COMMONWEALTH OF MASSACHUSETTS

DEPARTMENT OF TELECOMMUNICATIONS & ENERGY

_____

)

Investigation by the Department on its own)

Motion as to the propriety of the rates and)

charges set forth in M.D.T.E No. 17, filed with)

the Department on May 5, 2000 to become) D.T.E. 98-57, Phase III

effective June 4 and June 6, 2000 by New)

England Telephone and Telegraph Company)

d/b/a Bell Atlantic - Massachusetts)

_____)

INITIAL BRIEF OF VERIZON MASSACHUSETTS

Verizon Massachusetts(1) files this Initial Brief in support of its proposed modifications to Digital Subscriber Line ("DSL") Service and Line Sharing arrangements provided under Tariff No. 17. This Brief addresses issues raised in the Arbitration Petition of Covad Communications Company ("Covad"), filed on April 26, 2000, in D.T.E. 00-46, as well as concerns expressed by parties in this proceeding.

I. INTRODUCTION

Verizon-MA's proposed tariff complies with the requirements of the Federal Communications Commission's ("FCC") Line Sharing Order(2) pursuant to the Telecommunications Act of 1996 ("Act"). The FCC has ordered that incumbent local exchange carriers ("ILECs"), such as Verizon-MA, give competitive local exchange carriers ("CLECs") access to the high frequency portion of those copper loops on which the ILEC provides the voice service over the low frequency portion of the loop.

The policy issues in dispute(3) among Verizon-MA and some of the CLECs include: (1) intervals for line sharing provisioning; (2) intervals for providing the collocation augment to facilitate line-sharing arrangements; (3) ILEC ownership of the "splitter" equipment used to separate the voice and data transmission on a single loop facility and associated issues; (4) access to Operations Support Systems

("OSS") for electronic processing of line sharing orders; (5) "line sharing" over the unbundled network element platform ("UNE-P") by a CLEC providing both voice and data services over a single loop; and (6) line sharing on those loops provided over digital loop carrier ("DLC") to the Remote Terminal ("RT"). None of the CLECs' demands on those issues have merit and, if granted, would result in preferential treatment for those companies pursuing one type of business plan, i.e., those using line sharing to provide high speed data service to the detriment of all other competitors and Verizon-MA.

Under the Line Sharing Order, CLECs are entitled to parity of performance and non-discriminatory treatment -- which is what Verizon-MA has committed to provide them. The same standards will apply to Verizon's separate data affiliate in provisioning DSL service and line sharing arrangements in Massachusetts. However, the CLECs are not entitled preferential treatment nor to Verizon-MA required to bankroll their business plan. CLECs are not entitled to force Verizon-MA to purchase equipment for CLEC use, which is the essence of CLEC demands regarding splitter ownership and use of packet switching services to offer service over fiber-fed loops.

Some CLECs have also challenged Verizon-MA's proposed rates. Their complaints are meritless. The rates Verizon-MA has proposed are fully supported under the Department's approved forward-looking, incremental costing methodology. They also reflect the rates included in interim agreements reached between Verizon and two CLECs - Rhythms Links, Inc. ("Rhythms") and Covad Communications Company ("Covad") in Massachusetts in May 2000. See Exhs. VZ-MA 7 and 8.

Verizon-MA urges the Department to adopt the following rules regarding line sharing: (1) establish a six business day interval for provisioning the line sharing UNEs; (2) allow a 76 business day interval for collocation augments that facilitate line sharing; (3) deny demands that Verizon-MA purchase splitters for CLEC use; (4) provide access to OSS in accordance with vendor (i.e., Telcordia) specifications; (5) affirm Verizon-MA's proposal for line sharing over fiber facilities included in its May 5, 2000, and June 14, 2000, collocation tariff offering; and (6) affirm Verizon-MA's proposal to provide line sharing and reject CLEC demands to expand Verizon-MA's line splitting obligations to include purchases of splitters or other investments demanded by CLECs. Finally, Verizon-MA asks the Department to approve the various DSL Service and line sharing rates proposed by Verizon-MA in this proceeding.(4)

II. BACKGROUND AND DESCRIPTION OF DSL AND LINE SHARING

DSL technology provides "high speed, switched, broadband, wireline telecommunications capability that enables users to originate and receive high-quality voice, data, graphics or video telecommunications." See Second Report and Order, FCC Docket No. 98-147, ¶ 1 (released November 9, 1999). Under the FCC's Line Sharing Order, ILECs are required to make available to CLECs the high frequency portion of those local loops on which the ILEC is providing the voice as a separate UNE in order to encourage development of broadband xDSL services consistent with the goals of the Telecommunications Act of 1996 ("Act"). See 47 U.S.C. § 251(c)(3). That unbundling process is referred to as "line sharing."

In a line-sharing arrangement, the xDSL-based service is provided over a copper loop that is also used by the ILEC for the provision of a retail voice grade service. Exh. VZ-MA 2, at 4. Voice traffic is transported in the 0-4 KHz frequency range over that copper loop, while data traffic is transported in the available spectrum above 4 KHz. This frequency separation is accomplished through the use of "splitters" that can combine the separate voice and data services onto a single loop facility. Splitters or filters are also required at the customer location to separate these services for delivery to the appropriate customer premises equipment ("CPE"), e.g., a telephone set for the voice service and a personal computer for the data service.

Exh. VZ-MA 2, at 45. Under the Line Sharing Order, the FCC only requires an ILEC to provide a requesting carrier with access to the high frequency portion of a copper loop if the ILEC provides voice services on the loop over which the CLEC seeks to provide data services.

As the FCC noted, the Line Sharing Order addressed "with specificity the relevant issues necessary to enable the provision of line sharing" and "provided specific guidance for states regarding arbitration awards." Line Sharing Order, at ¶¶ 162, 164. The FCC recognized that carrying out its mandates would be a complicated endeavor because of substantial operational and technical issues, and therefore encouraged "requesting carriers and incumbent LECs to engage in a collaborative process at the regional level to develop solutions to incumbent LEC provision of shared line access." Line Sharing Order, at ¶ 128.

Verizon has been at the forefront in collaborative efforts in New York to resolve these complex technical issues on a region-wide basis. The Industry Collaborative, which is sponsored by the New York Public Service Commission ("NYPSC") under the supervision of one of its administrative law judges, included a large number of CLECs (including Rhythms and Covad). In this proceeding, Verizon-MA has presented two types of line-sharing arrangements -- known as "Scenario A" and "Scenario C" -- developed through during the Industry Collaborative on line sharing,(5) The following discussion addresses the various policy issues that are not yet resolved through the Collaborative, as well as pricing issues for various components of the DSL and line sharing offering.

III. ARGUMENT

A. The Six Business Day Interval for Provisioning the Line Sharing UNE Is Reasonable, Appropriate and In Accordance with the FCC's Requirements.

The line sharing "provisioning interval" is the time it takes the ILEC to complete a CLEC order to make line sharing available on a particular loop. Verizon-MA proposes a six business day interval for provisioning a line sharing arrangement for one to nine lines, and a negotiated interval thereafter, pursuant to the Carrier-to-Carrier ("C2C") Guidelines. Exh. VZ-MA 4, at 13-14. That same interval applies to Verizon's provisioning today of unbundled ADSL stand-alone loops.

Verizon-MA's proposed six business day interval is aggressive because of the numerous steps required in the process, which were described in detail by the Verizon Witness Panel.(6) Tr. 1:106-150; Exh. VZ-MA 4, at 8-19. The Company has agreed to revisit this interval in the near future to see if it can be shortened after it gains more experience with the installation of line sharing arrangements and implement OSS mechanization. Tr. 1:155-156. In no event would the interval that Verizon-MA would apply to the CLECs be longer than the interval that would apply to any Verizon affiliate offering DSL retail service.

By contrast, Rhythms, Covad and Digital Broadband Communications ("DBC"), Inc. have demanded that Verizon-MA meet a progressively shorter interval of three business days until September 7, 2000; two business days from then until December 7; and only one business day thereafter.(7) RLI/CVD Exh. 1, at 40-41. These requests are unreasonable.

