Although the Commission has indicated that states may require ILECs to recover some otherwise non-recurring costs through recurring charges,[209/] the most efficient and appropriate means of recovering such costs is through a one-time, non-recurring charge to the cost-causer. As Dr. Shelanski explained,

> It would be inefficient and impractical to spread such a concrete expense over an estimate of future usage, which could later prove to understate or exaggerate costs. Moreover, failing to recover the costs from the cost-causer typically creates perverse economic incentives and uneconomic behavior by the CLECs. In order to ensure that the CLEC has the correct incentives to target customers, invest in facilities, and establish efficient prices, it should be required to pay the full amount of the costs that are a direct result of its actions.

(VZ-VA Ex. 110 at 18-19.) Indeed, the Commission itself has observed that "Commission policy favors economically efficient prices that reflect the manner in which costs are incurred. A LEC that must make a non-recurring expenditure to provide 500 access service should not generally be forced to recover its costs as if it were using technology that causes a recurring charge. Such a mechanism would distort the prices paid by access customers."[210/]

Requiring Verizon VA to recover otherwise non-recurring costs through recurring charges would inappropriately shift the risk of cost underrecovery from the CLEC to the ILEC and introduce economic inefficiency that would distort the development of competition. If a carrier incurs a one-time cost caused by the connection of service and can only recover that cost through a recurring charge, then it bears the risk that it will lose the customer and not recover that one-time cost. The requesting CLEC itself should bear that risk. Otherwise, as Dr.

209/ *Local Competition Order* at 15875 ¶ 749.

210/ Order, *In the Matter of MCI Telecommunications Corp. Application for Review*, 12 FCC Rcd 16565, 16571 ¶ 12 (1997).

Shelanski explained, "the CLEC will not fully consider the long-run costs of serving customers, will have incentive to over-expand, and will shift substantial risks of its own business decisions to the ILEC and, perhaps, to future carriers. Conversely, by shifting substantial risks onto the ILECs, AT&T/WorldCom's proposal would require the ILEC's cost of capital to increase." (VZ-VA Ex. 110 at 20.)

Any concern the Commission might have with respect to whether certain non-recurring charges could result in large initial capital outlays that allegedly might discourage entry is not implicated by Verizon VA's non-recurring cost model here. As discussed below, the primary cost as to which the parties disagree concerning its recurring or non-recurring classification is the cost for a field dispatch to place a cross-connect at the serving area interface. But unlike, for example, the cost of constructing a collocation cage, the cost of a field dispatch is small, is incurred only when needed to provision a particular loop to a particular end-user (from whom the CLEC can recover the cost if it chooses), and is a typical provisioning cost incurred by all carriers, including Verizon VA itself. This non-recurring charge cannot be said to be a barrier to entry.

AT&T/WorldCom nevertheless argue that a cost should be deemed recurring whenever the activity in question might possibly benefit some other CLEC, or Verizon VA itself, at some hypothetical point in the future, even if the current requesting CLEC directly caused the cost to be incurred. (*See* AT&T/WCom Ex. 2 at 9-11; AT&T/WCom Ex. 8 at 29-31.) But the Commission has previously rejected such a theory in relation to interconnection: "To the extent that the equipment needed for expanded interconnection service is dedicated to a particular interconnector, . . . requiring the interconnector to pay the full cost of the equipment up front is

reasonable . . . *regardless of whether the equipment might be reusable.*"[211/] AT&T/WorldCom's proposal would result in the same inappropriate risk-shifting and economic inefficiency caused by a more general requirement to recover non-recurring costs through recurring charges. Shifting the risk of non-recovery of the initial non-recurring cost to the ILEC would the CLEC cause to receive distorted market signals, and increase the ILECs' cost of capital.

AT&T/WorldCom also wrongly suggest that Verizon may not properly impose non-recurring charges on CLECs for any tasks for which it bills retail customers through recurring rates. This argument confuses the classification of *costs* with how those costs are recovered through *rates*. The goal of a cost study is to identify the costs the ILEC incurs in providing UNEs to a CLEC and the manner in which those costs are incurred and then to shift that same cost structure to the CLEC. As Verizon VA's witnesses explained:

> **MR. CURBELO:** . . .[W]e identify the non-recurring costs for the CLECs in the same manner in which we incur those non-recurring costs. . . . And they, in turn, could recover . . . from their end users the way we recover from our end users in the retail side of the market.
> **MR. PEDUTO:** Or any way they want.

(Tr. at 4785; *see also* Tr. at 4772, 4781.) That is, even if Verizon VA chooses (or is required to) recover a non-recurring cost through a retail recurring rate, that does *not* transform the nature of the cost itself. Instead, the CLEC should, in parity with the ILEC, incur the same non-recurring cost.

Finally, despite AT&T/WorldCom's contentions to the contrary, Verizon VA will not double recover costs through recurring and non-recurring charges. In calculating its ACFs,

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[211/] Second Report and Order, *Local Exchange Carriers' Rates, Terms and Conditions for Expanded Interconnection through Physical Collocation for Special Access and Switched Transport*, 12 FCC Rcd 18730, 18750 ¶ 33 (June 13, 1997) ("Second Report and Order") (emphasis added); *see also Local Competition Order* at 15876 ¶ 751.

Verizon VA subtracted from its base year expense figure all non-recurring revenues it received during that year. (Tr. at 4762, 4765-66; VZ-VA Ex. 107 at 21.) These non-recurring revenues serve as a proxy for the non-recurring costs Verizon VA incurred during that year. By removing those revenues before calculating the ACFs, Verizon VA ensured that it will not double recover for non-recurring costs through application of the ACFs on the recurring side.

