

BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

**In the Matter of the Continued Costing and)
Pricing of Unbundled Network Elements,) Docket No.
UT-003013
Transport, Termination, and Resale) Phase A**

POST HEARING BRIEF OF VERIZON NORTHWEST INC.

W. Jeffery Edwards
Jennifer L. McClellan
Hunton & Williams
951 East Byrd Street
Richmond, Virginia 23219
(804) 788-8200

October 23, 2000

TABLE OF CONTENTS

I. Introduction 1

II. Legal Principles and Policy Considerations 2

 A. The Commission May Only Promote Competition Consistent With Controlling Law.2

 B. Impact of the Eighth Circuit Remand3

III. Line Sharing 4

 A. Positive Price for HUNE4

 B. Verizon-Owned Splitter Configuration4

 C. “Splitter Collocation”13

 1. Cable Lengths 14

 2. Location of the Splitter 15

 3. Engineering Costs 17

 4. Non-Recurring Costs For Minor Materials 17

 D. Line Splitting Over UNE-P18

IV. OSS Cost Recovery 22

 A. This Commission Correctly Concluded That Verizon Is Entitled To Recover Its OSS And Transition Costs From CLECs.22

 B. Verizon Seeks Recovery of OSS Transition Costs for Projects Undertaken Solely for The Benefit of CLECs.25

 C. Verizon’s OSS Costs Are Forward Looking.27

 D. CLECs are Not Entitled To Recover Their OSS Transition Costs From ILECs. 28

 E. Verizon Is Not Recovering Its OSS Transition Costs Through Retail Rates.29

 F. An Independent Audit of Verizon’s OSS Costs Is Unnecessary.30

 G. ILECs Are Entitled To Recover OSS Modification Costs Specific To Line

Sharing Through Line Sharing Rates.	31
H. Verizon’s Surcharge Rate Design Is Reasonable.	32
V. Collocation	33
A. Verizon’s Collocation Study Reasonably Captures Washington-Specific Costs.	33
B. Cage Enclosure	34
C. Floor Rental Space and Building Modification	36
1. Security Costs	36
2. Site Modification	37
3. Electrical	38
D. DC Power	39
E. Environmental Conditioning	41
F. Cable Splicing	41
G. Microwave Collocation	42
H. 45 Day Interval	43
VI. Conclusion	44

BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

In the Matter of the)	
)	Docket No. UT-003013
Continued Costing and Pricing of Unbundled)	Phase A
Network Elements, Transport, Termination, and Resale)	
)	

REPLY POST HEARING BRIEF OF VERIZON NORTHWEST INC.

Verizon Northwest Inc. (“Verizon”), by counsel, submits its reply brief in response to the opening briefs submitted by the other parties to this proceeding. For the reasons set forth below, the Commission should adopt the recommendations outlined in Verizon’s opening brief.

I. Introduction

1. Verizon has provided sufficient evidence in this case establishing that its line sharing proposals fully satisfy its obligations under the Act and FCC rules. The DLECs seek to impose further obligations on Verizon that have no basis in law, and unnecessarily exceed the national framework established by the FCC. Specifically, Covad and Rhythms would force Verizon to subsidize CLEC and DLEC business plans by indefinitely providing them with splitters that they are equally capable of purchasing on their own. Moreover, the CLECs seek to compel Verizon to affirmatively assist CLECs and DLECs in sharing the high and low frequencies of a loop when nothing in Verizon’s current practices prohibits them from doing so on their own. For the reasons outlined in Verizon’s post hearing briefs, the Commission should reject these efforts.

2. Similarly, Verizon’s evidence in this case establishes that its pricing proposals for line sharing, OSS cost recovery and collocation are just and reasonable and based on complete and fully-

documented cost studies that identify the costs that the company actually incurs to provide these elements and services to CLECs. These cost studies comply with the Act as interpreted by federal courts, FCC rules, and this Commission's orders, and thus should be adopted.

II. Legal Principles and Policy Considerations

A. The Commission May Only Promote Competition Consistent With Controlling Law.

3. As expected, Covad and Rhythms (collectively, the "DLECs") state that the Commission's primary responsibility in this docket is to price UNEs so as to enable CLECs to "effectively compete" with ILECs in the provisioning of telecommunications services in Washington. DLEC Brief at ¶ 3. Similarly, Advanced Telecom Group, AT&T, Electric Lightwave, Inc., McLeod Telecommunications Services, New Edge, XO, and Worldcom (collectively, the "Joint CLECs") contend that the primary policy decision facing the Commission is "whether the Commission's resolution of disputed issues will foster or inhibit the development of local exchange competition." Joint CLEC Brief at ¶ 3. Both groups, as well as the Staff, point to both state and federal law as the source of the Commission's pro-competition responsibilities.

4. The Commission, however, cannot promote competition in a vacuum. Instead, federal law requires the Commission to set line sharing, OSS and collocation prices at a level that permits Verizon to recover all of its costs to provide these elements and services. *See Verizon Brief* at ¶¶ 6-9, 13. Washington law is consistent with this mandate. Section 80.36.080 of the Revised Code of Washington expressly requires that all rates "shall be fair, just, reasonable and sufficient." REV. CODE WASH § 80.36.080 (West 1998). Moreover, the Commission's own rules require that rates and regulations be fair and just, and provide reasonable compensation to the utility. WASH.

REV. CODE ANN. § 80.36.140 (West 1998). Thus, under both state and federal law, the Commission may only implement competition in such a way as to ensure ILECs an opportunity to recover their costs to meet their obligations to competitors.

B. Impact of the Eighth Circuit Remand

5. The DLECs contend that the Eighth Circuit’s decision in the remand of *Iowa Utilities Board v. FCC*, 219 F.3d 744 (8th Cir. 2000), has no impact on this proceeding, mainly because it is stayed and may never become effective. DLEC Brief at ¶ 14. Verizon recognizes that until the Supreme Court acts, the applicable law on pricing methodology is in a state of flux. Yet, if the Commission issues a ruling based on the FCC’s current pricing rules, it will have to revisit its ruling if those rules are vacated by the Supreme Court—either by refusing to hear the case or upholding the Eighth Circuit’s decision. For this reason, Verizon reiterates its recommendation that the Commission classify the costs and rates in this docket as *interim*, subject to adjustment, or true-up, to conform with the Act once the Supreme Court acts or elects not to act on the Eighth Circuit decision.¹ See Verizon Brief at ¶¶ 19-22.

6. The DLECs also contend that the Eighth Circuit did not vacate the TELRIC methodology required by FCC Rule 51.505(b), but only the assumption of a hypothetical network contained in 51.505(b)(1). *Id.* at ¶ 15. This is a severe oversimplification. Whatever the ultimate pricing methodology adopted, the Eighth Circuit’s decision, if allowed to stand, will have a

¹ The FCC endorsed this type of approach in its Motion to Stay the Eighth Circuit’s decision when it noted that interconnection agreements approved before the Supreme Court acts on the Eighth Circuit’s Remand opinion should include “provision for refunds or ‘true-ups’ in the event that the [FCC’s current pricing rules] need[] to be altered.” See FCC Motion at 11.

substantial impact on the controlling pricing methodology. This is why the prices adopted in this proceeding should be interim prices, subject to true-up.

III.Line Sharing

A. Positive Price for HUNE

7. The DLECs and TRACER recommend that the Commission adopt a zero price for the HUNE. DLEC Brief at ¶¶ 2, 34-55, TRACER Brief at ¶ 2. Verizon proposes to do just that in setting rates for line sharing, and does not advocate a position on Qwest's pricing proposals.

8. Public counsel proposes that the Commission allocate a positive or "non-zero" price for the HUNE. Public Counsel Brief at 1. Public Counsel's position is based on its belief that adoption of a zero price would violate (i) "the fundamental regulatory principle that the loop is a shared cost," and (ii) § 254(k) of the Act. *Id.* Moreover, Public Counsel argues that the FCC Line Sharing Order allows, but does not mandate, a zero price. *Id.* at 7-8. Public Counsel does not recommend a specific price for Verizon, but suggests that the HUNE could be set somewhere in between 50% of the common costs established by the Commission and 50% of the loop costs. *Id.* at 8. Public Counsel goes on to suggest that the Commission adopt a "tracking" account to track revenues derived from line sharing, and require the ILECs to impute to themselves the recurring charge adopted in this docket. *Id.* at 12.

9. Verizon disagrees with Public Counsel that the loop is a shared cost. For this reason, Verizon does not seek a price for the HUNE.