The CLECs have presented no evidence to support their claims that an interval shorter than those applicable to standard xDSL UNE loops is necessary to meet market demands, or is in any other way appropriate. Their alleged rationale is that Verizon-MA already has provisioned the loop used for the line sharing UNE to the customer premises. Exh. RLI/CVD 1, at 40. They also claim that no dispatch is required and that the wiring work will take less than ten minutes to complete. Exh. RLI/CVD 1, at 39. Those arguments are wrong on both the law and the facts.

First, the FCC's Line Sharing Order itself made it clear that the most appropriate line sharing interval to apply at the outset is the interval applicable to the

ILEC's standard DSL loop provisioning -- and there is no dispute on the record here that that is the six business day interval proposed by Verizon-MA. Exh. VZ-MA 3, at 16; VA-MA Exh. 4, at 14; Tr. 1:84. Use of that interval ensures that the parity standard required by the Act is met. In setting guidelines for state arbitration awards, the FCC "set out . . . a presumption for the state commissions to use if necessary to establish performance standards for incumbent LEC provision of this unbundled network element." Line Sharing Order, at ¶ 171. With respect to intervals, the FCC "encourage[d] states to require, in arbitration proceedings, incumbent LECs to fulfill requests for line sharing within the same interval the incumbent provisions xDSL to its own retail or wholesale customers, regardless of whether the incumbent uses an automated or manual process." Line Sharing Order, at ¶ 173 (emphasis added). The FCC went on to explain that it was "urg[ing] states to consider a standard based on the time required to provision xDSL capable loops" because "[w]e believe that this is the most accurate analogue that currently exists." Line Sharing Order, at ¶ 174 (emphasis added). In a final decision issued on August 17, 2000, the Pennsylvania PUC followed this guidance and adopted the six business day interval, unanimously rejecting an ALJ recommendation that Rhythms and Covad's proposed provisioning intervals be adopted.

Thus, no doubt exists that the Line Sharing Order contemplates and expects parity of provisioning line sharing based on the time a standard DSL UNE Loop service is provisioned today. The FCC expressly stated in that Order that "we expect that incumbent LECs will implement ordering and provisioning mechanisms and interfaces that provide competitive LECs with the ability to obtain access to the high frequency portion of the loop in the same ordering and provisioning time intervals that the incumbent provides for its own xDSL-based service." Line Sharing Order, at ¶ 107 (footnote omitted). Under the proposed FCC standard, the appropriate provisioning interval that should be applied is the six business day interval Verizon-MA has proposed for one to nine business lines. In addition, the intervals set forth in the C2C Guidelines for greater than nine lines should be adopted. Use of those intervals ensures that the parity required by the Act is provided. (8)

Second, the "factual" basis for Rhythms and Covad's request for a highly accelerated interval is fundamentally flawed. The thrust of their claim is that the only work needed to provision line sharing on an existing loop is a simple cross-connects, requiring ten minutes of actual work, and that the lack of an outside dispatch means that this work can be performed on demand the same day it is requested. Exh. RLI/CVD 1, at 39. This, however, ignores the fact that there is much more work involved than merely a few minutes of wiring in the central office, especially at the front end ordering and work force allocation stage of the process, and at the back end testing stage to ensure the work has been provisioned properly. Exh. VZ-MA 4, at 15. Far from being simpler than provisioning a stand-alone loop, provisioning line sharing can be even more complicated because it involves providing a different service to a different provider, while simultaneously maintaining the existing voice service on an existing Verizon line.

As the CLECs are well aware, when a line sharing order is placed, it goes through a number of OSS and service centers. These centers must identify and verify the assigned cable and pair to be shared, identify and verify the tie cables to be used, update inventories needed for maintenance and network management purposes, update retail records to reflect the shared use of the line and update billing systems. Throughout this process "force to load" consideration must be taken into account in the organizations that process these front-end functions. Exh. VZ-MA 4, at 10.

Once that process is concluded, the Work Force Administrator must assign a technician to perform the work in the central office. Exh. VZ-MA 4, at 11; see also Tr. 1:124. Even though it would appear that an "outside" plant dispatch would not be required, the percentage of these orders that will require a dispatch is not known until further experience is gained. Exh. VZ-MA 4, at 17; Tr. 1:155-156. Moreover, it is important to note that, even if no outside dispatch is required, in every case a technician still must be assigned to perform the central office (e.g., cross-connection) work -- and in the case of unmanned central offices dispatched from another location -- and the "force to load" work considerations taken into

account for this function as well. Part of that "force to load" balancing is an attempt to ensure that dispatches to unmanned offices are as efficient as possible by having as many jobs performed at one time by one dispatch instead of piece-meal, one-at-a-time jobs. Complicating this balancing process is the fact that demand for services like DSL is cyclical and can be influenced by service providers' aggressive marketing campaigns, thereby creating peaks in service demand, sometimes during weekends or holidays. Pair swaps may also build more time into the provisioning process. Exh. VZ-MA 3, at 45.

Moreover, at any stage in this process mistakes can arise in terms of the information provided by the CLEC or the status of a particular line or facility relating to the request; "trouble-shooting" to determine the source of the error and to fix it diverts the attention and ability of personnel to complete "clean" orders as well as delays the defective one. For example, CLECs frequently change the connection location (i.e., the facilities assignment) as to where work needs to be performed in the central office in order to complete the order. Exh. VZ-MA 4, at 10. Examples of other types of problems include situations where the telephone number cannot be found in Verizon-MA's system, the cable and pair cannot be found, the slot on the splitter that the DLEC requested be used is already taken, or the loop is found to be not qualified, even though it was listed as qualified on the LSR. Exh. VZ-MA 4, at 10. If an error is detected, the service order "falls out" and must be manually fixed before the wiring and testing takes place. Exh. VZ-MA 4, at 11. The actual wiring must be completed and tested with great care to avoid miswiring the circuit, and it is at that stage as well that mistakes in the assigned task are often uncovered . Tr. 1:131-132; Exh. VZ-MA 4, at 11-12.

The fact that the physical work of a cross-connect can be completed in a few minutes says nothing about the time required for the full sequence of events to takes to provision a line sharing order. Such reasoning is analogous to expecting Sears to deliver a mail ordered sweater in 20 minutes, because that is all the time that is required to manufacture the sweater on the assembly line. Not only does such logic ignore all the steps involved in taking, processing, distributing the work and completing the order, it also ignores the fact that each line sharing order is essentially "custom-made" - because it involves the provisioning of line sharing over a loop that is currently serving an existing voice customer in a specific location, with all of the work force management planning which tailor-made ordering entails.

As previously noted, the FCC did not ignore the numerous steps involved in the provisioning process before concluding that, whether the provisioning ordering process is fully automated or manual, a parity standard with an ILEC's provisioning of xDSL loops is the most accurate standard to initially apply. Line Sharing Order, at ¶¶ 173-74. A recent arbitration decision in California reached the correct conclusion when confronted with identical demands by Covad, concluding that parity of provisioning - not the ever shrinking intervals proposed by Covad - was reasonable.(9) As previously stated, the Pennsylvania PUC recently reached the same conclusion.

Third, there is no record support for concluding that the ever-shrinking interval proposed by Rhythms, Covad and DBC serves any tangible public or private interest. The sole justification offered for this expedited process is the CLECs' claim that customers demand prompt service and faster transmission speeds, and that the CLECs will somehow be at a competitive disadvantage unless the intervals are made substantially shorter. Tr. 1:41. No evidence exists, however, that a six business day interval is not sufficiently prompt to meet customer needs and expectations, or that such an interval creates any competitive disadvantage or will diminish the demand for line sharing. (10)

While the CLECs imply that shortening Verizon-MA's interval will result in their end user customers receiving DSL services faster, that conclusion is unproven. The CLECs ignore the fact that they too are responsible for completing certain activities during the provisioning interval, and plan accordingly. Exh. VZ-MA 4, at 15. Covad's Reply to Verizon Record Request 3; Rhythms Reply to Verizon Record Request 2. More

importantly, they overlook the Internet Service Providers ("ISPs") who provide the actual DSL service to end user customers which Covad and Rhythms sell to them. Typically, those ISPs quote provisioning dates of three or more weeks from the date of a customer order, which is almost three times the six business day interval proposed here. Tr. 2:316. This translates into nothing more than a "hurry up and wait" situation for the end-user customer in any event. Accordingly, no purpose will be gained by attempting to meet immediately an unrealistically short interval, such as that proposed by Rhythms and Covad. Exh. VZ-MA 4, at 22.