2. Collection of Disconnect Costs at the Time of Connection.

Verizon VA's NRCM includes disconnection costs among the non-recurring costs for which Verizon VA charges when it connects a CLEC's unbundled service. Verizon VA's NRCM appropriately discounts the disconnect costs for the time value of money, based on a 2.5-year forecasted service life and a 12.95% cost of capital. (*See* VZ-VA Ex. 124 at 102.) This approach represents the industry norm, is entirely reasonable, and should be approved by the Commission.

Inclusion of disconnect costs at the time of connection is the only way to ensure that such costs are attributed to the entity that caused them and that they will, in fact, be recovered. Permitting recovery only at the time of disconnection would inappropriately shift the risk of non-recovery to ILECs, a particularly inequitable result since the ILEC has no choice but to provide UNEs to any requesting CLEC, regardless of the CLEC's financial qualifications or stability. Although the risk of uncollectables may be relatively low in the case of carriers such as AT&T and Worldcom, that is unquestionably not the case, in Verizon's experience, for all CLECs, whether due to financial troubles or other reasons. And, given the effect of the Commission's "pick and choose" rule,[212/] any CLEC will be able to take advantage of whatever provision the

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212/ 47 C.F.R. § 51.809.

Commission imposes here with respect to disconnect costs. Thus, it is appropriate for Verizon VA to include forward-looking disconnect costs in its NRC model. (*See* VZ-VA Ex. 107 at 335-36; VZ-VA Ex. 124 at 101.)

3. Charges For Expedited Orders.

Verizon VA's model properly includes increased rates for expediting orders. Additional charges for expedited orders are appropriate because requests for expedited service require adjustments to workload and schedules, and labor performed out-of-hours is paid at a premium over normal wages. (*See* VZ-VA Ex. 107 at 322-323; VZ-VA Ex. 116 at 75-76.) These orders thus simply cost more to fill than other orders, and the excess costs are due exclusively to the CLEC's demands. While AT&T/WorldCom's model includes no expedite charges, they have not even suggested such charges are inappropriate, and the Commission should accordingly accept them.

E. Specific Costs.

In a further effort to understate non-recurring costs, AT&T/WorldCom present a hodgepodge of criticisms concerning specific categories of provisioning tasks in Verizon VA's model and propose to assume away the costs of virtually all such tasks. Even a brief examination of these criticisms reveals that they are misguided and based on assumptions that are contrary to how efficient, real-world carriers operate.[213/]

213/ These issues are discussed at pages 22-45 of VZ-VA Ex. 116 and 69-89 of VZ-VA Ex. 124.

1. Hotcuts

In addition to their fantasy assumptions about electronic unbundling of stand-alone loops over fiber feeder, discussed above, AT&T/WorldCom complain about Verizon VA's procedures for provisioning loops using hotcuts. Ironically, these same procedures are in place precisely because the CLECs demanded them during industry meetings and Section 271 collaboratives. (VZ-VA Ex. 124 at 75-76, 80-81.) AT&T, in particular, has repeatedly requested modifications to the hotcut process that increase the time and expense associated with each cutover. In any event, Verizon VA's hotcut procedures comport with industry standards and are necessary to ensure that end-user service is not interrupted during a migration. As this Commission has noted, "[t]he ability of a BOC to provision working, trouble-free loops through hot cuts is of critical importance in view of the substantial risk that a defective cut will result in end-user customers experiencing service disruptions that continue for more than a brief period."[214/]

Yet in this proceeding, AT&T/WorldCom seek to assume away all the coordination tasks necessary to ensure trouble-free cutovers and to treat hotcuts as if they were a simple cutover of a retail customer from one part of the Verizon switch to another. The fact is, however, that hotcuts between carriers require careful — and sometimes time-consuming — coordination. AT&T/Worldcom's contrary characterization of hotcuts exposes their fundamental misunderstanding of the wholesale provisioning process. Thus, while AT&T/WorldCom criticize the frequency of travel between offices associated with the hotcut process (AT&T/WCom Ex. 116 at 62), the Commission has specifically "commend[ed] Bell Atlantic for" responding to CLEC demands by agreeing to engage in a pre-cutover visit to minimize

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214/ *New York § 271 Order* at 4109 ¶ 299.

problems and observed that such an additional visit "appears to be critical to the proper functioning of the hot cut process."[215] Indeed, Verizon VA's analysis suggests that if the procedures AT&T/WorldCom advocate had been in place, the frequency of service interruptions would have increased substantially. (VZ-VA Ex. 124 at 75.) The Commission should therefore approve Verizon VA's non-recurring charges for loop provisioning.

2. Central Office Wiring

AT&T/WorldCom also make two assumptions in an effort to eliminate or drastically reduce non-recurring costs for central office (CO) wiring. Both, however, are fundamentally untenable.

a) 100% Dedicated Inside Plant ("DIP") Assumption.

Petitioners improperly assume 100% Dedicated Inside Plant ("DIP") in their proposed costs for UNE-P and resale, even though no efficient carrier would implement that approach. Indeed, once again, AT&T/WorldCom have assumed use of a technique that they acknowledge has not been adopted by any carrier that they can identify, but rather is only some kind of a "modeling convention." (*See* Tr. at 4665; VZ-VA Ex. 116, Attachment B (AT&T/WCom Response to VZ-VA IV-28).) The Commission should reject AT&T/WorldCom's hypothetical musings.[216]

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[215] *New York § 271 Order* at 4052 ¶ 186.

[216] As Verizon VA's witness Mr. Peduto acknowledged, in a small number of situations, the jumper would still be in place when a CLEC requests a new UNE-P, and Verizon VA's typical occurrence factor for CO wiring tasks in connection with UNE-P should be somewhat less than 100%. (Tr. at 4843-44.)