B. Verizon-Owned Splitter Configuration

10. The DLECs request that the Commission require Verizon to continue to offer the

Verizon-owned splitter option. DLEC Brief at ¶¶ 28, 58. In effect, the DLECs seek to create a new unbundled network element in the form of a splitter. A number of legal principles and precedents preclude the Commission from ordering Verizon to purchase splitters for CLEC benefit. The obligation to *unbundle* existing network elements under the Act does not mean that CLECs are entitled to demand that incumbents purchase equipment for CLEC use, and then “unbundle” that equipment to further CLEC business plans. *See Iowa Utilities Board v. FCC*, 120 F.3d 753, 812-13 (8th Cir. 1997). In *Iowa Utilities Board*, the Eighth Circuit vacated the FCC’s “superior quality” rules that required an ILEC to provide interconnection and unbundled network elements that are superior in quality to the elements an ILEC provides to itself. *Id.* at 813 (“subsection 251(c)(3) implicitly requires unbundled access only to an incumbent LEC’s *existing* network—not to a yet unbuilt superior one”) (emphasis in original). The Eighth Circuit recently reaffirmed this holding stating that “[w]e again conclude the superior quality rules violate the plain language of the Act . . .; nothing in 47 U.S.C. § § 154(I), 201(b) or 303(r) gives the FCC the power to issue regulations contrary to the plain language of the Act.” *Iowa Utilities Board v. FCC*, 219 F.3d 744, 758 (8th Cir. 2000). The Eighth Circuit held that “subsection 251(c)(2)(C) requires ILECs to provide interconnection ‘that is at least equal in quality to that provided by the local exchange carrier itself’ Nothing in the statute requires the ILECs to provide superior quality interconnection to its competitors. The phrase ‘at least equal in quality’ establishes a minimum level . . . it does not require anything more.” *Id.*

11. Verizon currently does not have any stand-alone splitters in its network beyond those it purchased and installed for the benefit of CLECs. Thus, if Verizon *did* have an obligation to

provide CLECs with Verizon-owned splitters, it would have to discharge that obligation by continuing to purchase new splitters. Such a requirement would be inconsistent with the Eighth Circuit's conclusion that an incumbent LEC is only required to provide access to its existing network—"not to a yet unbuilt superior one." *Iowa Utilities Board v. FCC, supra*, 120 F.3d at 813. Verizon did purchase a limited number of splitters for CLECs as a *temporary* measure to facilitate the initial offering of line sharing to meet the FCC's June 6, 2000 deadline. Exhibit T-210:10 (Boshier).² However, Verizon never intended to continue purchasing splitters for CLECs indefinitely, and so informed CLECs from the moment it issued its line sharing proposal in Washington on May 24, 2000. *Id.* Verizon should not be required to so subsidize CLEC entry into the xDSL market.

12. The FCC's *Line Sharing Order* supports Verizon's position. In the *Line Sharing Order*, the FCC found that incumbents may *choose* to own and provide splitters to CLECs, but they are under no obligation to do so. *Line Sharing Order* ¶ 76 ("incumbent LECs may maintain control over the loop and splitter equipment").³

13. The FCC's recent interpretation of the *UNE Remand Order* in its decision approving the application of SBC to offer long distance service in Texas also supports Verizon's position.⁴ In

² As explained in Verizon's opening brief, line sharing arrangements already in place as of December 15, 2000, will not be disrupted, but will remain in place until the CLEC disconnects service. Verizon Brief at ¶ 51.

³ The FCC went on to explain that the reason ILECs are given this option is in order to address "concerns that the competitive LEC might be able to use its control over the splitter to degrade the incumbent LEC's voice signal or to disconnect the customer without regard for the customer's voice service." *Line Sharing Order* ¶ 78.

⁴ *In the Matter of Application by SBC Communications Inc., Southwestern Bell Telephone*
(continued...)

the *SBC 271 Order*, the FCC squarely rejected the same arguments that the DLECs raise here regarding Verizon’s obligation to own splitters for CLEC benefit. The FCC stated:

We reject AT&T’s argument that [SBC] has a present obligation to furnish the splitter when AT&T engages in line splitting over the UNE-P. The Commission has never exercised its legislative rulemaking authority under section 251(d)(2) to require incumbent LECs to provide access to the splitter, and *incumbent LECs therefore have no current obligation to make the splitter available*. As we stated in the *UNE Remand Order*, “with the exception of Digital Subscriber Line Access Multiplexers (DSLAMs), the loop includes attached electronics, including multiplexing equipment used to derive the loop transmission capacity.” We separately determined that the DSLAM is a component of the packet switching unbundled network element. We observed that ‘DSLAM equipment sometimes includes a splitter’ and that, “[i]f not, a separate splitter device separates voice and data traffic.” We did not identify any circumstances in which the splitter would be treated as part of the loop, as distinguished from being part of the packet switching element. That distinction is critical, because we declined to exercise our rulemaking authority under section 251(d)(2) to require incumbent LECs to provide access to the packet switching element.
...

SBC 271 Order ¶ 327 (emphasis added). The FCC concluded that:

The *UNE Remand Order* cannot fairly be read to impose on incumbent LECs an obligation to provide access to their splitters. Indeed, the only discussion of the splitter appeared in a discussion of a network element (the packet switching element) that we decided not to unbundle,⁵

(...continued)

Company, and Southwestern Bell Communications Services, Inc. d/b/a Southwestern Bell Long Distance Pursuant to Section 271 of the Telecommunications Act of 1996 to Provide In-Region, InterLATA Services in Texas, CC Docket No. 00-65, Memorandum Opinion and Order (rel. June 30, 2000) (hereinafter “SBC 271 Order”).

⁵ However, the FCC noted that “nothing in our rules prohibits an incumbent LEC from voluntarily providing the splitter in this line splitting situation.” *Id.* ¶ 325, n.902. As stated above, Verizon voluntarily undertook to do so as a *temporary* measure to meet the FCC’s line sharing (continued...)

Id. ¶ 328. Thus, Verizon has no obligation to provide splitters to the CLECs. Any Commission order directing Verizon to purchase splitters for CLEC benefit would be inconsistent with the FCC’s rules.⁶

14. FCC Rule 317 also supports Verizon’s position.⁷ That section, entitled “Standards for Requiring the Unbundling of Network Elements,” establishes specific factors that state commissions must consider before ordering the unbundling of additional network elements.⁸ FCC Rule 317(b) provides the analytical framework that a state commission *must* undertake to determine whether the lack of access to a non-proprietary network element impairs a carrier’s ability to provide the service the carrier seeks to offer. *Id.* Under this provision a state commission must conduct a

(...continued)

deadline. Doing so, however, does not obligate Verizon to continue purchasing splitters for CLECs forever.

⁶ The FCC did state that: “In response to petitions for reconsideration of the *UNE Remand Order*, we have been asked to consider whether to impose on incumbent LECs a new obligation to provide access to the splitter AT&T’s arguments merit prompt and thorough consideration . . . and we commit to resolving them expeditiously in our reconsideration of the *UNE Remand Order*.” However, although the FCC has initiated a Further Notice of Proposed Rulemaking, seeking comments on a broad array of related issues, no ruling has been rendered.

⁷ FCC Rule 317 was one of the revised rules that the FCC promulgated in the *UNE Remand Order*. The rule assumes that the network elements to be unbundled already exist in the ILEC’s network. As noted above, Verizon has no splitters in its network beyond those it provided to CLECs to facilitate implementation of the FCC’s Line Sharing Order, and splitters are not network elements.

⁸ FCC Rule 317(d) states that “[a] state commission must comply with the standards set forth in this [section] when considering whether to require the unbundling of additional network elements.” The requirements of Rule 317 cannot be evaded by classifying the splitter as a functionality of the loop. As noted above, the *SBC 271 Order* did not find that the splitter was part of the loop. *SBC Order* ¶ 327. If CLECs and DLECs want the splitter to be supplied on demand, they must demonstrate that the splitter is a separate network element and that they will be impaired if they do not have access to ILEC splitters. *See Line Sharing Order* ¶ 17, n.29. However, because CLECs and DLECs can obtain access to splitters from other DLECs or splitter vendors, no party can make this showing.

thorough review of a number of elements related to cost, timeliness, quality, ubiquity and impact on network operations. FCC Rule 317(b)(2). In conducting this analysis, the FCC indicated that the state commission should not focus on the operations of one CLEC, but rather should look at the effect on other CLECs seeking to offer the same service. *See UNE Remand Order* ¶¶ 53-54, 65; *id.* ¶ 53 (“the existence of some significant levels of competitive facilities deployment is probative of whether competitive LECs are impaired from providing service within the meaning of section 251(d)(2)”). This docket contains no evidence that would allow the Commission to engage in a meaningful analysis pursuant to FCC Rule 317. Moreover, such an analysis would not support the DLECs’ request that the Commission order Verizon to continue offering the Verizon-owned splitter configuration.

15. Finally, even if one were to focus exclusively on the public policy concerns enumerated in FCC Rule 317(c), it is clear that no justification exists to require Verizon to purchase splitters for CLEC use. FCC Rule 317(c) outlines five public policy concerns that a state commission may consider in determining whether to require the unbundling of any network element. For example, commissions may consider whether unbundling the network element promotes the “rapid introduction of competition” or “promotes facilities based competition, investment and innovation.” *Id.* These public policy concerns favor CLEC, not ILEC, ownership of splitters.

16. First, notably absent from the record is any evidence or even argument as to how much more rapidly xDSL services would be made available in Washington if Verizon were required to continue to supply splitters beyond December 15, 2000. *See also UNE Remand Order* ¶¶ 103-07. The DLECs’ rhetoric concerning their reliance on the Verizon-owned splitter configuration is simply

a smokescreen to conceal their unjustified demand that Verizon absorb a share of their business risks.⁹ Verizon should not be placed in the position of financing and administering a changing array of splitter types for use by various CLECs when those CLECs are perfectly capable of determining their own needs and acting accordingly. This is especially true in light of the rapid evolution of technology and the changing varieties of splitters and CLEC demands this evolution will create. Verizon should not be placed in the position of indefinitely having to finance and bear the risk of stranded splitter investment caused by CLEC attempts to keep up with these changes by demanding the most recent splitter innovation. Indeed, Verizon is already at risk of not being able to fully recover its initial investment in splitters. Verizon installed splitters based on the projected demand forecasts provided by the CLECs. *See* Exhibit T-210:8 (Boshier). However, these forecasts have never materialized, and Verizon only received 11 orders for line sharing in Washington using the Verizon-owned splitter option. Tr. 1254 (Boshier).