While Verizon-MA has emphasized throughout the proceeding that it, too, hopes to decrease the provisioning interval over time as it gains experience and the OSS upgrades are implemented,(11) there simply is no reason to expect or insist that a two, then one, day interval can or should be required in the coming few months, as the CLECs to insist. Attempting to meet such an unrealistically short interval would only jeopardize Verizon-MA's efforts to provide a "quality turn-up" of the provisioning of line shared loops, resulting in missed objectives and poor service. Tr. 1:82. Accordingly, in accordance with the FCC's Line Sharing Order, the Department should approve Verizon-MA's proposed six business day interval, which ensures parity of performance with the provisioning of stand-alone DSL loops, and will be provided on a non-discriminatory basis both to the CLECs and Verizon's data affiliate. Tr. 1:83-89.

B. The 76 Business Day Interval For Cabling and Splitter Capacity Is A Reasonable Standard for Providing Line Sharing.

Verizon-MA proposes that the current 76 business day interval, which applies to physical collocation and cable augments, should apply to splitter installations and cable augments to implement line sharing. Exh. VZ-MA 4, at 21. That interval is appropriate because the work that must be performed for line sharing augments and splitter installations is substantially the same as for other collocation arrangements. Exh. VZ-MA 4, at 21. Rhythms and Covad contend that Data LECs ("DLECs") are entitled to preferential treatment and recommend a special 30-calendar day interval for these DSL-related projects. Exh. RLI/CVD 1, at 46. Their proposal should be rejected for a number of reasons.

First, as was the case with line sharing provisioning intervals, Rhythms/Covad's argument is based on the false assumption that the physical work which needs to be performed to add cabling and splitter capacity is the main determinant of the time a collocation augment should take. Exh. RLI/CVD 1, at 49. They contend that new collocation arrangements are substantially more difficult and should take much more time than cable or splitter installation augments, because a new collocation arrangement may require construction of a cage, and cable and splitter augments do not. Exh. RLI/CVD 1, at 49. Verizon-MA has demonstrated that those assumptions are false.

As Verizon-MA has explained in detail, surveying for space, planning the routing of cable, ordering cable and obtaining equipment, coordinating with Verizon-MA's Central Office ("CO") Equipment Installers to perform the work, and coordinating with other work to be performed in a given central office consume the majority of the required time to complete a collocation job, whether it is new or an augment. Exh. VZ-MA 4, at 22. The physical act of installing a cable or a splitter rack is not the main determinant of installation time, and therefore dramatically reducing the collocation augment interval by as much as 75 percent (30 calendar days can equate to as few as 19 business days) is unreasonable. Tr. 2:338-340. In addition, the establishment of the 76 business day interval both for new collocation

arrangements and for augments in Massachusetts further underscores that there is no practical distinction between the two types of jobs. Exh. VZ-MA 4, at 22; D.T.E. 98-57, Phase I, Order, at 73 (March 24, 2000).

Second, the FCC on August 11, 2000, in issuing its order on reconsideration of certain advanced services and collocation matters, expressly rejected Covad's claim for a 45 calendar day collocation interval for new collocation arrangements. The FCC instead reasoned: "While a shorter interval, such as the 45 day calendar day interval Covad urges, obviously would provide even quicker deployment of advanced services, we are not persuaded on this record that an interval significantly shorter than 90 days would be reasonable for many collocation arrangements."(12) Covad's request here pertaining to collocation augments -- which requires substantially similar to new arrangements -- is no more reasonable than their rejected demand to the FCC.

Third, experience to date with line sharing provisioning demonstrates that the 76 business day interval is appropriate and achievable (with great effort), whereas the 30 calendar day interval is not. Exh. VZ-MA 4, at 23. Even with a special priority accorded to implement line sharing augments by the June 2000 timeframe as contemplated by the FCC's Line Sharing Order, collocation augments in New York were completed, on average, between 45 and 76 business days. This was only accomplished after a concerted effort was made between Verizon-NY and the DLECs to develop and implement an accelerated deployment plan for the period of March 13 to June 7, 2000. This deployment plan required numerous workarounds to establish collocation methods and procedures that Verizon-NY clearly indicated in collaborative discussions could not be sustained as a normal course of business. Likewise, the NYPSC adopted these procedures on "an emergency basis," and clearly acknowledged that the schedule was "compressed by meeting with installation vendors and CLECs along with detailed project management techniques in order to reduce the schedule significantly." See Case 00-C-0127, Order Adopting Bell Atlantic - New York Line Sharing Schedule for Provision of Digital Subscriber Line Service (issued April 24, 2000).

Fourth, Rhythms and Covad rely heavily on the fact that the ALJ Recommended Decision in Pennsylvania found that a 30-calendar day interval should be adopted. This is now a moot point because on August 17, 2000 the PAPUC issued its Final Decision in this matter and established a 45-business day interval, overturning the ALJ's ruling.

In actuality, the Texas decision deals only with one limited aspect of collocation - installation of tie cables - and does not address augments to place splitters at all.(13) The misstatement by Rhythms and Covad is crucial because both aspects must be addressed in collocation augments. Based on a review of the tariff in Texas that applies to splitter installation, the time allowed for that installation could vary from a minimum of 75 days to a maximum of 278 days.(14) Moreover, even with respect to the narrow focus of the Texas decision on tie cables, the essence of the decision is to apply the same existing collocation tariff to line sharing arrangements as applies to other tie cable collocation requests - just as Verizon-MA proposed - and not to apply a special, accelerated one. The Texas decision thus supports Verizon-MA's position, not that of Rhythms and Covad.

Even more on point is the California Arbitration Decision, in which Covad's request for a 30-calendar day interval was rejected because

setting intermediate intervals for every piece of equipment will not enhance the likelihood that service will be provisioned smoothly and timely. Rather, multiple and unnecessary intervals detract from efficient operations . . .. It is unreasonable to adopt different intervals for different pieces of equipment.

California Arbitration Decision, at 48-49.

Similarly, an Illinois Hearing Examiner also recently rejected Rhythms and Covad's claim to a 30 day collocation interval, concluding instead that

Rhythms and Covad's 30 day interval is substantially shorter than the collocation intervals this Commission has approved in the past and there is no reason for this Commission to require Ameritech Illinois to provide Rhythms and Covad with favored treatment over other telecommunications service providers by imposing a shorter interval than those we previously approved.(15)

Accordingly, Rhythms and Covad's arguments must be rejected in this proceeding.

Fifth, as with the line sharing provisioning interval itself, there is no evidence that the greatly accelerated, preferential collocation interval serves any public or competitive purpose. Application of the standard 76 business day collocation interval simply means that competitors must forecast their business needs and request collocation as a normal part of their business -- just as they do today -- such that any customer will not be deprived of service for an unacceptable period. Exh. VZ-MA 4, at 24. Moreover, there will be no competitive advantage to Verizon-MA from application of this 76 business day interval, since the same interval will apply to Verizon's separate data affiliate (which will be provisioning DSL service in Massachusetts in the future, pursuant to the same rules and intervals that apply to other DLECs). In fact, the only parties to suffer discrimination as a result of a 30 calendar day interval would be other CLECs which require collocation for work that is not line sharing related (such as CLECs offering POTS service), since their requests would now have to take a back seat to the special preference afforded DLECs utilizing line sharing as their business plan. Accordingly, the Rhythms/Covad's request for a 30-calendar day standard should be rejected.

