paragraph 51 the Commission required that ILEC requests to update OSS Transition Costs recovery in Part E of this proceeding be accompanied by updated NRC studies supported by time and motion studies.
- At paragraph 59 the Commission noted the gross discrepancy between Verizon's engineering activity work time estimates in support of the company's nonrecurring rates for loop conditioning and those of Qwest. The Commission found that the dispute goes to the reasonableness of Verizon's inputs, and Verizon was required to recalculate its costs using work time estimates previously approved for Qwest.
- At paragraph 122 the Commission noted Staff's disagreement with Qwest over the validity of SME estimates of order processing work times in support of nonrecurring cost studies. Commission Staff argued that, without time and motion studies it is difficult, if not impossible, to validate Qwest's expert testimony.
- At paragraph 125 the Commission rejected Qwest's proposed order processing work time and stated that approval of a different time value in future proceedings would be contingent on Qwest showing that work times used in its NRC studies are consistent with current and near-future efficient operations, based on time and motion studies.
- At paragraph 132 the Commission rejected Qwest's proposed work time to disconnect an enhanced extended loop because the SME estimate was inexplicably equal to the work time to add service, even though less activity was required. The Commission found that Qwest failed to provide substantive documentation in support of its proposal, in spite of the company's nearly exclusive control of relevant data.
- At paragraph 156 the Commission found that Qwest's support for the company's proposed nonrecurring "FCP field verification charge" for sub-loop access was wholly inadequate.
- At paragraph 171 the Commission found that the Joint CLECs proposed SME work time estimate to visually inspect manholes was more reasonable than Qwest's SME estimate, based on prior Commission decisions regarding work time estimates for activities performed in manholes.
- At paragraph 267 the Commission agreed with Commission Staff and the Joint CLECs that the access service request work time estimates used by Verizon in the company's NRC studies were unreasonably high and not well supported by the record. The Commission noted that Verizon's proposed values "would require us to accept a number of questionable assumptions on faith alone." Although a time and motion study was apparently performed by the Arthur Anderson consulting firm to support Verizon's NRC studies, Verizon did not submit that study as evidence in this proceeding, nor did the company present any testimony by personnel who performed the study.
- At paragraph 268 the Commission noted that the Arthur Anderson study was an improvement over the opinions presented by subject matter experts, and at

paragraph 277 the Commission required Verizon to adjust its NRC studies based on actual observed work times that were reported.

- 52 The record in Part D regarding nonrecurring cost studies is different from the record that was developed in Part B. Notably, the record in Part B includes the subject matter expert testimony of Thomas Weiss, a witness for the Joint CLECs. Mr. Weiss was employed as an engineer and manager for a local exchange company from 1970 to 1978, and as a public utility consultant from 1978 to 1997, with an emphasis on telecommunications during the last three years of that period. From October 1997 through March 2000, Mr. Weiss served as a management consultant to a independent telephone company in the northeastern United States.<sup>36</sup> The Commission found that Mr. Weiss' testimony carried less weight because his experience was with a company smaller than Qwest.<sup>37</sup> Although that finding was made in the context of the Commission's review of Qwest's recurring costs, Mr. Weiss' testimony regarding nonrecurring costs was either rejected or not considered for other reasons.<sup>38</sup> The Part B record demonstrates the difficulty of validating or refuting the opinions of one subject matter expert with those of another who does not have similar work experience with incumbent LEC operations and systems.
- 53 In Part D, WorldCom presented the testimony of Sidney Morrison.<sup>39</sup> Mr. Morrison was employed as a technician/engineer for Southern Bell Telephone and Telegraph from 1966 to 1970, and for Mountain Bell/U S WEST from 1970 to 1993. From 1993 to the present Mr. Morrison has served as a contract engineer/consultant for firms in the United States, Malaysia, and Switzerland.<sup>40</sup> From June 1997 through May 1999 Mr. Morrison worked at Qwest as an outside plant and central office engineer and trained Qwest engineers in collocation.
- 54 Even though Mr. Morrison's background includes extensive experience with large companies, Qwest argues that his subject matter expert testimony should be given little weight because he is not currently performing any of the tasks about which he makes work time estimates and because he does not provide any analysis based on actual data. WorldCom responds that an expert witness need not be currently performing the jobs in question to be able to evaluate whether Qwest's work time estimates and activities are overstated. *WorldCom Brief, at page 12*. WorldCom then states the crux of the problem facing the Commission: "Thus, to the extent that this Commission determines that expert opinion is a valid method to develop and evaluate cost studies, Mr. Morrison's opinions are at least as competent as those presented by
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- <sup>36</sup> See Docket No. UT-003013 – Part B, Exhibit No. T-1330, at pages 1-4.  
<sup>37</sup> See Part B Order, at para. 202, and Part B Reconsideration Order, at para. 81.  
<sup>38</sup> See Part B Order, at para. 128 (Weiss NRC recommendation rejected for being overspeculative) and para. 150 (Weiss NRC recommendation was withdrawn).  
<sup>39</sup> WorldCom also sponsored testimony by other witnesses as SMEs, but for the sake of this discussion we focus on Mr. Morrison.  
<sup>40</sup> Exhibit No. T-2270, at pages 2-5 (Morrison).

Qwest.” *Id.* Qwest presents a detailed summary of the process employed by Qwest to develop work time estimates in support of the company’s argument that its SME evidence is more competent. *Qwest Brief, at pages 13-15.* However, this summary only reinforces the conclusion that SME work time estimates cannot be validated by other SME work time estimates. Qwest also repleads its case why time and motion studies are an inappropriate means to validate work time estimates,<sup>41</sup> but the Commission’s finding in Part B that time and motion studies are an improvement over opinions by subject matter experts finds new relevance in the Part D record.

55 The very foundation of the nonrecurring rates proposed by Qwest rest on the input of subject matter experts who estimate the need to perform a particular task, the average amount of time it will take to complete this task, and the probability that this task will need to be performed. Although all subsequent calculations stem from these estimates Qwest proffers little, if any, additional support for its assumptions other than to claim that its engineers and product managers provided these estimates using forward looking assumptions based on their extensive experience with the tasks and activities associated with providing each service or network element.<sup>42</sup>

56 For its part, WorldCom characterizes Qwest’s cost study as backward-looking, inefficient, and lacking probative value. Unfortunately, WorldCom’s response to Qwest’s cost study is limited to its own expert opinions, suggesting that significant cost reductions were necessary to comply with TELRIC’s forward-looking and efficiency principles. Here the Commission is inexplicably asked to establish TELRIC rates without the benefit of credible supporting evidence.

57 Qwest’s attempt to dismiss the work time reductions proposed by WorldCom’s witnesses by characterizing its methods as arbitrary, unsupported, and not very scientific<sup>43</sup> also speaks to the specious reasoning that supports Qwest’s expert opinions. In sum, Qwest asks the Commission to accept the opinions of its subject matter experts at face value, while rejecting all other parties’ expert testimony, based on the theory that only the people who actually provision the network elements in question, can provide reasonable forward-looking estimates. This argument is untenable because -- as Commission Staff observes -- it leads to the inescapable conclusion that no one, including the Commission, could ever successfully challenge Qwest’s subject matter expert testimony.<sup>44</sup> Such a conclusion is impermissible because it conflicts with the Commission’s obligations pursuant to state statutes, and to promote efficient competition and to establish network element rates that are just, reasonable, and non-discriminatory pursuant to the Act..

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<sup>41</sup> See Qwest’s Brief, at pages 15-16.

<sup>42</sup> Qwest Brief, at page 6.

<sup>43</sup> TR at 4320.

<sup>44</sup> Staff Brief, at page 6.

58 Commission Staff asserts that the Commission must reject Qwest's nonrecurring cost study, as filed, because Qwest has failed to establish that its proposed nonrecurring rates are cost-based, reasonable, and nondiscriminatory. Staff emphasizes two significant flaws in Qwest's studies. First, Staff states that Qwest has never shown that its SME estimates are forward-looking estimates based on TELRIC principles. In fact, some estimates are two or three times older than the forward-looking component of the estimate claims to be.<sup>45</sup> Second, because Qwest provides no information on the actual time an SME, or an average of SMEs, take to perform a task, and how process or equipment improvements would affect that time, the SME estimates cannot be audited.<sup>46</sup> As a result there is no way for parties or the Commission to accurately judge the reasonableness of Qwest's proposed rates. After considering all of the parties' arguments, Staff's arguments are most persuasive.

59 Incumbent LEC reliance on cost studies that are unsupported by empirical data conflicts with the long recognized edict of the FCC that:

... [I]ncumbent LECs have greater access to the cost information necessary to calculate the incremental cost of the unbundled elements of the network. Given this asymmetric access to cost data, we find that incumbent LECs must prove to the state commission the nature and magnitude of any forward-looking cost that it seeks to recover in the prices of interconnection and unbundled network elements.

*Local Competition Order, at para. 680.*

60 Although Commission Staff identifies significant problems with Qwest's proposal, Staff suggests that Qwest's nonrecurring costs be approved on an interim basis with the understanding that they will be updated with time and motion studies to validate the subject matter expert's work time estimates in the next phase of this docket. Commission Staff's interim rate proposal leads to the acceptance of rates (albeit on a temporary basis) that likely overstate the efficient forward-looking cost of providing UNEs. Previous cost dockets have also raised concerns that the estimates of ILEC subject matter experts tend to be biased upwards.<sup>47</sup> Commission Staff's remedy is inconsistent with its previously stated concern that setting nonrecurring rates at "too high a level" can present a barrier to entry.<sup>48</sup> Thus, Staff's interim rate proposal is rejected.

61 Having concluded that Qwest fails to meet its burden of proof, WorldCom's proposed work time estimates are also rejected as they suffer from many of the same deficiencies as Qwest's proposals. While certain of WorldCom's arguments have

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<sup>45</sup> Staff Reply Brief, at page 6.

<sup>46</sup> TR at 4316-17.

<sup>47</sup> *Eighth Supplemental Order*, at para. 451.

<sup>48</sup> Staff Reply Brief, at page 4.

merit, in many cases the magnitude of the proposed adjustments are as speculative as Qwest's proposal.

62 The record indicates that Qwest's proposed costs are overstated because Qwest fails to demonstrate that the efficiency gains that have occurred since 1998 have been properly accounted for in its NRC study.<sup>49</sup> Thus, Qwest must resubmit its nonrecurring cost studies as part of a compliance filing after reducing all of its work time estimates by 30 percent.<sup>50</sup>

63 This composite adjustment is reasonable and accurate based on the supporting documentation for Qwest's nonrecurring cost studies and arguments by the parties. For example, Qwest's work time estimates for its proposed Innerduct Field Verification Fee<sup>51</sup> assume several more hours of activity time than is required for each manhole that Qwest inspects. This represents a substantial increase over the time estimate approved by the Commission in the Part B Order, at paragraph, yet there is no credible evidence in the record to support an increase of this magnitude. The record also indicates that Qwest significantly overstates the work time necessary to complete the BFR process, and substantially overestimates the cost of Space Availability Charge.<sup>52</sup> Furthermore, based on the previous cost proceedings, a composite work time reduction of 30 percent appears to be a conservative estimate of Qwest's recent productivity gains.<sup>53</sup>

64 Although it may be argued that a composite adjustment is too blunt or imprecise, the sheer size of the task requires such a remedy. Qwest's nonrecurring cost study is in excess of 500 pages long. Thus, it is unduly burdensome for the Commission to individually identify and remedy the abundance of problems created by Qwest's complete reliance on anonymous SME work time estimates.

65 It can also be argued that the composite work time reduction should not apply to rate elements that were largely unchallenged by parties. This argument must also be rejected, as there is nothing in the record indicating that the uncontested rate elements

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<sup>49</sup> For example, see TR at 4316-17.

<sup>50</sup> Some of the work time estimates contained in Qwest's cost study are the result of previous Orders of the Commission. The 30% time reduction does not apply to those estimates (e.g., six minutes at the interconnection service center, UT-960369, 8th Supplemental Order, at para. 468; one hour of outside plant engineering time to identify the location of load coils, UT-960369, 8th Supplemental Order, at para. 151; a craftsman will only require two minutes to analyze a disconnection order and will spend three minutes removing a jumper, UT-960369, 8th Supplemental Order, at para. 473; disconnect call work-time on carrier service-center telephone calls should be equal to that of Verizon, UT-003013, Part B Order, at para. 133). Rather, Qwest should abide by the Commission's prior decisions and explicitly demonstrate where this exemption applies within its nonrecurring cost study.

<sup>51</sup> Exhibit No. 2050 - Section 10.8.6.

<sup>52</sup> Although the record indicates that much of the information required to produce a space inquiry report is inventoried, it appears that Qwest assumes an unreasonable amount of time to assemble and verify its data and determine the appropriate charges. *WorldCom Brief*, at pages 35-37. See also Qwest's response to Staff discovery request WUTC 01-025, Exhibit No. 2064.

<sup>53</sup> Part B Order, at para. 123.

benefit from greater evidentiary support than those rate elements with obvious flaws. Furthermore, a different conclusion would run counter to the Part B Order, at paragraph 17, where the Commission asserted that “Qwest’s argument that the validity of its proposed rates can be inferred from the fact that other parties are not forthcoming with independent studies is thin.” As noted above, it is Qwest – and Qwest alone – that bears the ultimate burden to demonstrate that the costs it seeks to recover are cost-based, reasonable, and nondiscriminatory. The absence of a challenge does not overcome the flaws forming a barrier to approving the company’s proposed rates.

- 66 Qwest’s argument that it should not be required to file time and motion studies because they are prohibitively expensive and by definition backward looking is not persuasive. On the contrary, as noted by WorldCom and Commission Staff, Qwest fails to address the Commission’s previously expressed concerns,<sup>54</sup> and SME estimates cannot be substituted for properly conducted time and motion studies.<sup>55</sup> Thus, the submission of nonrecurring cost studies without supporting time and motion data in the future will be rejected absent extraordinary circumstances.
- 67 WorldCom also argues that Qwest’s nonrecurring cost study should be rejected because it reflects the embedded cost of providing interconnection and UNEs based on a legacy OSS, not the most efficient forward-looking OSS required by TELRIC principles. WorldCom claims that Qwest assumes excessive fallout and manual intervention in the ordering and provisioning process. To correct for this alleged error, WorldCom proposes that the Commission require Qwest to assume a 2% fallout in its studies. WorldCom also suggests that this rate that should be applied once during the entire end-to-end ordering and provisioning process. WorldCom’s arguments are rejected because they are not supported by the record. WorldCom fails to establish that the alleged forward looking systems -- namely Lucent’s Actiview Service Management System and OKI’s SMART-MDF -- are currently available and function as represented. Furthermore, Qwest argues that the application of fallout rates to individual work steps is more accurate because it allows the Commission to evaluate the efficiencies reflected in the cost studies in greater detail. Qwest’s argument is persuasive and Qwest’s fallout rates and methodology are approved.
- 68 It is further noted that Qwest has voluntarily filed specific reduced network element rates through Advice Letter 3319T and filed revisions to the SGAT,<sup>56</sup> Exhibit A, as part of the company’s overall efforts to comply with Section 271 of the Act. The Commission took no action on Qwest’s Advice Letter tariff filing at its the June 26,

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<sup>54</sup> *Eighth Supplemental Order*, at para. 450-451.

<sup>55</sup> Staff Brief, at page 6.

<sup>56</sup> Qwest’s statement of generally available terms (“SGAT”) was filed in the State of Washington pursuant to Section 252(f) of the Act.

2002, open public meeting, allowing the tariff pages to become effective on July 10, 2002. The Commission also approved Qwest's SGAT and all Exhibits, as filed on June 25, 2002, and allowed the SGAT to become effective on July 10, 2002.<sup>57</sup> On July 17, 2002, the Commission granted Qwest's request to revise Exhibit A to the SGAT, incorporating the rates from Qwest's new tariff pages.<sup>58</sup> The Commission in its Forty-Second Supplemental Order in the 271/SGAT proceeding subsequently noted:

Many of the rates [in Exhibit A that] AT&T objects to are rates under review in our costing and pricing proceedings. Allowing the rates in Exhibit A to become effective is not a substitute for our review in the costing and pricing proceedings. Should we require changes to the rates in Qwest's compliance filing, or if we approve rates in our costing and pricing proceedings that differ from rates included in revised Exhibit A, Qwest must modify Exhibit A to reflect these changes.

*271/SGAT Proceeding, Forty-Second Supplemental Order, at para. 7.*

69 Thus, Qwest must submit a revised Exhibit A to its SGAT for rates that are approved in this proceeding subsequent to entry of a final order.

70 Although Verizon relied on the results of a time and motion study in the Part B proceeding – suggesting that Verizon independently recognizes the necessity to validate subject matter expert testimony with empirical data – Verizon also argued on reconsideration in Part B that the Commission should not foreclose the use of “actual data” to support NRC studies in future proceedings. Verizon's argument makes clear that its reference to “actual data” does not encompass time and motion studies. Although the Commission's Part B Reconsideration Order affirms that parties are not foreclosed from relying on actual data or subject matter testimony in future proceedings, the Commission also clarified that it would not accept future ILEC-proposed nonrecurring costs simply because they rely on such data or testimony. The Part D record establishes that such an approach is no longer viable. Thus, all future nonrecurring cost studies filed by any party in any proceeding must be supported by time and motion studies.

#### e. Cost Factors

71 **Discussion:** Qwest states that two separate issues are presented in this case concerning the use of cost factors. First, there is Qwest's use of the previously approved factors of 19.62% and 4.05% to account for attributed and common costs.

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<sup>57</sup> See Docket Nos. UT-003022/003040 (“271/SGAT proceeding”), *Thirty-Ninth Supplemental Order* (July 1, 2002), at para. 327 and 391.

<sup>58</sup> See Docket Nos. UT-003022/003040, *Forty-First Supplemental Order* (July 17, 2002), at para. 3-5. Qwest's revised Exhibit A was allowed to become effective as of July 10, 2002.

Second, there is Qwest's use of direct expense factors to account for product management, sales, and business fee expenses. Qwest states that these factors are used in both the recurring and the nonrecurring cost studies submitted by Qwest in this proceeding, as they were in past proceedings. Qwest asserts that the WUTC approved not only the use of these factors, but their values as well. *Qwest Brief, at page 8.*

72 WorldCom disagrees with Qwest's application of cost factors to its Investment Based Costs and Direct Expenses to recover what Qwest terms Directly Assigned and Directly Attributable Costs. According to WorldCom, Qwest includes product management and advertising expense, sales expense, and business fees among its Directly Assigned Costs. WorldCom claims that Qwest should not have to provide for much -- if any -- product management or sales expense for nonrecurring charges. Thus, WorldCom argues that product management and sales expense factors should be removed from Qwest's NRC study. WorldCom argues further that the costs associated with activities such as product and service identification that are typically recovered through application of a product management expense factor, which -- in the case of UNEs -- are already being recovered by the ILECs as part of their OSS cost recovery. *WorldCom Brief, at pages 16-17.*

73 WorldCom maintains that Qwest's cost factor model is inconsistent with FCC pricing rules because it does not adequately demonstrate why certain costs should apply to nonrecurring charges. Therefore, WorldCom suggests that the Commission reject Qwest's application of cost factors to its nonrecurring costs. *WorldCom Brief, at page 17.*

74 WorldCom also argues that Qwest's cost factors are overstated for three reasons. First, Qwest allegedly inflates its prices by applying its factors on a compounding basis. Second, WorldCom states that Qwest fails to reflect cost savings that resulted from the Qwest/US West merger and recent workforce reductions. Third, WorldCom claims that Qwest's model produces lower cost factors when current expense data is inserted. WorldCom requests that the Commission require Qwest to file a compliance run of its expense factor model using data derived from Qwest's operations through at least December 31, 2001. WorldCom suggests that the Commission also consider recalculating Qwest's directly attributable and common cost factors based on more current data. *WorldCom Brief, at pages 17-22.*

75 Commission Staff contends that WorldCom overstates the degree to which utilizing current expense data results in lower cost factors. Staff states that while WorldCom's intermediate calculations appear to be correct WorldCom overstates the effect of the difference on the total TELRIC cost, in percentage figures, by a factor of ten. Thus, Staff contends that WorldCom's argument is misleading because the overall effect on TELRIC cost is less than one percent. *Staff Brief, at page 5.*



- 76 Qwest states that WorldCom's proposal to require Qwest to update all of its expense factors for use in a compliance run of its cost studies is ill-timed and unwarranted. Qwest argues that changing these cost factors mid-stream would create an unacceptable lack of continuity between its current cost studies and those studies already addressed by the Commission.<sup>59</sup> Qwest proposes that the Commission approve the use of the existing cost factors and instruct parties to revisit this issue in Docket No. UT-023003. *Qwest Brief, at pages 8-9.*
- 77 Qwest maintains that the sequential application of Qwest's cost factors does not lead to inflated cost estimates, as WorldCom argues, because the cost factors were designed to be applied sequentially. Qwest suggests that the Commission reject WorldCom's proposal to reduce Qwest's cost factors as the result of merger savings for several reasons. First, WorldCom's calculation of merger-related headcount reductions is vastly overstated. Second, because the base year calculations are from 1998, merger-related changes do not affect the costs modeled in this docket. Third, these changes do not relate exclusively to in region telecommunications services. Fourth, the factors modeled in this docket reflect lower than actual costs so existing calculations are lower than what would be produced by more current data. *Qwest Reply Brief, at page 9.*
- 78 WorldCom disagrees with Qwest's proposal to retain the existing cost factors with the option of re-examine the factors in the next cost docket. Rather, WorldCom suggests that the Commission fix the problems that WorldCom has identified in this proceeding and then carry the fix forward into the next docket. *WorldCom Reply Brief, at page 13.*
- 79 **Decision:** WorldCom alleges that Qwest's cost factors are inflated because Qwest includes inappropriate cost elements, the factors are applied on a compounding basis, the factors fail to account for merger savings, and more recent data results in lower estimates. The arguments proffered by WorldCom are not compelling. First, WorldCom failed to show that Qwest's cost factors have been calculated in a manner that is inconsistent with previous Commission Orders. Second, the evidence proffered by Qwest indicates that neither the compounding nor merger savings arguments offered by WorldCom result in overstated cost factors. Third -- and most importantly -- the evidence cited by Commission Staff indicates that when the cost factors are recalculated using more recent expense data the difference is negligible.<sup>60</sup> For these reasons, WorldCom's proposal is rejected. Qwest's proposal that the Commission approve the use of the existing cost factors is reasonable because there is insufficient evidence in this proceeding for the Commission to modify its previous decision. Qwest's proposal that the Commission revisit this issue in Docket No. UT-

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<sup>59</sup> Exhibit No.T-2210, at pages 5-9 (Gude), and Exhibit No T-2212, at page 3 (Gude).

<sup>60</sup> Staff Confidential Reply Brief, at page 5

023003 is sensible in light of the other elements and factors to be considered in that proceeding, and also is approved.<sup>61</sup>

## 2. QWEST'S INDIVIDUAL NONRECURRING RATES

### a. Resale Customer Transfer Charge ("CTC")

80 According to Qwest the activities required to process a customer transfer in the resale environment are virtually the same as those required to convert an existing POTS (plain old telephone service) customer from Qwest to a CLEC via the UNE-P. Thus, Qwest has submitted new rates for the resale CTC that allegedly reflect expected OSS flow-through improvements but differ from the comparable UNE-P rates by the amount of the approved OSS cost for resale functionality that is currently included in the CTC charge. In response to WorldCom, Qwest clarified that the CTC would only be assessed in a resale environment and not for UNE-P services.<sup>62</sup> Qwest does not believe that the CTC is otherwise disputed, and asks the Commission to approve the rates as filed. *Qwest Brief, at pages 16-17.* Staff believes that the rate Qwest proposed for this element is appropriate. *Staff Brief, at page 8.*

81 **Decision:** Qwest fails to provide the necessary support for its proposal. Qwest must reduce the work time estimates for this element by 30 percent for the reasons stated above in paragraphs 62 through 65.