17. Second, Verizon ownership of splitters certainly would not promote facilities-based competition. *See* FCC Rule 317(c)(2); *see also* *UNE Remand Order* ¶ 110 (“consumers benefit when carriers invest in their own facilities because such carriers can exercise greater control over their networks thereby promoting the availability of new products that differentiate their services in terms of price and quality”). The FCC emphasized that “line sharing relies on rapidly evolving

⁹ In light of Verizon’s public statements prior to the implementation of line sharing—including in its direct testimony filed May 24, 2000—any CLEC reliance on the Verizon-owned configuration beyond the initial offering is unreasonable. Verizon expressly informed CLECs that it would stop providing splitters as of a date certain, and that the period between June 6th and the sunset date “should be used by CLECs to place splitters in [Verizon] offices using one of the first two [configuration] options.” Exhibit T-210:10 (Boshier).

technology,” and is intended to “stimulate technological innovation” even more. *Line Sharing Order* ¶ 26. The Joint DLECs’ proposal for continued Verizon splitter ownership, however, would clearly hinder facilities-based competition and technological innovation by putting Verizon in charge of selecting the types of splitters and the time tables for their implementation. Moreover, the strongest proponent of ILEC splitter ownership has been AT&T, a company that has made no secret of its overall business plan to use telephone lines only on an interim basis, pending its movement to the provision of voice, data, and video services over cable television lines. Clearly, AT&T’s interest in this issue is connected to (i) its recognition that its business plan will entail the stranding of the “interim” splitter assets, and (ii) its preference that this burden should be borne by someone other than its own shareholders.¹⁰

18. Third, no evidence exists that Verizon ownership of the splitter would reduce regulation or be administratively practical to apply. *See* FCC Rule 317(c)(3) and (5). In fact, there is no evidence that the DLECs, let alone the dozens of other CLECs that are or may be interested in line sharing, could ever agree initially or in the future on the particular type of splitter to be installed. Also, ILEC ownership is administratively inefficient and cumbersome in view of the (i) greatly expanded central office wiring required to implement ILEC ownership of splitters, (ii) the absence of any reliable forecasts of aggregate or individual CLEC line-sharing/splitter demand, and (iii) the

¹⁰ Even absent the cable vs. telephone lines issue, stranding could be caused by CLEC migration to other data access technologies (such as wireless), or simply to more advanced splitter equipment. Rapid technological evolution of splitters and other advanced services equipment can be expected as market penetration of advanced services increases. Clearly, this risk of stranding of advanced services assets should be borne by the carriers who are providing those services and reaping the rewards associated therewith. ILECs are not required to serve as stranded-investment insurers for CLECs.

variety of types of splitters that incumbents could be required to maintain in inventory.

19. In short, no justification exists for requiring Verizon to continue to provide splitters for new line sharing orders beyond December 15, 2000. Nothing prevents the CLECs themselves from provisioning splitters to and among themselves, including sharing splitters in order to minimize their expenses. Accordingly, the DLECs' requests that Verizon be required to provide splitters to CLECs on demand after December 15, 2000 should be denied.¹¹

¹¹ To Verizon's knowledge, each state commission that has examined this issue has concluded that the ILEC *does not* have an obligation to own and maintain splitters for CLECs. In California, the arbitrator reached the same conclusion as Verizon regarding the ownership, based in part on the D.C. Circuit Order and the *Line Sharing Order*. The arbitrator concluded that "[w]hile a menu of choices may be optimal for the point of view of CLECs, it is neither required by the FCC, nor is it reasonable." Final Arbitrator's Report, *Rulemaking on the Commission's Own Motion to Govern Open Access to Bottleneck Services and Establish a Framework for Network Architecture Development of Dominant Carrier Networks*, Rulemaking 93-04-003, Investigation 93-04-002 (Interim Arbitration, Line Sharing Phase) (Cal. P.U.C., May 26, 2000, app'd Commission Order D.00-09-74, Sept. 22, 2000) ("California Final Arbitrator's Report") at 21. See also Arbitration Decision, *Covad Communications Company Petition for Arbitration Pursuant to Section 252(b) of the Telecommunications Act of 1996*, Docket Nos. 00-0312, 00-0313 (Ill. C. C., Aug. 17, 2000) at 12-13 (citing both *Line Sharing Order* and *SBC 271 Order* in concluding it is clear that "Ameritech Illinois is under no legal obligation to make available Ameritech Illinois owned splitters"); Order No. 76488, *In the Matter of the Arbitration of Rhythms Links, Inc.*, Case No. 8842 (Phase I) (Md. P.S.C., Oct. 6, 2000) at 11-13 (adopting Hearing Examiner's determination that under the FCC's *Line Sharing Order*, IEC ownership of the splitter is permissive, not mandatory); Order, *Investigation by the Department as to the Propriety of the rates and Charges Set Forth in M.D.T.E. No. 17*, Docket No. 98-57 (Phase III) (Mass. D.T.E, Sept. 29, 200) ("Massachusetts Order") at 32-35 (finding that the FCC's rules and orders clearly provide that the ILECs may provide splitters for CLEC use, but are not required to do so); Opinion and Order, *Petition of Covad Communications Company for an Arbitration and Award Against Bell-Atlantic Pennsylvania, Inc. Implementing the Line Sharing Unbundled Network Element*, Docket Nos. A-310696F002, A-310698F0002 (Penn. P.U.C., Aug. 17, 2000) at 29 (finding no basis in law or policy to require ILECs to purchase splitters); Interim Award, *Petition of IP Communications Corporation to Establish Expedited Public Utility Commission Oversight Concerning Line Sharing Issues*, Docket Nos. 22168, 22469 (Tex. P.U.C., Aug. 1, 2000) at 8 (holding that "the most reasonable interpretation of the *Line Sharing Order* . . . is that the ILECs can either provide CLECs with the splitter equipment or allow CLECs (continued...)

C.

(...continued)
to use their own splitter equipment”).

“Splitter Collocation”

20. The DLECs recommend that the Commission reject Verizon’s “collocation and splitter costs for line sharing,” claiming that they are based on “an incomplete survey of a limited number of Verizon collocations in Washington and the application of hypothetical pricing guidelines that do not correspond to the real equipment used for line sharing.” DLEC Brief at ¶ 58. The Joint DLECs fail to account for the fact that because line sharing is a brand new offering, Verizon has very few actual arrangements in place to study in developing its forward looking line sharing costs. Indeed, at the time Verizon conducted its study, it had not yet executed a line sharing agreement with any CLEC, and had provisioned no line sharing orders in Washington. Consequently, Verizon could only develop costs based on estimates of the equipment and activities necessary to provision this brand new service. Such estimates are not “hypothetical” since they reflect the actual equipment and processes Verizon uses to provision line sharing. Verizon’s estimates, and the resulting rates, are reasonable and based on the correct equipment.

21. The DLECs further allege that Verizon increased the recurring costs associated with line sharing by developing the costs based on “a model associated with digital circuit equipment” rather than actual cost information relating to passive splitters. DLEC Brief at ¶ 62. Generally, this criticism is based on Verizon’s cost estimates for the interim Verizon-owned splitter configuration. To develop costs for this configuration, Verizon treated splitters as circuit equipment since they are both booked to the same account. Tr. 1276. As explained below, Verizon found circuit equipment to be the most comparable equipment in its network to splitters, and thus a reasonable proxy in estimating certain costs.

1. Cable Lengths

22. The DLECs criticize Verizon's cost estimates for the Verizon-owned splitter configuration for failing to perform a study of cable lengths, stating that Verizon has already placed splitters in bays where CLEC splitters will be located. DLECs Brief at ¶ 60. There is no evidence to support the contention that Verizon "has already placed splitters in bays where CLEC splitters are located," and the transcript pages cited in the DLECs' brief do not address that point. This is hardly surprising, since at the time Verizon performed its cost study, it had no line sharing arrangements in place, and consequently no actual cable lengths to study. To develop costs for a product it had yet to provision, Verizon by necessity had to develop a cost estimate. Therefore, Verizon developed an estimate based on the average of cable lengths available for provisioning line sharing. Exhibit T-235:10 (Behrle).

23. Moreover, as of the hearings in this proceeding, Verizon only had 8 line sharing arrangements in place in Washington. Tr. 1254 (Boshier). Nor does Verizon expect to receive a dramatic increase in line sharing orders before the December 15, 2000 retirement-date for the Verizon-owned splitter configuration. Consequently, Verizon's current Washington line sharing data hardly provides an adequate sample size to perform any representative cost study. Therefore, requiring Verizon to study the actual cable lengths used in Washington will not result in a more reliable estimate of its line sharing costs associated with the interim Verizon-owned splitter configuration.

24. The DLECs also criticize Verizon's use of Category 5 cabling to connect splitters to distribution frames and CLEC collocation areas and ask the Commission to set prices based on the

use of Category 3 cabling. DLEC Brief at ¶ 61. Verizon requires the use of Category 5 cabling to protect its central offices and all equipment contained therein from electromagneting influence or radio frequency interference. Tr. 1267 (Bykerk). Because only the high frequency side of a circuit is more susceptible to radiated interference, only cables carrying high frequency traffic require this added protection. *See id.* Moreover, Verizon used Category 5 cabling to provision its own xDSL services, and will require its separate data affiliate to do so. Tr. 1270 (Bykerk). Therefore, Verizon's cabling requirements are nondiscriminatory.