C. Verizon-MA Should Not Be Required To Either Purchase Splitters For Use By CLECs Or Place Them In Any Configuration Demanded by CLECs.

The central office "splitter" is a device used to protect the CLEC's data equipment and the high frequency signal from the central office battery and from interference due to ringing on the voice circuit. Verizon-MA proposes two "splitter" configuration options, Scenario A and Scenario C. See Exh. VZ-MA 4, Attachment entitled "DSL/Line Sharing Current Configuration." The scenarios differ principally in the location of the splitter, and therefore in the precise arrangement of the connections between the splitter and other equipment. In both scenarios, however, it is the CLEC that selects and purchases the splitter. This ensures that the splitter will be compatible with the transmission characteristics of the specific retail service that the CLEC offers.

In Scenario A, the splitter is located within the CLEC's collocation space in Verizon-MA's central office. In Scenario C, Verizon-MA or the CLEC using a Verizon-approved vendor mounts the splitter on a relay rack in Verizon-MA's central office space either. Experience to date indicates that CLECs are ordering line-sharing under both options, which confirms both offer an effective means of line sharing.

Rhythms and Covad seek to expand these options by requiring Verizon-MA to: (1) purchase and install splitters for CLEC use; (2) make them available in small "line-at-a-time" or "shelf-at-a-time" increments; and (3) allow the splitter to be placed on the main distribution frame ("MDF"). However, no basis exists in law or fact for these requests, which would require Verizon-MA to buy an endlessly changing variety of splitters for CLEC use.

1. Splitter Ownership: Legal Precedent

A number of legal principles and precedents preclude the Department from ordering Verizon-MA to purchase splitters for CLEC use and benefit. It is axiomatic that the obligation to unbundle network elements arising under the Act does not mean that

CLECs are entitled to demand that incumbents purchase new equipment for CLEC use, and then "unbundle" that equipment to further CLEC business plans. In the Iowa Utilities Board case, the Eighth Circuit Court 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. More specifically, the Court held that "subsection 251(c)(3) [of the 1996 Telecommunications Act] requires unbundled access only to an incumbent LEC's existing network -- not to a yet unbuilt superior one." Iowa Utilities Board v. FCC , 120 F.3d 753, 812-13 (8th Cir. 1997) (emphasis in original). The Eighth Circuit Court recently reaffirmed this holding finding 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, slip op. at 22 (8th Cir. July 18, 2000)). It further 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.

None of the public policy arguments raised by Rhythms and Covad regarding the claimed "efficiency" of ILEC-owned splitters can override the statutory requirements of the Act. "As the Supreme Court made clear in Iowa Utilities Board, the FCC cannot reasonably blind itself to statutory terms in the name of efficiency." GTE Service Corp. v. FCC, 205 F.3d 416, 423-24 (D.C. Cir. 2000). Likewise, "[a]s noted by the Court in Iowa Utilities Board, 'delay and higher costs for new entrants . . . [that may] impede entry by competing local providers and delay competition' cannot be used by the FCC to overcome statutory terms in the [1996 Act]." Id. at 426.

Moreover, there is nothing in the Act, the FCC's regulations, or the UNE Remand Order(16) or Line Sharing Order that would support the CLECs' argument that the high-frequency portion of the loop must be provided complete with splitters. Owning and providing splitters simply cannot be regarded as an incident of the obligation to provide "access" to the high frequency portion of the loop. Indeed, that argument would prove too much; if ILECs were required to provide all equipment that might be useful in utilizing a network element, they would have an obligation to provide all of the equipment that CLECs currently own and locate in their collocation cages and Points of Presence ("POPs"). (17)

Even if the Eighth Circuit precedent did not apply (which it does), it is well settled that the requirements of the Act have pre-empted any independent authority that state commissions may have under their own state laws to require ILECs to supply splitters. AT&T Corporation v. Iowa Utilities Board, 119 S. Ct. 721, 729-732 (1999). Therefore, the Department, in making an assessment whether it should order Verizon-MA to purchase splitters for CLECs, must look to FCC rules and precedent. See id. at 730-31; Line Sharing Order, at ¶¶ 221 and 225 ("States may enact additional or modified unbundling requirements only to the same extent that we permit the states to modify the unbundling requirements in the [UNE Remand] Order . . .. States may take action to promote our overarching policies where it is consistent with the rules established in this proceeding") (emphasis added)). Thus, prior to ordering Verizon-MA to provide splitters to CLECs, the Department would have to conduct a two-part analysis.

The first prong of this analysis looks to FCC precedent, which is currently set forth in the Line Sharing Order and in the recent decision approving the application of Southwestern Bell Telephone ("SBC") to offer long distance service in Texas.(18) 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, at ¶ 76 ("incumbent LECs may maintain control over the loop and splitter equipment, if desired"). 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."(19) Id.

at ¶ 78. Thus, from the outset, it has been clear that ILEC ownership and control over the splitter is discretionary, not mandatory.

In the SBC 271 Order, the FCC squarely rejected the same arguments that Rhythms and Covad raise here regarding Verizon-MA's obligation to own splitters for CLEC benefit. The FCC stated that:

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, at ¶ 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, ...(20)

Id .at ¶ 328.

That conclusion simply reiterated the FCC's prior determinations in the Line Sharing Order itself that ILECs may choose to own and provide splitters to CLECs, but they are under no obligation to do so. The Arbitration decisions in California, Illinois, Texas and even Pennsylvania all reached the same conclusion.(21) In fact, the CLECs have yet to cite a single case in which it has been held that an ILEC must purchase splitters itself for CLEC use.

Despite this clear language and ample precedent, Rhythms and Covad attempt to argue here that Verizon-MA is under some form of legal obligation to provide splitters to requesting CLECs. Their argument is based entirely -- and wrongly -- on FCC implementing rule 51.319(h)(4) for the Line Sharing Order, which again states that ILECs "may" maintain ownership and control, and then goes on to state that in such circumstances the ILEC "shall provide" compatible loop and splitter functionality to comport with CLEC needs. To interpret this language as requiring ownership in all circumstances is simply silly, and would vitiate all the surrounding language in the Line Sharing Order, which explains why splitter ownership remains only a discretionary option for the ILEC. Thus, Verizon-MA has no obligation to own and provide splitters to the CLECs, and any Department order directing Verizon-MA to purchase splitters for CLEC benefit would be inconsistent with the FCC's rules and other state decisions.

But even if the Department were constrained by these FCC decisions (which it is) on splitter ownership, the CLECs would still have to satisfy the second prong of the test that involves an application of the requirements of Rule 317, promulgated by the FCC in its UNE Remand Order. 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.(22) 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. Under Rule 317(b)(2), a state commission must conduct a thorough review of a number of elements related to cost, timeliness, quality, ubiquity and impact on network operations. In conducting this analysis, the FCC indicated that the state commission should not focus on the operations of one CLEC, but rather the commission should look at the effect on other CLECs seeking to offer the same service. See UNE Remand Order ¶¶ 53-54, 65 ("the existence of some significant level of competitive facilities deployment is probative of whether competitive LECs are impaired from providing service within the meaning of section 251(d)(2)").

In this case, the requirements of Rule 317(b)(2) have not been satisfied. In fact, the only evidence that Rhythms and Covad provide are a few unsupported statements that competition will be hindered and that they will be impaired if Verizon-MA does not make splitters available to them on demand. For example, they claim that: (1) Verizon-MA "may be able to obtain splitters more easily than CLECs and at better rates" (Exh. RLI/CVD 1, at 58) (emphasis added); (2) a menu of splitter [ownership] options would promote competition;"(23) and (3) Verizon-MA "is in the best position to efficiently and effectively manage splitters in its central office" (id.).