### b. Adjacent Collocation.

82 In this proceeding Qwest proposed that adjacent collocation be priced on an individual case basis ("ICB"). Qwest states that the company has yet to receive a request for adjacent collocation in support of its proposal, and therefore does not have experience in performing the work activities necessary to provide this service. Thus, standard costs and prices cannot yet be developed. Qwest does not believe that any party disputed ICB pricing for this network element. Qwest acknowledges the Commission's reluctance to authorize ICB pricing, but Qwest suggests that ICB pricing is appropriate at this time. *Qwest Brief, at page 17.* Staff declined to comment on this issue, other than to assert that Qwest has yet to receive a request for Adjacent Collocation anywhere in its 14 state service territory.<sup>63</sup> *Staff Brief, at page 8.*

83 **Decision:** Given that Qwest has yet to receive a request for Adjacent Collocation anywhere in its service territory, there is insufficient data from which to develop

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<sup>61</sup> Parties are cautioned that subsequent to administrative review, it will be necessary for the Commission to review the procedural status of UT-023003 to ensure that this issue can be introduced in that proceeding without causing prejudice to any party.

<sup>62</sup> Exhibit No. T-2131, at page 5 (Malone).

<sup>63</sup> Exhibit No. 2120.

standard costs and prices for this network element. Qwest's proposal to price Adjacent Collocation on an individual case basis is reasonable and is approved. However, parties may petition for further review of this element in the event that Qwest receives one or more requests for Adjacent Collocation sufficient to warrant development of standard costs and rates.

**c. Remote Collocation and Remote Adjacent Collocation.**

84 **Discussion:** Qwest's Remote Terminal Collocation proposal offers CLECs space in available remote cabinets on a Standard Mounting Unit ("SMU") level.<sup>64</sup> Qwest proposes to charge CLECs a flat rate based on the number of SMUs their equipment occupies within a cabinet. Qwest states its Remote Terminal Collocation cost study<sup>65</sup> includes two cost elements: collocation space, and the feeder distribution interface ("FDI") terminations.<sup>66</sup> According to Qwest its Virtual Remote Terminal study<sup>67</sup> provides the nonrecurring rates for the maintenance of a CLEC's collocation at a remote terminal on an as-needed basis, includes a flat rate for the service order and follow up for each job associated with remote collocation, and includes half-hourly rates for engineering, maintenance, installation and training. *Qwest Brief, at pages 17-18.*

85 WorldCom challenges Qwest's proposed ICB Quote Preparation Fee ("QPF") nonrecurring charge associated with Remote Collocation. WorldCom argues that ICB charges are inappropriate because they do not provide an opportunity for the Commission to ensure that Qwest's costs are just and reasonable, nor do they guarantee that duplicate charges will not be assessed because there is no cost study to examine. WorldCom claims that Qwest's other collocation cost studies indicate that the QPF is associated with engineering activities that are duplicated in other charges. Thus, if the Commission approves a QPF for Remote and Remote Adjacent Collocation, WorldCom suggests that the QPF should be derived from a cost study and credited against Qwest's Space Construction nonrecurring charge. *WorldCom Brief, at pages at 22-23.*

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<sup>64</sup> An SMU is a standard measurement of vertical space, in this case 1.75 inches, within a hardened cabinet. *Qwest Brief, at page 17.*

<sup>65</sup> Exhibit No. 2030.

<sup>66</sup> The nonrecurring collocation space element allegedly includes the cost of the cabinet space, the cost of the cabinet, and all of the work and materials associated with placement of the cabinet and providing access to power in addition to identifying the cost of materials, engineering, splicing, installation and rights of way. The nonrecurring FDI terminations (per 25 pair) element purportedly includes the costs associated with augmenting the FDI to provide the requested terminations. This includes the material, engineering and splicing costs associated with installing a Serving Area Interface ("SAI") 25 pair block, and the material, engineering, splicing and installation costs associated with the cable, conduit and innerduct required to connect the FDI to the remote collocation cabinet. *Qwest Brief, at pages 17-18.*

<sup>67</sup> Exhibit No. 2029.

86 Covad claims that one of the methods by which Qwest proposes to provide access to loops where fiber optic cable is present is via its remote terminal collocation offering referred to as the DA Hotel. *Covad Reply Brief, at page 4.* Covad states that the Commission in its Part B Order ruled that Qwest's DA Hotel architecture creates a significant barrier to entry and thus is an inappropriate method by which to provide CLECs with access to fiber fed loops. Thus, Covad argues that under the rationale and precedent previously articulated by the Commission, Qwest's proposed nonrecurring rates for remote terminal collocation should be rejected. Further, Covad contends that the Commission should only consider those rates in future proceedings where the Commission also considers all of the technical, costing and pricing issues associated with CLEC access to fiber fed loops. *Covad Reply Brief, at page 5.*

87 **Decision:** Qwest argues that an ICB charge is appropriate because the process of establishing these collocations is not generally predictable; however, the record does not disclose why these costs should not be based on reasonable, verifiable, and explicit assumptions. Qwest's argument that an ICB charge is appropriate for Remote Collocation and Remote Adjacent Collocation QPFs is not persuasive. Qwest must file a cost study supporting its proposed QPF for Remote Collocation and Remote Adjacent Collocation in Docket No. UT-023003.<sup>68</sup> This decision is consistent with the Commission's Part B Order. In the Part B Order, the Commission found that the existence of location-specific variations in the cost of service did not require establishing individual, customer-specific rates for every rate element.<sup>69</sup>

88 WorldCom's witness Roy Lathrop presented testimony stating that Qwest agreed to credit the amount of the QFP toward payment of the Space Construction charge in a recent Arizona Corporation Commission ("ACC") proceeding.<sup>70</sup> Although Qwest makes no such offer in this proceeding, such a credit is appropriate and reasonable to avoid the double recovery of certain costs included in the QPF that are also associated with completing Remote Collocation and Remote Adjacent Collocation orders. Qwest must credit the subject QPF against the attendant Space Construction nonrecurring charge approved by the Commission.

89 Covad correctly points out that Qwest's proposed provisioning of this element is related to the company's Qwest's DA Hotel architecture that was rejected by the Commission in the Part B Order. This Order includes a recommendation that the Commission affirm its previous decision to address issues regarding CLEC access to fiber-fed loops at a later date.<sup>71</sup> While the Commission has expressed a desire to

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<sup>68</sup> Parties are cautioned that subsequent to administrative review, it will be necessary for the Commission to review the procedural status of UT-023003 to ensure that this issue can be introduced in that proceeding without causing prejudice to any party.

<sup>69</sup> Part B Order, para. 417-422.

<sup>70</sup> Exhibit No. T-2250, at page 32 (Lathrop).

<sup>71</sup> See decision section regarding Qwest's nonrecurring rates for unbundled packet switching. *Also see* Part B Order, at para. 43-44.

address these issues in a future proceeding, Qwest's proposed Space and FDI Termination charges are approved on an interim basis so that CLECs may acquire this element at a rate reviewed by the Commission.

**d. CLEC to CLEC Collocation.**

90 CLEC-to-CLEC Interconnection allows one CLEC to directly interconnect with another CLEC within the same Qwest central office. CLEC-to-CLEC connections are also available when a CLEC with multiple collocations in the same office wishes to connect those collocations. The types of CLEC-to-CLEC connections Qwest presented costs for are CLEC-to-CLEC Direct Connection and CLEC-to-CLEC Cross-Connection. *Qwest Brief, at page 18.*

**i. Direct Connections**

91 **Discussion:** CLEC to CLEC direct connection involves placement of a cable between the collocations of each CLEC. Qwest proposes that CLECs ordering the direct connection will be charged design, engineering, and installation flat charges. These flat or nonrecurring charges are designed to cover order processing, development of the price quote, and the time to engineer and install cable racking. Qwest proposes additional nonrecurring charges for virtual connections to cover the labor that connects a cable to a virtual collocation but not the cable itself. If two virtual collocations are involved, two Virtual Connections are to be charged. Qwest proposes a nonrecurring charge, if applicable, for each cable hole to cover the labor and material that is required to open and close holes, or slots between floors or through interior walls, designed to be compartmentalized.<sup>72</sup>

92 WorldCom alleges that the engineering costs associated with this charge are inflated. WorldCom recommends that Qwest be required to use eight hours of engineering time, instead of ten hours, to develop its flat charge for direct connection service.<sup>73</sup> Furthermore, WorldCom states that Qwest's list of engineering activities does not specifically identify whether any activities only need to be performed when - and if - cable racking is installed. WorldCom is concerned that while Qwest assumes that cable racking is only installed in a small percentage of cases, Qwest's engineering functions are included in every case, resulting in overstated engineering costs. WorldCom argues that Qwest should assign the same probabilities used in its cable racking estimates to any engineering tasks that are only required when cable racking must be installed.<sup>74</sup> *WorldCom Brief, at pages 24-26.*

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<sup>72</sup> Exhibit No. T-2100, at pages 10-11 (Easton).

<sup>73</sup> Exhibit No. T-2250, at page 8 (Lathrop).

<sup>74</sup> Exhibit No. T-2250, at page 6 (Lathrop).

- 93 Qwest contends that the real issue is whether the Commission will rely on work time estimates provided by Qwest employees who actually perform the work and engineer these connections, or on WorldCom's speculation that the time estimates are too long. Qwest notes that while WorldCom offers specific adjustments to collocation related work times, its pertinent witness has not toured a Washington central office ("CO") in at least seven years.<sup>75</sup> *Qwest Brief, at page 19*. WorldCom argues that it is not relevant whether its witness has toured a Washington CO recently, since the vast majority of activities in Qwest's cost study need not take place in the CO. *WorldCom Reply Brief, at page 16*.
- 94 WorldCom also disagrees with many of the underlying assumptions that Qwest used to develop the costs related to the cable racking portion of Qwest's direct connection flat charge.<sup>76</sup> For example, WorldCom challenges Qwest's assumption that 50% of its COs require "Major Aerial Support" for cable racking. According to WorldCom, such modifications are established prior to a CLEC ordering Cross Connection service and it is inappropriate to include such costs again. Similarly, WorldCom claims that it should not have to pay for additional cable racking because Qwest has already assumed sufficient cable racking installation costs as part of its collocation Space Construction charge for physical collocation. WorldCom states that if Qwest must actually add additional cable racking to provide CLEC-to-CLEC interconnection, it is because Qwest has inefficiently located CLEC's collocation arrangements in remote parts of the CO. WorldCom argues, thus, Qwest should be required to exclude aerial support and cable racking costs from Direct Connection charges.
- 95 WorldCom alternatively proposes that only a recurring charge is appropriate because cable racking, once installed, becomes part of the central office building and is available to be used by Qwest and other CLECs.<sup>77</sup> *WorldCom Brief, at pages 27-28*. Finally, WorldCom expresses concern that Qwest's model may assume too much outside labor in its study. WorldCom recommends that the Commission require Qwest to assume 80% in house labor when developing Direct Connection costs.<sup>78</sup> *WorldCom Brief, at pages 28-30*.
- 96 Qwest refutes WorldCom's claim that collocators should be assumed to be in close proximity to each other, and that Qwest's collocation cost study should have captured costs for cable racking between the CLECs. According to Qwest, its collocation cost study did capture some cable racking costs, but specifically did not include

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<sup>75</sup> Exhibit No. 2264.

<sup>76</sup> According to WorldCom the cable racking portion of Qwest's nonrecurring "flat" charge assumes that five percent of the time collocators will require twenty feet of new cable racking (for DS0, DS1 and DS3 cabling), and that ninety percent of the time collocators will require ten feet of new cable racking for fiber cabling. *WorldCom Brief, at pages 26-27*.

<sup>77</sup> Exhibit No. T-2250, at pages 10-12 (Lathrop).

<sup>78</sup> Exhibit No. T-2250, at page 14 (Lathrop).

assumptions for sufficient cable racking to connect CLECs to each other. Qwest's believes that its assumption of a modest amount of additional cable racking is reasonable, and should be accepted by the Commission. *Qwest Reply Brief, at page 9.*

97 **Decision:** Again, Qwest asks the Commission to accept the opinions of its SMEs at face value because they are the only persons who actually perform the work and engineer the connections. This argument is rejected for the reasons stated above in paragraphs 57-58.

98 WorldCom argues that Qwest should not be permitted to charge for additional cable racking between CLEC's collocations because Qwest is already compensated for these costs as part of its collocation Space Construction charge for physical collocation. WorldCom's argument is not persuasive. Qwest persuasively argues that it is unreasonable to assume that Qwest contemplated and included racking for CLEC to CLEC connections at the time physical collocation was ordered. It would be inappropriate for Qwest to charge for materials related to these connections in its physical collocation rates. WorldCom's argument that additional cable racking is not required unless Qwest has inefficiently located CLECs within the CO is highly speculative. Most – if not all – central offices existed prior to passage of the Telecom Act and Cos were not designed with collocation in mind. The availability of physical space varies from CO to CO.

99 WorldCom argues that Qwest overstates costs by inflating engineering work times and including rack-related engineering for all requests even though racks are only installed in a small percentage of jobs. Based on a comparison of the parties proposals, WorldCom's argument is persuasive. Qwest should not be compensated for engineering associated with cable racks that do not need to be installed. In addition to the work time adjustment previously required, Qwest must assign the same probabilities used in its cable racking estimates to any engineering tasks that are only required when cable racking must be installed.

100 WorldCom suggests that cable racking costs should be recovered through recurring charges because once installed they become part of the CO available for use by all parties. *WorldCom Brief, at page 28.* However, the Commission has previously found that it is consistent with FCC orders to require that such costs be recovered as nonrecurring because ILECs should not be forced to underwrite the risk of investing in equipment dedicated to the interconnector's use, regardless of whether the equipment is reusable.<sup>79</sup> Thus, WorldCom's proposal is rejected.

101 WorldCom next argues that if Qwest is permitted to assume that cable racking will be installed, then Qwest also should be required to assume its existing rack capacities.

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<sup>79</sup> Part A Order, at para. 265.

Although Qwest has assumed too few cables will occupy these racks, it is unreasonable to assume capacities will approach the levels suggested by WorldCom. Qwest must assume that rack capacities will be no less than 20 DS0 cables, 10 DS1 cables, and 3 DS3 cables. All other assumptions in Qwest's Direct Connection proposal are reasonable and are approved. Qwest must reduce the work time estimates for elements by 30 percent for the reasons stated above in paragraphs 62 through 65.

102 WorldCom disagrees with the "USWT" labor percentage used in Qwest's NRC study, however, WorldCom fails to cite any evidence in support of its proposed adjustment.

*ii. Cross Connections*

103 **Discussion:** Qwest's Cross Connection service is available when CLEC's collocation arrangements have available capacity on termination cables at a Qwest intermediate distribution frame. To provision this element the collocations are connected by running a "jumper" between the existing CLEC cables. *WorldCom Brief, at page 30.* Qwest's proposed CLEC-to-CLEC cross connection nonrecurring charge purportedly covers Qwest's costs for processing the order, and designing and installing the cross connection between CLECs. *Qwest Brief, at page 20.*

104 WorldCom argues that Qwest inflates costs by using the work time assumed necessary to design a high capacity circuit as a proxy for Cross Connection circuit design. WorldCom contends that the Cross Connection circuit design is less complicated and should take less time to provision because CLECs provide a "Design Layout Record" when ordering this element. WorldCom claims that Qwest's assumptions are not forward-looking because they rely on data from 1998, and, thus, ignore changes that have been implemented in Qwest's OSS. WorldCom also argues that Qwest inflates a number of work time estimates. As a remedy, WorldCom suggests that Qwest develop costs separately for electronic and manually-submitted orders, remove any costs associated with verifying and validating database information, reduce design group time, and reduce the time allotted for separate activities that can be performed in parallel or in combination (provided the activities are not inconsistent with forward-looking OSS).<sup>80</sup> *WorldCom Brief, at pages 30-34.*

105 Qwest maintains that the work time reductions proposed by WorldCom are highly speculative and unsubstantiated. Qwest argues that even though the CLEC provides the design layout to Qwest, Qwest still engages in the circuit design and engineering process as for any other high capacity circuit.<sup>81</sup> Qwest states that WorldCom's adjustments are inappropriate because they are based on the best-case scenario (i.e., simplest and least expensive) rather than considering all possible scenarios. *Qwest*

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<sup>80</sup> WorldCom's proposed adjustments are listed in Exhibit No. 2251.

<sup>81</sup> Exhibit No. T-2151, at page 11 (Hubbard).



*Brief, at pages 20-21.* Qwest claims that while its back up information was originally gathered in 1998, it was verified as being appropriate to use in 2000. Finally, Qwest does not believe that any OSS changes impact the actual circuit design process, which is a manual process that is always performed by a design engineer. *Qwest Reply Brief, at page 10.*

106 **Decision:** Consistent with previous Commission Orders, Qwest must develop separate manual and electronic rates.<sup>82</sup> The Commission has ordered separate electronic and manual ordering rates for other network elements, and there is no evidence to support a different outcome for cross connections. WorldCom's argument with respect to circuit design is not persuasive. Qwest provides sufficient explanation why circuit design for a CLEC to CLEC connection does not necessarily take less time than a traditional high capacity circuit.<sup>83</sup> The general requirement that Qwest's work time estimates be adjusted by 30% remains unchanged.

**e. Space Availability Charge**

107 **Discussion:** Qwest proposes a nonrecurring space availability charge to apply to each request for a space inquiry report. The space inquiry report provides CLECs with information regarding the existing collocation conditions within an office such as (1) the number of collocators in an office, (2) the amount of collocation space available in an office, (3) a description of the measures under way to make additional space available for collocation, and (4) the modifications in the use of space since the last report. Qwest's proposed charge for the space inquiry report applies on a "per office" basis each time a report is requested.<sup>84</sup> *Qwest Brief, at page 21.*

108 WorldCom argues that Qwest's space inquiry costs are overstated as a consequence of the inflated work time estimates Qwest uses to develop costs. According to WorldCom, Qwest's response to a Staff discovery request<sup>85</sup> indicates that Qwest currently "inventories" most of the required information to produce these reports. Since this information is readily available, WorldCom argues that the amount of time to produce a report should be reduced. *WorldCom Brief, at pages 34-37.*

109 **Decision:** WorldCom's argument that Qwest's proposed Space Availability Charge is overstated as a result of inflated work time estimates is persuasive. Although the record indicates that much of the information required to produce a space inquiry report is inventoried, it appears that Qwest assumes an unreasonable amount of time to assemble and verify its data. Qwest must resubmit its Space Availability Charge proposal after reducing the total work time by 30 percent for the reasons stated above

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<sup>82</sup> See *Seventeenth Supplemental Order*, at para. 112. See also Part B Reconsideration Order, at paragraph 68, and the *Fortieth Supplemental Order* in this proceeding.

<sup>83</sup> Exhibit No. T-2154, at page 19 (Hubbard).

<sup>84</sup> Exhibit No. 2025.

<sup>85</sup> Exhibit No. 2064.

in paragraphs 62 through 65. As noted above in the overview of Qwest's nonrecurring cost studies, this adjustment reflects agreement with WorldCom that steps 1, 3, and 4 in the subject process are predominantly mechanized operations. In light of fact that the Space Inquiry Report is a flat rate, quote preparation time will be negligible.

**f. Space Optioning**

- 110 **Discussion:** Collocation Space Optioning permits CLECs, Qwest, and Qwest affiliates to option space for future collocation needs. Space reservation options provide the CLEC with a right of first refusal on collocation space when requests are made by other parties with firm collocation orders. Qwest offers optioned space to CLECs for caged, cageless, and virtual collocation arrangements. Space can be optioned for transmission equipment for up to 1 year, circuit switched equipment for up to 3 years, or power plants for up to 5 years. Qwest's cost study identifies costs associated with application processing, feasibility determination, common space engineering, records management, and administration of the first right of refusal process.<sup>86</sup> *Qwest Brief, at page 22.*
- 111 WorldCom argues that Qwest assumes excessive work time to develop its Space Optioning costs. For example, Qwest includes engineering hours but allegedly fails to justify why any engineering is required prior to a CLEC exercising its option and occupying the space. WorldCom suggests that the Commission reduce the amount of work time assumed in the cost study and order Qwest to credit CLECs for engineering associated with Space Optioning when the option is exercised. *WorldCom Brief, at pages 38-40.*
- 112 Qwest argues that a credit is inappropriate because the space optioned by CLECs is not specifically assigned nor designated to a specific CLEC within the central office. Thus, it is unlikely that any of the engineering tasks associated with Space Optioning are duplicated when the collocation option is exercised. *Qwest Brief, at page 22-23.*
- 113 **Decision:** WorldCom's argument that Qwest assumes excessive work time is persuasive because, according to the record, if Qwest is not holding a specific space for a CLEC when the CLEC orders Space Optioning, then the engineering time assumed by Qwest is significantly overstated. The engineering time assumed should reflect only the amount of time necessary to determine if the CLEC's potential collocation request is technically feasible. Qwest must reduce the work time estimates for this element by 30 percent for the reasons stated above in paragraphs 62 through 65. Qwest is not required to apply a credit when an option is exercised because Qwest does not specifically assign or designate optioned space, and because

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<sup>86</sup> Exhibit No. 2028.

there may be a significant lag between when a CLEC options space and subsequently exercises the option.

**g. DS1 / DS3 / OC Capable Loops**

114 Qwest states that its nonrecurring costs for installation and disconnection of high capacity loops that were approved by the Commission in the Part B Order. Qwest does not believe that these rates are specifically at issue in the Part D Proceeding. *Qwest Brief, at page 23.* Commission Staff believes that Qwest's proposed rates for these network elements are appropriate. *Staff Brief, at page 9.*

115 **Decision:** The Commission resolved these issues in the Part B Order, and no party identified additional concerns in this proceeding. Thus, these issues do not require any additional findings.

**h. Coordinated Installation w/o Cooperative Testing**

116 When an existing Qwest end-user or a CLEC end-user changes to another CLEC, this installation option offers CLECs the ability to coordinate the conversion activity with Qwest to minimize any service interruption. The nonrecurring charge for this type of installation is designed to recover the additional costs that Qwest incurs associated with coordinating the installation with the CLEC.<sup>87</sup> *Qwest Brief, at page 24.*

117 **Decision:** Qwest fails to provide the necessary support for its proposal. Qwest must reduce the work time estimates for this element by 30 percent for the reasons stated above in paragraphs 62 through 65.

**i. Basic Install with Cooperative Testing**

118 Qwest offers five provisioning options for installing loops, including two new nonrecurring loop installation charges proposed in the Part D proceeding. Each of Qwest's provisioning options offers CLECs a different "level" of testing and coordination of unbundled loops at installation, and each "level" involves different work groups and performance of a greater or lesser number of work steps.<sup>88</sup> Covad disputes Qwest's proposed charge for "basic installation with cooperative testing." Covad's arguments are predicated on the claim that Qwest cannot deliver a "good" loop without cooperative testing.

119 Basic installation consists of work steps performed by a central office technician – and in some instances a field technician – to connect an end user with a CLEC's network. An integral part of this process is testing to assure continuity to the end

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<sup>87</sup> Exhibit No. 2050.