Use of 100% DIP is not appropriate in the current market and would increase costs to CLECs and end users. In a 100% DIP environment, Verizon VA would have to add significant additional switching equipment so that every incoming cable to the central office could be pre-connected to a piece of switching line equipment. In other words, there would have to be switch line equipment dedicated to each feeder pair entering the central office. This would require Verizon VA to increase the amount of switching equipment drastically — and to charge CLECs for such equipment in its recurring rates. Because the utilization factor for feeder cable is less than 100% for sound engineering reasons, it simply makes no economic sense to purchase and install enough switching equipment to facilitate connection of all feeder pairs to the switch simultaneously. (*See* VZ-VA Ex. 116 at 28.)

Indeed, AT&T/WorldCom's only defense of the 100% DIP assumption is that it is a "modeling convention," not an assumption about how carriers in fact operate. (*See* Tr. at 4966.) However, for non-recurring UNE rates to have any economic validity, they must be based on the costs that the incumbent, acting efficiently, incurs in performing the tasks necessary to serve their wholesale customers. TELRIC demands, in short, that "costs should be recovered in a manner that reflects the way they are incurred."[217/] Verizon VA incurs the costs of running a jumper from the MDF to the Verizon switch for new UNE-P service as a one-time cost. To ignore this reality in favor of "modeling conventions," as AT&T/WorldCom would have it, is to consign the model to an inevitably inaccurate measure of costs.

217/ *See Local Competition Order* at 15873 ¶ 742.

b) Distributing Frames

AT&T/WorldCom apparently assume that all MDFs in Verizon VA's territory are Low Profile Distribution Frames (LPDF) or COSMIC-type frames.[218/] (*See* AT&T/WCom Ex. 2 at 34; AT&T/WCom Ex. 21 at 48.) They assert that such frames allow for the use of a single short "jumper" to perform a cross-connect and accordingly require short central office wiring times. Again, however, this assumption ignores operational realities. As an initial matter, Verizon VA does not widely use such frames; Verizon VA has found that in general, COSMIC-type frames are not operationally effective or cost-efficient. (*See* VZ-VA Ex. 124 at 34.) Ironically, even if they *were* widely used, the frames that AT&T/WorldCom envision would *not* lower the cost of provisioning UNEs. These frames require careful administration and control over the assignment of ports on the block terminating the switch (or the collocation equipment) so that the assigned port is always close to the customer's cable pair — administration that is impractical in a multi-LEC environment because the CLEC blindly chooses a port location without knowing the location of the customer's cable pair. (*See* VZ-VA Ex. 124 at 33-38.) Thus, AT&T/WorldCom's assumption of the ubiquitous deployment of LPDF or COSMIC-type frames offers no justification for their extremely short central office wiring times.

3. Field Installation

Verizon VA's non-recurring model appropriately accounts for the costs incurred by dispatching a field technician to perform cross-connects at the feeder distribution or serving area interface. As noted above, Verizon VA's model assesses field installation charges on a CLEC

[218/] Notwithstanding their testimony, AT&T/WorldCom appear to be somewhat confused about their own model's assumptions. In discovery, when asked whether their model assumes that all MDFs are low-profile or COSMIC-type frames, AT&T/WorldCom simply responded "[n]o." (*See* VZ-VA Ex. 116, Attachment B.)

only when a field dispatch is required to fulfill the specific CLEC order. (*See* VZ-VA Ex. 116 at 43, 45.) AT&T/WorldCom do not deny that Verizon VA will sometimes need to dispatch a field technician to fulfill an order, but, based on nothing more than a "modeling convention" that they admit has nothing to do with the operation of a real-world carrier, insist that the costs for such dispatches be recovered through recurring charges.[219/]

Petitioners posit that the cross-connect at the feeder distribution interface is a dedicated part of the loop like the NID and drop that, once placed, is never removed. In other words, Petitioners assume 100% dedicated outside plant such that once a distribution pair terminated on the field side of the feeder distribution interface has been assigned to a premise, it will remain permanently cross-wired to a specific feeder pair terminated on the central office side of the interface. But, as Verizon VA has explained, that is not "the way an efficient plant is constructed." (Tr. at 4863.) Rather, an efficient network is designed to flexibly permit cross-connects between distribution and feeder facilities to be moved and rearranged in response to orders and service changes (*e.g.*, disconnecting a cross-connect to free up a needed feeder facility when the premise served by a given distribution cable has remained vacant for a long period of time). (*See* VZ-VA Ex. 116 at 39-45.) Dedicating a feeder pair to each distribution pair would drastically increase the amount of feeder cable needed and therefore increase recurring costs — costs for which Petitioners do not account. Petitioners' own witnesses conceded that they could not identify any carrier that actually employs 100% Dedicated Outside Plant (Tr. at 4667) and

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219/ AT&T/WorldCom also suggest that Verizon VA has overstated the amount of work performed by the field installation work group. Yet their criticisms assume an idealized job in which the technician has to visit only a single location per job in the field and encounters no difficulty or roadblock requiring additional work. Such an approach, however, fails to account for the real-world situations a field technician will face, conditions that are captured in Verizon's survey of workers who actually engage in or supervise field work. (*See* VZ-VA Ex. 124 at 97-99.)

that this was "not an assumption about what physically is taking place in the carrier's network" (Tr. at 4667-68.) But a model cannot accurately estimate the costs of providing UNEs if it simply ignores how an efficient carrier provides such elements in favor of hypothetical modeling conventions.

Because cross-connects are not permanently placed as part of the loop, Verizon VA appropriately seeks to recover the cost of fieldwork to place a cross-connect when such work is triggered by a CLEC order. (Tr. at 4803.) Verizon VA incurs this cost on a non-recurring basis and does not recover that cost through recurring charges. As discussed above, in these circumstances, the CLECs accordingly should pay a non-recurring charge for the required work.