Those few conclusory statements are clearly insufficient for the Department to conduct the thorough review that is contemplated under Rule 317(b) to determine that CLECs and DLECs will be "impaired" if Verizon-MA does not own splitters and supply access to CLECs on a line-at-a-time or shelf-at-a-time basis. See Rule 317(b); UNE Remand Order, at ¶¶ 72-88. For example, no evidence exists that it would be more cost effective for Verizon-MA to purchase and install splitters instead of the CLECs.(24) In fact, numerous CLECs are already purchasing such equipment and using it to provide advanced services.(25) Further, there is no indication that Verizon-MA ownership of splitters would shorten the time it takes for the CLECs to enter the market or provide services to end user customers. See UNE Remand Order, at ¶ 89 ("delays caused by the unavailability of unbundled network elements that exceed six months to one year may materially diminish the ability of competitive LECs to provide services they seek to offer").

To the extent that there has been a recent shortage of splitters, this shortage would apply to both Verizon-MA and the CLECs. Likewise, since Verizon-MA would obtain splitters from the same third-party vendors as the CLECs and DLECs, no showing can be made that splitter ownership by either the CLECs or DLECs will have a negative effect on the quality of the splitters, the ability of the CLECs to serve customers ubiquitously, or the technical manner in which the competitors operate their network. UNE Remand Order, at ¶¶ 96-99. Assuming that the parties purchase splitters from the same vendors, there can be "no material operational or technical differences in functionality" between a Covad supplied splitter or a Verizon-MA supplied splitter. UNE Remand Order, at ¶ 99. In addition, CLEC ownership of the splitter gives the CLEC the flexibility to choose the splitter they want to use and to upgrade those splitters as advances in technology occur. Therefore, the CLECs' arguments fail to satisfy the FCC's impairment standard based on ample evidence that they are capable on their own to purchase and install splitters in quantities and types that are suited to their own business needs.

2. Splitter Ownership: Public Policy Considerations

The issue of splitter ownership also raises public policy concerns that are enumerated in FCC Rule 317(c). 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.(26) 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. Clearly, there is no justification to require Verizon-MA to purchase splitters for CLEC use based on that rule.

First, no evidence or even argument was presented in this proceeding as to how much more rapidly xDSL services would be made available in Massachusetts if Verizon-MA

were required to supply splitters. Rule 317(c)(1); see also UNE Remand Order, at ¶¶ 103-107. Rhythms and Covad's rhetoric concerning more rapid deployment is simply a smokescreen to conceal their unjustified demand that Verizon-MA absorb a share of their business risks. Verizon-MA, however, 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. Exh. VZ-MA 3, at 26. 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. Exh. VZ-MA 4, at 28.

Verizon-MA should not be placed in the position of 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.(27) The individual CLEC is implementing its individual business plan, and there is no reason why Verizon-MA should be placed in the position of underwriting that plan by financing a key part of the initial or on-going investment to carry it out -- especially when the CLEC, not Verizon-MA, will ultimately reap the reward if the plan is successful.

Second, Verizon-MA ownership of splitters certainly would not promote facilities-based competition. See Rule 317(c)(2); see also UNE Remand Order, at ¶ 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 technology," and is intended to "stimulate technological innovation" even more.(28) Line Sharing Order, at ¶ 26. Rhythms and Covad's proposal for Verizon-MA splitter ownership, however, would clearly hinder facilities-based competition and technological innovation by placing Verizon-MA in charge of selecting the types of splitters and the time tables for their implementation.

Third, Verizon-MA's ownership of the splitter would not reduce regulation or be administratively practical to apply. See Rule 317(c)(3) and (5). Although some CLECs may argue that the Department could require that CLECs agree on Verizon-MA's provision of only a certain type of splitter, this is a "last-ditch" effort that contradicts a basic CLEC theme of requiring Verizon-MA to make a variety of options available to them in the line sharing setting in order to accommodate the different business plans of all the CLECs. Exh. RLI/CVD 1, at 56. In addition, there is no evidence to indicate that any of the CLECs that are or may be interested in line sharing could ever agree initially or over an extended period on the particular type of splitter they would want Verizon-MA to buy. To illustrate the point, even on the issue of splitter location, Rhythms and Covad are pursuing separate options, with Rhythms placing splitters in its collocation cages and Covad wanting to place them in central office common areas. Tr. 2:366. ILEC ownership would also be administratively inefficient and cumbersome in view of the following: (1) greatly expanded central office wiring that would be required to implement ILEC ownership of splitters: (2) the absence of any reliable forecasts of aggregate or individual CLEC line-sharing/splitter demand: and (3) the variety of types of splitters that ILECs could be required to maintain in inventory. Exh. VZ-MA 3, at 25.

Likewise, no justification exists for requiring Verizon-MA to both own splitters and then provide them to CLECs in small line-at-a-time or shelf-at-a-time increments. There would be extensive administrative problems with implementing splitter shelf-at-a-time, as well as added complications for the ordering, provisioning, and repair work process.(29) Nothing would prevent the CLECs themselves from provisioning splitters to and among, themselves in such small increments, including sharing splitters in order to minimize their expenses.(30) Exh. VZ-MA 3, at 27. Accordingly, the CLECs' arguments provide no basis as to why Verizon must both own the splitters on CLECs' behalf and provide them on a one-by-one basis, according to CLEC demands. Rather, their arguments only confirm the unanimous conclusion of state commissions to date, as well as the FCC, that an ILEC has the right -- but not the obligation -- to purchase and control splitters for CLEC use.

3. Splitter Location

Rhythms and Covad's claim that they should be entitled to mount splitters directly on the main distribution frame in the central office. Exh. RLI/CVD 1, at 60. Their request has also been uniformly rejected as a matter of law. This is because the United States Court of Appeals for the District of Columbia recently overturned FCC rules that would have given CLECs the right to designate where equipment can be collocated in an ILEC's central office. In vacating the FCC's rules, the Court concluded that the ILEC, not a CLEC, has the right to determine where equipment is collocated in the ILEC's facilities:

The FCC offers no good reason to explain why a competitor [CLEC], as opposed to the LEC, should choose where to establish collocation on the LEC's property; . . . It is one thing to say the 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 LEC property owners, are free to pick and choose preferred space on the LEC's premises, subject to only technical feasibility. There is nothing in Section 251(c)(6) that endorses this approach.

GTE Services Corp. et. al. v. FCC, et al., 205 F.3d 416, 426 (D.C. Cir. 2000)(emphasis added).

Based on this D.C. Circuit Court decision, the arbitrators in both California and Illinois rejected claims that Covad was entitled to dictate the location of the splitter. See California Arbitration Decision, at 19; Illinois Arbitration Decision, at 14. Likewise, the parties in this proceeding fail to provide any authority giving them that right. Thus, there is no reason to belabor the issue of what is or is not the most "efficient" manner in which to mount the splitter, since the CLECs are not entitled to dictate that location in Verizon-MA's central office, as a matter of law.(31)

D. The DLECs Have Adequate Access to Verizon-MA's OSS, and No Specific Schedule to Implement OSS Upgrades Should Be Implemented.

Verizon-MA currently provides an appropriate level of OSS support for line sharing and is in the process of updating its systems to facilitate the electronic processing of line sharing orders. Rhythms and Covad contend, however, that Verizon-MA has not provided them with adequate access to its OSS, and has not kept them informed of the upcoming updates of Verizon-MA's OSS for line sharing purposes. Therefore, they request that the Department impose a specific deadline for the implementation of the OSS upgrades. Rhythms and Covad are wrong, and their request should be denied.

There is no reason for the Department to mandate any specific schedule for these OSS updates, which are targeted for completion, on a staggered basis, beginning March 2001. Accordingly, there is no need for Department action and the requests of Rhythms Links and Covad and AT&T for definitive Department-imposed schedules should be denied.

First, in its Line Sharing Order, the FCC acknowledged that the ILEC would not be able to fully modify the OSS in time for the scheduled roll-out of line sharing. Line Sharing Order, at ¶¶ 126-30. Second, they incorrectly assert that Verizon has not disclosed information regarding the necessary line sharing OSS modifications. Since January 2000, there have been approximately 30 Industry Collaborative meetings of the OSS subgroup in New York. At those meetings, Verizon-NY has worked closely with the DLECs and CLECs (including Rhythms and Covad) regarding the steps involved to upgrade Verizon's OSS. Verizon-NY has also kept Collaborative members fully

informed that significant upgrades from Telcordia before the OSS upgrades can be completed. In fact, at one of those meetings, Telcordia made a comprehensive presentation on the product that it was providing to Verizon-NY. Exh. VZ-MA 4.