2. Location of the Splitter

25. The DLECs advocate the location of splitters (i) on the MDF, (ii) in a common area within 25 feet of the MDF, or (iii) in the CLEC's collocation area. DLEC Brief at ¶ 63-68. However, as discussed in Verizon's opening brief, it is the ILEC, not the CLEC, who has the right to determine where equipment is collocated in the central office. *GTE Services Corp. v. FCC*, 205 F.3d 416, 426 (D.C. Cir. 2000); California Final Arbitrator's Report at 22-24. *See also* Verizon Brief at ¶ 57.

26. There are also several practical reasons why the Commission should reject the Joint DLECs' proposals to place splitters on the MDF or in a common area within 25 feet of the MDF.¹² Verizon outlined the inefficiencies of placing splitters on an MDF in its opening brief. *See* Verizon Brief at ¶ 58. Similarly, Verizon's opening brief explained why placing splitters within 25 feet of the MDF is not feasible. *Id.* at ¶ 59.

¹² Verizon offers a line sharing configuration in which splitters are located in a CLEC's collocation space.

27. Verizon's proposed splitter configurations make placement of splitters in a common area of the central office unnecessary for several reasons. First, current options for CLEC collocation include cageless, which permits the CLEC to place its own splitters in an open arrangement and freely-accessible bay. Exhibit T-210:11 (Boshier). Therefore, Verizon's line sharing Configuration No. 2, whereby a CLEC places its splitter in its collocation area, alleviates the need for a common arrangement if the CLEC orders cageless collocation. Second, CLECs can test the physical loop without access to the cable pair side of a splitter in a common area. Verizon provides CLECs with access to its 4-TEL loop testing system through its internet-based GUI wholesale internet service engine ("WISE"). This system provides CLECs with the capability to test the loop path from Verizon's switch, through the splitter, to the end user's premises. *Id.* When Verizon performed demonstrations of the WISE access to the 4-TEL system for CLECs in February and March of this year, all parties—including the DLECs—expressed satisfaction with the 4-TEL test data. Exhibit T-220:8-9 (Bykerk). Moreover, Verizon permits CLECs to perform "high-frequency" testing from their point of collocation. Thus, it is unnecessary to place splitters in a common area of the central office.

28. Finally, placing splitters in a common area would create an inefficient use of Verizon's limited central office space. Verizon's central offices do not generally contain open spaces providing community access to equipment. *Id.* at 12. Thus, to support a common splitter area, Verizon would have to create just such an open area in offices that are already cramped for space.

29. Verizon's proposed line sharing configurations place splitters in the most efficient location possible within the limits of the space utilization plan for a particular central office. Where

CLECs chose not to place splitters in their collocation space, Verizon places them in a splitter rack as close to the MDF as practical. Exhibit T-224:6. For the reasons outlined above and in Verizon's opening brief, the Commission should reject the DLECs' recommendations to mandate splitter placement on the MDF, within 25 feet thereof, or in a common area.

3. Engineering Costs

30. While they do not expressly criticize any of Verizon's engineering estimates, the DLECs propose engineering time assumptions and related collocation pricing based on estimates developed by Michael Zulevic and John Klick. DLEC Brief at ¶¶ 70-71, 75. These estimates should not be applied to Verizon's engineering costs. Mr. Zulevic admits that he never performed any time and motion studies, and his estimates were taken from the Collocation Cost Model developed by AT&T but not submitted in this docket. Tr. 987-88 (Zulevic). Mr. Zulevic also admitted that these estimates were never intended to assume the characteristics of any Verizon central offices. *Id.* at 988-89.

31. Moreover, Mr. Zulevic's time estimates are not significantly different from the estimates contained in Verizon's cost studies. Exhibit T-225:3-5 (Casey); Exhibit T-235:3-5 (Behrle). Thus, requiring Verizon to apply Mr. Zulevic's estimates would not modify Verizon's rates to any degree substantial enough to justify the effort.

4. Non-Recurring Costs For Minor Materials

32. The DLECs recommend that the Commission reject Verizon's proposed non-recurring "costs" for "minor materials" used to install splitters, and require Verizon to perform a cost study on the installation of splitters. DLEC Brief at ¶ 81. The DLECs contend that rather than

proposing a price based on the “actual cost of the handful of nuts and bolts required to place a splitter in a rack, Verizon concocted a hypothetical cost that has no basis in any type of reasonable cost study, but instead results from the simple application of a set percentage to the cost of equipment.”

Id. Again, at the time Verizon performed its cost study, it did not have any actual work orders for line sharing to establish the cost of minor materials for the interim Verizon-owned splitter arrangement. Tr. 1276 (Behrle). Consequently, the company followed its standard operating procedure of applying a minor material loading factor using all circuit equipment as a surrogate for this interim configuration. *Id.* The result produced a reasonable estimate of the costs Verizon will incur to install this splitter configuration until December 15, 2000.

33. The DLECs contend further that the Commission should “reject Verizon’s attempt to compel CLECs to pay for jumper costs that Verizon would incur regardless of line sharing.” *Id.* at ¶ 82. Verizon concedes that it would have to pay maintenance costs for the jumper wire carrying voice service regardless of line splitting, and agrees to make the appropriate revisions to its cost study to reflect the costs of only 2 jumpers on the MDF incremental to line sharing.

D. Line Splitting Over UNE-P

34. The Joint CLECs contend that “mass market local exchange competition” will not begin in Washington until ILECs make the UNE-P available at reasonable rates, terms and conditions. Joint CLEC Brief at ¶ 23. They contend, however, that the UNE-P cannot be fully successful unless customers can obtain both voice and data services over a loop where a CLEC is the voice provider. *Id.* The Joint CLECs assume the only way this can happen is for ILECs to be required to “make line-splitting available to UNE-P providers.” *Id.* at ¶ 24. This is not true.

Nothing prevents a UNE-P provider from entering into a “line splitting” arrangement with another CLEC or DLEC.¹³ Indeed, a CLEC can place a splitter in its collocation space today and combine it with an unbundled loop, unbundled port and DSL signal into a single facility arrangement for an end user. Exhibit T-216:5-6 (Boshier). The issue, however, is whether an ILEC has an obligation to affirmatively do anything to facilitate that arrangement. Under the Act and the FCC’s rules, the answer is no.¹⁴

35. The Joint CLECs assert that line splitting rests upon the principles of the Act and existing FCC rules that obligate ILECs to provide access to all of the features, functionalities and capabilities of a loop. Joint CLEC Brief at ¶¶ 25-28. The FCC’s *Line Sharing Order* clearly limited an ILEC’s obligations to provide access to the high frequency portion of the loop to situations in which the ILEC is the voice provider:

[L]ine sharing contemplates that the incumbent LEC continues to provide POTS services on the lower frequencies while another carrier provides data services on higher frequencies. The record does not support extending line sharing requirements to loops that do not meet the prerequisite condition Accordingly, we conclude that incumbent LECs must make available to competitive carriers ***only the high frequency portion of the loop network element on loops on which the incumbent LEC is also providing analog voice service*** .

¹³ Verizon notes that there is a fundamental flaw in any notion that line sharing or splitting can be provided over a UNE-P. To separate the high frequency portion of the loop from the voice frequency, a splitter must be inserted into the network somewhere between the MDF and the switch. Therefore, the UNE-P must be ***unbundled***, then ***recombined*** with a splitter. By definition, this is not a UNE-P, which is a combination of elements that are not separated by the ILEC. Thus, as the Massachusetts Commission recently recognized, a UNE-P arrangement does not remain in place after provisioning of line splitting, but the line splitting arrangement replaces the UNE-P arrangement. Massachusetts Order at 39 (citing FCC’s *SBC Texas 271 Order* at ¶ 325).

¹⁴ See previous discussion in Section III(B) regarding the Verizon-Owned Splitter Configuration.

. . . We note that in the event that the customer terminates its incumbent LEC provided voice service, for whatever reason, the competitive data LEC is required to purchase the full stand-alone loop network element if it wishes to continue providing xDSL service. ***Similarly, incumbent carriers are not required to provide line sharing to requesting carriers that are purchasing a combination of network elements known as the platform. In that circumstance, the incumbent no longer is the voice provider to the customer.***

Line Sharing Order ¶ 72 (footnotes omitted) (emphasis added). *See also* 47 U.S.C. § 319(h)(3) (“[a]n incumbent LEC shall ***only*** provide a requesting carrier with access to the high frequency portion of the loop if the incumbent LEC is providing, and continues to provide, analog circuit-switched voiceband services on the particular loop for which the requesting carrier seeks access.”) (emphasis added); California Final Arbitrator’s Report at 30-32; Massachusetts Order at 39.

36. This limitation on the scope of line sharing is not simply an arbitrary service definition, but rather is firmly grounded in competitive requirements. In applying the “necessary” and “impairment” requirements, the FCC concluded that the very source of the “impairment” experienced by DLECs seeking to offer data services over unbundled loops was the economic advantage purportedly enjoyed by incumbents that offered both voice and data services over the same loop. For example, the *Line Sharing Order* states that “it is the fact that the incumbent is already providing voice service on a loop that makes the preservation of competitive access to the high frequency portion of that loop so vital.” *Line Sharing Order* ¶ 56. As the FCC also recognized, the corollary of that conclusion is that the requisite “impairment” does not exist – and unbundling is therefore not required – where the incumbent is *not* providing voice-grade services over the loop that the CLEC seeks to utilize for its data services.