VII. VERIZON VA'S COSTS RELATED TO XDSL-COMPATIBLE LOOPS, LINE SHARING, AND LINE SPLITTING.

Verizon VA has submitted detailed and fully supported cost studies establishing the recurring and non-recurring costs it incurs in providing CLECs with xDSL-compatible loops, line splitting, and line sharing. By contrast, AT&T/WorldCom submitted *no* studies with respect to the costs of these activities. Instead, they rely on assertions that certain costs should not be recovered or should be picked up in general expense factors in some unspecified manner, or they make isolated criticisms of Verizon VA's studies. In both cases, AT&T/WorldCom's arguments are unavailing, and the Commission should approve the rates produced by Verizon VA's studies.

A. Verizon VA's Line Conditioning Costs Are Consistent with Prior Commission Decisions and Should Be Approved.

Verizon VA proposes recovery of costs for line conditioning through a non-recurring charge if — and only if — a CLEC requests conditioning that exceeds Verizon's network design

standards.[220/] In particular, where load coils are present on copper loops longer than 18,000 feet, the load coils generally cannot be removed because they are necessary for the circuits to function at voice grade standards. (VZ-VA Ex. 107 at 126-27; Tr. at 4994.) Verizon VA does not condition such loops for itself, but it will do so in the relatively rare case that a CLEC requests it. Similarly, because xDSL technologies are generally designed to operate with up to 6,000 feet of bridged tap, if a CLEC requests that Verizon remove bridged tap less than 6,000 feet, it will incur a charge for that special work. (Tr. at 5000, 5027-28.) The limited line conditioning charges Verizon VA proposes are consistent with economic principles and past precedent and should be approved.

1. Loop Conditioning Costs Should Be Recovered Through Non-Recurring Charges.

AT&T/WorldCom's arguments that Verizon VA should not be allowed to recover its costs for loop conditioning, or, in the alternative, that such costs should be recovered on a recurring basis (AT&T/WCom Ex. 2 at 26), contravene both this Commission's rulings and principles of cost causation. In a series of decisions, this Commission has repeatedly confirmed that incumbent LECs such as Verizon are entitled to recover the costs of conditioning loops at CLECs' request.[221/] Just recently, the Commission reaffirmed to the Supreme Court that its "express . . .

220/ This issue is discussed at pages 138-42 of VZ-VA Ex. 107; pages 60-64 of VZ-VA Ex. 116; and 130-43 of VZ-VA Ex. 124.

221/ *See Local Competition Order* at 15692 ¶ 382 ("Some modification of incumbent LEC facilities, such as loop conditioning, is encompassed within the duty imposed by section 251(c)(3). *The requesting carrier would, however, bear the cost of compensating the incumbent LEC for such conditioning.*") (emphasis added); Third Report and Order, *Deployment of Wireline Services Offering Advanced Telecommunications Capability*, 14 FCC Rcd 20912 ¶ 82 (1999) ("Line Sharing Order"); *id.* at ¶ 87 ("[W]e conclude that incumbent LECs should be able to charge for conditioning loops when competitors request the high frequency portion of the loop."); *UNE Remand Order* at 3784 ¶¶ 192-93 ("We agree that networks built today normally

directions" make clear that incumbent LECs are not required to condition loops for advanced services "for free."[222/] Numerous state commissions, including those in Pennsylvania, North Carolina, Michigan, Illinois, Maine, Washington, Minnesota, New York, and Missouri, have agreed and approved the imposition of loop conditioning charges.[223/]

AT&T/WorldCom's assertion that loop conditioning costs should be recovered through recurring charges is similarly incorrect. This Commission has made clear that "the costs

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should not require voice-transmission enhancing devices on loops of 18,000 feet or shorter. Nevertheless, the devices are sometimes present on such loops, and the incumbent LEC may incur costs in removing them. *Thus, under our rules, the incumbent should be able to charge for conditioning such loops.*") (emphasis added); *New York § 271 Order* at ¶ 259.

Indeed, in the *UNE Remand Order*, the Commission not only upheld the recoverability of loop conditioning costs, but also went further and ruled that load coil removal costs would be recoverable even where load coil placement would not be called for under current network standards. *See UNE Remand Order* at 3784 ¶¶ 192-93; *Line Sharing Order* at ¶ 82; *see also* VZ-VA Ex. 107 at 138-39; VZ-VA Ex. 116 at 60-61.

222/ FCC Reply Brief at 10 n.7. The Commission also has recognized the substantial costs that incumbent LECs must incur, noting that loop conditioning "can be expensive." *Line Sharing Order* at ¶ 8 n.9.