Second, Verizon-MA cannot complete the necessary OSS upgrades on the date proposed by Rhythms and Covad.(32) They seek a firm commitment date of March 1, 2000, the same date established in Pennsylvania, or anytime sooner. Exh. RLI/CVD 1, at 65. Verizon-MA cannot implement the OSS changes by that date because of the substantial work activities involved in converting Massachusetts, along with other regions, and the fact that each region must be converted separately.

Since the Telecordia contact was executed the first week of week of August 2000, a series of steps between Verizon and the vendor has been triggered that are time-consuming and sequential in nature. Tr. 3:568. They include software delivery, load and acceptance of the software packages, and testing. See Exh. DTE-BA-MA 1-15. Once final acceptance of the software occurs on February 15, 2001, Verizon-MA will begin deployment throughout the Verizon (former Bell Atlantic) footprint. A priority schedule will be developed collaboratively with the CLECs.

Third, the OSS upgrades must be implemented on a region-by-region basis. There are five regions or data centers where these systems reside through the former Bell Atlantic footprint. Tr. 2:479. Therefore, the software must be updated for each particular region before it is operational in that region. Tr. 2:480. Since Verizon is mandated in Pennsylvania to modify its OSS by March 1, 2001, that region will be implemented first. Because Massachusetts is in a different region from Pennsylvania, it would be virtually impossible for Verizon to agree to that same date for implementation in Massachusetts. Tr. 2:481. Moreover, other jurisdictions, like New York - which is in yet another region, are also requesting a March 1, 2001, date. This further complicates the matter, leading to the conclusion that implementing OSS updates, by region on a staggered, monthly basis, beginning March 1, 2001, is the only viable solution. Accordingly, there is no need for further Department action and the requests of Rhythms and Covad for a definitive Department imposed schedule should be denied.

Finally, should the CLECs be interested in working with Verizon to rank the regions where updates are required by order of preference, Verizon-BA would be willing to discuss this with the CLECs and hopefully reach a mutually agreeable schedule for the industry.

E. "Line Sharing" For UNE-P And Resold Loops Is Not Required.

AT&T contends that line sharing should be available where the voice service is being provided by a voice CLEC using UNE-P provided by Verizon-MA. Exh. AT&T 1, at 3. Although relying on the FCC's Line Sharing Order, AT&T describes this as a line splitting arrangement, whereby the ILEC inserts a splitter into a UNE-loop (including those employed in the UNE-P combination) so that a UNE-P CLEC may provide both voice and data services, either on its own or with another CLEC, utilizing a single loop facility terminating at the customer's premises. Exh. AT&T 1, at 6. Thus, AT&T specifically ties in the concept of line splitting with splitter ownership by arguing that Verizon-MA is obligated to facilitate the provisioning of line splitting apparently by creating a new UNE combination with an ILEC-provided splitter as one of the elements. These arguments should be denied.

The contention that Verizon-MA must provide line sharing when it does not provide the voice service is contrary to the clear language of the Line Sharing Order, which specifically provides that:

[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 . . .. 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.(33)

Line Sharing Order, at ¶ 72 (emphasis added).

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, at ¶ 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.

Thus, no doubt exists that the FCC intended that incumbents, such as Verizon-MA, 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. See SBC 271 Order, at ¶¶ 320-29. In that proceeding, AT&T and others argued that SBC had an obligation to provide line sharing over UNE-P loops. The FCC disagreed:

[U]nder the Line Sharing Order, the obligation of an incumbent LEC to make the high frequency portion of the loop separately available is limited to those instances in which the incumbent LEC is providing, and continues to provide, voice service on the particular loop to which the requesting carrier seeks access. Thus, the situation that these commenters describe is not technically line sharing, because both the voice and data service will be provided by competing carrier(s) over a single loop, rather than [SBC]. To avoid confusion, we characterize this type of request as "line splitting," rather than line sharing. . . .

Id at ¶ 324.

The FCC concluded that:

[I]ncumbent LECs have an obligation to permit competing carriers to engage in line splitting over the UNE-P where the competing carrier purchases the entire loop and provides its own splitter. . . . For instance, if a competing carrier is providing voice service over the UNE-P, it can order an unbundled xDSL-capable loop terminated to a collocated splitter and DSLAM equipment and unbundled switching combined with shared transport to replace its UNE-P with a configuration that allows provisioning of both data and voice service.(34)

Id. at ¶ 325 (emphasis added).

Finally, AT&T's definition of line splitting requires the creation of a modified UNE-P where Verizon-MA would be required to insert (into a local loop) a Verizon-MA owned, deployed and maintained splitter . Exh. AT&T 1, at 12. The splitter element would thus be combined with the other current elements that comprise a UNE-P. But the FCC has made clear that Verizon-MA is not obligated to create this modified UNE-P because incumbents are not required to provide splitters to enable UNE-P CLECs to offer integrated voice and data service.

First, AT&T's definition of line splitting is premised on the erroneous assumption that the splitter is a UNE. It is not. See SBC 271 Order, supra. As previously discussed, the FCC has explicitly stated in its Line Sharing Order that the ILEC may, at its discretion, provide the splitter, but is not required to do so. Also, as previously discussed, the FCC, in the 271 SBC Order, roundly rejected AT&T's argument that ILECs have a present obligation to unbundle or furnish the splitter when AT&T engages in line splitting over the UNE-P. See 271 SBC Order, at ¶ 327.

Second, even if the splitter was a UNE element (which it is not), AT&T's definition would require Verizon-MA to assemble a new combination of elements. In other words, Verizon-MA would have to take apart a pre-assembled UNE-P combination, insert a splitter and then combine all of these previously uncombined network elements into a new configuration. The Eighth Circuit has held that ILEC cannot be required to combine elements.(35) Recently, the Eighth Circuit 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, Dkt. 96-3321, slip op. at 24 (7/18/00). AT&T's request for this modified UNE-P should be denied.

The CLECs are, however, permitted to engage in line splitting. Tr. 1:207. The CLECs can compete in the provision of integrated voice/data services by purchasing unbundled ADSL-compatible loops and adding their own appropriate splitter and DSLAM equipment in order to provide voice and data service using the same loop. Exh. VZ-MA 3, at 57. Nothing in Verizon-MA's line sharing or unbundled loop tariffs prohibits any CLEC or DLEC from introducing line splitting in this fashion. Furthermore, in the New York Collaborative, discussions to facilitate line splitting have already begun, and Verizon has repeatedly stated that it is prepared to continue this work with the CLECs and DLECs to facilitate line splitting.(36) Tr. 1:206-210. Accordingly, AT&T's request must be denied.

F. Verizon-MA Has Already Undertaken All Required And Necessary Actions and Commitments to Make Line Sharing Available Where Customers May Be Served Partly By Fiber Facilities.

Rhythms and Covad contend that Verizon-MA should be obligated to provide the line sharing UNE if the end-user is served over fiber-fed digital loop carrier ("DLC"). Exh. RLI/CVD 1, at 75. Verizon-MA does not have a current legal obligation to provide line sharing for CLECs on fiber served loops. The Line Sharing Order emphasizes that the "line sharing" network element itself involves only the high frequency portion of a copper loop.(37) Thus, no obligation exists under the Line Sharing Order to provide "line sharing" as an unbundled element on an end-to-end basis over both the copper and fiber portion of the loop. See 47 C.F.R. § 51.319(h)(1).