37. Thus, no doubt exists that the FCC intended that incumbents, such as Verizon, should

be **required** to unbundle the high frequency portion of the loop **only** where the incumbent provides voice services. The FCC recently resolved any doubts about this in the *SBC 271 Order*. *SBC 271 Order* ¶¶ 320-29. See also Verizon Opening Brief at ¶ 65.

38. The Joint CLECs attempt to circumvent the plain language of the FCC’s *Line Sharing Order* by labeling the service it seeks as “line splitting.” However, their definition of line splitting requires the creation of a modified UNE-P where Verizon would be required to insert into a local loop a Verizon owned, deployed and maintained splitter. The splitter element would thus be combined with the other current elements that compose a UNE-P. Verizon, however, is not obligated to create this modified UNE-P. First, this definition is premised on the assumption that the splitter is a UNE. It is not. See *SBC 271 Order, supra*. Second, even if it were an element—which it is not—the Joint CLECs’ definition would require a new combination of elements. The Eighth Circuit has held that ILECs cannot be required to combine elements. *Iowa Utilities Board*, 120 F.3d at 813 (“§ 251(c)(3) requires an incumbent LEC to provide access to the elements of its network only on an unbundled (as opposed to a combined) basis.”). The Eighth Circuit recently reaffirmed this decision, stating that under the 1996 Act “[i]t is not the duty of the ILECs to ‘perform the functions necessary to combine unbundled network elements in any manner. . . .’” *Iowa Utilities Board*, 219 F.3d at 759.

39. In short, in Washington, the CLECs **are permitted** to engage in line splitting today. Nothing in the Act or FCC rules requires Verizon to do anything more than provide the underlying UNE-P. The Joint CLECs have not provided any compelling reason why this Commission should prejudge the FCC’s determination on this issue and require the development of procedures that may

prove inconsistent with the national framework established by the FCC's ultimate decision on line splitting over a UNE-P. *See* Verizon Brief at ¶¶ 67-73. Accordingly, the Joint CLEC's requests should be denied.¹⁵

IV.OSS Cost Recovery

A. This Commission Correctly Concluded That Verizon Is Entitled To Recover Its OSS And Transition Costs From CLECs.

40. The DLECs and the Joint CLECs spend a great deal of time challenging the Commission's previous decision in the Generic Costing and Pricing Docket that ILECs are entitled to recover their OSS and transition costs from CLECs. DLEC Brief at ¶ 98-99; Joint CLEC Brief at ¶¶ 4, 8, 11, 19, 32-35. Specifically, the Joint CLECs claim that neither the Act nor the FCC's TELRIC methodology authorize the recovery of such costs. Joint CLEC Brief at ¶ 33-38. The Joint CLECs again urge the Commission to spread Verizon's OSS costs among all end users in its Washington service territories rather than allowing recovery from CLECs, claiming that OSS implementation costs benefit all consumers since they are necessary to the development of competition. *Id.* at ¶¶ 39-47.

41. This Commission has already rejected these arguments and definitively ruled that § 251(d)(1) of the Act entitles ILECs to recover the OSS and transition costs associated with their wholesale requirements from CLECs:

While Congress required the ILECs . . . to open up their networks to competition, it also sought to ensure that they would be compensated

¹⁵ Both the California and Massachusetts Commissions have refused to require ILECs to provide access to the HUNE where a CLEC purchases a UNE-P. California Final Arbitrator's Report at 32-38; Massachusetts Order at 39-40.

for reasonable costs incurred as a result of their efforts to comply with this mandate

* * * *

. . . [T]he Act is designed to facilitate efficient entry into the local market. The act does not state that an ILEC or its retail customers should subsidize the price of UNEs. Rather the Act provides that when a CLEC orders a UNE, it must pay a fair and just price, which will compensate the ILEC for its reasonable costs.

Some parties to this proceeding have argued that CLECs are not responsible for the OSS costs because, even if no CLEC enters an ILEC market, the ILEC must incur these costs in anticipation of competition materializing. The Commission finds this argument to be faulty because it merely illustrates that should no demand for OSS arise, the ILEC will be unable to recover its costs from a CLEC. A lack of demand does not indicate an absence of cost responsibility. For example, if an ILEC were to spend money attempting to develop a video product, and there turns out to be no demand for the video product, the cost responsibility for the development expenditures should clearly be assigned to the unsuccessful video product.

Seventeenth Supplemental Order, *In the Matter of the Pricing Proceeding for Interconnection, Unbundled Elements, Transport and Termination, and Resale*, Docket Nos. UT-960369, *et. al.* (“*Generic Costing and Pricing Docket*”) (W.U.T.C. Sept. 23, 1999) at ¶¶ 98-102.

42. The Commission’s ruling is consistent with the rulings of at least three federal courts. In *Bell Atlantic-Delaware, Inc. v. McMahon*, 80 F. Supp.2d 218, 248 (D.De. 2000), the United States District Court for Delaware held that “[n]othing on the face of the Act prohibits imposing an additional charge to compensate Bell for providing OSS access to its competitors.” The Delaware court upheld the Delaware Commission’s decision to impose OSS “access” charges on CLECs, but remanded the decision back to the Commission to determine whether Bell’s OSS access charges for resale orders were already recovered through its wholesale resale rates. *Id.* at 247-49.

43. Similarly, the U.S. District Court for the Eastern District of Kentucky rejected the very arguments put forth by the Joint CLECs and the DLECs here. *AT&T Communications of the South Central States, v. BellSouth Telecommunications, Inc.*, 20 F. Supp.2d 1097, 1104-05 (E.D. Ky. 1998). In that case, AT&T argued that an interconnection agreement requiring new entrants, but not the incumbent, to pay the costs of electronic interface development for OSS violated the Act and FCC regulations. The Court agreed with the Kentucky Commission that nothing in the law supported AT&T's position:

The FCC regulations only state that ILECs must cooperate with competitors and make available access to their OSS, but FCC regulations do not state that access to an ILEC's OSS must be subsidized by the ILEC. The PSC correctly notes that "[o]ne would not argue he was denied access to a concert on the basis that he was required to first buy a ticket." Because the electronic interfaces will only benefit the CLECs, the ILECs, like BellSouth, should not have to subsidize them. BellSouth has satisfied the nondiscrimination prong by providing access to network elements that is substantially equivalent to the access provided for itself. AT&T is the cost causer, and it should be the one bearing all the costs; there is absolutely nothing discriminatory about this concept.

Id. at 1104-05 (citations to record omitted).

44. Finally, in *U.S. WEST Communications v. AT&T Corp.*, Nos. A1-97-085, A1-97-082 (D.N.D. January 8, 1999), the U.S. District Court for North Dakota upheld the North Dakota Commission's approval of an interconnection agreement recovering U S WEST's OSS costs from AT&T. The Court correctly ruled:

No one disputes that access to OSS is essential. It is in fact a critical and essential part of the infrastructure being sold to the competitor. The act and the Agreement mandate the provision of interconnection . . . on a nondiscriminatory basis. That does not mean that the incumbent LEC must pay a portion of the costs involved in providing the interconnection for the use of a competitor.

Slip op. at 21.¹⁶

B. Verizon Seeks Recovery of OSS Transition Costs for Projects Undertaken Solely for The Benefit of CLECs.

45. Contrary to the DLECs' claims, the OSS projects for which Verizon seeks cost recovery do not benefit Verizon, but were undertaken solely for the benefit of the CLECs. Indeed, Verizon identified in its evidence each and every OSS project for which it seeks cost recovery and described in detail how each benefits the CLECs and why they do not benefit Verizon's retail operations in any way. *See generally* Exhibit T-260 (Holland), Exhibit T-262:2 (Holland). No party rebutted or criticized any of these descriptions. Nor did any party offer any analysis, documents, or other evidence to support their vague claims that these projects provide some benefit to Verizon or identify which projects provided the purported benefit.

46. The DLECs' contentions on the presumed benefits to ILECs are based upon a faulty premise. Specifically, the DLECs claim that "as a result of major mergers and consolidations . . . the ILECs currently are burdened with numerous legacy OSS systems that do not communicate well

¹⁶ In addition to the courts in Delaware, Kentucky, and North Dakota, Commissions in Alabama, New Mexico, and North Carolina have ruled that ILECs are entitled to recover their OSS transition costs from CLECs. *See* Report and Order, *In Re Petition of Telephone Company of Central Florida, Inc. for Arbitration of Resale Agreement with BellSouth Telecommunications, Inc. Pursuant to the Telecommunications Act of 1996*, Docket 26800 (Ala. P.S.C. May 26, 1999); Supplemental Findings of Fact, Conclusions of Law and Order, *In the Matter of the Consideration of the Adoption of a Rule Concerning Costing Methodologies*, Docket Nos. 96-310-TC, 97-334-TC (N.M. C.C., Dec. 31, 1998) at ¶ 54; Order Ruling on Motions for Reconsideration, Clarification, and Comments, *In the Matter of General Proceeding to Determine Permanent Pricing for Unbundled Network Elements*, Docket No. P-100, Sub. 133d (N.C.U.C. August 18, 1999).

with each other Thus, much of the OSS work being undertaken by ILECs now—in terms of eliminating database errors and developing a single set of rules to be utilized system wide—will be extremely valuable to ILECs in the near future.” DLEC Brief at ¶ 98. This is simply not true for Verizon, as none of these types of modifications are in the projects for which Verizon seeks cost recovery. Moreover, as the FCC’s Order approving the GTE/Bell Atlantic Merger made clear, the OSS systems used by the former GTE and Bell Atlantic companies **will not** be consolidated into one integrated system, but rather each will continue to serve the territories they have always served. *See In re Application of GTE Corporation and Bell Atlantic Corporation*, Docket No. 98-184, Order (rel. June 16, 2000) Appendix D, § VI, ¶ 18.¹⁷