223/ *See Pennsylvania § 271 Order*; *Recommended Order Concerning all Phase I and Phase II Issues Excluding Geographic Deaveraging, Permanent Pricing for Unbundled Network Elements*, Docket NO. P-100 Sub 133d, 2001 WL 811182, at *24 (N. Carolina Util. Comm'n June 7, 2001) ("*North Carolina Order*"); Opinion and Order, *Ameritech Michigan*, Case No. U-12540, 2001 WL 306699, at *9 (Mich. Pub. Serv. Comm'm Mar. 7, 2001); Order, *Illinois Commerce Commission on its Own Motion v. Illinois Bell Telephone Co. Investigation of Construction Charges*, Docket No. 99-0593, 2000 Ill. PUC Lexis 654, at *157 (Ill. Commerce Comm'n 2000) ("*Illinois Order*"); Order (Part 1 Issues E3 & E7) (Final Order for all Other Issues), *Mid-Maine Telplus Request for Arbitration*, Docket Nos. 98-593 & 98-806, at 27 (Me. Pub. Util. Comm'n Mar. 25, 1999); 17th Supplemental Order, Interim Order Determining Prices; Notice of Pre-hearing Conference, Docket Nos. UT-960370 & UT-960371, at 132 (Wash. Utils. and Transp. Comm'n Sept. 23, 1999); *Consolidated Petitions of AT&T Communications of the Midwest, Inc. et al.*, Docket. Nos. P-442, 421, *et. al.*, 1997 Minn. PUC LEXIS 49, *115 (Minn. Pub. Util. Comm'n Mar. 17, 1997); Opinion and Order Concerning DSL Charges at 41, 1999 NY PUC LEXIS 759, at *65-*66; Arbitration Order, *Petition of Dieca Communications Inc.*, Case No. TO-2000-322, 2000 Mo. PUC LEXIS 260, *17 (Mo. Pub. Serv. Comm'n Mar. 23, 2000). (*See generally* VZ-VA NRC Rebuttal at 61-62; VZ-VA NRC Surrebuttal at 134 & n.90.)

incumbents impose on competitors for line conditioning are [to be] in compliance with [its] pricing rules *for non-recurring costs*."[224/] There is simply no basis to revisit that express conclusion here.

2. AT&T/WorldCom's Challenges to the Amount of Verizon VA's Conditioning Charges Are Baseless.

As with other non-recurring costs, Verizon VA developed its costs for loop conditioning based on a survey of personnel experienced in performing and supervising this work. (VZ-VZ Ex. 107 at 140.) AT&T/WorldCom, by contrast, have not submitted any cost study with respect to loop conditioning tasks. (Tr. at 4979-80.) Instead, they offer unrealistic time estimates based solely on the unsubstantiated opinions of two consultants who regularly testify against ILECs on behalf of AT&T/WorldCom but do not perform conditioning tasks themselves. (*See* AT&T/WCom Ex. 13, Attachment 1; VZ-VA Ex. 124, Attachment F.)

AT&T/WorldCom's consultants grossly understated loop conditioning costs by eliminating necessary work steps, underestimating the time for the work steps they chose to include, and generally failing to appreciate the conditions under which these activities are performed in the real world. (*See* VZ-VA Ex. 124 at 138-40.) For example, for all conditioning activities, they either failed to include or understated the time to (1) receive orders; (2) process orders in Verizon VA's databases; and (3) close out orders and send them to engineering. They also disregarded the OSHA-mandated requirements for work area protection and the time it takes to erect and disassemble such protection properly (VZ-VA Ex. 124 at 139.) In short,

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224/ *UNE Remand Order* at ¶ 194 (emphasis added); *New York § 271 Order* at ¶ 254 ("The costs incumbents impose on competitors for line conditioning . . . are non-recurring charges . . . ."); *see also North Carolina Order* at *24 ("The Commission agrees . . . that the ILECs should be allowed to impose non-recurring charges for conditioning loops.").

AT&T/WorldCom's suggested work times for conditioning activities are undocumented and divorced from reality and cannot possibly account for the critical actions associated with these activities.

AT&T/WorldCom's contention that Verizon VA should reduce incremental conditioning costs by conditioning loops in batches of 25 or 50 loops whenever a CLEC requests the conditioning of a *single* loop (AT&T/WCom Ex. 13 at 149) also is without merit. As an initial matter, even if it were possible, AT&T/WorldCom's proposal would degrade the quality of service available on Verizon VA's network. (*See* VZ-VA Ex. 124 at 136; Tr. at 4995-96, 5016-17.)[225/] Such conditioning would render the 24 or 49 unnecessarily conditioned loops useless for voice service (unless Verizon VA then turned around and re-installed bridged taps or load coils) — without any expectation, let alone guarantee, that those newly conditioned loops would ever be needed for data services. (VZ-VA Ex. 107 at 136-40; VZ-VA Ex. 116 at 63.) But more fundamentally, AT&T/WorldCom's simplistic assumptions about the availability of batches of spare pairs for conditioning are simply incorrect. (VZ-VA Ex. 107 at 138-39.) For example, Verizon VA witness John White testified that, having studied a large sample of loaded pairs in Virginia, he had found an average of only five spare pairs per 25-pair complement. (Tr. at 4994-

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225/ State commissions have recognized this reality. For instance, the North Carolina Utility Commission recently concluded that "it would not be prudent to remove load coils from such long loops, other than the loop over which advanced services, *i.e.*, xDSL services, have been requested." *See North Carolina Order* at *33. Likewise, the Connecticut Department of Public Utility Control concluded that, if loops were conditioned in batches rather than in response to specific requests, "efficiency would decrease, because customers using Telco service for only voice transmission would experience a decline in the quality of service offered." Decision, *DPUC Review of SNET's Studies of UNE Non-recurring Charges*, Dkt. No. 00-03-19, 2000 Conn. PUC LEXIS 187, at *60 (Conn. Dep't Pub. Util. Control June 29, 2000).

95.)[226/] Therefore, conditioning in 25-pair batches would rarely be possible. Moreover, even if Verizon VA were to rearrange binder groups to consolidate the spares for batch conditioning, as AT&T/WorldCom then suggested, it would destroy all the spare capacity for voice service at that distance and accordingly constrain Verizon VA's options for meeting future demand for voice services in that area. (Tr. at 5006-5007.)