<sup>88</sup> Exhibit No. T-1251, at page 17 (Hubbard).

user's Network Interface Device ("NID"). Basic installation with cooperative testing includes additional work steps by Qwest to contact the CLEC to perform cooperative testing, and to provide all test results to the CLEC.<sup>89</sup>

120 The basic installation with cooperative testing charge applies to DS0, DS1, DS3, and OCn loops. Covad stipulates that that it typically orders unbundled 2 or 4 wire non-loaded loops or ISDN loops from Qwest.<sup>90</sup>

121 **Discussion:** The basic installation performance test that Qwest performs on all loops is designed to test the facility and its ability to transport a specific signal. Performance tests are conducted only on that portion of the loop that is actually a part of Qwest's network, and are intended to establish that the loop meets industry standards. Qwest represents that its cost model assumes that Qwest performs its own testing on the loop to ensure continuity prior to contacting the CLEC for cooperative testing.

122 According to Qwest, the CLEC's specifications for a loop may be different than Qwest's, depending on the CLEC's use of the loop. If the CLEC desires a loop that meets Qwest's standards and does not need to test for its own standards, it can simply order basic installation with performance testing. Qwest will then test the loop, provide the results and repair any faults. At the end of the process Qwest will either provide a loop that meets the requested specifications for the loop or affirm that no loop exists on that route.<sup>91</sup> Under this option, after receiving the loop, the CLEC can send it back if it fails those tests, and request either adjustments of the loop delivered or a substitute loop. Qwest contends that a fundamental purpose of cooperative testing is to expedite resolution of any issues found by the CLEC and to allow a CLEC to determine for itself whether a loop meets its own special needs.

123 Qwest proposes that the Commission adopt the same rate that was previously approved for basic installation with performance testing as the rate for basic installation with cooperative testing. The nonrecurring study for costs associated with performance testing was submitted in UT-960369, and resulted in an approved tariff rate that remains in effect.<sup>92</sup> Qwest contends that the cooperative testing and performance testing options require action by the same work groups, and that work steps are essentially the same. In performance testing, Qwest documents and communicates to the CLEC prior to facility acceptance, basic installation test results regarding only the Qwest facility. In cooperative testing, Qwest and the CLEC perform acceptance testing of both the Qwest facility and the CLEC facility. According to Qwest, the time estimated to contact the CLEC and provide performance test results is about the same amount of time it takes to perform the

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<sup>89</sup> Exhibit No. T-1251, at pages 17-19 and 22 (Hubbard).

<sup>90</sup> TR at 5015-5016.

<sup>91</sup> Qwest Brief, at page 25. See Exhibit No. T-2151, at pages 15-17 (Hubbard).

<sup>92</sup> See Qwest tariff WN U-42, Section 3.1.G.

cooperative test with the CLEC. Qwest argues, therefore, the pricing for both activities should be the same.

124 Although Qwest did not resubmit its nonrecurring cost study in this proceeding, Qwest produced the relevant section of that study in response to a Covad data request. *See Exhibit 2065*. Covad contends that the study, which was filed in 1998, is outdated. Covad also argues that the study should be given no evidentiary weight because Qwest did not produce the entirety of the cost study, and because rates cannot be based on a model not fully a part of this proceeding. In support of its argument, Covad cites the Commission's Part B Order and – indirectly – the Eighth Supplemental Order in UT-960369. *Covad Brief, at pages 8-9*. Covad's citation to prior Commission Orders is not germane because the cost studies being discussed in those Orders are loop cost models filed by parties in UT-960369, and not UNE nonrecurring cost studies.<sup>93</sup>

125 Covad argues that Qwest's proposed rate for installation with cooperative testing should be rejected because Qwest relies on a cost study not fully admitted into evidence. However, Covad does not explain how Exhibit No. 2065 is incomplete for purposes of this proceeding, nor does Covad argue that other sections of the cost study are necessary in order to fully understand this rate proposal. Thus, there is no factual basis that compels rejection of Qwest's proposed rate as being unsupported by a sufficient cost study.

126 Likewise, Covad did not provide any evidence to support its claim that Qwest's NRC study is outdated, other than reference to the date of the study itself. The Commission initiated Docket No. UT-023003 to consider whether specific UNE rates established in UT-960369 and earlier parts of this proceeding have become outdated, but there is no factual basis in this record to conclude that Qwest's study data is outdated.

127 Alternatively, Covad contends that Qwest should be required to participate in cooperative testing with any requesting CLEC at no charge beyond Qwest's nonrecurring rate for basic installation and the recurring charge for the loop.<sup>94</sup> Covad claims that it would not incur the cost associated with cooperative testing if it could rely on Qwest's loop installations to meet required technical specifications.<sup>95</sup> However, Covad fails to submit sufficient evidence to support its claim that Qwest's basic installation process is unreliable.

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<sup>93</sup> Qwest's loop cost model in UT-960369 was referred to as the Regional Loop Cost Analysis Program ("RLCAP"). Qwest's nonrecurring rate for basic installation with performance testing was produced by the company's Nonrecurring Cost Program ("NRC"), and not RLCAP.

<sup>94</sup> Exhibit No. T-2350, at p.17 (Cabe).

<sup>95</sup> Exhibit No. T-2350, at p.7 (Cabe).

128 According to Covad's witness Dr. Ricard Cabe, Qwest previously performed basic installation with cooperative testing at no additional charge.<sup>96</sup> Thus, there was no incentive for Covad to rely on Qwest's basic installation testing procedures, and it appears that Covad has routinely requested cooperative testing. Covad objects to now being charged for an installation option that previously was provided at no cost, however, there is no evidence in the record that documents Qwest's alleged "historical inability to provision loops correctly." *Covad Brief, at page 13*. Thus, it appears that Covad's contention regarding Qwest's basic installation option is overly speculative.

129 Both Qwest and Covad argue that Qwest data produced in response to Covad Data Request No. 60 supports their respective positions. Covad contends that Qwest failed to provide evidence that it does, in fact, deliver good loops and that Qwest fails to conduct performance testing on ordered loop circuits. These contentions are refuted by Exhibit No. 2366/C-2366 summarizing the test results produced to Covad Data Request No. 60. Qwest's response to Covad's Data Request No. 60 consists of basic installation with cooperative testing results on Covad loop orders that were completed during the month of January, 2002.<sup>97</sup> Qwest points out that problems were detected and fixed on 27% of the ordered loops prior to cooperative testing with Covad.<sup>98</sup> Qwest's witness Hubbard provided credible testimony regarding Qwest's testing practices and policies, and his prefiled testimony reasonably explained four orders discovered by Covad that may have been completed out of process or were not documented correctly.<sup>99</sup> This evidence supports the finding that Qwest was properly conducting pre-tests on loop orders prior to contacting Covad for cooperative testing during January 2001, and that Qwest considered 73% of the pre-tested loops to be good.

130 Covad maintains that a \$0 rate for basic installation with cooperative testing is appropriate because 1) cooperative testing is a collaborative process that is necessary to ensure that the installation is done correctly, 2) it frequently points out defects that are not detected until cooperative testing is performed, and 3) it is sometimes used during installation activities before Qwest is ready to deliver the loop. Covad cites an illustrative example from Qwest's responses to Data Request 60 for each of these points, and also references four other orders that may have been completed out of process or were not documented correctly.<sup>100</sup>

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<sup>96</sup> Exhibit No. T-2350, at p.7 (Cabe).

<sup>97</sup> See Exhibit No. C-2161 – excerpts from Qwest's response to Covad Data Request No. 60 (and supplements). See also Exhibit Nos. C-2359, C-2360, C-2361, C-2362, C-2363, C-2364, and C-2365.

<sup>98</sup> Exhibit No. T-2151, at p. 23 (Hubbard). Relevant confidential numbers are stated in Exhibit CT-2151.

<sup>99</sup> See Exhibit No. T-2154, at pages 5-6 (Hubbard).

<sup>100</sup> Exhibit No. T-2358, at pages 2-5 (Cabe), and Exhibit Nos. C-2362 through C-2365.

- 131 The examples cited by Covad do not substantiate that Qwest is incapable of providing “good” loops, and Covad’s argument that these examples represent an unacceptably high number of occurrences based on the total sample reviewed is not persuasive. Qwest’s performance assurance plan provides for escalating incentives that are not triggered unless a threshold number of infractions occur. Thus, even though every infraction is accounted for, Qwest’s provisioning performance is not based on a standard of perfection.
- 132 Qwest Witness Hubbard prepared a chart entitled “Installation Option Comparison” to depict the varying work groups and work steps associated with each loop provisioning option, including “Basic with Cooperative Testing Option.” *Exhibit No. T-1251 at p. 22*. According to Qwest’s chart, the cooperative testing option involves the same work groups as performance testing and requires one additional work step.<sup>101</sup> Basic installation with cooperative testing is substantially similar to basic installation with performance testing.
- 133 Covad argues that other jurisdictions have concluded that cooperative testing charges are inappropriate and that the ILEC should not charge for cooperative testing. *Covad Brief, at pages 13-15*. However, Qwest correctly points out that in each instance cited by Covad, cooperative testing was mandatory because the ILEC did not offer basic installation without that service. *Qwest’s Reply Brief, at pages 15-16*. In this case, where Qwest offers the basic installation provisioning option, including the pre-testing of its portion of the loop facility, additional cooperative testing is performed for the benefit of the CLEC. Covad argues that Qwest will incur additional expense when it delivers a “bad” loop or when cooperative testing is required to resolve a problem. However, the fact that Qwest may incur additional costs where a problem exists in the complete loop facility does not warrant a requirement that Qwest perform cooperative testing in all instances without just and reasonable compensation.
- 134 Covad suggests that a more reasonable approach is to view the issue of cooperative testing as essentially a quality of service issue.<sup>102</sup> Covad contends that the requirement to cooperatively test every loop at the time of delivery is not an enhancement to the basic installation process, but a procedure that involves necessary costs to both parties that will continue unless Qwest devises other measures that ensure quality performance of installation activities.
- 135 Qwest’s performance assurance plan (“QPAP”) in Docket Nos. UT-003022/003040 establishes measures to ensure quality performance. Covad points out that the QPAP does not contain performance measures that benchmark deficiencies that are caught during the cooperative testing process. *Covad Reply Brief, at page 9*. However,

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<sup>101</sup> Also see Exhibit No. T-2100, at replacement page 15A (Kennedy).

<sup>102</sup> Exhibit No. T-2350, at page 16-17 (Cabe).

Covad does not present a convincing argument why such a measure is necessary or how the absence of such a measure warrants compelling Qwest to provide cooperative testing without compensation. The QPAP performance indicator definition (“PID”) OP-5 measures deficiencies that occur after the basic installation provisioning option is completed, and the order is closed before delivery to the CLEC. If Qwest fails to deliver “good” loops as required by the basic installation option, then other incentive provisions of the QPAP are triggered. The record in this proceeding does not support a conclusion that Qwest has historically failed to deliver “good” loops or is otherwise incapable of doing so.

136 Covad’s suggestion that the Commission should alternatively delay implementation of Qwest’s cooperative testing charge until Qwest demonstrates that it provides “good” loops<sup>103</sup> is rejected because sufficient evidence of Qwest’s ability to provision “good” loops already exists in the record of this Part D proceeding.<sup>104</sup> Furthermore, delay is not consistent with the QPAP’s incentive mechanism for Qwest’s basic installation provisioning option.

137 Covad also suggests that the Commission should “limit any charge for optional cooperative testing to the situation where the cooperative test is *not* performed:

- (a) to facilitate Qwest’s *own provisioning responsibilities*, or
- (b) to replicate the performance tests that are or *should be performed* on every loop installation.<sup>105</sup> (*Emphasis added*).

Covad’s suggestion is rejected because the italicized language is vague and raises other issues not addressed on the record.

138 Exhibit C-2361 (“C-2361”) is a portion of a test record produced by Qwest in response to Covad Data Request No. 60. C-2361 illustrates a situation where a Qwest technician was performing a pre-test and thought the testing showed some bridge tap (“BT”) on the line. The technician then contacted Covad and asked the Covad technician to verify if Covad detected service-affecting BT on the line. Whereas all Covad provisioning orders were for basic installation with cooperative testing, the contact by the Qwest technician is consistent with the process modeled in Qwest’s cost study. However, if Covad requests the basic installation provisioning option and *Qwest* initiates cooperative testing because of a problem detected during the pre-test, then Qwest may not charge Covad for performing cooperative testing.

139 Covad suggests that the Commission should offset cooperative testing charges by mandating that CLECs can also be reimbursed for their own costs to test loops that

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<sup>103</sup> Covad Reply Brief, at page 10.

<sup>104</sup> See Exhibit No. T-2151/CT-2151, at page 23 (Hubbard).

<sup>105</sup> *Id.*



Qwest did not properly provision. This suggestion is rejected, as the QPAP provides an appropriate incentive mechanism for Qwest's basic installation provisioning option.

140 Finally, Covad suggests that the Commission should specify that Qwest may not charge for multiple cooperative tests or for cooperative tests associated with repair dispatches within thirty days of installation when trouble is determined to be Qwest's fault or in the Qwest network. Superficially, this suggestion does not appear to be inconsistent with Qwest's provisioning options or the QPAP, however, the issue has not been fully developed in the Part D record. Accordingly, Covad may present evidence and arguments regarding this proposal in any other appropriate proceeding where a record can be fully developed.

141 **Decision:** Many arguments were presented regarding this issue, and numerous decisions are stated in the discussion section above for purposes of clarity and efficiency. Basic installation with cooperative testing enables a CLEC to test loop facilities on its own network at the same time as testing is performed on Qwest's network. In the majority of instances, it is not technically necessary that both networks be tested at the same time, and the cooperative-testing provisioning option requires Qwest to perform additional work steps. Other parties, including Covad, do not recommend any specific adjustments to Qwest's time estimates for cooperative testing as provided in Qwest's nonrecurring cost study for performance testing. Qwest's proposed rate for basic installation with cooperative testing is approved subject to the adjustments that are required for all nonrecurring charges.

#### **j. Multiplexing**

142 **Discussion:** Qwest proposes a nonrecurring charge for installation and disconnection for DS3 to DS1 multiplexing.<sup>106</sup> Qwest states that its nonrecurring study presented in Part D was conducted in the same manner as the predecessor Part B study, which was approved by the Commission, so these rates should likewise be approved. *Qwest Brief, at pages 29-30.* Staff agrees that Qwest's proposed rates for these network elements are appropriate. *Staff Brief, at page 9.*

143 WorldCom argues that Qwest's proposed rates are excessive because they include unnecessary and redundant activities. WorldCom suggests that the Commission reduce the time for work items by 700.42 minutes in the installation study and 524.15 minutes in the disconnect study. *WorldCom Brief, at page 41.* WorldCom also challenges Qwest's assertion concerning its Part B cost study. According to WorldCom, the Commission approved Qwest's Part B proposal, subject to the general adjustments required of Qwest's NRC methodology. *WorldCom Reply Brief, at page 20.*

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<sup>106</sup> Exhibit No. T-2100, at page 21 (Easton).

144 **Decision:** WorldCom's proposed adjustments are rejected because they are not sufficiently supported by the record. Qwest must adjust its multiplexing rates as required by the Part B Order, if it has not already done so. Qwest also must reduce its work time estimates for this element by 30 percent for the reasons stated above in paragraphs 62 through 65.

**k. UDOT/EUDIT**

145 Qwest states that it has complied with the Commission's orders in Docket Nos. UT-003022/003040, where the Commission required Qwest to eliminate the distinction between UDOT and EUDIT pricing. Qwest represents that the company has filed compliant rates in both its SGAT and its wholesale tariff, WN U-42, Section 3.1 L. Accordingly, Qwest does not believe that the Commission need address issues in Part D regarding UDOT/EUDIT. Thus, Qwest has withdrawn its testimony related to UDOT/EUDIT rates in this proceeding. *Qwest Brief, at page 30.*

146 **Decision:** Qwest has addressed this issue by complying with the Commission's orders in Docket Nos. UT-003022/003040 and has withdrawn pertinent evidence.<sup>107</sup> No further decision on the merits is required in this Part D proceeding.

**l. UDF Field Verification**

147 Qwest's dark fiber rate elements in Part D provide CLECs the option to obtain single strand increments for all unbundled dark fiber rate elements filed on a per-pair basis in Part B of this docket (i.e. fiber loop, transport, cross connect and termination). Qwest is also introducing nonrecurring charges for field verification-engineering and dark fiber splice. Field verification - engineering is a step in the field verification/quote preparation ("FV/QP") process that identifies additional engineering record searches for splice locations and splicing availability. This rate is charged up front but deducted from the FV/QP when a single splice is available and the CLEC requests Qwest to move forward with the process.<sup>108</sup> *Qwest Brief, at page 30.*

148 **Decision:** No party disputes this issue, and Qwest's proposal is reasonable insofar as Qwest will credit the field verification against future nonrecurring charges when a dark fiber splice is ordered. However, Qwest must reduce the work time estimates for this element by 30 percent for the reasons stated above in paragraphs 62 through 65.

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<sup>107</sup> See Exhibit No. E-2129, errata to Kennedy testimony deleting page 17, line 7, through page 21, line 16, of Exhibit No. T-2100.

<sup>108</sup> Exhibit No. T-2100, at page 22.

**m. Dark Fiber Splice**

149 Qwest states that it will accommodate a CLEC's request for access to a Qwest fiber UNE-loop or subloop. In doing so, Qwest will provide a fiber stub from an accessible splice point when unspliced non-ribbon fiber is available. If space permits, the CLEC may use this fiber stub for making its fiber splice.<sup>109</sup> Qwest proposes only a nonrecurring charge to apply to this element. *Qwest Brief, at page 30.*

150 **Decision:** No party objected to Qwest's proposal. However, Qwest must reduce the work time estimates for this element by 30 percent for the reasons stated above in paragraphs 62 through 65.

**n. Local Tandem Switching**

151 **Discussion:** Qwest states that unbundled local tandem switching includes the facilities connecting the trunk distribution frames to the tandem switch and all functions of the switch itself, including those facilities that establish a temporary transmission path between two other switches. The local tandem switching elements also include the functions that are centralized in local tandem switches rather than end office switches, such as call recording, the routing of calls to operator services, and signaling conversion features.<sup>110</sup> Qwest proposes nonrecurring charges to apply when a CLEC chooses to purchase use of a DS1 trunk port, terminating at a DS1 demarcation point on a local tandem switch. Each DS1 tandem trunk port includes a subset of 24 DS0 channels that incur nonrecurring charges to establish both the first and each additional trunk group member. *Qwest Brief, at page 31.*

152 Commission Staff believes that Qwest's proposed rates for these network elements are appropriate. *Staff Brief, at page 10.*

153 WorldCom recommends that the Commission reject Qwest's proposal because neither its testimony nor its response to WorldCom's discovery demonstrate how and when Qwest's proposed local tandem NRCs will be applied. WorldCom argues that Qwest fails to meet its burden of proof. *WorldCom Brief, at pages 41-42.*

154 **Decision:** The documentation supporting Qwest's proposal does not provide parties a meaningful opportunity to scrutinize Qwest's purported costs. Qwest must reduce the work time estimates for this element by 30 percent for the reasons stated above in paragraphs 62 through 65.

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<sup>109</sup> Exhibit No. T-2100, at page 22.

<sup>110</sup> Exhibit No. T-2130, at page 3.

**o. Local Switching**

155 Qwest states that access to unbundled local switching encompasses line-side and trunk-side facilities, plus the features, functions and capabilities of the switch including access to vertical features that the switch is capable of providing, as well as any technically feasible customized routing functions.<sup>111</sup> The specific nonrecurring charges for various aspects of the local switching element are addressed in other sections below. *Qwest Brief, at page 31.*

**p. Vertical Features**

156 Qwest claims that certain vertical features require additional activities by Qwest personnel in order to become activated in the switch. Therefore, nonrecurring charges have been developed in the ENRC<sup>112</sup> to reflect the additional costs that result from those activities. *Qwest Brief, at page 31.* Commission Staff believes that Qwest's proposed rates for these network elements are appropriate. *Staff Brief, at page 10.*

157 **Decision:** Qwest fails to provide the necessary support for its proposal. Qwest must reduce the work time estimates for this element by 30 percent for the reasons stated above in paragraphs 62 through 65.

**q. Subsequent Order Charge**

158 Qwest proposes that a nonrecurring subsequent order charge apply to recover the cost of processing an order when a CLEC requests additional vertical switch features to an existing port. *Qwest Brief, at page 32.*

159 **Decision:** Qwest fails to provide the necessary support for its proposal. Qwest must reduce the work time estimates for this element by 30 percent for the reasons stated above in paragraphs 62 through 65.

**r. Digital Line Side Port**

160 Basic Rate Interface Integrated Services Digital Network ("BRI-ISDN") is a digital architecture that provides integrated voice and data capability on a 2-wire loop. A BRI-ISDN Port is a Digital 2B+D (2 Bearer Channels for voice or data and 1 Delta Channel for signaling and D Channel Packet) line-side switch connection with BRI-ISDN voice and data basic elements. According to Qwest, the digital line port includes vertical switch features. In addition, the premium digital line port provides Centrex Management System, Conference Calling - Meet Me, Conference Calling -

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<sup>111</sup> Exhibit No. T-2130, at page 4 (Malone).

<sup>112</sup> Exhibit No. 2023.

Preset, and Conference Calling - Station Dial. Qwest proposes nonrecurring charges for the first port and each additional port. *Qwest Brief, at page 32.* Staff believes that Qwest's proposed rates for these network elements are appropriate. *Staff Brief, at page 10.*

161 **Decision:** Qwest fails to provide the necessary support for its proposal. Qwest must reduce the work time estimates for this element by 30 percent for the reasons stated above in paragraphs 62 through 65.

**s. Digital Trunk Port**

162 In Part D, Qwest proposes rates for the following types of digital trunk ports: DS1 Local Message Trunk Port, Unbundled DS1 PRI ISDN Trunk Port Supporting Direct Inward Dial/Direct Outward Dial/Private Branch Exchange ("DID/DOD/PBX"), and DS3 and OCN Trunk Ports. Qwest states that these elements may be ordered via the Special Request Process. Qwest's proposal calls for a nonrecurring charge for the digital trunk port, as well as nonrecurring charges for the establishment of the first and each additional message trunk group member associated with the digital trunk port. *Qwest Brief, at page 32-33.* Staff believes that Qwest's proposed rates for these network elements are appropriate. *Staff Brief, at page 10.*

163 **Decision:** Qwest fails to provide the necessary support for its proposal. Qwest must reduce the work time estimates for this element by 30 percent for the reasons stated above in paragraphs 62 through 65.

**t. DS0 Analog Trunk Port**

164 Qwest states that its proposed nonrecurring charges are supported by Exhibit 2023. *Qwest Brief, at page 33.* Staff believes that Qwest's proposed rates for these network elements are appropriate. *Staff Brief, at page 10.*

165 **Decision:** Qwest fails to provide the necessary support for its proposal. Qwest must reduce the work time estimates for this element by 30 percent for the reasons stated above in paragraphs 62 through 65.

**u. Customized Routing**

166 **Discussion:** Qwest states that customized routing is a software function of a switch that enables CLECs to direct particular classes of calls to specific outgoing trunks. Qwest claims that while customized routing applications are unique to each CLEC Qwest has developed a "standardized" offering for which it proposes to assess nonrecurring charges based on the development and installation of customized line class codes. For Operator Services ("OS") or Directory Assistance ("DA") routing only, Qwest proposes a nonrecurring charge for the development of a customized line

class code, and a second nonrecurring charge per installation per switch. Qwest states that all other forms of customized routing are designed to meet the specific requirements of an individual CLEC and, therefore, will be charged on an individual case basis (“ICB”). *Qwest Brief*, at page 33.