47. The Joint CLECs’ attempt to show that Verizon benefits from its OSS transition projects is likewise faulty. They claim that the costs “ILECs incur to modify their OSS to convert them to the ‘most efficient telecommunications technology currently available’ are not included among the costs the FCC has authorized ILECs to recover under the Act.” Joint CLEC Brief at ¶ 11. Verizon does not seek recovery of costs to convert OSS to efficient technology. The OSS modified by Verizon fulfilled its end-user customer requirements using systems and processes that met their

¹⁷ During the hearings, the Joint DLECs implied through the questioning of Verizon’s pricing witness that Project 22 relating to CLEC performance measures was completed to track the specific performance measurements of Verizon compared to the CLECs, and was of benefit to Verizon as a merger condition. Tr. 1524 (statement of Covad counsel). However, as explained by Verizon’s witness familiar with the OSS projects for which the company seeks recovery, Project 22 had nothing to do with the OSS performance measures contained in the FCC merger conditions. Project 22 resulted from a California Commission Order and extensive collaborative discussions between Verizon and CLECs to allow CLECs access to OSS performance results so as to allow them to predict future performance and develop their own processes and systems. Exhibit T-260:58-59 (Holland).

needs in the most efficient and cost effective manner available. Exhibit T-255:2 (Casey). Verizon seeks only recovery of the costs incurred to provide CLECs with access to its OSS functionalities and to develop systems to receive and process wholesale orders as required under the Act and the FCC's rules. These costs are directly linked to the CLECs' activities to engage in local market competition.

48. Finally, the Joint CLECs contend that the ILECs "assumed the risk that other carriers would not seek to provide local service in their service territories when they constructed their OSS to function in a single provider environment." Joint CLEC Brief at ¶ 19; *see also* ¶ 34. The Joint CLECs fail to mention, however, that prior to the Act, they were not required to affirmatively take steps to help other carriers enter the market, and certainly were never required to provide CLECs with access to their OSS. There can be no "assumption of the risk" when the "risk" did not even exist.

C. Verizon's OSS Costs Are Forward Looking.

49. The Joint CLECs argue that Verizon is not entitled to recover OSS transition costs because they are not TELRIC compliant. Joint CLEC Brief at ¶ 33-34. Specifically, the Joint CLECs argue that costs incurred to transform "legacy monopoly OSS systems" to permit a multi-carrier environment should not be recovered. *Id.* Verizon's OSS enhancement costs are not embedded costs in the sense used by the FCC in its Local Competition Order; they have nothing to do with the historical embedded costs of the existing network. Exhibit T-325:8 (Tanimura). Instead, the OSS enhancement costs are forward-looking since they were required to change the ILEC's systems for the future competitive environment.

50. Moreover, OSS transition costs are *developmental* in nature, which by definition precede the deployment of the technology in development and are recovered in the prices of the new technology. Exhibit T-327:5 (Tanimura). In this sense, these costs are analogous to the research and development costs underlying the forward-looking, least cost technology switch used to develop UNE-port rates. *Id.* at 5-6; Exhibit T-325:8 (Tanimura). Firms in competitive markets, such as switch manufacturing, do not assume away these transition costs, but recover them in the prices of their products. The same concept applies to OSS modifications to implement the wholesale requirements of the Act.

D. CLECs are Not Entitled To Recover Their OSS Transition Costs From ILECs.

51. The Joint CLECs seek to eliminate their OSS cost recovery obligations by asking the Commission to permit them to recover from the ILECs any costs they incur to modify their OSS to the extent that the modifications mirror ILEC modifications. Joint CLECs Brief at ¶ 53. OSS enhancements undertaken by the both ILECs and CLECs were performed solely for the benefit of CLECs. As discussed above, these modifications do not benefit the ILECs in any way, and thus they should not be required to pay for them. Moreover, there is no statute or Commission order that requires CLECs to develop OSS interfaces; CLECs make the choice to modify their OSS systems after performing a cost/benefit analysis and determining that they can recover these costs in the future. ILECs, on the other hand, could perform no such analysis since the Act and FCC Orders mandated that they develop processes and systems to provide CLECs with access to their OSS functionalities and wholesale services. In addition, CLECs are not under any legal obligation to place wholesale orders electronically, but ILECs are required to develop systems to receive orders

electronically.

52. This Commission has already rejected the CLECs' request for recovery of their OSS costs from ILECs. *See* Twenty-Sixth Supplemental Order, *Generic Cost Proceeding*, Docket Nos. UT-960369, et. al., (rel. Sept. 1, 2000) at ¶ 53. For the reasons set forth above, it should do so in this proceeding as well.

E. Verizon Is Not Recovering Its OSS Transition Costs Through Retail Rates.

53. Staff expresses its belief that Verizon's OSS transition charge would be reasonable, but erroneously argues that Verizon is recovering OSS transition costs in its retail rates. Staff Brief at ¶ 43. As explained in Verizon's opening brief, Verizon's retail rates in Washington do not currently recover its OSS developmental or enhancement costs. Verizon Brief at ¶¶ 94-95. Staff contends "Verizon's and Qwest's revenue growth have resulted in earning levels in excess of their authorized rates of return," and that the "additional revenue growth is sufficient to permit recovery of OSS start-up costs." *Id.* at ¶ 48. If Staff's argument was carried to its logical extreme, there would be no need for any cost dockets under the Act because retail rates potentially would recover the costs to provide all UNEs and collocation. However, that is not how § 251 of the Act requires UNEs and collocation to be priced. Moreover § 251(d)(1)'s requirement that UNE rates be set without reference to a rate of return or other rate-based proceeding makes very clear that Staff's analysis is misplaced in this docket.

54. Indeed, Staff can point to no particular retail rate that was ever established that explicitly took into account OSS enhancements or that recovers these costs. Tr. 1603 (Spinks). Staff did not conduct any kind of cost analysis to substantiate its contention that these costs are recovered

through Verizon's retail rates, but merely relied on a staff analysis of Verizon's earnings at the time of an informal earnings review that was never made part of any record. *Id.* at 1604.

55. Moreover, just because a company incurs and books costs in 1998 to establish a new service to be deployed in 1999 does not mean all of those costs will be recovered when the service rolls-out in 1999. With all developmental costs in any industry, there is normally a lag time between the cost generation and cost recovery. Exhibit T-327:10-11 (Tanimura).

56. Staff's analysis is incorrect, and Verizon's retail rates do not recover the OSS transition costs for which Verizon seeks recovery. Consequently, the Commission should reject Staff's recommended retail rate reductions.

F. An Independent Audit of Verizon's OSS Costs Is Unnecessary.

57. The Staff and the DLECs do not address the sufficiency and accuracy of Verizon's OSS cost estimates, and do not criticize how they were determined. Nonetheless, they recommend that the Commission initiate an independent audit of Verizon's OSS costs. Staff Brief at ¶ 44, Joint CLEC Brief at ¶ 36. Staff's only justification for an audit is their view that the Commission should remain "vigilant" in setting rates. Staff Brief at ¶ 44-45. The Joint CLECs likewise contend that an independent audit is the only way the Commission can verify Verizon's calculations of its OSS costs since neither the Commission nor the parties have the resources to do so. Joint CLEC Brief at ¶ 36-38. However, neither party explains why the adjudication process—complete with the opportunity to conduct discovery—was not sufficient in this context while it is in every other cost proceeding.

58. As the Joint CLECs recognize, the Seventeenth Supplemental Order required Verizon

to: (i) make an affirmative showing that OSS costs were not already being recovered through annual charge factors, providing work papers demonstrating how prior calculations were “backed out” prior to calculating the annual charge factors used in its recurring and non-recurring cost studies; (ii) prove that the costs for which Verizon seeks recovery would not have been incurred but for the obligation to provide CLECs with access to its OSS; and (iii) show the extent—if any—to which OSS costs are being recovered through retail rates. Seventeenth Supplemental Order at ¶ 108-09. Verizon provided extensive and detailed evidence on each of these points, much of which went unchallenged except through vague and unsubstantiated conclusory statements by the parties. Accordingly, the opportunity to address these costs has passed, and there is no need to create an additional layer of adjudication through an audit process.¹⁸

G. ILECs Are Entitled To Recover OSS Modification Costs Specific To Line Sharing Through Line Sharing Rates.

¹⁸ Verizon notes that it has not been required to perform an audit of its OSS transition costs in any other state, even in California where Pacific Bell voluntarily undertook one.

59. The DLECs appear to address only the cost recovery mechanism for OSS costs relating to upgrades necessary for line sharing, stating that such costs should be recovered through a monthly recurring charge until the costs are recovered. DLEC Brief at ¶ 93. Verizon does not seek cost recovery for OSS upgrades specific to line sharing in this proceeding, since those costs have not yet been quantified. However, to the extent that modifications are required to an ILEC's OSS to provide any element or services, the Act requires that those costs be recovered from the CLECs who caused those costs to be incurred. Therefore, any costs incurred to provide line sharing should be recovered from CLECs placing line sharing orders. This is consistent with the FCC's ruling that ILECs "should recover in their line sharing charges those reasonable incremental costs of OSS modification that are caused by the obligation to provide

line sharing as an unbundled network element.” *FCC Line Sharing Order* at ¶ 146. Verizon reserves its right to seek recovery of OSS costs specific to line sharing once those costs are quantified.