Petitioners' fantasy assumption of batch conditioning also would unreasonably shift significant costs to Verizon VA. They propose that a CLEC pay a non-recurring charge that recovers only the prorated cost of one conditioned loop — that is, 1/25th the cost of deloading a 25-pair complement or 1/50th the cost of removing bridged taps from a 50-pair complement. (Tr. at 4981-82.) Although they vaguely suggest that the remaining costs might somehow be recovered through recurring charges (Tr. at 4982-83), that would improperly force Verizon and carriers other than the CLEC that requested the conditioning, to pay the majority of the costs for conditioning that they have not requested, would not request themselves, and do not consider necessary for their own service offerings. At bottom, AT&T/WorldCom's proposal requires unnecessary and wasteful work that will degrade voice quality, simply so Petitioners can pay less than it costs Verizon VA to condition a loop at their request. That is a manifestly inappropriate solution.

226/ Mr. Riolo conversely admitted that he had performed *no* study of Verizon's network in Virginia to determine the frequency with which loaded pairs appear in complements of 25 or more. (Tr. at 4989.)

B. Verizon VA's Loop Qualification Charges Are Appropriate and Should Be Approved.

Verizon VA offers three services in connection with loop qualification.[227] The primary means by which CLECs obtain loop qualification information is by submitting queries to Verizon VA's automated loop qualification database (the "Database"). (VZ-VA Ex. 107 at 127.)[228] The costs associated with this mechanized qualification process are recovered through a recurring charge on each xDSL-compatible loop or line sharing or splitting arrangement.[229] (VZ-VA Ex. 107 at 132-34.) As of July 31, 2001, information for loops in 102 of the 105 Verizon VA wire centers in which CLECs are collocated, representing more than 99% of all the loops in wire centers with collocation, was included in the Database.[230] (VZ-VA Ex. 107 at

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[227] This issue is discussed in VZ-VA Ex. 107 at 136-37, VZ-VA Ex. 116 at 54-60; and VZ-VA Ex. 124 at 144-54.

[228] A requesting CLEC also can electronically request and receive certain qualification information contained in Verizon VA's Loop Facility Assignment and Control System (LFACS) database. (VZ-VA Ex. 116 at 55.) In fact, in October 2001, Verizon implemented an enhancement to its OSS that provides CLECs with electronic access to loop make-up information (including cable segment lengths and gauges, bridged tap lengths, gauges and locations, load coil locations, and DLC system types) as that information currently exists in the LFACS database. (VZ-VA Ex. 124 at 149-50.) Verizon VA is not proposing any charge for such access at this time.

[229] AT&T/WorldCom's proposal that the Database costs be recovered through a per query charge would be impossible to implement and would leave Verizon VA with little recovery of the substantial investment it has been required to make. Verizon VA cannot automatically track how many times any CLEC uses the loop qualification database. Moreover, Verizon VA has permitted CLECs to order an extract of the entire loop qualification database, thereby allowing CLECs to access information without needing to access Verizon VA's system. Verizon VA has no way of determining how many times such CLECs access loop qualification information. (VZ-VA Ex. 124. at 152.)

[230] Should a CLEC seek to prequalify one of the miniscule number of loops that have not been populated in the Database, Verizon VA will provide such information through manual loop qualification, but will not impose the non-recurring charge for that process. (*See* VZ-VA Ex. 116 at 57-58; VZ-VA Ex. 124 at 153).

130.) In order to provide CLECs with additional information not included in the Database, Verizon offers two other options, subject to non-recurring charges: Manual Loop Qualification and Engineering Query. (VZ-VA Ex. 107 at 136-37.) Petitioners offer no valid reason to reject Verizon VA's costs for these services.

AT&T/WorldCom's primary argument is that incumbent LECs must provide requesting carriers automated access to all available information regarding loop qualification through an automated database. (*See, e.g.*, AT&T/WCom Ex. 8 at 39.) But that is both unrealistic and inconsistent with the Commission's rulings. As required by the Commission, Verizon VA "provide[s] requesting carriers the same underlying information that the incumbent LEC has in any of its own databases or other internal records."[231/] The Commission has specifically rejected a CLEC's "unqualified request that the Commission require incumbent LECs to catalogue, inventory, and make available to competitors loop qualification information through automated OSS even when it has no such information available to itself."[232/] The Commission explained:

> If an incumbent LEC has not compiled such information for itself, *we do not require the incumbent to conduct a plant inventory and construct a database on behalf of requesting carriers.* We find, however, that an incumbent LEC that has manual access to this sort of information for itself, or any affiliate, must also provide access to it to a requesting competitor on a non-discriminatory basis. In addition, we expect that incumbent LECs will be updating their electronic database for their own xDSL deployment and, to the extent their employees have access to the information in an electronic format, that same format should be made available to new entrants via an electronic interface.[233/]

231/ *UNE Remand Order* at 3885 ¶¶ 427-428.

232/ *Id.* at 3886 ¶ 429.

233/ *UNE Remand Order* at 3886 ¶ 429 (footnotes omitted) (emphasis added).

Verizon VA complies fully with the Commission's ruling in this respect. Indeed, the Commission has reviewed Verizon's loop qualification processes several times — in connection with Verizon's section 271 applications in New York, Massachusetts, Connecticut and Pennsylvania — and has repeatedly rejected the very arguments made here and concluded that Verizon's processes comply with the requirements of the Telecommunications Act.[234/]

In any event, assembling a database with full loop make-up information for all of Verizon VA's loops as AT&T/WorldCom propose would be a massive and cost-prohibitive effort. (VZ-VA Ex. 116 at 58.) Completely mechanizing the loop qualification process would require review of detailed information for each of millions of loops, and would result in much higher database costs for all carriers (VZ-VA Ex. 116 at 58.) AT&T/WorldCom do not account for such costs in their model; they assume that fully automated systems magically appear, but account for no CLEC contribution to the costs of developing such systems.[235/]