167 Qwest maintains that the FCC determined in the UNE Remand Order that OS and DA do not have to be provided on an unbundled basis when an ILEC offers customized routing. Qwest believes that its customized routing proposal meets the FCC’s requirement and, therefore, Qwest is no longer required to provide OS and DA as UNEs. *Qwest Brief*, at page 34.

168 WorldCom disputes whether Qwest’s customized routing proposal meets the FCC’s requirement. WorldCom contends that it submitted a completed customized routing form to Qwest, including attachments demonstrating how its request to route OS/DA calls to existing Feature Group D (“FGD”) trunks can be implemented, but Qwest refuses to comply. According to WorldCom, Qwest acknowledges that WorldCom’s request is technically feasible but that Qwest has made a business decision not to translate a “411” call to a toll call and provide common transport.<sup>113</sup> WorldCom argues that Qwest’s refusal to implement FGD customized routing violates the parties’ interconnection agreement, the Telecom Act, and FCC orders. *WorldCom Brief*, at page 43-46.

169 WorldCom also argues that Qwest’s ICB pricing proposal for customized routing is so vague that it is impossible to determine if the proposed rates are reasonable and nondiscriminatory. WorldCom recommends that Qwest be required to submit a verifiable cost study based on WorldCom’s FGD customized routing needs so that the Commission and the parties can evaluate the proposal based on concrete information. *WorldCom Brief*, at page 53.

170 Commission Staff notes that Qwest did not provide cost support for its customized routing rates.<sup>114</sup> Staff believes that if WorldCom wants customized routing using FGD trunks it should be required to seek it through the Bona Fide Request (“BFR”) procedure. *Staff Brief*, at page 11. Citing the FCC’s UNE Remand Order,<sup>115</sup> Commission Staff maintains that the issue to be addressed is whether Qwest has “accommodated” WorldCom’s request for FGD customized routing. However, Staff contends that regardless of how this issue is resolved, Qwest should be required to present cost studies for OS/DA to enable the Commission to determine if Qwest’s proposed price exceeds its costs so that cross subsidization is not a concern. *Staff Reply Brief*, at page 8.

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<sup>113</sup> TR at 4756-57.

<sup>114</sup> TR at 4184.

<sup>115</sup> “..... Thus, we require incumbent LECs, to the extent they have not accommodated technologies used for customized routing, to offer OS/DA as an unbundled network element.” (Emphasis added). UNE Remand Order, at para. 463.

- 171 WorldCom claims that it has already completed the steps that comprise the BFR process without success.<sup>116</sup> Thus, requiring WorldCom to start over through another “official” BFR process would simply require WorldCom to repeat steps already taken, adding expense and delay. *WorldCom Reply Brief, at pages 28-29.*
- 172 Qwest claims that WorldCom’s assertion that Qwest has violated the parties’ interconnection agreement by refusing to implement FGD customized routing is disingenuous because the record shows that WorldCom requested customized routing only weeks before the hearings in this docket. According to Qwest, the parties were still in the process of conducting implementation meetings when hearings were conducted. Furthermore, Qwest maintains that under the terms of the interconnection agreement WorldCom is permitted to designate only “unique” trunks for customized routing. Qwest interprets this language such that it is only required to route traffic to WorldCom’s FGD trunks that are not shared with other carriers. Qwest claims that it has agreed to route WorldCom’s traffic to its “unique” FGD trunks, as interpreted. *Qwest Reply Brief, at pages 11-12.*
- 173 WorldCom challenges Qwest’s interpretation of the parties’ interconnection agreement. WorldCom claims that Qwest’s interpretation is unreasonable and ignores the fact that the interconnection agreement explicitly states that WorldCom may route calls to existing FGD trunks. Moreover, WorldCom argues that it would be uneconomical and wasteful for the Commission to interpret the agreement as advocated by Qwest, as such a ruling would result in the underutilization of trunk groups and significant unnecessary expense to WorldCom. *WorldCom Reply Brief, at pages 23-24.*
- 174 Qwest maintains that WorldCom’s proposed solution for customized routing was shown at the hearings to require significant additional investment per switch, and ultimately would only work on Lucent switches.<sup>117</sup> Qwest states that less than half of its central offices in Washington contain the Lucent 5E switch that WorldCom’s solution addresses. Moreover, Qwest maintains that implementation of FGD customized routing faces additional obstacles that would need to be addressed by Qwest and the requesting CLEC because FGD trunks uses industry standard Equal Access SS7 signaling protocols while Qwest’s customized routing, on the other hand, routes CLEC OS/DA calls using industry standard traditional signaling. Qwest claims that these differences in signaling create inconsistencies when gathering data

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<sup>116</sup> WorldCom represents that 1) it submitted its written request and technical specifications on Qwest-supplied forms and pursuant to Qwest’s directions, 2) technical experts have met on several occasions to discuss the issues, 3) letters have been exchanged between company executives consistent with the agreed upon escalation process, 4) the escalation process is complete, and 6) Qwest has refused to provide WorldCom with customized routing over its existing Feature Group D trunks. *WorldCom Reply Brief, at pages 28-29.*

<sup>117</sup> Exhibit No. 2194 and TR at 4741-44.

for accurate ordering, provisioning, billing, and maintenance of these facilities. Qwest also notes that FGD trunks generally terminate at an access tandem switch, and not at the end office. Therefore, WorldCom would have to extend its FGD trunks beyond the access tandem to the end office at substantial expense.<sup>118</sup> Finally, Qwest states that it remains willing to discuss these and other issues with WorldCom in order to attempt to implement WorldCom's request for customized routing across FGD trunks. *Qwest Brief, at pages 35-36.*

175 WorldCom argues that the "significant investment" referred to by Qwest relates to right to use fees that Qwest claims it will need to pay vendors for the software to implement FGD customized routing. WorldCom contends that such fees are normally recovered as part of Qwest's local switching network element rates, and thus, WorldCom should pay Qwest for any right-to-use fee investment necessary for customized routing in the same way that it pays Qwest for all other right-to-use fee investments – through the recurring local switching rate. WorldCom claims that the FCC specifically addressed this issue and held that right-to-use fees should be included in the UNE rate, and should not be separately recovered.<sup>119</sup> *WorldCom Reply Brief, at pages 27-28.*

176 WorldCom argues that there is no evidence to support Qwest's claim that there are signaling obstacles to overcome before FGD customized routing can be provisioned. On the contrary, WorldCom argues that the record indicates that its request is technically feasible and that Qwest refuses to provide FGD customized routing because it has made a business decision to deny WorldCom's request. WorldCom maintains that its proposal will not require it to extend FGD trunks to the end office as suggested by Qwest. According to WorldCom, it is simply requesting that Qwest route WorldCom's local customers' OS/DA traffic in the same way that Qwest currently routes WorldCom's long distance customers' OS/DA traffic. WorldCom argues that its customized routing proposal takes its UNE-P customers' local OS/DA calls and makes them "look like" long distance calls that would naturally flow to WorldCom's existing network. WorldCom also argues that Qwest is disingenuous when it implies that the parties are continuing to work together to resolve these issues. According to WorldCom the parties are at an impasse. *WorldCom Reply Brief, at pages 25-26.*

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<sup>118</sup> Qwest argues that its customized routing functions occur at the end office and, at present, these calls cannot be "tandemed." That is, Qwest is unaware of any signaling technology that would allow for the routing of these types of calls to any type of tandem switch. *Qwest Brief, at page 36.*

<sup>119</sup> *In the Matter of Petition of MCI for Declaratory Ruling that New Entrants Need Not Obtain Separate License or Right to Use Agreements Before Purchasing Unbundled Elements*, CC Docket No. 96-98, FCC 00-139 (Rel. April 27, 2000), at para 9-11.



177 Qwest argues that WorldCom's request is tantamount to 411 presubscription.<sup>120</sup>  
Qwest states that while the FCC is currently considering this issue on its own the  
record in this proceeding lacks sufficient evidence for the Commission to reach an  
informed decision regarding 411 presubscription or even the merit of WorldCom's  
arguments. *Qwest Reply Brief, at pages 11-12.*

178 WorldCom disagrees with Qwest's assertion that it is actually asking for 411  
presubscription. WorldCom claims that 411 presubscription refers to the ability of  
end-user customers to choose their OS/DA carrier, regardless of which local carrier  
the customers choose. However, WorldCom claims it merely wants to be able to  
designate where its end users' OS/DA traffic is routed so that it can self-provision  
OS/DA services. *WorldCom Reply Brief, at page 23.*

179 **Decision:** This generic cost proceeding is not an appropriate forum to resolve  
WorldCom's claim that Qwest's refusal to implement FGD customized routing  
violates the parties' interconnection agreement. If WorldCom believes that Qwest  
has breached the parties' contractual agreement, then WorldCom must initiate other  
more appropriate process to address its grievances.<sup>121</sup>

180 WorldCom also claims that Qwest's refusal to implement FGD customized routing  
violates the Telecom Act and FCC orders. In support of this claim WorldCom cites  
paragraph 463 of the UNE Remand Order, which states:

... SBC responds that the customized routing of Feature Group D  
is not technically feasible in all end-office switches. Bell South,  
however, offers a technical solution to MCI WorldCom's  
concern in some of its offices and states its willingness to deploy  
these solutions throughout its network. In instances where the  
requesting carrier obtains the unbundled switching element from  
the incumbent, the lack of customized routing effectively  
precludes requesting carriers from using alternative OS/DA  
providers and, consequently, would materially diminish the  
requesting carrier's ability to provide the services it seeks to  
offer. *Thus, we require incumbent LECs, to the extent they have  
not accommodated technologies used for customized routing, to  
offer OS/DA as an unbundled network element.*

*(Emphasis added).*

181 WorldCom notes that other state commissions have reached similar conclusions and  
ordered the ILECs to provide WorldCom OS and DA as UNEs until its FGD solution

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<sup>120</sup> "Presubscription" refers to the process by which a customer preselects a carrier, to which all of a  
particular category or categories of calls on the customer's line will be routed automatically.

<sup>121</sup> For instance, WorldCom can file a petition for enforcement of interconnection agreement under  
WAC 480-09-530 of the Commission's rules.

was implemented. For example, the California Public Utility Commission (“CPUC”) concluded that:

We agree with the FAR’s conclusion that paragraph 463 refers to the same type of customized routing that MCI is requesting in this arbitration. It is significant that while the FCC acknowledges that there may be technical difficulties in accomplishing the customized routing requested, it does not indicate that technical infeasibility would excuse the ILEC from the requirement to offer OS and DA as UNEs.... Therefore, there was no need for the arbitrator to determine whether particular functions are technically feasible in particular switch types.<sup>122</sup>

182 The CPUC’s reasoning of FCC’s UNE Remand Order is sound and applies to the very facts before the Commission in this proceeding. Paragraph 463 of the FCC’s UNE Remand Order provides that the existence of technical uncertainty does not release an ILEC from its responsibility to provide OS and DA at cost based rates until such time as it has accommodated the CLECs customized routing request.<sup>123</sup> Qwest must submit a cost study, consistent with this decision, for OS and DA so that these network elements are available at cost based rates to CLEC’s whose customized routing needs have not been accommodated by Qwest.

183 The FCC’s Second Louisiana Order<sup>124</sup> also supports this decision. Paragraph 226 of that Order states:

MCI raises a separate challenge to BellSouth's customized routing offering. MCI claims that BellSouth will not "translate" its customers' local operator services and directory assistance calls to Feature Group D signaling. As a result, MCI cannot offer its own operator services and directory assistance services to customers it serves using unbundled local switching. MCI, however, fails to demonstrate that it has requested Feature Group D signaling, and BellSouth claims that it has never received such a request. Thus, the record is inconclusive as to this objection. *We believe, however, that MCI may have otherwise raised a legitimate concern. If a competing carrier requests Feature Group D signaling and it is technically feasible for the incumbent LEC to offer it, the incumbent LEC's failure to*

<sup>122</sup> CA-PUC Decision 01-09-054 (Rel. September 20, 2001), at page 12.

<sup>123</sup> The record in this proceeding also indicates that WorldCom’s proposal is technically feasible, but has been rejected by Qwest for business considerations TR at 4752-57.

<sup>124</sup> *In the Matter of Application of BellSouth Corporation, BellSouth Telecommunications, Inc., and BellSouth Long Distance, Inc. for Provision of In-Region, InterLATA Services in Louisiana*, CC Docket No. 98-121 (Rel. October 13, 1998) (“Second Louisiana Order”).

*provide it would constitute a violation of section 251(c)(3) of the Act. Our rules require incumbent LECs, including BOCs, to make network modifications to the extent necessary to accommodate interconnection or access to network elements. (Emphasis added).*

184 Qwest recommends that the Commission reject WorldCom's proposal because it was shown at the hearings to require significant additional investment per switch, and ultimately would only work on Lucent switches. Qwest suggests that if it does accommodate WorldCom's request that WorldCom, the cost causer, should be solely responsible to pay for necessary software upgrades. However, I believe that the Commission must reject Qwest's argument because, as cited by WorldCom, it is contrary to the FCC's opinion on this matter. While contemplating the issue raised by Qwest the FCC stated:

We conclude that the "nondiscriminatory access" obligation in section 251(c)(3) requires incumbent LECs to use their best efforts to provide all features and functionalities of each unbundled network element they provide, including any associated intellectual property rights that are necessary for the requesting carrier to use the network element in the same manner as the incumbent LEC. In particular, incumbent LECs must exercise their best efforts to obtain co-extensive rights for competing carriers purchasing unbundled network elements. *We further find that the nondiscriminatory access obligation requires incumbent LECs to allocate any costs associated with acquiring the necessary intellectual property rights among all requesting carriers, including themselves....*<sup>125</sup>

*(Emphasis added, footnotes omitted).*

185 The software upgrade identified by Qwest, and the attendant right to use fees, fall within the scope of the FCC's discussion. Therefore, at such time as Qwest implements the FGD customized routing requested by WorldCom, Qwest must seek recovery of these costs in the nondiscriminatory manner described by the FCC above. Qwest may subsequently request that the Commission address anew whether the company's proposal to offer OS and DA at market based rates should be approved.

186 Finally, Qwest proposes to assess nonrecurring charges based on the development and installation of customized line class codes. WorldCom represents that where customized routing is provided over FGD trunks, WorldCom further implements

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<sup>125</sup> *In the Matter of Petition of MCI for Declaratory Ruling that New Entrants Need Not Obtain Separate License or Right to Use Agreements Before Purchasing Unbundled Elements.* CC Docket No. 96-98, FCC 00-139 (rel. April 27, 2000) at para 9. See generally discussion at paras. 9-11.

OS/DA via line class codes in its own network. *WorldCom Brief, at page 45.* Thus, it appears that WorldCom would not be subject to Qwest's proposed nonrecurring line class code charges where customized routing is accomplished via FGD trunks, and no party otherwise challenges Qwest's proposed rates to develop and install line class codes. Qwest's proposal is approved, subject to the 30% work time adjustment.

**v. Common Channel Signaling / SS7**

187 **Discussion:** Common Channel Signaling/Signaling System 7 ("SS7") provides multiple pieces of signaling information via the SS7 network. This signaling information includes, but is not limited to, specific information regarding calls made on associated Feature Group D trunks and/or LIS trunks, Line Information Database ("LIDB") data, Local Number Portability, Custom Local Area Signaling Services ("CLASS"), 8XX set up information, call set up information and transient messages. Qwest proposes nonrecurring charges for CCS/SS7 that include: 1) Common Channel Signaling Access Service ("CCSAC") Options Activation charge for basic translations; and 2) CCSAC Options Activation charge for database translation. *Qwest Brief, at page 37.*

188 Advanced Intelligent Network ("AIN") is a call-related database platform that enables telecommunications companies to provide customized incoming and out-going call management services. Qwest offers AIN Customized Services, AIN Platform Access and AIN Query Processing.<sup>126</sup> Qwest proposes that the nonrecurring rates for AIN Customized Services and AIN Platform Access will be determined on an individual case basis because the feature functionality of the service is defined by the CLEC. *Qwest Brief, at page 37.*

189 WorldCom argues that it is uncertain what Qwest is proposing with regard to SS7 charges. WorldCom states that Qwest's testimony on these rate elements is vague and that neither a review of Qwest's SGAT nor Qwest's discovery responses allow WorldCom to determine with particularity the circumstances under which Qwest proposes to assess its rates on CLECs. WorldCom believes that Qwest failed to meet its burden of proof and recommends that the proposed SS7 charges be rejected. *WorldCom Brief, at page 53.*

190 **Decision:** Qwest fails to provide the necessary support for its proposal. Qwest must reduce the work time estimates for this element by 30 percent for the reasons stated above in paragraphs 62 through 65.

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<sup>126</sup> Exhibit No. T-2130, at pages 13-15 (Malone).

**w. Miscellaneous Charges**

191 **Discussion:** Qwest’s proposed miscellaneous nonrecurring charges are intended to cover the costs of additional engineering, labor and testing incurred by Qwest at the request of the CLEC. Miscellaneous Charges may be assessed when, at the direction of a CLEC, work activity is requested that is not part of the nonrecurring charges normally associated with a product.<sup>127</sup> *Qwest Brief, at pages 37-38.*

192 Covad challenges Qwest’s Miscellaneous Charges proposal because they allegedly encompass all the charges that CLECs incur regularly during provisioning and maintenance of UNEs, but lack any cost support or clearly defined and applicable statement of application. Covad states that because Qwest fails to provide a cost study in support of its proposal, it also fails to meet its burden of proof. Covad argues that Qwest should not be allowed to charge CLECs any of the rates contained in the Miscellaneous Charge category. *Covad Brief, at page 25.*

193 Qwest suggests that Covad’s citation to a transcript reference “5/21/02 (Easton) page 153” to support its claim may be the result of confusion with a cost docket in Minnesota where hearings were conducted on that date. Qwest asserts that there is no basis in the record that supports Covad’s allegation. Qwest maintains that its Miscellaneous Charges are supported by Exhibit 2023, and the additional information provided in C-2024.

194 **Decision:** I do not find Covad’s argument compelling because it is not supported by the record in this proceeding. However, Qwest fails to provide the necessary support for its proposal. Qwest must reduce the work time estimates for this element by 30 percent for the reasons stated above in paragraphs 62 through 65.

**x. UNE Combinations**

195 **Discussion:** Qwest states that UNE-P involves the provision of UNE combinations to CLECs. The UNE platform consists of either 1) UNEs already existing in combination to serve existing customers, or 2) combinations of UNEs not previously combined to serve new customers. *Qwest Brief, at page 38.* Staff believes that Qwest’s proposed rates for these network elements are appropriate. *Staff Brief, at page 11.*

196 WorldCom argues that Qwest’s cost study includes costs for inappropriate activities, overstates work time estimates, and lacks the level of documentation to meet TELRIC standards. Specifically, WorldCom claims that Qwest assumes excessive time to validate data, and that its jumper running times are overstated because Qwest assumes

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<sup>127</sup> Exhibit No. T-2100, at pages 23-25 (Easton).

that all jumpers are run one at a time instead of in combination. *WorldCom Brief, at pages 53-58.*

197 **Decision:** The record is sufficiently developed with respect to jumper running times and indicates that it is unlikely that the average time for a technician to complete this task will approach one minute as suggested by WorldCom.<sup>128</sup> Therefore, Qwest's jumper running times are approved. However, all additional work time estimates must be adjusted by the 30% factor as discussed above.

**y. UNE-P Conversions**

198 **Discussion:** Qwest maintains that it has prepared a nonrecurring cost study that identifies the costs associated with the provision of UNE-P for POTS (including Centrex, PAL and analog PBX), PBX DID Trunks, ISDN-BRI and ISDN PRI. In addition, this study purportedly identifies the nonrecurring costs associated with providing combinations of design type services, the nonrecurring costs incurred by Qwest to convert existing customers to UNE-P, and the nonrecurring costs to provide new UNE-P service. *Qwest Brief, at pages 39-40.* Commission Staff believes that Qwest's proposed rates for these network elements are appropriate. *Staff Brief, at page 12.*

199 **Decision:** Qwest fails to provide the necessary support for its proposal. Qwest must reduce the work time estimates for this element by 30 percent for the reasons stated above in paragraphs 62 through 65.

**z. UNE-P New Connection**

200 **Discussion:** Qwest claims that its UNE-P POTS nonrecurring cost study identifies the nonrecurring costs incurred by Qwest to provide new service via UNE-P to a CLEC. In this instance, the customer location does not have existing service.<sup>129</sup> Qwest argues that WorldCom's proposed adjustments for this element are improper and unsupported. According to Qwest, WorldCom's witness proposed 50% reductions in work times but could not specify whether Qwest's work times were overstated or if the probability of occurrence was too high.<sup>130</sup> Staff believes that Qwest's proposed rates for these network elements are appropriate. *Staff Brief, at page 12.*

201 WorldCom argues that its witness was unable to provide more specific recommendation on these issues because Qwest's supporting documentation,

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<sup>128</sup> TR at 4939-41.

<sup>129</sup> Exhibit No. T-2020, at page 12 (Million).

<sup>130</sup> TR at 4934-5.

including discovery responses, lacked adequate descriptions of the tasks being performed. *WorldCom Reply Brief, at pages 30-31.*

202 **Decision:** WorldCom’s argument is compelling, even if its proposed work time adjustment is unsupported by the evidence through no fault of its own. The record indicates that there are several inconsistencies within Qwest’s cost study and support documentation. For example, Exh. C-2024 indicates that its source data is from 1999. Qwest did not provide sufficient evidence to support these values and there is no evidence that supports the supposition that the data has been updated to reflect recent productivity gains. Moreover, the supporting documentation appears to include, without explanation, the cost of reconnecting a customer line, even though it claims to estimate the cost of establishing a new service connection.<sup>131</sup> Qwest’s proposed nonrecurring rate for UNE-P New Connection must be adjusted to eliminate work time for reconnecting a customer line, and other work times must be adjusted by a 30% reduction as discussed above.

**aa. Unbundled packet Switching**

203 **Discussion:** Qwest contends that FCC rules only require it to offer TELRIC rates for unbundled packet switching (“UPS”) where Qwest is providing a similar service to its own retail customers through remote Digital Subscriber Line Access Multiplexers (“DSLAMs”) at the end of Qwest fiber-feeder. What’s more, there must also be no available space for a CLEC to collocate a similar DSLAM and no alternative to provide DSL service through a direct copper loop between the customer and the CLEC. *Qwest Brief, at page 41.*

204 Where these conditions are present, Qwest provides UPS interface ports at either a DS1 or DS3 level in the central office. The ports are the physical entry points into the Asynchronous Transfer Mode (“ATM”) Cell Relay Service Network and include the electronic equipment used in connecting the channel to the ATM Cell Relay Service Network. In addition, the service includes an unbundled packet switch Customer Channel that provides the path from the remote DSLAM to the interface port, including all functionality of the DSLAM. According to Qwest, if a CLEC chooses to provide its own facility from the DSLAM to the central office, Qwest offers an alternative to the Customer Channel that only provides the DSLAM functionality. When developing costs Qwest allegedly estimated the efficient replacement cost of overlaying remote DSLAMs on the existing network and installing integrated cabinets in some areas to provide UPS to all customers served by a loop with fiber feeder running to a digital loop carrier (“DLC”) terminal. Qwest claims to have based its study on its actual cost of installing remote DSLAMs in environmentally sound cabinets to provide UPS for customers served by DLC. *Qwest Brief, at pages 64-65.*

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<sup>131</sup> Exhibit No. 2023, at page 360.