The issue of fiber-fed DLC arises when the portion of the loop closest to the customer (the "distribution" portion) is copper, but the signals from various copper subloops serving various customers are combined together at a Remote Terminal ("RT") using DLC facilities and carried on fiber (the "feeder" portion) back to the central office. Exh. VZ-MA 4 at 58. Contrary to Rhythms and Covad's allegations, the DLC facilities that Verizon-MA has currently deployed cannot support the provisioning of DSL services. Exh. VZ-MA 3, at 41. Therefore, from a technical perspective, it is not reasonable to expect Verizon-MA to be able to provide "line sharing" over the fiber or DLC portion of a loop.

Verizon-MA would, however, make available to CLECs in Massachusetts collocation at,

or interconnection to adjacent or nearby Remote Terminals ("RT") or at the Feeder/Distribution Interface ("FDI") for placement of DSLAMs and other needed equipment. Once a CLEC has collocated at one of those points, under the terms of the tariff, Verizon-BA will make available to the CLEC line sharing over the cooper distribution subloop serving the end-user customer. Exh. VZ-MA 3, at 40. The CLEC can then provide its own transport back to its network. Through this tariff and interconnection process, Verizon-MA will provide CLECs with the ability to place DSLAM equipment at the RT, to provide "line sharing" over the copper subloop, and access to the feeder back to the central office. These capabilities are all that is necessary under the Line Sharing Order, which requires that "incumbents must provide unbundled access to the high frequency portion of the loop at the remote terminal as well as at the central office" and to do so "even where the incumbent LEC's voice customer is served by DLC facilities." Line Sharing Order, at ¶ 91 (emphasis added).

Rhythms and Covad argue that placing their own DSLAM equipment in the RT's and purchasing on an unbundled basis the portions of the feeder and distribution portions of the loop are inadequate. Instead, they seek to use a particular type of technology in which "line cards" that perform the DSLAM function are placed in specially upgraded DLC equipment for the purpose of providing DSL service -- the so-called "plug and play" option. Exh. RLI/CVD 1, at 80. Their only direct legal support for this specific demand, however, stems not from the Line Sharing Order, but from the FCC's UNE Remand Order.(38) The UNE Remand Order, however, expressly declined to require that the individual piece-parts of equipment that enable high speed data transmission (referred to as "packet switching") generally need to be made available as network elements, using as examples the aggressive plans of both Covad and Rhythms to support the finding that DSL deployment would not be impaired without such unbundling. UNE Remand Order ¶¶ 306-07. In discussing the very limited exception to this rule, the FCC further noted that "[t]he incumbent will be relieved of this unbundling obligation only if it permits a requesting carrier to collocate its DSLAM in the incumbent's remote terminal, on the same terms and conditions that apply to its own DSLAM." UNE Remand Order, at ¶ 313.

To date, Verizon-MA has not deployed in its RTs -- or anywhere else --the DLC equipment equipped with the line card DSLAM technology, nor does it have any such line card DSLAMs in use today in the network. Exh. VZ-MA 4, at 37. This technology is in its infancy and is not ready for mass deployment. An alternative having DSLAM collocated with the DLC equipment at the RT is under consideration. The field visit that took place in Massachusetts as part of this proceeding made it clear that, in some cases, this is manageable, and in others it is not feasible to implement based on space limitations.

In no event, however, should any argument be made or obligation imposed that Verizon-MA must purchase for use by CLECs any new DLC equipment or line card DSLAMs. As in the case of splitter ownership, there is no legal basis to impose such a requirement on Verizon-MA to bear the financial risk for CLECs. Likewise, Verizon-BA is not obligated to provide a number of new UNEs that the CLECs believe will assist them in providing line sharing over fiber-fed loops. Exh. RLI/CVD 1, at 75-76.

As noted above, a number of legal principles preclude the Department from adopting these proposed new UNEs. First, a number of these capabilities, such as line cards that provide DSLAM/splitter functionality, control cards, software, and ATM edge switches, do not exist in Verizon-MA's network, and Verizon-MA has no legal obligation to provide them.(39) See Iowa Utilities Board, 120 F.2d at 813; Iowa Utilities Board, slip op. at 21-22. Second, Rhythms and Covad have not alleged that they would be impaired if these new UNEs were not provided, and they have made no attempt to satisfy the requirements of Rule 317.(40) Thus, those requests for new UNEs should be denied.

In addition, Verizon-BA is not required to provide packet switching as a UNE under the FCC's UNE Remand Order. In that proceeding, the FCC established a national policy framework to be used in determining whether particular network elements should be unbundled. UNE Remand Order, at ¶ 154. Using this framework, the FCC concluded "given the nascent nature of the advanced services marketplace, we will

not order unbundling of the packet switching functionality as a general matter." Id. at ¶ 306. The FCC found that the ILECs do not retain monopoly positions in the advanced services market, and that they do not "possess significant economies of scale in their packet switches compared to [the CLECs]." Id. at ¶ 308. The FCC, however, identified and codified one limited exception to this ruling under which an ILEC would have to provide non-discriminatory access to unbundled packet switching. The FCC rule clearly states that "[a]n incumbent ILEC shall be required to provide non-discriminatory access to unbundled packet switching capability only where each of the following conditions are satisfied:

(1) The incumbent LEC has deployed digital loop carrier ("DLC") systems including, but not limited to, integrated loop carrier or universal digital loop carrier systems; or has deployed any other system in which fiber optic facilities replace copper facilities in the distribution section (e.g., end office to remote terminal, pedestal or environmentally controlled vault);

(2) There are no spare copper loops capable of supporting xDSL services that the requesting carrier seeks to offer;

(3) The incumbent LEC has not permitted the requesting carrier to deploy Digital Subscriber Line Access Multiplexers ("DSLAMs") in the Remote Terminals ("RTs") pedestal, or environmentally controlled vault or other interconnection points (or to take advantage of virtual collocation arrangements at such points); and

(4) The incumbent has deployed packet switching capability for its own use."(See 47 C.F.R. § 51.319(c)(3)(B) (emphasis added).

Since Verizon-MA has a tariff provision that allows collocation at RTs and does not have any packet switching capability for its own use (Exh. VZ-MA 4, at 37), neither condition three nor four can be satisfied.(41) Thus, since each of the above conditions have not been satisfied, Verizon-MA is not obligated to provide access to unbundled packet switching under this four-part test. More important, for this test to apply, an ILEC must have deployed DSLAMs at its RTs. UNE Remand Order, at ¶ 313. This is not the case for Verizon-MA. Therefore, there is no need for the Department to mandate any action at this time.

G. Verizon-MA's Proposed Rates for DSL Loops and Line Sharing Are Just, Reasonable, and Fully Supported by Costs Developed Using Department Approved Cost Methodologies.

In this proceeding, Verizon-MA has presented a conservative pricing proposal for unbundled ADSL loops and two types of line-sharing arrangements -- known as "Scenario A" and "Scenario C" -- that were developed in the ongoing Industry Collaborative in New York. A chart of Verizon-MA's proposed rates is contained in Exh. VZ-MA DTE-BA-MA 1-1 (Errata).

As previously stated, Verizon-MA's recurring rates for unbundled DSL loops are already approved by the Department and are not at issue in this case. Rather, this proceeding addresses recurring and non-recurring charges to condition a DSL loop for line sharing. Verizon-MA's proposal rate seeks to recover a small, well-defined group of costs that are clearly among the Total Element Long-Run Incremental Costs ("TELRIC") of providing access to the high-frequency portion of a copper loop. These

include certain incremental costs specifically associated with line sharing (e.g., splitter installation and maintenance and the costs of "wideband testing" arrangements), as well as certain general recurring and non-recurring incremental costs associated with ordering and "hooking up" the line sharing arrangement.