234/ *See* Memorandum and Order *In the Matter 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 CT* (*"Connecticut"*) 16 FCC Rcd 14147 (rel. Jul. 20, 2001) (*"Connecticut § 271 Order"); See Pennsylvania § 271 Order.*

235/ AT&T/WorldCom also assert that Verizon VA's Database was developed for use with Verizon's own retail xDSL offering and therefore is insufficient to provide loop qualification to CLECs. (AT&T/WCom Ex. 13 at 155-58.) As the Commission has previously found, they are wrong. *See New York § 271 Order* at ¶ 143 (finding Bell Atlantic's mechanized and manual loop qualification processes sufficient where they allowed requesting carriers to access information "in substantially the same time and manner" as Bell Atlantic's retail operations. Though xDSL technologies and equipment vary, all xDSL technologies rely on the high frequency portion of the loop, and thus they all are affected by distance, presence of load coils and bridged taps, and interference from T-1 and other disturbances — the basic information that Verizon VA's Database provides. (VZ-VA Ex. 116 at 56.) Although the Database does provide a summary determination whether a loop is qualified by Verizon's standards, it also provides the underlying information on which that determination is based, as required by the Commission. (VZ-VA Ex. 116 at 56.; VZ-VA Ex. 124 at 146).

To the extent CLECs require additional information beyond what is available in the Database or Verizon's Loop Facility Assignment and Control System,[236/] they can obtain that information through two manual loop qualification methods. In particular, the CLEC may request that Verizon VA engage in manual loop qualification for a particular loop, or a CLEC offering xDSL or related services that differ technically from Verizon retail services or that use different terminating electronics may want additional information and can request an engineering query. (VZ-VA Ex. 107 at 137; VZ-VA Ex. 116 at 55.) If a CLEC requests either or both of these optional processes, Verizon VA will impose the associated non-recurring charges, which recover costs for, among other things, performing tests on the loop and checking paper records. AT&T/WorldCom offer no reason to question the validity of these charges.

C. Verizon VA's Wideband Testing System Charge Should Be Approved.

Verizon VA also proposes a recurring charge, applied to line sharing and line splitting arrangements, to recover the cost of wideband testing system equipment purchased to ensure that the loop is capable of supporting the desired services and to isolate any problems to either the data or the voice layer.[237/] (VZ-VA Ex. 107 at 150, 152.) Without this enhanced capability, Verizon VA (and CLECs) would incur greatly increased dispatch costs that would far outweigh the additional cost of the wideband testing system itself. (VZ-VA Ex. 107 at 150-51.) Accordingly, the charge is appropriate and should be mandatory for all CLECs that purchase line sharing or line splitting.

236/ As noted previously, in addition to the Database, CLECs also have access to LFACs, at no charge.

237/ This issue is discussed in VZ-VA Ex. 107 at 150-52 and VZ-VA Ex. 124 at 104-10.

AT&T/WorldCom initially argue that wideband testing and the associated charge should be optional to the CLEC. However, wideband testing is necessary to provide a fully functional xDSL-compatible loop to the CLEC. (VZ-VA Ex. 107 at 151; VZ-VA Ex. 124 at 104-07.) Even if a CLEC conducted testing and offered Verizon VA the results, that could not occur until after Verizon had provisioned the loop — too late to serve the very purpose for which Verizon VA does this testing. If Verizon VA is to be held accountable for service level quality, it is only fair that it be allowed to use its own testing system. Moreover, making wideband testing optional would considerably increase the monthly cost per line assessed on those CLECs that did choose such testing, because the wideband testing costs would be spread over fewer xDSL lines. As a result, those CLECs that want to ensure good service for their customers would be paying a much higher rate. (VZ-VA Ex. 124 at 106.)

AT&T/WorldCom's further suggestion that wideband testing costs be included in the ACFs (AT&T/WCom Ex. 13 at 110) would violate principles of cost causation. Such an approach would spread these costs over all products and services instead of just the cost-causing xDSL services. (VZ-VA Ex. 124 at 110.) As a result, purchasers of POTS loops would effectively subsidize testing that is unique to xDSL-compatible loops. In fact, because Verizon VA is not proposing at this time to allocate investments in the underlying loop to line sharing CLECs, little or no wideband testing costs would be recovered from the cost-causing line sharing CLEC under AT&T/WorldCom's proposal. By contrast, Verizon's approach of spreading total wideband testing costs over the expected number of lines used for xDSL-compatible loops, line

sharing, and line splitting more closely ties testing costs to the cost causers.[238] (VZ-VA Ex. 107 at 152.)

Finally, AT&T/WorldCom's contention that recovery of wideband testing costs should be denied unless Verizon VA provides CLECs with direct access to the system (AT&T/WCom Ex. 13 at 105) is meritless. Verizon VA provides to CLECs, upon request, the same test results that Verizon VA's wholesale technicians use. There is no reason to require Verizon VA to give CLECs direct control over Verizon VA's test equipment. Verizon VA does not turn over other kinds of network testing, maintenance and repair equipment to CLECs, and AT&T/WorldCom offer no reason to treat wideband testing differently. (VZ-VA Ex. 107 at 152.)

D. Verizon VA's Cooperative Testing Charge is Appropriate and Should Be Approved.

Verizon VA 's proposed a reasonable non-recurring charge for cooperative testing.[239] Such testing goes beyond the normal testing Verizon VA performs in conjunction with provisioning loops and is done only at the request of the CLECs, often with a Verizon technician working under the direction of the CLEC. (VZ-VA Ex. 107 at 144; VZ-VA Ex. 124 at 128.)