205 Covad claims there are numerous faults in Qwest's UPS proposal. Covad states that because the Commission concluded in the Part B Order that Qwest's "DA Hotel" proposal provides a significant barrier to entry, it follows then that Qwest's UPS rates create similar barriers because they are based on the same architecture. Covad maintains that under the rationale and precedent previously articulated by the Commission, Qwest's UPS rates must be rejected and any consideration of those rates in the future should be included in a proceeding in which the Commission considers all of the technical, costing, and pricing issues associated with CLEC access to fiber fed loops. *Covad Brief, at page 17.* Covad also claims that Qwest's proposal is discriminatory because Qwest utilizes its packet switched network to provide an end-to-end service to its customers but a CLEC's use would be restricted to transmission and DSLAM functionality between the CO and remote terminal.<sup>132</sup> Thus, the "last half-mile" to the customer is utilized by Qwest but unavailable to CLECs. *Covad Brief, at page 24.*

206 According to Qwest, the Commission reached its aforementioned conclusion concerning DA Hotels based on the assumption that the DA Hotel proposal only provided CLECs the ability to share the distribution portion of the loop but not the feeder portion, and based on its interpretation of language in the FCC's Line Sharing Reconsideration Order about line sharing over DLC facilities. *Qwest Reply Brief, at page 17.* However, Qwest argues that its current UPS proposal does not limit a CLEC's ability to access the feeder portion of the loop for three reasons: 1) CLECs can purchase the distribution subloop to provide service to the end-user customer; 2) another CLEC ("CLEC2") can purchase the entire UNE loop and the CLEC purchasing UPS ("CLEC1") can purchase distribution from CLEC2; and 3) for loops over which Qwest provides voice service, a CLEC can line-share over the distribution subloop. *Qwest Brief, at page 65.*

207 Qwest also argues the FCC clarified that the Line Sharing Reconsideration Order in no way modified the criteria set forth in the Commission's UNE Remand Order regarding the unbundling of packet switching functionality.<sup>133</sup> Thus, UPS continues to be required only where specific circumstances are present. Further, Qwest states that the FCC specifically declined to adopt definitions of packet switching that excluded DSLAMs from the packet switching functionality in the UNE Remand Order.<sup>134</sup> Qwest concludes that there is no basis for the Commission to reject Qwest's DSLAM-based UPS architecture when the FCC has specifically accepted this architecture. *Qwest Reply Brief, at page 17-18.*

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<sup>132</sup> TR at 4456.

<sup>133</sup> Qwest cites *In the Matter of Deployment of Wireline Services Offering Advanced Telecommunications Capability and Implementation of the Local Competition Provisions of the Telecommunications Act of 1996*, CC Docket No. 98-147 and CC Docket No. 96-98 (released February 23, 2001) ("Order Clarification"), at para. 1.

<sup>134</sup> Qwest Reply Brief, at page 18, citing the UNE Remand Order, at para. 303-304.



- 208 Covad claims that Qwest's proposal should be rejected because Qwest fails to show that its UPS proposal is the most efficient least cost solution. As a remedy, Covad argues that UPS costs should reflect the use of Next Generation Digital Line Carrier ("NGDLC"). Covad claims that NGDLC architecture exhibits an investment of \$123 per subscriber, whereas the Qwest DA Hotel solution costs four times that amount – requiring an investment of \$514 per subscriber.<sup>135</sup> *Covad Brief, at page 19-22.*
- 209 Qwest claims that Covad offered no cost study to support the claim that NGDLC architecture would be cheaper than Qwest's overlay solution, but instead relied on general claims about the falling cost of digital telecommunications equipment.<sup>136</sup> *Qwest Brief, at page 65.* Qwest maintains that it submitted evidence establishing that NGDLC is not the least-cost solution, and therefore, Covad's proposal is without merit.<sup>137</sup> Moreover, Qwest maintains that Covad's least cost solution is inconsistent with previous decisions because it appears to assume that DLC systems will be deployed throughout 100% of the network, rather than the 40-60% DLC architecture assumption the Commission relied upon to establish Qwest's loop rates. *Qwest Reply Brief, at page 18.*
- 210 Covad argues that Exhibit No. C-2074 demonstrates that Qwest's UPS proposal is based on an "overlay" approach. According to Covad, the "overlay" approach utilized by Qwest is nothing more than an embedded cost approach and does not comply with TELRIC principles. *Covad Brief, at page 23.*
- 211 Covad claims that it is uncertain whether Qwest's UPS product offering is competitively viable and legally sufficient because Qwest offers UPS at an unspecified bit rate. Covad argues that CLECs may not be able to differentiate its product from Qwest based on quality of service because it will be unable to ensure a specific class or quality of service to their end users. Of even greater concern to Covad are the charges associated with ordering UPS. Covad contends that a CLEC would have to pay at least \$2 more than Qwest's xDSL retail rates in order to cover just its costs in obtaining UPS.<sup>138</sup> *Covad Brief, at page 24.*
- 212 Qwest contends that it did not specify a bit rate because a CLEC can run whatever rate it wants through the virtual channel which shares a digital pipe with other Qwest and CLEC services between the DSLAM and the ATM switch port. At peak times Qwest agrees that all services in a virtual channel may face restricted bandwidth. However, if Covad wants a committed bit rate, Qwest contends that Covad may order an appropriately sized subloop feeder to connect the DSLAM to the ATM port and a dedicated loop of the same size. *Qwest Reply Brief, at page 19.*

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<sup>135</sup> TR at 5063-4.

<sup>136</sup> Exhibit No. T-2370, at pages 9-11 (Donovan).

<sup>137</sup> Exhibit No. C-2074.

<sup>138</sup> See TR at 4452-56.

- 213 Covad argues that it is improper for CLECs to have to pay UNE rates based on anything other than an architecture that is least cost, forward-looking, and utilizing the most efficient architecture and equipment. Thus, Qwest's UPS costs and rates should be rejected, and Qwest should be ordered to rerun its cost models with an architecture based on NGDLC. *Covad Brief, at pages 24-25.*
- 214 **Decision:** In the Part B Order the Commission rejected both Qwest's and Verizon's proposals for providing CLECs access to fiber fed loops. The Commission also declined to adopt Covad's proposal to base these costs on NGDLC architecture because the record was not sufficiently developed at the time. In reaching that decision, the Commission found that its interests were best served by waiting for the outcome of one or both of the investigations being conducted by the California Public Utilities Commission and the FCC. These investigations were long underway and presumably close to assessing the technical feasibility of various line sharing over fiber and UPS architectures.
- 215 The record in this proceeding indicates that not much progress has been made since the Commission last considered these interrelated issues. Neither the FCC nor the CPUC has released findings. Indeed, the FCC has suggested that the services in question should receive less regulatory attention. Therefore, Qwest's UPS rates are approved on an interim basis, subject to the work time adjustments required by this decision so that CLECs may have the opportunity to order UPS. While Qwest's UPS proposal is based on the same DA Hotel architecture that the Commission rejected in the Part B Order, the record does not support rejecting Qwest's UPS proposal in favor of costs based on NGDLC. As part of this decision, it is recommended that the Commission affirm its previous decision to address issues regarding CLEC access to fiber-fed loops at a later date.<sup>139</sup>
- 216 Covad expresses concern that Qwest's UPS proposal would result in a price squeeze for carriers because the charges associated with ordering UPS would require a CLEC to pay at least \$2 more than Qwest's xDSL retail rates in order to cover just its costs in obtaining UPS. However, the record on this issue is not sufficiently developed to support Covad's argument. The remainder of Qwest's proposal is reasonable and is approved.

#### **bb. Operator Services / Directory Assistance**

- 217 **Discussion:** Qwest believes that the FCC's UNE Remand Order exempts Operator Services ("OS") and Directory Assistance ("DA") from TELRIC pricing as an unbundled network element so long as Qwest provides CLECs with access to customized routing. Because Qwest believes it provides access to customized routing, and because operator services and directory assistance are competitive

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<sup>139</sup> See Part B Order, at para. 43-44.

services, Qwest has submitted a market rate for call branding and switch set-up associated with OS and DA in its SGAT. The rate for call branding is allegedly the result of a retail study based primarily on the charges Qwest incurs with an outside vendor each time a CLEC requests this service. Qwest did not provide this study or the attendant documentation in this proceeding because it considered this service to be the subject of market, rather than TELRIC, pricing. *Qwest Brief, at pages 42-43.*

218 WorldCom contends that the FCC has found that to the extent technically feasible, an ILEC must identify and re-brand the traffic it provides to its competitors.<sup>140</sup> WorldCom argues that even if the incumbent provides customized routing, it is still obligated to provide nondiscriminatory access to its OS/DA. Thus, WorldCom argues that even if the Commission concludes that TELRIC rates are not required for branding, the Commission should nonetheless establish TELRIC rates for branding so that CLECs may receive nondiscriminatory access (i.e., access to branding at Qwest's cost.) WorldCom requests that Qwest's proposed branding rates be rejected and that Qwest be required to submit cost studies to support its nonrecurring rates. *WorldCom Brief, at page 59-61.*

219 According to Commission Staff, regardless of how the Commission resolves arguments relating to customized routing, Qwest should be required to submit cost studies for its Operator Services/Directory Assistance costs, to allow the Commission to determine whether Qwest's price exceeds its costs to ensure that these rates are not being subsidized by other services in violation of RCW 80.36.300(4). *Staff Reply Brief, at page 8.*

220 **Decision:** In light of the decision regarding customized routing, Qwest must file cost studies for this network element to be offered at cost based rates. Commission Staff does not identify how these rates might be cross subsidized by other services, but it appears that the filing of cost studies will enable Staff to perform all necessary analysis.

### cc. Directory Listings

221 **Discussion:** Qwest states that directory assistance listing ("DAL") information consists of name, address and telephone number information for all end users of Qwest and other LECs that are contained in Qwest's directory assistance database, and -- where available -- related elements required in the provision of directory assistance service to CLEC's end users.<sup>141</sup> Qwest proposes the use of market-based pricing for the provision of DAL information.<sup>142</sup> *Qwest Brief, at page 67.*

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<sup>140</sup> UNE Remand Order, at para. 443.

<sup>141</sup> Exhibit No. 2059 - Section 10.6.1.1.

<sup>142</sup> Exhibit No. T-2131, at page 11 (Malone).

222 WorldCom contends that the FCC determined in the Local Competition Order that the DAL database is a UNE under section 251(c)(3).<sup>143</sup> WorldCom states that DAL is also subject to the Telecom Act's nondiscriminatory access requirements of section 251(b)(3). Thus, WorldCom claims that the DAL database must be unbundled and provided to CLECs at TELRIC based rates. *WorldCom Brief, at pages 80-82.*

223 Qwest claims that WorldCom's argument that the FCC declared the DAL database a UNE is erroneous.<sup>144</sup> Qwest argues that the body of the UNE Remand Order does not identify the DAL database as a UNE and does not order ILECs to provide DAL at TELRIC pricing. According to Qwest, the FCC's UNE Remand Order discusses DAL in conjunction with OS/DA services more generally and holds that ILECs need not unbundle OS/DA as long as the ILEC also provides CLECs with customized routing. Thus, Qwest claims that its market based pricing proposal is appropriate because the company offers customized routing. *Qwest Brief, at page 67.*

224 WorldCom claims that in the recent DAL Provisioning Order,<sup>145</sup> the FCC recognized that ILECs continue to charge CLEC and competing DA providers discriminatory rates for DAL. WorldCom concedes that while the FCC declined to adopt a specific pricing structure for DAL it encouraged states to set their own rates consistent with the nondiscriminatory access requirements of 251(b)(3). WorldCom notes that the FCC cited a decision of the New York Public Service Commission in which it established cost-based rates.<sup>146</sup> WorldCom suggests that the Commission should reach a similar conclusion. Furthermore, WorldCom argues that the FCC recently reaffirmed that ILECs must "make available to unaffiliated entities all of the in-region telephone numbers they use to provide non-local directory assistance service at the same rates, terms and conditions they impute to themselves"<sup>147</sup> and "comply with the nondiscrimination requirements set forth in section 272(c)(1)."<sup>148</sup> WorldCom argues that because Section 251(b)(3) mandates nondiscriminatory access between all competitive providers, Qwest must provide DAL at the same price it imputes to itself or, put another way, at cost. *WorldCom Brief, at pages 82-83.*

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<sup>143</sup> Local Competition Order, at para. 538.

<sup>144</sup> Exhibit No. T-2320, at page 5 (Lehmkuhl).

<sup>145</sup> *Provision of Directory Listing Information under the Telecommunications Act of 1934, As Amended*, CC-Docket No. 99-273 FCC 01-27 (rel. January 23, 2001) ("DAL Provisioning Order").

<sup>146</sup> DAL Provisioning Order, at para. 38, citing Opinion and Order in Module 1 (Directory Database Services), Case 98-C-1375, Opinion No. 00-02, State of New York Public Service Commission (Feb. 8, 2000).

<sup>147</sup> *FCC Memorandum Opinion and Order, In the Matter of the Petition of SBC Communications Inc. for Forbearance of Structural Separation Requirements and Request for Immediate Interim Relief in Relation to the Provision of Nonlocal Directory Assistance Services, et al*, CC Docket No. 97-172, DA 00-514, (rel. April 11, 2000) ("SBC Forbearance Order"), at para 2.

<sup>148</sup> SBC Forbearance Order, at para. 15.

225 Qwest states that WorldCom's witness could not explain what it meant by cost-based pricing for DAL,<sup>149</sup> did not offer its own cost model,<sup>150</sup> and did not offer evidence that Qwest's proposed market-based prices are discriminatory. Qwest argues, therefore, there is no evidentiary basis in the Part D record from which the Commission could conclude that Qwest's DAL rates are discriminatory. *Qwest Brief, at page 67.*

226 Furthermore, Qwest argues that the FCC recognized that obtaining customer listing was one of the costs of self-provisioning directory assistance services. Qwest further argues that the FCC rejected the argument that self-provisioning directory assistance service, including obtaining customer listings, would involve substantial and material cost and delay competitive entry into the local market. Qwest contends that the FCC's recognition of alternatives available to the use of Qwest's customer listing negates the need for regulated prices justifying approval of market based rates for this element. *Qwest Brief, at page 68.*

227 WorldCom represents that the Texas Commission has already set cost based rates for DAL and that the California Commission has ordered that cost based rates be considered in one of its cost proceedings.<sup>151</sup> WorldCom claims the record shows that as late as the fourth quarter of 1999 the average TELRIC rate for DAL over Qwest's 14 state territory ranged between \$0.0073 per listing for initial loads and \$0.0171 per listing for daily updates.<sup>152</sup> Thus, WorldCom claims that there is no basis for imposing a "market rate" of 2.5 cents per initial listing and 5 cents for each update. WorldCom suggests that the Commission adopt the aforementioned TELRIC rates as an interim solution and order Qwest to submit TELRIC studies for DAL. *WorldCom Brief, at page 83.*

228 WorldCom also argues that Qwest's proposed reload-of-refresh rate is unreasonable.<sup>153</sup> According to WorldCom, Qwest incurs programming costs whenever reloads are furnished since the data needs to be extracted from Qwest's databases. However, WorldCom claims that Qwest does not incur other costs associated with setting up a new account—charges that Qwest presumably recoups when it charges for an initial listing. Therefore, WorldCom proposes that in situations where WorldCom may need a reload through no fault of Qwest, WorldCom should reimburse Qwest for reasonable programming fees and computer time to extract the reload data. Qwest should continue to provide reload data at no charge

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<sup>149</sup> TR at 4977-80.

<sup>150</sup> TR at 4983.

<sup>151</sup> See *Application by Pacific Bell Telephone Company (U 1001 C) for Arbitration of an Interconnection Agreement with MCImetro Access Transmission Services, L.L.C. (U 5253 C) Pursuant to Section 252(b) of the Telecommunications Act of 1996*, Decision No. 01-09-054, Application No. 01-01-010 (Filed January 8, 2001), 2001 Cal PUC Lexis 821 (September 20, 2001).

<sup>152</sup> Exhibit No. 2135.

<sup>153</sup> Exhibit No. 2056, - Section 10.6.2.

when the need for the reload is attributable to Qwest's provision of corrupted data. *WorldCom Brief, at pages 84-85.*

229 Qwest disagrees with WorldCom's assertion that DAL rates should be cost based and that reload rates should be lower than initial load rates for several reasons. First, since DAL listings are not UNEs, Qwest does not assert that its proposed rates are TELRIC. Thus, WorldCom's argument about reduced costs to Qwest is irrelevant. Second, to the extent Qwest is "recouping" new account set-up costs, it does so through its separate one-time set up fee.<sup>154</sup> Finally, WorldCom's argument overlooks the fact that Qwest does in fact charge 20% less for reloads than it does for the initial loads.<sup>155</sup> *Qwest Reply Brief, at pages 14-15.*

230 WorldCom also objects to Qwest's insertion of a transport fee of \$0.002 per listing for DAL. WorldCom claims that it has already expended financial and capital resources to build and maintain its own electronic system for receiving DAL information from Qwest known as NDM or "network data mover." WorldCom argues that if it is required to pay Qwest to transport the data over WorldCom's own facilities, then WorldCom would consequently pay twice for transport and would unjustly enrich Qwest.<sup>156</sup> *WorldCom Brief, at page 84.*

231 Commission Staff agrees with WorldCom witness Michael Lehmkuhl<sup>157</sup> that the Commission may adopt TELRIC rates for DAL because the Telecommunications Act recognizes that states may adopt additional unbundling requirements above and beyond those on the FCC's national list. However, Staff supports Qwest's position on the per-query issue. Staff states that in the Commission's review of Qwest's compliance with section 271 of the Act, the Commission determined that FCC decisions require access to call-related databases only at the signaling transfer point on a per-query basis. Thus, allowing CLECs to access and purchase the database services on a bulk basis in this proceeding would be inconsistent with this Commission's prior order.<sup>158</sup> *Staff Brief, at pages 12-13.*

232 **Decision:** Qwest's essential argument is that the Commission should approve its market-based DAL rate proposal because the company offers customized routing. However, in light of the decision regarding Qwest's customized routing proposal, Qwest's market-based rate proposal for DAL is also rejected.

233 Even if the Commission subsequently finds that Qwest's provisioning of customized routing qualifies for the FCC's OS/DA exemption, Qwest's DAL proposal should be

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<sup>154</sup> Exhibit No. 2056 - Section 10.6.4.

<sup>155</sup> Exhibit No. 2056 - Sections 10.6.1, 10.6.2.

<sup>156</sup> Exhibit No. T-2320, at page 10 (Lehmkuhl).

<sup>157</sup> See Exhibit No. T-2320, at pages 6-7.

<sup>158</sup> See Docket Nos. UT-003022/003040, Qwest Section 271 Application for Washington State, Revised Initial Order (August 31, 2000), at para. 146-162.

rejected because WorldCom presents convincing evidence and arguments that market-based rates for DAL are discriminatory and, therefore, contradict both the Telecom Act and FCC orders. For example, the FCC states in the DAL Provisioning Order:

Section 251(b)(3) of the Act and the Commission's rules prohibit LECs from charging discriminatory rates, for access to DA databases, to competing directory assistance providers that fall within the protection of that section (i.e., those that provide telephone exchange service or telephone toll service). Thus, LECs must offer access to their DA database at rates that do not discriminate among the entities to which it provides access. Further, failure to provide directory assistance at nondiscriminatory and reasonable rates to DA providers within the protection of section 251(b)(3) may also constitute an unjust charge under section 201(b).<sup>159</sup> (*Footnotes omitted*).

234 Furthermore, while the FCC declined to adopt a specific pricing standard in its SBC Forbearance Order the FCC did conclude that the ILECs “must make available to unaffiliated entities all of the directory listing information that they use to provide regionwide directory assistance service at the same rates, terms, and conditions they impute to themselves...”<sup>160</sup> Therefore, Qwest’s proposal is rejected because it fails to consider the cost Qwest actually incurs to provide DAL.<sup>161</sup>

235 WorldCom’s proposal to adopt the rates cited in Exhibit No. 2135 on an interim basis is approved. While these rates may be in need of an update, they are a reasonable proxy for Qwest’s forward-looking costs. These rates should remain in effect until Qwest submits and the Commission approves a Washington-specific cost study that complies with TELRIC principles.<sup>162</sup> These decisions are consistent with Staff’s argument and the FCC determination in the SBC Forbearance Order that ILECs must make DAL information available at the same rates, terms, and conditions they impute to themselves.

236 WorldCom’s argument that Qwest should not be permitted to charge an additional fee for DAL transport is also persuasive. The unchallenged evidence cited by WorldCom

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<sup>159</sup> DAL Provisioning Order, at para. 35.

<sup>160</sup> SBC Forbearance Order, at para. 15.

<sup>161</sup> “Qwest does not assert that its proposed [DAL] rates are TELRIC.” *Qwest Reply Brief, at pages 14-15.*

<sup>162</sup> A Washington specific study is necessary because the rates found in Exhibit No. 2135 are company wide. That is, “...US West’s TELRIC prices vary across our 14 states, but average out at \$0.0073 per listing for the initial load of the database and \$0.0171 per listing for daily listing record updates.” Exhibit No. 2135, at page 5.

indicates that it has already incurred the cost to provide transport.<sup>163</sup> Permitting Qwest to charge an additional transport fee would unjustly enrich Qwest. Consistent with WorldCom's proposal, Qwest must continue to provide reload data at no charge when the need for the reload is attributable to Qwest's provision of corrupted data. However, WorldCom fails to show that Qwest avoids any costs in reloading DAL data. Qwest argues convincingly that the "avoided cost" WorldCom seeks to exclude from the reload rate was never included in the rate element, and a discount is inappropriate.<sup>164</sup>

237 Finally, Staff's argument regarding per-query access to the DAL database is rejected as it contradicts the FCC findings that:

... LECs must transfer directory assistance databases in readily accessible electronic, magnetic tape, or other format specified by the requesting LECs, promptly upon request, as indicated below. We also conclude that non-discriminatory access requires that updates be provided to requesting LECs in the same manner as the original database transfer, and that such updates be made at the same time as updates are made to the providing carrier's database. Consistent with our conclusion today in the Third Report and Order, the providing LEC shall provide access to its directory assistance database in any format specified by the requesting LEC, if the providing LEC's internal systems can accommodate that format.<sup>165</sup> (footnotes omitted)

238 The FCC makes a distinction between DAL and other call-related databases. In 1996 the FCC determined that "LECs, upon request, must provide nondiscriminatory access on an unbundled basis to their call-related databases for the purpose of switch query and database response through the SS7 network." *Local Competition Order, at para. 484*. The FCC defined call-related databases as those SS7 databases used for billing and collection or used in transmission, routing, or other provision of a telecommunications service. *Local Competition Order, at footnote 1126*. The FCC defined query and response as: "Query and response access to a call-related database is intended to require the incumbent LEC only to provide access to its call-related databases as is necessary to permit a competing provider's switch (including the use

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<sup>163</sup> Exhibit No. T-2320, at page 10 (Caputo).

<sup>164</sup> Exhibit No. 2056 - Section 10.6.4.

<sup>165</sup> *In the Matters of Implementation of the Telecommunications Act of 1996, Telecommunications Carriers' Use of Customer Proprietary Network Information and Other Customer Information, Implementation of the Local Competition Provisions of the Telecommunications Act of 1996, Provision of Directory Listing Information*, Third Report and Order in CC Docket No. 96-115, Second Order on Reconsideration in CC Docket No. 96-98, and Notice of Proposed Rulemaking in CC Docket No. 99-273, FCC 99-227 (Rel. September 9, 1999) ("1999 Directory Listing Order"), at para. 153.



of unbundled switching) to access the call-related database functions supported by that database." *Local Competition Order, at footnote 1127.*

239 However, in the 1999 Directory Listing Order the FCC rejected per-query access to operator service and directory assistance databases because it was discriminatory. In the 1999 Directory Listing Order, at paragraph 151, MCI requested that the FCC clarify "that the *Local Competition Second Report and Order* requires providing LECs to share directory assistance databases in magnetic tape or electronic format at the election of the requesting carrier." The FCC agreed, and ordered bulk access at paragraph 152. Thus, the FCC allows ILECs to limit CLECs to per query access to call-related databases that switches use to complete calls, but requires bulk access of directory listing information.