H. Verizon’s Surcharge Rate Design Is Reasonable.

60. Staff criticizes Qwest’s reliance on “unverifiable” forecasts of the number of service orders it expects to process, and suggests that if the Commission wants to use forecasted service orders for Qwest and Verizon, it should look to either the RBOCs’ post 271 service order experience or to the market share experience of AT&T. Staff Brief at ¶ 41. However, Staff does not explain why there is any reason to believe that Verizon will receive the same service order volume in Washington as a different company with different service territory characteristics in other states. There is no evidence in the record to support such a finding.

61. Staff argues that the Commission should permit recovery only of OSS transition costs attributable to Washington state. Staff Brief at ¶ 51. Verizon’s transition OSS costs were incurred on a nationwide basis within the former GTE Telephone Operations territories and are not attributable to any one state since the same systems are used for wholesale activity throughout the entire Verizon-West territory.¹⁹ Exhibit T-327:8 (Tanimura). Thus, Verizon’s proposal to base OSS recovery on nationwide costs is linked to the actual way in which the costs were incurred, as well as the activity in each particular state: Washington CLECs will pay for the cost recovery in direct proportion to the amount of activity they generate in Washington.

¹⁹ The OSS systems that served the former GTE companies nationwide continue to serve those states, while the systems that served the former Bell Atlantic states continue to serve the Verizon-East states.

62. The Joint CLECs contend that Verizon's OSS surcharge does not recover OSS costs from CLECs in proportion to the use they make of the ILEC's OSS. Joint CLECs Brief at ¶ 48. By establishing a per-order surcharge based on the forecasted number of local service requests accepted by the ILEC to provision services to CLECs, Verizon does indeed recover OSS costs based on access and use of those systems.

V.Collocation

63. The parties raise very few criticisms of Verizon's collocation costs and proposed rates. With the exceptions noted below, the Joint CLECs do not object to or propose to modify Verizon's proposed collocation rates. Joint CLECs Brief at ¶ 85. Staff generally argues that Verizon's collocation prices must be based on Washington-specific costs. Staff Brief at ¶ 59. No other party addressed Verizon's collocation rates.

A. Verizon's Collocation Study Reasonably Captures Washington-Specific Costs.

64. The Joint CLECs and Staff generally criticize Verizon for failing to use Washington-specific costs in its collocation study. Verizon should not be forced to limit its central office sample used to develop collocation costs to a single state's activity. As was the case in Washington, collocation activity within a state may not give Verizon a large enough study sample to accurately develop average costs. Therefore, using a broad sample of collocation projects nationwide permits Verizon to develop a more representative estimate of collocation costs that will be incurred in any given state. Generally, significant differences in collocation costs are caused by the needs of a particular office, not its geographic location. Material costs delivered to a particular site from Verizon's national vendors will cost the same regardless of where they are shipped. Only materials

ordered from a local vendor and labor rates will vary significantly from state to state. As discussed below, Verizon uses accepted industry practices to convert these state-specific costs to a national average. Thus, determining costs using additional projects from around the country, adjusted to account for any variances between states, allows Verizon to develop an average cost that is more representative of collocation costs it will incur.

65. At the time that Verizon performed its collocation cost study for Washington, it did not have significant collocation activity in Washington. California and Texas were the only states in which the company had already incurred collocation costs that could be captured in a study. For cost elements that do not vary significantly from state to state, Verizon relied on its actual experience in California and Texas as a reasonable estimate of the future costs it would incur in Washington. Exhibit T-311:17 (Callanan/Ellis). For items that do vary by state (such as labor rates, taxes and shipping) adjustments were made to the California and Texas cost estimates through the Area Modification factors published in the National Construction Estimator (“NCE”) or through RS Means in order to reflect Washington-specific costs. *Id.* Verizon only uses these manuals where it does not have itemized contractor invoices that identify costs actually incurred. The Area Modification Factors and the NCE are widely circulated and accepted in the construction industry as a method for estimating costs of commercial and industrial construction. Thus, Verizon’s use of these resources to estimate costs that vary by state is a reasonable method for calculating state-specific costs that is consistent with industry practice.

B. Cage Enclosure

66. The Joint CLECs object to Verizon’s proposed non-recurring charge for cage

enclosure, stating that the cost estimates underlying the charge are “fundamentally flawed.” Joint CLECs Brief at ¶¶ 86-91. Specifically, the Joint CLECs criticize Verizon for (i) using California and Texas costs rather than Washington-specific costs, despite the Company’s collocation experience in Washington; (ii) averaging the non-Washington costs and converting them to a national average using area modification factors from the National Construction Estimator; (iii) using the resulting national average to determine the amount of mark-ups above material and labor costs; and (iv) making assumptions in its cost calculations that are unsupported by, or conflict with, record evidence. *Id.* at ¶¶ 87-90. As explained in Section V(A), Verizon’s reliance on its California and Texas collocation experience, plus the use of the NCE and RS Means to develop Washington specific costs are a reasonable method to determine Washington specific costs in the absence of actual Washington data.

67. Contrary to the Joint CLECs’ assertions, Verizon does not add an additional mark-up to its cage construction costs. Verizon’s cost study identifies the total costs that its vendors charge to complete a job. Within the vendors’ total cost may be the vendors’ mark-up, which Verizon must pay for construction jobs. Verizon spreads this expense across all cost elements contained in the cage construction category on a percentage basis since the vendors do not itemize to which elements their mark-up applies. Verizon does not add any “additional” mark up to this total cage construction cost, but presents only the total cost incurred by the company.

68. In the absence of “verifiable data,” the Joint CLECs recommend that the Commission permit Verizon to charge its proposed cage enclosure charges only if the charges include fencing, gate, site modification and electrical, and either segregate grounding costs into a separate rate

element or include them in Verizon's cage enclosure rates with a corresponding increase in the proposed rates to reflect this additional element. Joint CLECs Brief at ¶ 91. Verizon does not object to segregating grounding costs into a separate rate element.

C. Floor Rental Space and Building Modification

69. The Joint CLECs express concern with Verizon's methodology for calculating its floor space rental rate, and the potential for double recovery of costs. Joint CLECs Brief at ¶ 92. Rather than proposing any modifications, the Joint CLECs recommend that the Commission address its concerns in connection with Verizon's building modification and environmental conditioning rates. *Id.* The Joint CLECs recommend several modifications to the costs underlying Verizon's building modification charge, which are addressed below.

1. Security Costs

70. The Joint CLECs recommend that the Commission disallow Verizon's proposed security charges because they are unsubstantiated "rough guesses" from an unidentified source that are not Washington-specific. *Id.* at ¶ 96. The Joint CLECs specifically criticize Verizon's proposal to spread card reader and controller costs equally between itself and four collocators. Joint CLECs Brief at ¶ 94. They believe that Verizon uses the central office in greater proportion than the CLECs, and therefore should bear a greater proportion of the costs. *Id.*

71. Regardless of how much central office floor space Verizon uses in proportion to the CLECs, or how many employees each has in the office, the security measures are a direct result of the CLECs' presence. Where Verizon employees are the only people with access to its central offices, a card access reader was unnecessary: key locks provided adequate security since only

Verizon employees possessed the keys. However, with multiple employees of multiple competing companies, the more sophisticated security access cards are necessary to track access to the central office as well as provide security. *See* Tr. 1516-17 (Richter).

72. The Joint CLECs also contend that Verizon's allocation of storage security costs solely on CLECs is discriminatory and a violation of the *Advanced Services Order*. Joint CLECs Brief at ¶ 95. However, these costs are a direct result of the CLEC's presence in the central office: but for the CLEC's presence in the central office, Verizon would never have had to install locks on its storage facilities. Thus, the CLEC is the appropriate cost causer, and should bear the full responsibility for storage security costs.

73. As an alternative for disallowing recovery of security costs altogether, the Joint CLECs recommend that the Commission require Verizon to establish a separate security rate structured in a similar manner as Qwest's proposed Security charge. Joint CLECs Brief at ¶ 96. Because security costs are always incurred when building modifications occur for collocation, Verizon finds it reasonable to include security costs in the building modification charge. Conceptually, Qwest's security charge structure appears similar to Verizon's. However, Verizon's appears easier to implement.

2. Site Modification

74. The Joint CLECs recommend that the Commission disallow any charge based on Verizon's cost estimates for site modification for relying on California and Texas cost information rather than Washington-specific data. Joint CLECs Brief at ¶¶ 97, 100. As explained above, building modification costs do not vary significantly by state, and thus the California and Texas

estimates provide a reasonable estimate of building modification costs incurred in Washington.

75. As an alternative to rejecting Verizon's site modification charges, the Joint CLECs request that the Commission order Verizon to recalculate its cost estimates to average demolition, minor HVAC and dust partition costs across all central offices in the sample rather than just those in which such costs were incurred. *Id.* at ¶¶ 98-100. The Joint CLEC's suggestion is merely an attempt to artificially decrease Verizon's costs by increasing the number of central offices across which they are spread. Those costs, however, should be spread only across those central offices in which the activities occur.

76. Finally, the Joint CLECs recommend that demolition, minor HVAC and dust partition costs should be recovered as part of the non-recurring charge for cage enclosure or cageless site preparation. *Id.* at ¶ 100. However, Verizon will not necessarily carry out its building modification activities in conjunction with providing cage enclosures. Exhibit T-327:19 (Tanimura). To assume that they do would be to base collocation rates on "imaginary" costs, an approach invalidated by the Eighth Circuit's Remand decision. Verizon's rate structure reflects the manner in which the costs are actually incurred. Moreover, combining building modification costs and cage enclosure costs into one rate element forecloses the option currently available to a CLEC to chose another vendor to provide its cage enclosure.