238/ AT&T/WorldCom's assertion that Verizon VA's wideband testing charge is an attempt to recover costs due to a supplier error (*see* AT&T/WCom Ex. 13 at 112-14) reflects a basic misunderstanding of such testing. The Alcatel refund on which Petitioner rely relates to the vendor's failure to integrate the wideband testing into the DSLAM that Verizon was then planning to use for *retail* DSL service. (VZ-VA Ex. 124 at 108.) Verizon's proposed wideband testing charge here is not based on integrated testing functionality, which would not be efficient in a wholesale environment since CLECs provide their own DSLAMs.

239/ This issue is discussed at pages 142-44 of VZ-VA Ex. 107 and 128-29 of the Ex. 124.

Such testing was actually demanded by CLECs, and this Commission applauded the New York Public Service Commission's initiatives regarding such testing.[240/]

Nonetheless, AT&T/WorldCom now propose that Verizon VA should bear its cooperative testing costs. (*See* AT&T/WCom Ex. 13 at 139-40.) This proposal makes no economic sense. The CLEC is unquestionably the cost causer since such testing is performed only at the request of a CLEC and goes beyond what Verizon would normally do. Furthermore, CLECs can install their own testing capability and render cooperative testing by Verizon unnecessary. As a result, requiring Verizon to bear a share of the cooperative testing cost would create an economically perverse incentive for CLECs *not* to install their own capability even when it would otherwise be efficient to do so simply because the CLEC would rather share the cost with Verizon VA.

E. Verizon VA's Splitter-Related Costs Are Appropriate.

Verizon's studies consider two separate line sharing scenarios that were developed in the line sharing collaborative process.[241/] In the first, the splitter is located in the CLEC's collocation space in Verizon's central office ("Scenario A"); in the second, it is mounted on a relay rack located in Verizon's central office space ("Scenario C"). (VZ-VA Ex. 107 at 153-54.) Verizon VA's studies produce rates in this proceeding for splitter installation and equipment support and splitter administration and support. AT&T/WorldCom's criticisms of the underlying costs are unavailing.

240/ *See, e.g., Pennsylvania § 271 Order* at ¶ 84 (rejecting CLEC's claim that Verizon failed to conduct *enough* cooperative testing); *New York § 271 Order* at ¶ 319 (discussing NY collaborative).

241/ This issue is discussed in VZ-VA Ex. 107 at 153-59 and VZ-VA Ex. 124 at 119-27.

1. The Commission Has Already Rejected AT&T/WorldCom's Assumption that Splitters Should Always Be Mounted on the CO Frame.

In an effort to reduce splitter and line sharing charges, AT&T/WorldCom propose that the Commission assume that splitters will always be mounted at or near the MDF. (AT&T/WCom Ex. 13 at 122-23.) However, this proposal has already been rejected by the Commission and is in any event unworkable and inefficient.

In its *Line Sharing Order*, the Commission specifically recognized the possibility that the splitter would *not* be located within the frame, stating that in such cases "we would expect the states to allow the incumbent LEC to adjust the charge for cross-connecting the competitive LEC's xDSL equipment to the incumbent LECs' facilities to reflect any cost differences arising from the different location of the splitter, compared to the MDF."[242] More recently, the Commission specifically affirmed the right of an incumbent LEC to "decide where collocated equipment will be placed within its premises as long as the incumbent acts reasonably and nondiscriminatorily."[243] As the Commission explained:

> In recognition of the incumbent's right to use an manage its own property, we find that each incumbent should maintain ultimate responsibility for assigning collocation space within its premises. . . . Ultimately, it is the incumbent who will be responsible for planning and maintaining the premises for the benefit of all users — the incumbent, its affiliates and subsidiaries, and other collocators.[244]

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[242] *Line Sharing Order* at ¶ 145.

[243] Fourth Report and Order, *Deployment of Wireline Services Offering Advanced Telecommunications Capability*, 16 FCC Rcd 15435, 15436 ¶ 2 (rel: Aug. 8, 2001).

[244] *Id.* at 15480-81 ¶¶ 90, 91. The Commission made this determination on remand from the D.C. Circuit, which had vacated Commission rules that would have given CLECs the right to

Moreover, contrary to AT&T/WorldCom's claims, frame-mounted splitters are not currently workable in a central office environment. In many central offices, it would not be technically feasible to put all CLECs' splitters on the main distributing frame. Given limited capacity at the MDFs, congestion would force Verizon VA to deny space to some CLECs. In addition, adopting frame-mounted splitters as a standard design would preclude Verizon VA from maximizing space and efficiency in its central offices. The frame-mounted splitters may take up to five times more of the amount of space that rack-mounted splitters would occupy. The existence of finite amounts of space in central offices, and the existence of numerous conflicting demands for that space, including requests for collocation, is a reality that simply cannot be ignored in a forward-looking study. (VZ-VA Ex. 124 at 119-20.)

2. Verizon VA's Splitter Installation and Equipment Support Costs for Scenario C Are Reasonable.

Verizon VA's proposed rate for a CLEC that chooses to have Verizon VA install a splitter on the CLEC's behalf is reasonable and well-supported. Verizon VA used the same method it has used to develop installation costs for other investments by applying an EF&I factor to the material cost of the equipment, which in this case is the splitter. (VZ-VA Ex. 107 at 156-

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designate where equipment can be collocated in an ILEC's central office. The court had concluded that the ILEC, not a CLEC, has the right to make that determination:

> It is one thing to say the [incumbent] LECs are forbidden from imposing unreasonable minimum space requirements on competitors; it is quite another thing, however, to say that competitors, over the objection of [incumbent] LEC property owners, are free to pick and choose preferred space on the [incumbent] LEC's premises, subject only to only technical feasibility. There is nothing in Section 251(c)(6) that endorses this approach.

GTE Servs. Corp. v. FCC, 205 F.3d 416, 426 (D.C. Cir. 2000).