**dd. Operator Services**

240 In light of the decision regarding Qwest's customized routing proposal, the parties' arguments concerning the propriety of Qwest's OS/DA proposal is moot. Qwest's market-based rate proposal is rejected, and Qwest must offer OS and DA at the TELRIC rates established in UT-960369 to CLECs whose customized routing needs have not been accommodated by Qwest.

**ee. Access to Poles, Conduit, and Rights of Way**

241 **Discussion:** Access to poles, ducts and rights-of-way ("ROW") provides CLECs the ability to attach facilities to Qwest-owned or controlled poles, ducts, and ROW in order to provide telecommunications services. Qwest offers access on a first-come, first-served basis to existing facilities that are not allocated for repair, emergency or projects in progress. Although some of these rate elements were considered in Part B, Qwest filed revised rates for each of the nine pole, conduit, and ROW access elements in this proceeding because Qwest believes that updates are necessary.<sup>166</sup> Qwest's proposal calls for nonrecurring elements associated with Pole Inquiry Fee (per inquiry), Innerduct Inquiry Fee (per inquiry), ROW Inquiry Fee, ROW Document Preparation Fee, Field Verification Fee (per Pole), Field Verification Fee (per Manhole), Planner Verification (per Manhole), Manhole Verification Inspector (per Manhole), and Manhole Make-Ready Inspector (per Manhole).

*Qwest Brief, at pages 43-44.*

242 WorldCom argues that many of Qwest's work times should be reduced because they are overstated while others must be eliminated altogether because they are associated with unnecessary activities. Generally, WorldCom argues that CLECs should not have to compensate Qwest for Pole, Innerduct, or ROW Inquiry fees since the database inquiries do nothing to reduce the need for physical inspections. WorldCom also challenges the amount of time Qwest assumes is necessary to conduct field

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<sup>166</sup> Exhibit No. 2046 and Exhibit No. 2050.

verification and argues that Qwest should not be compensated for field verification costs associated with updating Qwest's database. WorldCom claims it is inconsistent with TELRIC principles to charge CLECs to update Qwest's databases because the fact that Qwest's databases are unreliable is not caused by a CLEC application, even if the application is the event that brings the problem to light. *WorldCom Brief, at pages 62-63.*

243 **Decision:** Qwest has included an unreasonable amount of time for database and field verifications with respect to access to poles, conduit, and rights of way. In the Part B Order the Commission expressed concern that Qwest's proposal would lead to excessive recovery of costs. The Commission also noted that the record was not sufficiently developed to reach a definitive conclusion.<sup>167</sup> This Order affirms the Commission's Part B findings with regard to access to poles, conduit, and rights of way. However, Qwest also must reduce work time estimates by 30 percent for the reasons stated above in paragraphs 62 through 65, to the extent that the adjustment does not conflict with the Commission's Part B Order.

#### **ff. Bona Fide Request Process**

244 **Discussion:** Qwest claims that its estimate of the time needed to complete a bona fide request ("BFR") process is based on the experience of its SMEs in analyzing requests by CLECs for services or arrangements that it does not currently provide. The estimates provided by Qwest's SMEs allegedly represent the average amount of time spent on each particular activity. *Qwest Brief, at page 51.*

245 WorldCom maintains that Qwest has overestimated the cost of conducting the BFR process by inflating work times and including time estimates for unnecessary activities. WorldCom suggests that the Commission require Qwest to reduce its work time estimates so that BFR cost are developed using no more than 3.5 hours for the Infrastructure Availability Center and 13.5 hours for its Interconnection Planning group. *WorldCom Brief, at pages 67-69.*

246 Qwest argues that the work time reductions proposed by WorldCom should be rejected because they are speculative suggestions made by a witness who has no familiarity with Qwest's processes. Qwest states that the only type of request handled through the BFR process is one where there is a question of technical feasibility. Therefore, Qwest believes its time estimates are appropriate because the process requires that many people will be consulted and actual "thinking time" must be considered to apply creative solutions to new questions. *Qwest Brief, at page 51.*

247 WorldCom claims that work time estimates are overstated because Qwest fails to demonstrate that its study excludes the cost associated with "thinking time" for BFRs

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<sup>167</sup> Part B Order, at paras. 163-171.

that address identical issues. WorldCom argues that Qwest should not be compensated more than once for “thinking time” for repeating an identical task. *WorldCom Reply Brief, at page 33.*

- 248 **Decision:** Qwest overstates the work time necessary to complete the BFR process. Qwest must reduce its proposed BFR charge by 30 percent, or in effect, recalculate its costs using no more than 18.2 hours of activity, consistent with work time adjustments established by this Order for the reasons stated above in paragraphs 62 through 65.
- 249 WorldCom argued in favor of significant work time reductions so that Qwest would not be compensated twice for “thinking time” associated with identical BFR feasibility analysis. WorldCom’s arguments are not persuasive. WorldCom cites Qwest’s response to data request WCI 06-457 to show that Qwest processed identical BFRs in 2000 and 2001. However, the information cited by WorldCom is no longer germane because Qwest during the Section 271 workshop process before this Commission agreed that once physical feasibility has been addressed, future requests would be addressed via the special requests process.<sup>168</sup>
- 250 In order to clarify the distinction between BFRs and special requests, Qwest must provide CLECs, upon request, an updated company-wide list of topics for which technical feasibility has already been considered in the BFR process. This will allow CLECs to more accurately determine and audit the charges they expect to incur when making requests for different interconnection services.

### 3. QWEST’S RECURRING COSTS

#### a. Overview

- 251 Qwest uses several different investment models to calculate UNE investments.<sup>169</sup> According to Qwest UNE investments represent the capital expenditures for materials and installation that would be necessary in order for Qwest to replace its network facilities. Exhibit No. 2021 contains electronic copies of each Qwest investment model, along with the model documentation describing the methodology used in each model, along with instructions on how to run the model. *Qwest Brief, at page 52.*

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<sup>168</sup> TR at 4557-9.

<sup>169</sup> The studies filed in this proceeding calculate costs using the following investment models: Loop Module (“LoopMod”); Usage Model (“SUM”); Switching Cost Model (“SCM”) Features Module; Dark Fiber Module; OCn NAC Model; OCn Extended Unbundled Dedicated Interoffice Transport (“EUDIT”) NAC Model; Signaling (“SIS”) Model; and Wholesale Cost Program (also referred to as “WINPC3”).

**b. Factors**

252 Discussion and decisions regarding factors in the context of Qwest's nonrecurring  
cost proposal are identical to factors issues in the context of recurring costs, and will  
not be repeated here.

**4. QWEST'S INDIVIDUAL RECURRING RATES****a. Collocation****i. Channel Regeneration**

253 **Discussion:** Qwest states that it will provide channel regeneration without additional  
charge to a CLEC if such regeneration is necessary to meet the ANSI standard for the  
particular facility requested. Qwest also offers channel regeneration as an optional  
service that a CLEC may request even though regeneration is not required to meet the  
ANSI standards.<sup>170</sup> Commission Staff raised concerns regarding Qwest's initial  
proposal in prefiled testimony. In response to Staff's testimony, Qwest claims to  
have modified its cost study to revise how it recovers its costs for channel  
regeneration.<sup>171</sup> With that modification, Qwest does not believe that there are any  
disputed issues remaining regarding the channel regeneration element. *Qwest Brief,*  
*at page 53.* Commission Staff agrees that Qwest has addressed its concerns, and Staff  
supports the rates proposed by Qwest in Exhibit No. 2050.<sup>172</sup> *Staff Brief, at page 14.*

254 WorldCom expresses concern that Qwest inflates costs by assuming an excessive  
percentage of outside vendor labor in its study. WorldCom suggests that the  
Commission require Qwest to recalculate its costs assuming 80% Qwest labor.  
*WorldCom Brief, at page 71.*

255 **Decision:** WorldCom's argument is not persuasive because it is not sufficiently  
supported by the record. Based on the evidence cited by Qwest and Staff, Qwest's  
proposed channel regeneration rates are reasonable and are approved.

**ii. Fiber Terminations**

256 **Discussion:** Qwest states that in Part A of this proceeding the Commission ordered  
Qwest to make a compliance filing using Verizon's proposed rates for DS0, DS1 and  
DS3 terminations. According to Qwest, however, Verizon's rates for fiber  
terminations do not provide any recovery for the recurring costs associated with the  
equipment on which the fibers terminate. Therefore, Qwest submits a cost study that

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<sup>170</sup> Exhibit Nos. T-2150, at page 12, and T-2151, at pages 2-3 (Hubbard).

<sup>171</sup> Exhibit Nos. T-2049, at pages 2-3 (Million), and 2051.

<sup>172</sup> See TR at 4294.

develops a rate for recovery of the cost of the fiber distribution frame (“FDF”) and fiber distribution panel (“FDP”) upon which the fibers terminate, and the fiber jumpers necessary to make the connections.<sup>173</sup> Qwest claims that discussions with Verizon confirm that no such recurring cost was included in the study Verizon filed in Part A.<sup>174</sup> Thus, Qwest introduces an additional element that allows for recovery of FDP costs not included in the rates filed in compliance with the Commission’s Part A Order. *Qwest Brief, at page 53.*

257 **Decision:** Based on the evidence cited by Qwest, Qwest’s proposed fiber termination rates are reasonable and are approved.

#### b. Remote Collocation and Remote Adjacent Collocation

258 **Discussion:** Qwest states that there are two recurring charges associated with remote collocation and remote adjacent collocation – collocation space and FDI terminations. Qwest claims that collocation space charges are assessed on a per-SMU basis.<sup>175</sup> The recurring cost purportedly includes maintenance costs associated with collocated equipment, plus a small portion of the power pedestal expense. The recurring FDI termination cost allegedly includes the maintenance costs associated with this equipment. *Qwest Brief, at page 54.*

259 Staff notes that the Commission previously rejected Qwest’s DA Hotel proposal because it creates a significant barrier to entry.<sup>176</sup> Staff argues that the Commission should apply the “necessary and impair” standards of the Telecom Act to determine whether line splitters and packet switching should be classified as UNEs. Staff recommends that the Commission apply the FCC’s “rule of four” when deciding this issue.<sup>177</sup> Thus, Staff suggests that the ILECs be required to provide unbundled splitters and packet switching at remote locations for CLECs serving fewer than four DSL lines from a given location. *Staff Brief, at pages 14-16.*

260 **Decision:** Commission in the Part B order determined that it was prudent to defer issues relating to the cost of CLEC access to fiber fed loops to a future proceeding. While Staff proposes an interesting solution, the Part D record has not been sufficiently developed to support a definitive conclusion and Staff’s proposal would be best addressed in the broader context of the future proceeding contemplated by the

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<sup>173</sup> Exhibit No. 2031.

<sup>174</sup> TR at 4308.

<sup>175</sup> An SMU is a standard measurement of vertical space, in this case 1.75 inches, within a hardened cabinet. *Qwest Brief, at page 17.*

<sup>176</sup> 32<sup>nd</sup> Supplemental Order at para. 42.

<sup>177</sup> “The FCC used its “rule of four” when it determined that unbundled switching would no longer be required in Zone 1 wire centers for end users having four or more switched access lines.” Citing UNE Remand Order at para. 278. Staff suggests that the Commission apply an analogous test to UPS. *Staff Brief, at page 15.*

Commission. Therefore, consistent with this Order's decision regarding Qwest's nonrecurring remote collocation proposal, Qwest's recurring remote collocation charges are approved on an interim basis.

**c. CLEC to CLEC Collocation**

261 **Discussion:** Qwest proposes a recurring charge for cable racking. The charge is a per foot, per month charge that purportedly recovers the cost of the racking used to support the cabling, but not the cabling itself. Qwest states that prices also vary by the type of cabling being supported (e.g., DS0, DS1, DS3 and fiber). *Qwest Brief, at page 54.*

262 WorldCom argues that the Commission should reject Qwest's proposal because its various collocation costs studies are inconsistent. For example, if Qwest assumes a single floor central office to develop its space rental costs, WorldCom contends that Qwest should not develop cable lengths or cable racking distances based on an assumption that requires traversing multiple floors. *WorldCom Reply Brief, at page 34.*

263 **Decision:** WorldCom's arguments regarding recurring costs parallels its arguments regarding nonrecurring costs. WorldCom also suggests that Qwest's assumptions are inconsistent from one study to another, but WorldCom fails to cite evidence supporting this assertion. Thus, there is no basis to make a recurring cost decision that deviates from that made in regards to nonrecurring costs for this element. Qwest's proposed rates are approved on an adjusted basis, consistent with the decision regarding its nonrecurring CLEC to CLEC collocation rates outlined above.

**d. Space Optioning**

264 Qwest states that the recurring charge for space optioning, known as the space option fee, is \$2.00 per square foot. This fee is based on the amount of space being optioned on per-month and per-square foot basis. According to Qwest there is no cost study to support that charge because it was agreed to in the 271 workshops. *Qwest Brief, at page 56.*

265 **Decision:** Based on the evidence cited by Qwest, Qwest's proposed space optioning rate is reasonable and is approved.

**e. OCn Capable Loops**

266 Qwest states that Ocn capable loops are digital transmission paths that transport bi-directional high capacity SONET (Synchronous Optical Network) signals at varying rates of signaling capacity. The transmission path runs from a Qwest serving wire center network interface to the end user network interface located at the end user's

premises within the serving area of the wire center. The installed investments for On loops are calculated in the NAC model with investment inputs for fiber from Loomed cost model.<sup>178</sup> *Quest Brief, at page 56.* Commission Staff believes that Quest's proposed rates are appropriate. *Staff Brief, at page 16.*

267 **Decision:** Based on the evidence cited by Quest, Quest's proposed rates for this element are reasonable and are approved.

**f. OC-48 UDIT**

268 Quest claims that its cost study supporting its rate for OC-48 UDIT is consistent with the cost studies submitted in Part B for OC-3 and OC-12 UDIT. Quest maintains that the rates for the lower capacity UDITs were accepted in the Part B Order, at paragraphs 244-246. Qwest does not believe that the OC-48 UDIT rate was challenged in Part D. Qwest proposes that these rates be approved as filed. *Qwest Brief, at page 56.* Commission Staff believes that Qwest's proposed rates are appropriate. *Staff Brief, at page 16.*

269 **Decision:** Based on the evidence cited by Qwest, Qwest's proposed rates for this element are reasonable and are approved as set out in Exhibit No. 2050.

**g. UDIT/E-UDIT**

270 Qwest and Staff state that Qwest's testimony on this issue was withdrawn. *Qwest Brief, at page 30; Staff Brief, at page 16.*

271 **Decision:** These elements do not require a decision.

**h. Unbundled Dark Fiber**

272 Qwest filed a cost study supporting its costs and prices for unbundled dark fiber.<sup>179</sup> Qwest does not believe that any party took issue with any specific aspect of this study. *Qwest Brief, at page 57.*

273 **Decision:** Based on the evidence cited by Qwest, Qwest's proposed rates for this element are reasonable and are approved as set out in Exhibit No. 2050.

**i. Local Switching**

274 **Discussion:** Vertical switch features are software attributes of end office switches. Qwest offers a list of vertical features that are available to CLECs that purchase a line

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<sup>178</sup> Exhibit No. 2037.

<sup>179</sup> Exhibit No. 2038.

side port. The unbundled line port has a recurring charge to recover the cost of the port previously established by this Commission. In this proceeding, Qwest proposes an additional element of recurring cost to recover the previously unaccounted for capitalized lease cost.<sup>180</sup>

275 Qwest claims that Commission approved switching costs for Washington, which originated with an FCC Staff analysis of 1995 switch investments,<sup>181</sup> do not include Qwest's capitalized lease costs that represent the right-to-use fees Qwest pays for the additional software needed to provision vertical features in the switch. Qwest claims that the depreciation studies used in the FCC Staff's study include switching costs recorded as investments, while the capitalized lease costs were recorded as expense at the time of the analysis. Thus, the cost of the port derived from those depreciation studies excludes the capitalized lease costs for software that is critical to the functionality of the vertical features. Qwest has developed a separate study that estimates the capitalized lease costs associated with vertical features on a "per port" basis.<sup>182</sup>

276 Qwest proposes that these capitalized lease costs be added to the existing analog line-side port rate of \$1.34 per port. Qwest argues this will result in a new port rate of \$1.85 that more appropriately reflects the costs of the port and vertical features. In the company's response to Bench Request No. 48, Qwest explains why it believes that the annual charge factor of 22.95% that the Commission used in Docket Nos. UT-960369 does not include recovery of the right-to-use fees.

277 In addition to a basic analog line-side port, Qwest proposes to offer a new premium 6-way port for use primarily by Centrex customers. In addition to the costs for 6-way ports, this new premium port allegedly includes costs for Centrex Management Systems ("CMS") and certain other features used for Centrex services. Qwest states that the premium port rate is incremental to the analog line-side port rate so no additional costs for vertical features are included. However, like the analog port, the premium port would also include the capitalized lease costs associated with vertical features. Thus, the premium port is calculated by adding the analog port rate of \$1.85 to the incremental port rate of \$2.00, for a total of \$3.85.<sup>183</sup> *Qwest Brief, at pages 57-58.*

278 **Decision:** If the Commission's decision in UT-960369 did no more than rely on the FCC Staff analysis of 1995 switch investments, then Qwest's argument regarding the appropriateness of its proposed rate would have merit. However, the Commission

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<sup>180</sup> Exhibit No. T-2020, at page 27 (Million).

<sup>181</sup> See Qwest Brief, at page 58, referring to the *Eighth Supplemental Order*, at para. 299. Also see Exhibit No. 2020, at pages 26-27.

<sup>182</sup> See Exhibit No. 2032 and TR at 4308-12.

<sup>183</sup> Exhibit No. 2033.



considered other pertinent data in addition to the FCC investment analysis, most significantly vendor contracts. The Eighth Supplemental Order states:

Based upon our evaluation of data provided by the ILECs in response to various bench requests, including their vendor contracts, as well as the [FCC] Joint Board Staff switching investment analysis cited by GTE, we conclude that a reasonable value to assign the investment per working line is \$150.00.[footnote omitted] We will use this value for both GTE and U S WEST. While we recognize that historically the unit cost per line declines as the size of the switch increases, the vendor contracts provided by GTE and U S WEST indicate that the industry has moved to a per line charging mechanism in recent years.

*Eighth Supplemental Order, at para. 312.*

279 The Eighth Supplemental Order places equal weight on the various factors considered by the Commission in reaching its decision. Qwest's testimony on right-to-use fees makes no mention of how the fee was handled in the contracts referred to in the Eighth Supplemental Order. Qwest fails to meet its burden of demonstrating that the right-to-use fees it now seeks to impose were not accounted for in the Commission's prior decision through all of factors considered. For example, the vendor contracts may have included software costs. Qwest's proposed revision to the port rate for analog services is rejected.

280 However, Qwest persuasively argues that the digital market was in an early stage of development when the issue was considered in UT-960369, and therefore, the cost of the digital BRI ports was not fully reflected in the cost data. Accordingly, Qwest's proposed revision for digital services is approved. In other words, the port rate for ordinary voice service should not be increased, but it is appropriate to raise the rate for ISDN PRI port terminations.

#### **j. Vertical Features**

281 Qwest maintains that one additional feature, CLASS Call Trace, was not captured in the Commission's method of determining switching costs for two reasons. First, the CLASS Call Trace cost is developed on a "per event" basis to perform traces on calls on an as needed basis; it is not a monthly recurring charge. Second, the majority of costs for this service are based on the labor expenses of the people performing the traces, and the cost to store the data needed to complete the trace.<sup>184</sup> Thus, those costs would not be captured in an investment amount. Finally, the amount of switching cost included in the study is related to recorded announcements that Qwest

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<sup>184</sup> Exhibit No. T-2020, at page 29 (Million).

does not believe is reflected in the rates determined by the Commission. *Qwest Brief, at pages 58-59.*

282 **Decision:** Based on the evidence cited by Qwest, Qwest's CLASS Call Trace proposal is reasonable and is approved.

**k. Digital Line Side Port**

283 Qwest proposes to offer a digital line-side port, supporting BRI ISDN, in both a basic and a premium port. Qwest's rate for the basic digital line-side port allegedly includes a port rate of \$8.33 and the capitalized lease cost of \$0.51 for a total of \$8.83.<sup>185</sup> The premium digital line-side port is calculated by adding the basic port rate, including capitalized lease costs of \$8.84 to the premium increment of \$2.00, for a total of \$10.84. *Qwest Brief, at page 59.* Commission Staff believes that Qwest's proposed rates for this element are appropriate. *Staff Brief, at page 16.*

284 **Decision:** Based on the evidence cited by Qwest, Qwest's proposed rates are reasonable and are approved.

**l. Digital Trunk Ports**

285 In response to Bench Request No. 49, Qwest explains that it does not believe that the trunk port investment sought to be recovered through these charges was included in the FCC data originally used to calculate switching costs.<sup>186</sup> Commission Staff believes that Qwest's proposed rates for this element are appropriate. *Staff Brief, at page 16.*

286 **Decision:** Qwest's response to Bench Request No. 49 indicates that the FCC data used to calculate switching costs did not include certain costs related to ISDN-BRI trunk ports. However, Qwest's response only discusses changes with respect to BRI trunk ports, not standard PBX trunk ports. It is reasonable to assume that the cost of PBX trunk ports is already reflected in the FCC's calculations because PBX trunk ports were commonly available at the time the calculations were performed. Accordingly, Qwest's proposal is approved only with respect to ISDN-BRI trunk ports. All other proposed costs are rejected.

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<sup>185</sup> Exhibit Nos. 2033 and 2034.

<sup>186</sup> These recurring rates are developed in Exhibit Nos. 2039 (DS1 Trunk Port cost study), 2041 (PRI ISDN Trunk Port cost study), and 2042 (DID/PBX Trunk Port cost study).

**m. DS0 Analog Trunk Ports**

287 According to Qwest, Exhibit No. 2040 supports the recurring rates for this network  
element. Qwest maintains that the port investment it now seeks recovery for were  
excluded from the FCC data originally used to calculate switching costs as supported  
by the company's response to Bench Request No. 49. Commission Staff believes that  
Qwest's proposed rates for this element are appropriate. *Staff Brief, at page 16.*

288 **Decision:** For the reasons noted above, Qwest's proposed rates for DS0 analog trunk  
ports are rejected because the company fails to meet its burden to demonstrate that  
these rates are just and reasonable.

**n. Customized Routing**

289 Qwest does not propose any specific monthly recurring charges for the customized  
routing solutions it is currently offering. *Qwest Brief, at page 59.* In light of the fact  
that Qwest's customized routing proposal does not entail monthly recurring charges  
there is no need to address this issue.