3. Electrical

77. The Joint CLECs recommend that the lighting and electrical outlets component of Verizon's electrical costs should be included in its cage enclosure or cageless site preparation charges. Joint CLECs Brief at ¶ 101. For the reasons discussed in paragraph 76, the Commission

should reject this proposal.

78. The Joint CLECs further recommend that the Commission reject a rate to recover floor grounding bar costs until Verizon recalculates those costs to reflect a facility shared between Verizon and the CLECs rather than one dedicated solely to CLEC use. *Id.* Verizon's proposal reflects the way in which it actually provisions collocation since it provides a floor bar for the collocation area. Tr. 1457-58 (Richter). In order to ensure CLECs have adequate grounding, Verizon places a floor grounding bar in the immediate vicinity of the CLEC's collocation area. Tr. 1460 (Richter). Because Verizon's own equipment will not be in the immediate vicinity in most cases, Verizon provides a dedicated CLEC grounding bar. Thus, for Verizon to share a grounding bar with CLECs would require longer cables, increasing the costs of ground wire equipment. *Id.* Moreover, establishing a separate grounding bar for CLECs makes it easier to isolate the source of any problems relating to grounding. *Id.* at 1488.

79. The Joint CLECs also recommend that Verizon recover these recalculated costs through a separate non-recurring charge for grounding or as part of the cage enclosure charge. *Id.*

For the reasons discussed in paragraphs 76-77, these costs should not be recovered through the cage enclosure rate. However, Verizon would not object to recovering the costs of a floor grounding bar through a separate grounding non-recurring charge.

D. DC Power

80. Staff recommends that the Commission reject Verizon's power cost proposal because it is "not verifiable." Staff Brief at ¶ 60. Staff specifically criticizes Verizon's estimate of a single labor rate of 15 minutes per foot for placement of the power cable rather than a different estimate depending on the size of cable being placed. *Id.* at ¶ 60-61. The 15 minute estimate represents an average time to place cable and perform all activities necessary for the placement of power cable on the cable rack. This 15-minute estimate is also used by Verizon to create work orders for its own cable pulls.

81. Verizon's averaging approach permits predictability in the charges a CLEC must pay for cable pulls. When a CLEC places an order for collocation, they do not know the size of cabling that will be necessary to provide power until the cable is pulled. By developing costs based on average cable pulls rather than size-specific pulls, CLECs can predict their up-front costs.

82. Staff also expresses a concern that Verizon overstates its costs for cable pulls. *Id.* at ¶ 62. Staff recommends that the Commission require Verizon to either rerun its cost study with "verifiable data" or use an average of three to five minutes per foot for installation of power cable. *Id.* Staff's proposed three to five estimate is unrealistic, and at best is an estimate of pulling cable through conduit, as reflected in R S Means and the NCE. However, this is not the activity captured in Verizon's 15 minute average.

83. The Joint CLECs criticize Verizon's methodology for calculating DC Power, and request that the Commission authorize Verizon to charge no more than its proposed \$513 for 40 amps of DC power, including both A and B feeds. Joint CLECs Brief at ¶¶ 102-03. Verizon

proposes to charge \$513 for each of the A and B feeds, providing requested capacity on each. This will provide the CLECs with the potential for redundant power, but Verizon has no way to monitor how that power is actually used. For these reasons, Verizon believes it is appropriate to develop a charge based on capacity.

E. Environmental Conditioning

84. The Joint CLECs recommend that the Commission refuse to permit Verizon to charge for environmental conditioning until it provides (i) Washington-specific cost support, (ii) details the costs to construct both a dedicated HVAC system and one shared by both Verizon and CLECs, and (iii) evidence of the extent to which each type of system is used in Verizon's Washington central offices. *See* Joint CLECs Brief at ¶¶ 104-106. The costs underlying Verizon's environmental conditioning charges are based on the actual activities performed by the company's land and building group. These activities do not vary significantly between central offices or states. Moreover, Verizon's cost study assumptions are based on known data regarding the number of collocators in Verizon's central offices and the amount of amps they request. Thus, Verizon's estimates reasonably capture the costs incurred in Washington. Moreover, the approach used in Verizon's cost study provides support for price proposals that apply to all Washington central offices, as opposed to requiring separate prices for each central office. Verizon's proposed prices also recover the costs directly attributable to the CLECs, regardless of whether those costs relate to dedicated or shared HVAC systems. Therefore, the Joint CLECs' recommendation should be rejected.

F. Cable Splicing

85. The Joint CLECs recommend that the Commission set Verizon's cable splicing charge equal to what XO f/k/a/ Nextlink alleges it pays its outside contractor—\$28 per splice. Joint CLECs Brief at ¶ 107. As explained in Verizon's opening brief, this quote is wholly unreliable as the basis for determining cable splicing costs in a Verizon central office in Washington—or anywhere else. *See* Verizon Brief at ¶ 135.

86. Alternatively, the Joint CLECs request that the Commission require Verizon to permit CLECs to conduct their own fiber splicing outside the central office. Joint CLEC Brief at ¶ 107. Verizon permits CLECs to conduct their own cable splicing within their collocation area. Verizon prefers that the CLEC provide a sufficient length of fiber cable from the first manhole outside the central office so that it can be pulled through the cable vault and through the central office to the CLEC location. Exhibit T-293:8-9 (Richter); Exhibit 296. If, however, the CLEC would prefer that the fiber be spliced in the cable vault and then extended to the collocater's equipment area, there is a cost in the cost study to accommodate this request based on the costs Verizon actually pays Washington vendors for cable splicing.

G. Microwave Collocation

87. Teligent devotes its entire brief to its request that the Commission require Verizon to file a collocation tariff offering microwave collocation at standard prices and on standard terms and conditions, subject to the provisioning requirements applicable to other forms of collocation. Teligent argues that since microwave collocation is substantially similar to physical collocation, many of the costs in evidence in this proceeding can be used to develop a standard rate, requiring

only a few instances of ICB pricing. Teligent Brief at ¶¶ 6, 23-25. This argument is based on an assumption that the processes applicable to microwave collocation are generally the same as those required for standard collocation arrangements. *Id.* However, Teligent failed to provide any evidence that its contentions are true, and there is nothing in the record to support its claims.

88. While Verizon agrees that some cost elements may be used for microwave collocation from Verizon's collocation cost study, Tr. 1473-74 (Richter), there is no "typical" microwave collocation arrangement that can be used to develop a cost study specific to microwave collocation. There are numerous ways to provide microwave arrangements, and costs depend specifically on the type of arrangement. Exhibit 299, Section 2.6. *See* Verizon Brief at ¶ 136. Accordingly, costs for microwave collocation arrangements should be handled on an individual basis through the bona fide request process.

H. 45 Day Interval

89. Staff does not address its 45 day interval proposal in its opening brief. The Joint CLECs correctly point out that collocation intervals are being addressed in the Collocation Rulemaking, Docket No. UT-990582, and that the Commission should apply the resulting rules to costing issues. Joint CLEC Brief at ¶ 109. However, the Joint CLECs find a 45 day interval reasonable and recommends its adoption. *Id.*

90. Verizon agrees that the Commission should address the collocation interval in the context of the UT-990582 Rulemaking Docket. Regardless of where this issue is decided, however, the Commission must bear in mind that shorter collocation intervals inevitably lead to higher costs, as overtime and contract labor will be necessary. *See* Verizon Brief at ¶ 137. Moreover, in many

cases, it takes more than 45 days for deliveries of materials from vendors alone. Exhibit T-282:3 (Ries). Thus, such an unrealistic interval should not be adopted.

91. Moreover, Verizon notes that in its recent Collocation Remand Order, the FCC adopted a 90-day physical collocation interval. *Order on Reconsideration and Second Further Notice of Proposed Rulemaking in CC Docket No. 98-147 and Fifth Further notice of Proposed Rulemaking in CC Docket No. 96-98*, FCC 00-297 (rel. Aug. 10, 2000) at ¶¶ 5, 34, 37. Similarly, the Texas, Pennsylvania, and Florida Commissions have found 90-day intervals for physical collocation reasonable. *See Investigation of Southwestern Bell Telephone Company's Entry into the Texas InterLATA Telecommunications Market, Project No. 16251*, Order No. 51 Approving Time Intervals for Provisioning Collocation under Revised Physical Collocation Tariff, at 1-2 (Tx. P.U.C. Aug. 18, 1999); *Nextlink Pennsylvania, Inc.*, P-00991648 *et al.*, 1999 USWL 983416 (Pa. PUC 1999); *Supra Telecommunications and Information Systems v. BellSouth Telecommunications, Inc.*, Docket No. 980-800-TP, Final Order Resolving Complaint regarding Physical Collocation, 1999 USLW 99534, at *17 (Fla. PSC 1999). Thus, Verizon's collocation intervals are reasonable, and should be approved.

VI. Conclusion

For the reasons set forth above and in Verizon's opening brief, the Commission should adopt Verizon's complete set of terms and conditions and prices for line sharing, and its proposed OSS and collocation rates.

Respectfully submitted,

VERIZON NORTHWEST INC.

By _____

W. Jeffery Edwards
Jennifer L. McClellan
Hunton & Williams
951 East Byrd Street
Richmond, Virginia 23219
788-8200

Dated: October 23, 2000