**o. Common Channel Signaling/SS7**

290 **Discussion:** Qwest states that the recurring rates for its Common Channel  
Signaling/SS7 proposal are assessed on a per-terminating-call basis.<sup>187</sup> *Qwest Brief, at  
page 61.*

291 WorldCom claims that it is uncertain what Qwest proposes with regard to SS7  
charges. WorldCom argues that Qwest's testimony on these rate elements is vague,  
and that neither a review of Qwest's SGAT nor Qwest's discovery responses allows  
WorldCom to determine with particularity the circumstances under which Qwest  
proposes to assess these rates. WorldCom contends that Qwest fails to meet its  
burden of proof, therefore, its proposed SS7 charges should be rejected. *WorldCom  
Brief, at page 53.*

292 Qwest maintains that it has addressed the concerns expressed by WorldCom in  
response to Record Requisition No. 2502. Qwest's response states that Qwest does  
not intend to assess SS7 charges to CLECs who purchase the local switching UNE,  
including UNE-P. *Qwest Brief, at page 61.* Commission Staff believes that Qwest's  
proposed rates for this element are appropriate. *Staff Brief, at page 17.*

293 **Decision:** As noted in the order section regarding nonrecurring costs for this element,  
WorldCom's challenge is not sufficiently developed. WorldCom fails to identify  
aspects of Qwest's proposal that require additional clarification. WorldCom offers no

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<sup>187</sup> Exhibit No. T-2130, at pages 11-12 (Malone).

new arguments here. Consistent with that decision above, and based on the evidence cited by Qwest, Qwest's proposed rates are reasonable and are approved.

**p. ICNAM**

294 **Discussion:** Qwest claims WorldCom is attempting for the fifth time in two years to persuade the Commission to order Qwest to provide bulk access to the inter-network calling name ("ICNAM") database.<sup>188</sup> Qwest maintains that this docket was opened for the purpose of setting rates for UNEs, and that it is not a proper forum for litigating -- or in this case re-litigating -- terms and conditions. *Qwest Brief, at pages 61-63.*

295 WorldCom argues that ICNAM is a UNE and, as such, Qwest is obligated to provide access on just, reasonable, and nondiscriminatory terms. Thus, WorldCom maintains that Qwest should be required to provide access to its CNAM database on a bulk download or "batch" basis. WorldCom claims that limiting access to a per-query or "dip" basis discriminates against WorldCom and other CLECs by giving Qwest an unfair advantage regarding costs, service quality, and the provision of new and innovative services. *WorldCom Brief, at pages 72-73.*

296 Qwest argues that the Commission has already decided four times that bulk access to the ICNAM database is not required as a term or condition of the SGAT and that per-query access is consistent with Qwest's legal obligations.<sup>189</sup> Qwest states that there was no argument presented in this proceeding suggesting that the Commission should reverse its previous decisions. *Qwest Brief, at page 62.*

297 WorldCom concedes that the Commission considered this issue in the Qwest 271 proceeding. However, WorldCom claims the scope of the Section 271 docket was limited to the FCC's requirements for a Regional Bell Operating Company ("RBOC") to satisfy the competitive checklist. Thus, WorldCom claims that the Commission did not necessarily analyze the issues in that docket based on its ability to expand the unbundling obligations set by the FCC. *WorldCom Reply Brief, at page 35.*

298 WorldCom states that the FCC has determined that query-only access to other databases is discriminatory. WorldCom claims an analogy can be made between

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<sup>188</sup> Exhibit No. T-2320, at pages 11-22 (Lehmkuhl).

<sup>189</sup> "The ALJ and the Commission rejected WorldCom's demand for bulk access to the ICNAM database in the ALJ's draft initial order, the ALJ's revised initial order, the Commission's final order and the Commission's order on reconsideration on Workshop One issues. See Docket Nos. UT-003022/UT-003040, Revised Initial Order (August 31, 2000), ¶¶155-158 (recounting the ALJ's determination in the Draft Initial Order), 162; Commission Order Addressing Workshop One Issues: Checklist Items No. 3, 7, 8, 9, 10, 12 and 13 (June 11, 2001), ¶¶ 57-58, 78-79; *Twenty-Fifth Supplemental Order*, Order Granting in Part and Denying in Part Petitions for Reconsideration of Workshop One Final Order (February 8, 2002), ¶¶ 27-32, 47-48, 57-59." *Qwest Brief, at page 62, footnote 31.*

access to the CNAM database and another call-related database, the directory assistance listing database. According to WorldCom the FCC specifically held that LECs may not restrict competitive access to the DAL database by restricting access to per-query access only.<sup>190</sup> Similarly, WorldCom claims that the CNAM database is also a call-related database and competitors' access to this database should not be limited to a per-query or per-dip basis only. *WorldCom Brief, at page 76-77.*

299 WorldCom states that the Michigan commission has found that the ILEC is obligated to provide full or batch access to the CNAM database in a downloadable format.<sup>191</sup> WorldCom requests that the Commission order Qwest to provide CNAM data on a batch basis. *WorldCom Brief, at page 77.*

300 Qwest claims that the Commission has already reviewed the decision of the Michigan Public Service Commission cited by WorldCom and determined that it merely states a conclusion without explanation and, as such, "provides little guidance for this Commission in determining whether access to the [ICNAM] database should be on a per-query or bulk transfer basis."<sup>192</sup> Qwest also maintains that the FCC validated providing access on a "per dip" basis in the Connecticut 271 Order.<sup>193</sup> Finally, Qwest suggests that the Commission reject WorldCom's argument that "it may be more economical" to allow full database access because it has already been rejected by the FCC, which stated that "the cost incurred by a requesting carrier to self-provision or use alternative databases does not appear to materially diminish the carrier's ability to provide the services it seeks to offer."<sup>194</sup>

301 **Decision:** WorldCom's claims that query only access to the ICNAM database is discriminatory is not supported by either the FCC's rules or orders. For example, in the Local Competition Order the FCC determined that "LECs, upon request, must provide nondiscriminatory access on an unbundled basis to their call-related databases for the purpose of switch query and database response through the SS7 network."<sup>195</sup> Contrary to WorldCom's assertions, this supports the conclusion that Qwest must provide CLECs access to the database, not the database itself. Indeed, the footnote within this passage clearly states:

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<sup>190</sup> WorldCom cites the FCC's 1999 Directory Listing Order, paragraph 152, as support. See discussion and decision in this Order's nonrecurring cost section regarding "Directory Listings."

<sup>191</sup> See *In the Matter of the Application of SWBT Michigan for Approval of Cost Studies and Resolution of Disputed Issues Related to Certain UNE Offerings*, Case No. U-12540 at 21, 2001 Mich. PSC LEXIS 33 (March 2001).

<sup>192</sup> See *Twenty-Fifth Supplemental Order*, Docket Nos. UT-003022/003040, at para. 28-29, and 57.

<sup>193</sup> *In the Matter of Application of Verizon New York Inc., Verizon Long Distance, Verizon Enterprise Solutions, Verizon Global Networks Inc., and Verizon Select Services Inc., for Authorization to Provide In-Region, InterLATA Services in Connecticut*, CC Docket No. 01-100, Memorandum Opinion And Order (Rel. July 20, 2001), at Appendix D, at para. 59.

<sup>194</sup> See UNE Remand Order, at para 415.

<sup>195</sup> Local Competition Order, at para 484.

“Query and response access to a call-related database is intended to require the incumbent LEC only to provide access to its call-related databases as is necessary to permit a competing provider's switch (including the use of unbundled switching) to access the call-related database functions supported by that database. The incumbent LEC may mediate or restrict access to that necessary for the competing provider to provide such services as are supported by the database.”

*Local Competition Order, at para. 484, fn. 1099.*

302 The FCC affirmed this decision in the UNE Remand Order.<sup>196</sup> Furthermore, the FCC's rules specifically address the method by which CLECs may access call related databases:

“For purposes of switch query and database response through a signaling network, an incumbent LEC shall provide access to its call-related databases, including but not limited to, the Calling Name Database, 911 Database, E911 Database, Line Information Database, Toll Free Calling Database, Advanced Intelligent Network Databases, and downstream number portability databases by means of physical access at the signaling transfer point linked to the unbundled databases...”

*47 C.F.R. 51.319(e)(2)(i).*

303 WorldCom does not cite a more recent FCC ruling that alters these decisions. Thus, WorldCom's request that Qwest be required to provide bulk downloads or batch access to its ICNAM database is rejected. Qwest provides access to the ICNAM database in a manner that is consistent with FCC rules and orders, as well as Commission orders.

#### **q. EEL Transport**

304 Qwest offers recurring fixed and recurring per mile charges for OC-3, OC-12, and OC-48. In this proceeding, Qwest introduces OC-48 fixed and per mile recurring charges for four separate mileage bands. Qwest states that recurring rates for the lower capacity EELs were not contested by other parties in the Part B proceeding.<sup>197</sup> Qwest claims that the rate for this higher capacity offering was developed in the same way as the rates in Part B, and should be accepted. *Qwest Brief, at page 63.*

305 **Decision:** No party objects to Qwest's proposed EEL Transport rates. Qwest's proposed rate structure for EEL Transport is reasonable and is approved.

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<sup>196</sup> UNE Remand Order, para. 402.

<sup>197</sup> See Part B Order, at para. 216.

**r. Unbundled Packet Switching**

306 **Discussion:** Qwest states that the FCC only requires ILECs to offer unbundled packet switching (“UPS”) in certain circumstances where the ILEC does not provide CLECs access to remote terminal collocation.<sup>198</sup> Qwest proposes that UPS costs be based on Qwest’s DA Hotel architecture in those circumstances. Qwest argues that no party has offered an alternative proposal and requests that the Commission adopt its proposed costs and recurring rate elements. *Qwest Brief, at page 63.*

307 Covad argues that Qwest’s UPS rates are driven by the costs associated with the remote collocation of DSLAMs at a DA Hotel. Covad claims that because the network architecture, equipment, assumptions, and inputs underlying the DA Hotel architecture are not TELRIC-compliant, and have been previously rejected by the Commission as an appropriate method for access to fiber fed loops, Qwest’s UPS offering is defective and should be rejected. Moreover, Covad claims Qwest fails to show that its proposal is the least cost, most efficient solution.

308 Covad requests that the Commission require Qwest to base its UPS costs on NGDLC architecture. WorldCom contends that it submitted compelling evidence demonstrating that the NGDLC solution is more cost-efficient and, consequently, lower cost, than Qwest’s remote DSLAM solution. Covad claims that NGDLC architecture reflects an investment of \$123 per subscriber, whereas the Qwest DA Hotel solution costs four times that amount – requiring an investment of \$514 per subscriber. *Covad Brief, at pages 17-25.*

309 Qwest argues that while Covad opposes Qwest’s recurring costs, it fails to propose any costs in support of its proposal. Thus, the Commission cannot conclude that Covad’s proposal is the lower cost alternative. Qwest argues that its evidence is reliable. According to Qwest, the evidence establishes that Qwest reviewed various alternatives and concluded that its proposal met TELRIC requirements, and establishes appropriate costs for the provisioning of unbundled packet switching under the limited circumstances where Qwest is required to do so.<sup>199</sup> *Qwest Brief, at page 66.*

310 Covad claims that Qwest’s only support for its UPS proposal is grounded in the fact that Covad did not provide a cost study to support its NGDLC proposal. Covad maintains that this argument must be rejected because Qwest has the burden of proof to demonstrate that its proposed rates are just and reasonable. *Covad Reply Brief, at pages 11-13.*

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<sup>198</sup> See UNE Remand Order, at para 313.

<sup>199</sup> Exhibit No. C-2074.

311 **Decision:** Consistent with other decisions in this Order, Qwest's UPS rates are approved on an interim bases, and are subject to the same requirements as decided for nonrecurring rates so that CLECs may order UPS. While Qwest's UPS proposal is based on the same DA Hotel architecture that the Commission rejected in the Part B Order, the record in this proceeding does not support rejection of Qwest's UPS proposal in favor of costs based on NGDLC. As part of this decision, it is recommended that the Commission affirm its previous decision to address these issues at a later date.<sup>200</sup>

**s. Operator Services / Directory Assistance**

312 This issue was addressed in the nonrecurring section of this Order, and no new issues were presented in the recurring cost section of parties' briefs. Thus, in light of decisions in this Order regarding Qwest's customized routing proposal, the parties' arguments concerning the propriety of Qwest's OS/DA proposal does not require further discussion or decision. Qwest's market-based rate proposal is rejected, and Qwest must submit a cost study for OS and DA so that these network elements can be made available at cost based rates to CLEC's whose customized routing needs have not been accommodated by Qwest.

**t. Directory Listings**

313 This issue has been fully addressed above with respect to Qwest's nonrecurring cost proposal.

**u. Category 11 and Daily Usage Record File**

314 Qwest claims it did not propose cost studies for these rate elements because it has not completed work on the cost studies supporting those rates.<sup>201</sup> Therefore, Qwest's proposes that this study be deferred to a subsequent proceeding.. Qwest also proposes that the study for "Daily Usage Record File" be deferred to a later proceeding. Qwest states that WorldCom proposes to address the "Daily Usage Record File" rate element in Docket No. UT-023003, and Qwest does not object to that proposal. *Qwest Brief, at page 68.*

315 **Decision:** The record in this proceeding does not support any conclusion regarding these matters. The parties must address these rate elements, with adequate support, in Docket No. UT-023003.

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<sup>200</sup> See Part B Order, at para. 43-44.

<sup>201</sup> Exhibit No. T-2020, at page 32 (Million).



#### 4. VERIZON'S NONRECURRING AND RECURRING COSTS AND RATES

##### a. Overview

316 **Discussion:** Verizon's proposed UNE costs and rates in Part D are few in number, and the majority of the company's proposed rates are uncontested. Verizon proposed rates for the following network elements:

1. Multiplexing (*Nonrecurring*)
2. Fiber Optic Patchcord ("FOP") Collocation
  - FOP Pull (*Nonrecurring*)
  - FOP Termination (*Nonrecurring*)
  - FOP – 24 Fiber Connectorized (*Nonrecurring*)
  - FOP – Facility Termination (*Recurring*)
  - FOP – Cable Duct Space (*Recurring*)
3. Virtual Collocation
  - Engineering/Major Augment Fee (*Nonrecurring*)
  - Facility Cable – Category 5 Connectorized (*Nonrecurring*)
  - Virtual Equipment Installation (*Nonrecurring*)
  - Virtual Software Upgrades (*Nonrecurring*)
  - Virtual Card Installation (*Nonrecurring*)
  - Virtual Equipment Maintenance (*Recurring*)
  - Frame Space
    - Relay Rack
    - Floor Space
  - Routine and Trouble Maintenance Activities
  - Category 5 (metallic) Cable (*Nonrecurring*)
4. Dedicated Transit Service ("DTS")
  - Service Order – Semi-Mechanized (*Nonrecurring*)
  - Service Order – Manual (*Nonrecurring*)
  - Service Connection– CO Wiring (*Nonrecurring*)
  - Service Connection – Provisioning (*Nonrecurring*)

These network element costs and rates are discussed below.

317 **Decision:** In Phase D parties provided extensive testimony on the reasonableness of Qwest's cost studies. Comparatively little testimony addressed Verizon's submission. As discussed further below, few concerns were raised by the parties about the Verizon's NRC studies.

318 As with the Qwest study, there are problems associated with the Verizon NRC study. First, the study relies on time and motion data that the Company submitted in Part

B.<sup>202</sup> Whereas the Commission found the values submitted by Verizon in Part B to be unreasonable, Verizon is required in its compliance filing to make the same methodological adjustment to its work time estimates that were required in Part B.<sup>203</sup>

319 Furthermore, Verizon fails to submit adequate support for the data provided by its subject matter experts.<sup>204</sup> But unlike with Qwest, no testimony was submitted that suggested the adoption of alternative values. Consequently, similar adjustments to work time estimates are not proposed based upon our review of the evidence. Accordingly, Verizon's SME nonrecurring cost work time estimates are approved as reasonable on an interim basis only, and Verizon must resubmit nonrecurring cost studies supported by time and motion studies in Docket No. UT-023003.<sup>205</sup>

### b. Multiplexing Service Connection

320 Multiplexing is the combining of two or more channels into a single channel for transmission over the telecommunications network. Multiplexing also refers to the division of a transmission facility into two or more channels. For transmission of data signals, the more channels or the higher the bandwidth of a signal, the more data that can be transmitted over the medium. Special telecommunications equipment is necessary to combine or divide channels at various frequency levels.<sup>206</sup>

321 **Discussion:** In Part D, Verizon submitted nonrecurring service connection rates for DS3 to DS1 multiplexing allegedly based on the cost of central office activity to respond to a CLEC order. Verizon did not identify separate service connection costs for DS1 to DS0 multiplexing, and thus did not propose separate nonrecurring service connection rates for this item.<sup>207</sup> *Verizon Brief, at para. 11.* Verizon's proposal calls for multiplexing service connection rates to apply when a CLEC places a wholesale loop and transport UNE order with a specific request for DS3 to DS1 multiplexing. Verizon states that separate rates are identified for installation orders and disconnection orders. The proposed multiplexing nonrecurring rates allegedly do not include the recovery of common costs, as Verizon does not mark-up its nonrecurring costs.<sup>208</sup> *Verizon Brief, at para. 12.*

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<sup>202</sup> See Exhibit No. 2003, at page 9 of 12, and, *for example*, Exhibit No. C-2002, at page 65.

<sup>203</sup> Part B Reconsideration Order, at para. 113-14. The 20% factor should only be used where Verizon has adopted a true-up value that exceeds 20%.

<sup>204</sup> See Exhibit No. C-2002, at pages 31, 34, and 37.

<sup>205</sup> Parties are cautioned that subsequent to administrative review, it will be necessary for the Commission to review the procedural status of UT-023003 to ensure that this issue can be introduced in that proceeding without causing prejudice to any party.

<sup>206</sup> Exhibit No. T-2001, at page 4 (Richter).

<sup>207</sup> According to Verizon, all of the material and labor costs for provisioning DS1 to DS0 multiplexing were included in Verizon's monthly recurring rate proposed in Part B of this proceeding. Exhibit T-2005, at p. 6 (Steele/Richter).

<sup>208</sup> Exhibit No. T-2009, at page 6 (Steele/Richter).

322 Verizon contends that no party contests Verizon's proposed multiplexing service  
connection costs or rates, and the company argues that relevant rates proposed in Exh.  
2009 should be adopted. *Verizon Brief, at para. 14.*

323 **Decision:** Verizon is correct that no party disputes its proposed Multiplexing Service  
Connection rates. Based on the evidence, Verizon's proposed multiplexing service  
connection rates are approved on an interim basis, subject to the Overview Decision  
section above.

### c. Fiber Optic Patchcord

324 The fiber optic patchcord is an optical fiber jumper with fiber connections on each  
end that provide a connection between a collocator's equipment and Verizon's fiber  
distribution panel.

325 **Discussion:** Verizon proposed nonrecurring rates for Fiber Optic Patchcord Pull,  
Fiber Optic Patchcord Termination, and Fiber Optic Patchcord – 24 Fiber  
Connectorized. Verizon proposed recurring rates for Fiber Optic Patchcord – Facility  
Termination and Fiber Optic Patchcord – Cable Duct Space. These proposed fiber  
optic rates apply to caged, cageless, and virtual collocation arrangements. Verizon  
maintains that no party contested its fiber optic patchcord rates and that they should  
be approved without adjustment. *Verizon Brief, at para 15.*

326 According to Verizon the monthly recurring rates for all collocation elements include  
an equal percentage mark-up above their TELRIC for recovery of its forward-looking  
common costs (i.e., a fixed-allocation pricing approach). Verizon applied the fixed  
allocator of 24.75% approved by the Commission in UT-960369. Verizon claims it  
did not mark up the costs supporting its proposed nonrecurring rates to recover  
common costs.<sup>209</sup> *Verizon Brief, at para. 16.*

327 Verizon agreed with Commission Staff's position that prices for fiber optic cables  
should be set on the "per connector cable" basis, rather than on a per foot basis.<sup>210</sup>

328 **Decision:** Verizon initially mislabeled data in its cost study; however, fiber optic  
cable costs were properly calculated on a "per connector cable" basis, rather than on a  
"per linear foot" basis as explained by Verizon in Exh. T-2004, at p. 7. Based on the  
evidence, Verizon's proposal is approved with one specific modification. While  
Verizon's proposal implements the Common Cost Factor ("CCF") of 24.75%  
approved in the Commission's Part A Order, the Commission in Part B of this  
proceeding ordered Verizon to recalculate its costs using a CCF of 19.3%.<sup>211</sup>

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<sup>209</sup> Exhibit No. T-2005, at pages 8-9 (Steele/Richter).

<sup>210</sup> Exhibit No. T-2004, at page 7 (Steele/Richter).

<sup>211</sup> See Part B Order, at para. 379. Also see Part B Order on Reconsideration, at para. 154.

Therefore, as part of a compliance filing, Verizon should be required to recalculate its costs for all recurring and nonrecurring rate elements filed in Part D using the CCF of 19.3%. Further, Verizon's nonrecurring rates for fiber optic patchcord are approved on an interim basis and subject to the Overview Decision section above.

#### d. Virtual Collocation

329 Verizon describes virtual collocation as an arrangement between a CLEC and Verizon to place equipment provided by the CLEC in Verizon's central office. Under this arrangement, Verizon installs and maintains CLEC-provided equipment that is dedicated to the exclusive use of the CLEC. The equipment is installed on a relay rack in the Verizon central office. Like caged or cageless collocation, the CLEC provides the fiber optic facilities that connect Verizon's entrance manhole to the CLEC's virtually collocated equipment.<sup>212</sup> *Verizon Brief, at para. 23.*

330 According to Verizon, certain collocation costs and rates established by the Commission in the Part A Order apply to virtual collocation. Specifically, Verizon contends that the costs approved in Part A for facility pull, facility terminations, and DC power are also incurred by Verizon to provide virtual collocation.<sup>213</sup> *Verizon Brief, at para. 24.* Verizon states that the company's Expanded Interconnection Services cost study in Part D addresses only those costs incurred by Verizon to provide virtual collocation that were not addressed in Part A. Verizon groups nonrecurring costs for virtual collocation into the following elements: Engineering / Major Augment Fee – Virtual, Virtual Equipment Installation, Virtual Software Upgrades, and Virtual Card Installation. Virtual Equipment Maintenance is subject to a recurring cost.<sup>214</sup> *Verizon Brief, at para. 26.*

#### i. Power Cable

331 **Discussion:** Virtual collocation includes costs for "power cable." Verizon relies on the same average power cable lengths for virtual collocation that were established for physical collocation in Part A of this proceeding.<sup>215</sup> Commission Staff disputes Verizon's proposed costs. Staff argues that there are differences in power cable lengths for virtual and physical collocation because physically collocated equipment is situated more distant from battery supplies than virtually collocated equipment.

332 Verizon argues that cable lengths for virtually collocated equipment are not always shorter than those for physically collocated equipment. The location of a power plant

<sup>212</sup> Exhibit No. T-2005, at page 10 (Steele/Richter).

<sup>213</sup> Exhibit No. T-2001, at pages 5-6 (Richter); Exhibit T-2005, at p. 5 (Steele/Richter).

<sup>214</sup> Exhibit No. T-2005, at pages 10-11 (Steele/Richter).

<sup>215</sup> Verizon's response to Staff's Record Requisition Request No. 2501 indicates that all of the company's data relate to cables used for physical collocation, not for virtual collocation. Verizon's study averaged cable length data from 114 central offices. *See* TR at 4107.

in a central office must meet specific requirements and optimize service to all facilities. Power is then distributed to units called battery distribution fuse bays (“BDFBs”) located within the telecommunications equipment areas.<sup>216</sup> Power cables are then run from the BDFB to telecommunications equipment. By placing BDFBs within the telecommunications equipment areas, the power cable lengths to equipment are minimized. Verizon places BDFBs in the physical collocation areas and in the area where virtual collocation equipment is located.<sup>217</sup> Verizon argues, thus, the engineering requirements for cable lengths are the same for physical and virtual collocation arrangements, and average power cable lengths should be the same for both collocation arrangements. *Verizon Reply Brief, at para. 3.*

333 According to Verizon, equipment is placed throughout its central offices based on available vacant space, with similar types of equipment placed together in a specific part of the central office.<sup>218</sup> Therefore, because equipment is placed in a CO based on function and not ownership, Verizon argues that there is no reason to assume that power cable lengths will differ depending on the type of collocation being considered. *Verizon Brief, at para. 25.*

334 Verizon has virtual collocation in only three central offices in Washington, and the company conducted a survey of cable lengths for those central offices to “spot check” the reasonableness of using the same average cable lengths for both physical and virtual collocation costs. Verizon claims that the average power cable length for Washington central offices with virtual collocation was within 4 feet of the average power cable length assumed by Verizon in its physical collocation cost study.<sup>219</sup> Thus, Verizon believes the actual data on virtual collocation cable lengths in Washington validates the assumptions it used to develop virtual collocation costs. *Verizon Reply Brief, at para. 4.*

335 Commission Staff notes that Verizon relies on cable length data from collocation arrangements in states other than Washington. Based on data Verizon provided in its response to Staff’s Data Request No. 13, Verizon’s average power cable length is 123 feet.<sup>220</sup> Staff notes that these data include several cable lengths of 250 feet or longer, including one that is more than 400 feet long, and that none of the data points were from Washington central offices.<sup>221</sup> Commission Staff contends that it is not clear whether all sites analyzed by Verizon actually used optimally placed BDFBs.

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<sup>216</sup> The cost associated with the power cable from the power plant to the BDFB is not part of the nonrecurring cost for power cable.

<sup>217</sup> Exhibit No. T-2004, at pages 5-6 (Richter).

<sup>218</sup> Exhibit No. T-2004, at page 4 (Richter).

<sup>219</sup> TR at 4099. The average power cable lengths at the three central offices in Washington is 127 feet, whereas the average length in Verizon’s study is 123 feet.

<sup>220</sup> Exhibit No. 2017, Attachment Three, at pages 2-4.

<sup>221</sup> TR at 4093.

- 336 Verizon contends that the sample size in the Washington study, just three COs, was not large enough to create a meaningful cost average for virtual collocation cable lengths. Instead, Verizon argues that the cable length data provided from other states applies equally to Washington, because Verizon's central offices are substantially similar from state to state.<sup>222</sup> *Verizon Reply Brief, at para. 5.*
- 337 Commission Staff argues that Verizon has failed to meet its burden of proof that power cable lengths for virtual collocation are the same as cable lengths for physical collocation. Commission Staff further notes that Verizon relies on data that was collected in 1997 or 1998, and argues that the company's data may be outdated. According to Commission Staff, virtual power cable length costs should be based on verifiable data using power cables from virtual collocation sites in Washington State. *Staff Brief, at pages 19-20.*
- 338 **Decision:** Verizon compounds power cable assumptions in the company's study in a way that give rise to an unacceptable level of uncertainty. Verizon assumes that BDFBs are placed in comparable physical proximity in both physical and virtual collocation arrangements, and that central offices in other states are substantially similar to central offices in Washington. Furthermore, if Verizon's spot check of average power cable lengths for virtual collocation in Washington is insufficient to constitute a meaningful sample then its reliability for other purposes is also uncertain. Verizon does not state when the spot check was performed. Verizon collected power cable data for its study during 1997-1998. If the spot check was performed during that same 1997-1998 time period, then the significance of the spot check is diminished because additional virtual collocation arrangements may have been implemented.
- 339 Verizon does not adequately explain why the company could not produce study data based on virtual collocation arrangements from other jurisdictions. If the company was capable of surveying physical collocation arrangements in other jurisdictions and conducting a spot check of virtual collocation arrangements in Washington, then the company also was capable of surveying virtual collocation arrangements in central offices located in other jurisdictions that are supposedly comparable to those in Washington. Such a survey was not performed.
- 340 Most significantly, Verizon fails to explain why the company's study does not rely on power cable lengths between BDFBs in Washington central offices and Verizon's own telecommunications equipment. According to Verizon, virtual collocation arrangements will be located in existing relay racks next to Verizon's telecommunications equipment.<sup>223</sup> Thus, Verizon's ability to produce a meaningful study based on Washington-specific data is not restricted by the purported dearth of

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<sup>222</sup> TR at 4120.

<sup>223</sup> TR at 4112.

existing virtual collocations because the company can survey power cable lengths between BDFBs and its own equipment. The ready availability of reliable data to calculate average power cable lengths for virtual collocation in Verizon's Washington central offices leads to the rejection of the company's proposed rate on a permanent basis.<sup>224</sup>

341 No party presented evidence of an alternative rate or an appropriate adjustment to apply to Verizon's cost study. Accordingly, Verizon's proposed rate is approved on an interim basis subject to the Overview Decision section above, but Verizon must file a revised study based on power cable lengths between BDFBs and the company's own telecommunications equipment and virtual collocation arrangements located in Washington central offices in Docket No. UT-023003.

## ii. Other Virtual Collocation Costs

342 **Discussion:** The only remaining virtual collocation issues briefed by parties relate to Verizon's Engineering/Major Augment Fees and Virtual Equipment Installation Fees. These issues, which are not disputed, are clarified below.

343 Verizon's Engineering/Major Augment Fees are designed to apply to each virtual collocation arrangement that is designated as a major augmentation. Major augments are those requests that add telecommunications equipment that require: additional AC or DC power systems; heating, ventilation and air conditioning system modifications; or a change in the size of the collocation arrangement.<sup>225</sup> *Verizon Brief, at para. 29.*

344 Verizon claims it has developed two different Engineering/Major Augment rates to address Commission Staff's concerns that CLECs should not pay for outside plant engineering activities in all circumstances. The proposed "Engineering/Major Augment – Virtual with Entrance Facilities" rate of \$557.81 applies in situations when a CLEC requests an entrance fiber cable to be placed. The proposed "Engineering/Major Augment – Virtual Without Entrance Facilities" rate of \$378.90 applies when a CLEC does not request that an entrance fiber cable be placed.<sup>226</sup>

345 Commission Staff states that Verizon's approach to eliminating outside plant engineering costs when there is no entrance facility involved is acceptable. *Staff Brief, at page 20.*

346 Verizon's proposed Virtual Equipment Installation rate applies on a per quarter rack (or quarter bay) basis to recover the costs for engineering and installation of virtual

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<sup>224</sup> Similarly, the Commission's Part A Order rejected Qwest's use of company wide power cable length data in favor of WA specific data. *See* 13<sup>th</sup> Supplemental Order, at para. 356.

<sup>225</sup> Exhibit No. T-2005, at page 12 (Steele/Richter).

<sup>226</sup> Exhibit No. T-2004, at pages 2-3 (Richter).

collocation equipment. This rate applies to the installation of powered equipment including, but not limited to, ATM, DSLAM, frame relay, routers, OC3, OC12, OC24, OC48, and NGDLC. *Verizon Brief, at para. 33.*

347 Verizon developed a weighted cost for the installation of circuit equipment based on the frequency that each type of equipment is virtually collocated in Verizon's central offices.<sup>227</sup> Verizon claims to have used this weighting method because CLECs have previously expressed to Verizon a strong desire to have a simplified rate structure that results from weighting costs, and the simplified rate structure is less administratively burdensome than implementing an individual rate for each type of equipment collocated.<sup>228</sup> *Verizon Brief, at para. 34.* Verizon agrees to recalculate its per rack installation costs if the equipment allocation percentages change significantly.<sup>229</sup> Commission Staff states that this approach also is acceptable. *Staff Brief, at page 20.*

348 **Decision:** Verizon has addressed all concerns raised by other parties and no party disputes the company's proposed virtual collocation rates, except for average power cable costs. Based on the evidence, Verizon's proposed virtual collocation recurring rates – other than power cable – are reasonable and are approved. Verizon's proposed virtual collocation nonrecurring rates – other than power cable – are approved on an interim basis subject to the Overview Decision section above.

#### e. Dedicated Transit Service

349 **Discussion:** Verizon proposes rates for Dedicated Transit Service ("DTS") to comply with the FCC's Collocation Remand Order.<sup>230</sup> DTS is available for DS0, DS1, DS3, and dark fiber connections. In addition, Verizon proposes to provide other technically feasible cross-connection arrangements, including lit fiber, on an Individual Case Basis as requested by CLECs. According to Verizon, DTS is only available when both collocation arrangements (caged, cageless, or virtual) being connected are within the same Verizon premises, provided that the collocated equipment is used for interconnection with Verizon and/or for access to Verizon's unbundled network elements.<sup>231</sup> *Verizon Brief, at para. 40.*

350 Verizon proposes nonrecurring rates for the following service order and service connection elements for DS0 (or voice grade levels), DS1/DS3 and optical (dark fiber) levels:

- Service Order – Semi-Mechanized;

<sup>227</sup> Exhibit No. T-2001, at pages 13-14 (Richter), and Exhibit No. 2003/C-2003, at pages 29-31.

<sup>228</sup> Exhibit No. T-2004, at page 3 (Richter).

<sup>229</sup> *Id.*

<sup>230</sup> *In the Matter of Deployment of Wireline Services Offering Advanced Telecommunications Capability*, Fourth Report and Order, F.C.C. Comm'n Order No. 01-204, 16 FCC Rcd 15435 (2001) ("Collocation Remand Order").

<sup>231</sup> Exhibit No. T-2005, at page 14 (Steele).



- Service Order – Manual;
- Service Connection– CO Wiring; and
- Service Connection – Provisioning.

351 To process CLEC requests for DTS, Verizon will incur costs for ordering, provisioning, CO wiring (central office and jumper material), and disconnect activities. There are three additional costs that Verizon proposes to apply to a DTS order: 1) record order costs; 2) OSS transition costs; and 3) OSS transaction costs. The record order costs are those associated with an administrative change to an existing CLEC account, such as a name change. Verizon proposes to use the record order costs of \$3.70 for a manual order and \$2.09 for a semi-mechanized order that were approved in Part B of this proceeding. Verizon also proposes that the OSS Transition costs of \$3.27 and the OSS Transaction costs of \$3.76 approved by the Commission in the Part A Order apply to DTS orders.<sup>232</sup> *Verizon Brief, at para. 45.*

352 Consistent with prior Commission orders, Verizon proposes separate nonrecurring rates or charges for manual and semi-mechanized orders, and separate rates for installation and disconnection. Verizon does not propose to mark-up the costs that support its proposed nonrecurring rates to recover common costs.<sup>233</sup> *Verizon Brief, at para. 42.* Verizon anticipates that DTS requests for DS0, DS1, and DS3 will be processed in the same manner as dedicated non-switched transport requests, and DTS requests for dark fiber will be processed in the same manner as dark fiber dedicated transport requests. Thus, Verizon proposes that the company's costs for dedicated non-switched transport and dark fiber that were submitted in the Part B proceeding be adopted for relevant DTS costs.<sup>234</sup> *Verizon Brief, at para. 44.*

Verizon claims that its DTS rates were uncontested and should be adopted without modification. *Verizon Brief, at para. 40.*

353 **Decision:** No party contested Verizon's proposed DTS rates in this proceeding. Based on the record, Verizon's proposed rates are approved on an interim basis subject to the Overview Decision section above. However, to the extent that Verizon's proposed DTS rates rely upon costs filed in Part B of this proceeding, Verizon must make a compliance filing to amend its rates to reflect any cost study adjustments that the company was required to make pursuant to the Commission's Part B Order.

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<sup>232</sup> Exhibit No. T-2001, at page 19 (Richter).

<sup>233</sup> Exhibit No. T-2005, at page 16 (Steele).

<sup>234</sup> Specifically, those costs are the ordering, service connection, and disconnect costs for a "new" dark fiber order and the "change" order costs for metallic non-switched dedicated transport for DS0, DS1, and DS3. *See* Exhibit No. T-2001, at page 18 (Richter).

#### IV. FINDINGS OF FACT

354 Having discussed above in detail the written testimony and the documentary evidence concerning all material matters, and having stated findings of fact and conclusions of law in the text of the Order, the preceding detailed findings and conclusions are incorporated by this reference.

- (1) The Washington Utilities and Transportation Commission is an agency of the State of Washington, vested by statute with authority to regulate rates, rules, regulations, practices, accounts, securities, and transfers of public service companies, including telecommunications companies.
- (2) Qwest Corporation and Verizon Northwest, Inc., are each engaged in the business of furnishing telecommunications service within the state of Washington as a public service company.

#### V. CONCLUSIONS OF LAW

355 The Washington Utilities and Transportation Commission has jurisdiction over the subject matter of this proceeding and all parties to this proceeding.

- 356
- (1) Tariffs that are filed with the Commission pursuant to the findings, conclusions, and directions of the final order in this docket will be just and reasonable in accordance with the pricing standards stated in Section 252(d) of the Telecommunications Act of 1996, and fair, just, reasonable, and sufficient in accordance with RCW 80.36.080.

#### VI. ORDER

357 The Commission hereby orders as follows:

358 The rates proposed by Qwest and Verizon, respectively, are approved, in part, and rejected, in part, consistent with findings and conclusions as follows:

- 359
- (1) As to each network rate element that is uncontested or is approved without change, Qwest and Verizon shall file tariffs consistent with a final order in this proceeding no later than eight business days after the service date of a final order, with a stated effective date of twelve business days after the date of filing, unless additional time is specifically requested and granted by letter of the Commission's executive secretary. The tariff filings must be limited to uncontested rate elements, rate elements approved without change, or those specifically authorized in this Order.

- 360 (2) As to each network rate element that is rejected as proposed, Qwest and Verizon shall file rate tariffs and supporting compliance filings consistent with this Order no later than ten business days after the service date of a final order. Other parties may respond to those items no later than fifteen business days after the service date of a final order, unless additional time is specifically requested and granted by letter of the Commission's executive secretary. The Commission will enter an order approving or disapproving the subsequent filings or giving further instructions.
- 361 (3) A copy of each filing with the Commission must be served on counsel for other parties so that it is received on the date filed with the Commission.
- 362 (4) Each compliance filing must be accompanied by a brief description of what is accomplished by the filing, how it complies with the terms of the final order, and specifically must identify each input modified, including the exhibit, page, and line number where the modification was made.
- 363 (5) The Commission retains jurisdiction over all matters and the parties in this proceeding to effectuate the provisions of this Order.

Dated at Olympia, Washington and effective this 11th day of October, 2002.

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

LAWRENCE J. BERG  
Administrative Law Judge

**NOTICE TO THE PARTIES:**

**This is an Initial Order. The action proposed in this Initial order isn not effective until entry of a Final Order by the Utilities and Transportation Commission. If you disagree with this Initial Order and want the Commission to consider your comments, you must take specific action within the time limits outlined below.**

**WAC 480-09-780(2) provides that any party to this proceeding has twenty (20) days after the entry of this Initial Order to file a *Petition for Administrative Review*. What must be included in any Petition and other requirements for a Petition are stated in WAC 480-09-780(3). WAC 480-09-780(4) states that any *Answer* to any Petition for review may be filed by any party within (10) days after service of the Petition.**

**WAC 480-09-820(2) provides that before entry of a Final Order any party may file a *Petition to Reopen* a contested proceeding to permit receipt of evidence essential to a decision, but unavailable and not reasonably discoverable at the time of hearing, or for other good and sufficient cause. No *Answer* to a Petition to Reopen will be accepted for filing absent express notice by the Commission calling for such answer.**

**One copy of any Petition or Answer filed must be served on each party of record, with proof of service as required by WAC 480-09-120(2). A original and nineteen copies of any Petition or Answer must be filed by mail deliver to:**

**Attn: Carole J. Washburn, Secretary  
Washington Utilities and Transportation Commission  
PO Box 47250  
Olympia, WA 98504-7250**

## APPENDIX A

### WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION AND FEDERAL COMMUNICATIONS COMMISSION CASES

#### Washington Utilities And Transportation Commission

*In the Matter of the Pricing Proceeding For Interconnection, Unbundled Elements, Transport and Termination, and Resale*, Docket Nos. UT-960369 (general), UT-960370 (US WEST), and UT-960371(GTE) (“Docket No. UT-960369, et al.,” or “UT-960369”).

- Eighth Supplemental Order; Interim Order Establishing Costs for Determining Prices in Phase II, 1998 Wash. UTC LEXIS 446 (April 16, 1998) (“Eighth Supplemental Order” or “8<sup>th</sup> Supplemental Order”).
- Seventeenth Supplemental Order; Interim Order Determining Prices, (August 30, 1999) (“Seventeenth Supplemental Order” or “17<sup>th</sup> Supplemental Order”).
- Twenty-Fourth Supplemental Order; Order Rejecting Tariffs; Authorizing Refiling, (May 4, 2000) (“Twenty-Fourth Supplemental Order” or “24<sup>th</sup> Supplemental Order”).
- Twenty-Sixth Supplemental Order (Phase II), 2000 Wash. UTC LEXIS 557 (September 1, 2000) (“Twenty-Sixth Supplemental Order” or “26<sup>th</sup> Supplemental Order”).
- Twenty-Seventh Supplemental Order (Phase III); Final Order; (September 1, 2000) (“Twenty-Seventh Supplemental Order” or “27<sup>th</sup> Supplemental Order”).

*In the Matter of the Continued Costing and Pricing of Unbundled Elements, Transport and Termination*, Docket No. UT-003013 (“UT-003013”).

- Thirteenth Supplemental Order; Part A Order Determining Prices for Line Sharing, Operations Support Systems, and Collocation, 2001 Wash. UTC LEXIS 145, 207 P.U.R. 4<sup>th</sup> 379 (January 31, 2001) (“Thirteenth Supplemental Order,” “13<sup>th</sup> Supplemental Order,” or “Part A Order”).
- Twenty-Third Supplemental Order; Order on Reconsideration; Modifying Prior Order, In Part, 2001 Wash. UTC LEXIS 355 (July 20, 2001) (“Twenty-Third Supplemental Order,” “23<sup>th</sup> Supplemental Order,” or “Part A Reconsideration Order”).

- Thirty-Second Supplemental Order; Part B Order; Line Splitting, Line Sharing Over Fiber Loops; OSS; Loop Conditioning; Reciprocal Compensation; and Nonrecurring and Recurring Rates for UNEs, 2002 Wash. UTC LEXIS 99 (June 21, 2002) (“Thirty-Second Supplemental Order,” “32<sup>nd</sup> Supplemental Order,” or “Part B Order”).
- Thirty-Eighth Supplemental Order; Final Order on reconsideration, Part B – Corrected, (September 26, 2002) (“Thirty-Eighth Supplemental Order,” “38<sup>th</sup> Supplemental Order,” or “Part B Reconsideration Order”).

### **Federal Communications Commission**

- *In re Implementation of the Local Competition Provisions in the Telecommunications Act of 1996*, CC Docket Nos. 96-98 and 95-185, First Report and Order, 11 FCC Rcd 21905, 1996 FCC LEXIS 4312 (Rel. Aug. 8, 1996) (“Local Competition Order”).
- *In the Matter of Implementation of the Local Competition Provisions of the Telecommunications Act of 1996*, CC Docket No. 96-98, Third Report and Order and Fourth Further Notice of Proposed Rulemaking (Rel. Nov. 5, 1999) (“UNE Remand Order”).
- *In the Matters of Deployment of Wireline Services Offering Advanced Telecommunications Capability and Implementation of the Local Competition Provisions of the Telecommunications Act of 1996*, CC Docket Nos. 98-147 and 96-98, Third Report and Order in CC Docket No. 98-147 and Fourth Report and Order in CC Docket No. 96-98 (Rel. Dec. 9, 1999) (“Line Sharing Order”).
- *In the Matter of Deployment of Wireline Services Offering Advanced Telecommunications Capability and Implementation of the Local Competition Provisions of the Telecommunications Act of 1996*, Third Report and Order on Reconsideration in CC Docket No. 98-147, Fourth Report and Order on Reconsideration in CC Docket No. 96-98, Third Further Notice of Proposed Rulemaking in CC Docket No. 98-147, Sixth Further Notice of Proposed Rulemaking in CC Docket No. 96-98 (Rel. Jan. 19, 2001) (“Line Sharing Reconsideration Order”).
- *In the Matters of Deployment of Wireline Services Offering Advanced Telecommunications Capability*, CC Docket No. 98-147, First Report and Order and Further Notice of Proposed Rulemaking, 14 FCC Rcd 4761 (Rel. March 31, 1999) (“Advanced Services Order”).
- *In the Matter of Application of BellSouth Corporation, BellSouth Telecommunications, Inc., and BellSouth Long Distance, Inc. for Provision of In-Region, InterLATA Services in Louisiana*, CC Docket No. 98-121 (Rel. October 13, 1998) (“Second Louisiana Order”).
- *In the Matters of Implementation of the Telecommunications Act of 1996, Telecommunications Carriers’ Use of Customer Proprietary Network*

*Information and Other Customer Information, Implementation of the Local Competition Provisions of the Telecommunications Act of 1996, Provision of Directory Listing Information, Third Report and Order in CC Docket No. 96-115, Second Order on Reconsideration in CC Docket No. 96-98, and Notice of Proposed Rulemaking in CC Docket No. 99-273, (Rel. September 9, 1999) (“1999 Directory Listing Order”).*

- *FCC Memorandum Opinion and Order, In the Matter of the Petition of SBC Communications Inc. for Forbearance of Structural Separation Requirements and Request for Immediate Interim Relief in Relation to the Provision of Non-local Directory Assistance Services, et al., CC Docket No. 97-172 ,DA 00-514 (Rel. April 11, 2000) (“SBC Forbearance Order”).*
- *Provision of Directory Listing Information under the Telecommunications Act of 1934, As Amended, First Report & Order, CC Docket No. 99-273, FCC 01-27 (2001) (“DAL Provisioning Order”).*

## APPENDIX B

### PART D INITIAL ORDER – TELECOMMUNICATIONS ACRONYMS

AIN	Advanced Intelligent Network
ATM	Asynchronous Transfer Mode
BDFB	battery distribution fuse bay
BFR	Bona Fide Request
BRI-ISDN	Basic Rate Interface Integrated Services Digital Network
BT	bridge tap
CCF	Common Cost Factor
CCSAC	Common Channel Signaling Access Service
CLASS	Custom Local Area Signaling Services
CLEC	competitive local exchange company
CMS	Centrex Management Systems
CO	central office
CTC	Customer Transfer Charge
DA	Directory Assistance
DAL	directory assistance listing
DID/DOD/PBX Exchange	Direct Inward Dial/Direct Outward Dial/Private Branch
DLC	digital loop carrier
DSLAM	Digital Subscriber Line Access Multiplexers
DTS	Dedicated Transit Service
ENRC	enhanced nonrecurring cost model
FGD	Feature Group D
FDI	feeder distribution interface
FDF	fiber distribution frame
FDP	fiber distribution panel
FOP	Fiber Optic Patchcord
FV/QP	field verification/quote preparation
ICB	individual case basis
ICNAM	inter-network calling name



ILEC	incumbent local exchange companies
LIDB	Line Information Database
NID	Network Interface Device
NGDLC	Next Generation Digital Line Carrier
NRC	Nonrecurring Costs
OS	Operator Services
OSS	operational support systems
PID	performance indicator definition
QPAP	Qwest's performance assurance plan
QPF	Quote Preparation Fee
RBOC	Regional Bell Operating Company
ROW	rights-of-way
SME	subject matter experts
SMU	Standard Mounting Unit
SS7	Signaling System 7
TELRIC	total element long run incremental cost
UNE	unbundled network elements
UPS	unbundled packet switching