Contrary to Rhythms and Covad's claims, Verizon-MA's costs studies for DSL conditioning and line sharing utilize forward-looking methodology that appropriately reflects the fact that the DSL technologies at issue in this proceeding are, by definition, copper-based. Verizon-MA established rates based on costs developed in accordance with the Department's approved cost methodologies and accepted annual cost factors from the Consolidated Arbitrations proceeding. Exh. VZ-MA 2, at 71. In addition, Verizon-MA's cost studies properly reflect current work time estimates developed via a thorough review of relevant work activity, which is then adjusted based on the occurrence level of the individual activity and the estimated time involved to complete the task. Exh. VZ-MA 2, at 64. In the final analysis, the work time estimates are actually quite conservative, understating VZ-MA's present experience. Exh. VZ-MA 2, at 66. Relevant labor rates based on VZ-MA's directly assigned labor costs by specific job function code for Massachusetts are then applied to the estimated work time to ultimately produce an average cost. Exh. VZ-MA 2, at 67.

Although some CLECs assert that Verizon-MA's rates are too high, their claims are groundless. In fact, when the proposed non-recurring charges are appropriately amortized, the rate levels are below typical retail charges for DSL-based data services. See VZ-MA's Reply to DTE Record Request 7.

Verizon-MA is not proposing at this time any charges to recover a portion of the investment costs of the shared loop facility, although it reserves its right to do so in the future. Since no loop cost allocation is proposed at this time, however, it would be premature to address in any detail Rhythms and Covad's argument that such an allocation would be inappropriate under any circumstances.

In addition, since the costs of all of the line-sharing-related OSS upgrades that Verizon-MA will ultimately be required to implement have not yet been determined, Verizon-MA proposes to set a zero "placeholder" rate for OSS cost recovery, subject to retroactive true-up once the relevant costs can be determined. This is a reasonable approach given the timing of this proceeding and the need for Verizon-MA to recover these yet-to-be-determined costs from the CLECs for their use of the facilities.

Rhythms and Covad's objections to Verizon-MA's rate proposals are without merit and reflect a misunderstanding of the application and price levels for several proposed charges. See Verizon-MA's Reply to DTE Record Request No. 7. Likewise, they erroneously attempt to substitute new cost methodologies in place of those that have already been reviewed and approved by the Department in the Consolidated Arbitration proceedings. Rhythms and Covad also seek to avoid some costs entirely.

For example, Rhythms and Covad argue that wideband testing is unnecessary to support a wholesale line-sharing offering, and they therefore should not have to pay for it. Nevertheless, they undoubtedly will seek to hold Verizon-MA to rigorous service standards that can only be achieved efficiently through the use of such testing arrangements. This pricing philosophy is fallacious and reveals a "want-something-for-nothing" mentality that is inequitable and unsupportable.

For the reasons set forth in detail below, Rhythms and Covad's arguments should be rejected, and Verizon-MA's cost studies and rate proposals should be accepted as the basis for setting appropriate DSL and line sharing rates.

1. Loop Qualification

Loop qualification is the process used to determine whether a particular loop is qualified for ADSL or HDSL transmission. Exh. VZ-MA 2, at 10. Certain technical difficulties arise when ADSL or HDSL signals are transmitted over loops that exceed

a certain length or are otherwise configured in ways that impair xDSL transmission. The loop qualification process identifies those loops that are unqualified and why.

For example, in accordance with standard industry practice, copper cable pairs greater than 18,000 feet in length are generally fitted with "load coils" to improve their voice transmission characteristics.(42) Exh. VZ-MA 2, at 7. However, despite the benefits that load coils provide for voice transmission, "loaded" loops are generally unsuitable for xDSL transmission because the load coils can cause severe signal attenuation in the frequencies above the voice band (i.e., above 3,000 Hz). Exh. VZ-MA 2, at 30-31. Therefore, a "loaded" loop would not qualify for xDSL. The load coil would need to be "removed," or more accurately the loop is disconnected from the coil and the loop is re-spliced. Exh. VZ-MA 2, at 31 n.20.

Another example is bridged taps, a technique used to make cable pairs available at multiple customer terminal locations Bridged taps lengthen the loop and thus can cause interference and reflection of signals from the point the loop branches. Exh. VZ-MA 2, at 8, 37. Although the presence of normal quantities of bridged taps is not likely to significantly impact xDSL transmission, Verizon-Ma will remove the bridged taps from a DSL loop upon request. Exh. VZ-MA 2, at 37.

Verizon-MA's proposed charges for loop qualification include the following: the mechanized and manual loop qualification charges and the engineering query charge. Exh. VZ-MA 2, at 10. Rhythms and Covad contend that CLECs should not be subject to any charges for loop qualification. That proposition is totally unfair and unjustifiable, and must be rejected by the Department .

Verizon-MA proposes a recurring charge of $0.65 per month per link for mechanized loop qualification. The costs associated with that charge are the forward-looking costs of creating and maintaining the Loop Facilities Qualification Database. Exh. VZ-MA 2, at 12. Regarding database creation, the only cost recovered in the wholesale charge is for the performance of MLT testing. The maintenance component includes costs relating to program changes, loading and extracting data, and the updating of the records in the database performed by engineers in the Facilities Management Center ("FMC") resulting from ongoing facilities changes and loop plant growth.

The Loop Qualification Database supports both VZ-MA's retail DSL service and the provision of unbundled ADSL- and HDSL-compatible loops to CLECs. Exh. VZ-MA 2, at 12. CLECs can query the database through VZ-MA's standard OSS wholesale interfaces, including both EDI and the Web GUI. The query may identify the loop in question by telephone number or address. The principal loop qualification information that is available from the database and would be of interest to CLECs is the total metallic loop length (including bridged taps), as determined by an MLT test. Exh. VZ-MA 2, at 12-13. The loop length information obtained from the MLT test is then associated in the database with the telephone number and address of each of the loops served by that terminal. The database is updated on an ongoing basis to reflect any changes in loop qualification information resulting from modifications or rearrangements of facilities.

Verizon-NY is currently working with CLECs as part of the Industry Collaborative to determine the CLECs' data requirements for loop information via the database, and whatever is established in New York for access to LFACS would apply equally in Massachusetts. (43) Exh. VZ-MA 4, at 68-69.

Verizon-MA's Mechanized Loop Qualification Charge is reasonably based and fairly applied. The costs reflect the average testing cost per loop utilized for xDSL transmission, which was derived from the average testing time per loop multiplied by Department accepted labor rates, and then divided by the forecasted number of retail and wholesale DSL links that Verizon-MA will be providing or using over a five-year period on a net present value basis. Exh. VZ-MA 2, at 67-68. That charge will not be imposed on loops served by central offices that are not included in the database at the time of the CLEC request.

Likewise, the Department should approve Verizon-MA's proposed non-recurring, per link charges for the Manual Loop Qualification and Engineering Query. Those charges are $113.67 ($153.84 expedited) for the manual loop qualification, and $147.91 ($200.05 expedited) for the engineering query. Both fees are based on the costs associated with processing and responding to CLEC requests using new average work time estimates as input. Those revised work time estimates appropriately reflect the work involved. Exh. VZ-MA 2, at 72, 76. Moreover, by applying two separate and distinct charges, Verizon-MA properly recovers the costs from the cost-causing CLEC.

A CLEC may request manual loop qualification to obtain more detailed information than is available from the LFACS database. Likewise, if MLT testing and a review of paper records is not sufficient to provide the CLEC with the additional information requested, an engineering query can be conducted. This utilizes yet another layer of detail, e.g., cable plats. Rhythms and Covad contend that the LFACS Database should contain all of this loop make-up ("LMU") data on all circuits, and manual loop qualification and engineering query charges should not be imposed. That argument is without merit.

The intent of completing and conducting an inventory of loop make-ups in LFACS was to facilitate provisioning of designed circuits. LMUs have also been added gradually over the years for those terminals where requests for these circuits have occurred. Rhythms and Covad's position, however, directly contradicts standard industry practice, which is reflected in the vendor's (Telcordia) recommendation that count make-ups should not be built for terminals that have little possibility of being assigned a data circuit. The reason for this recommendation is that any count make-up once entered must be maintained. Since the network was constructed to support POTS service, the need for loop make-up to support provisioning of that type of services was nonexistent.

Accordingly, the Department should reject Rhythms and Covad's claims, and approve Verizon-MA' s proposed rates.

2. Loop Conditioning

Under the Line Sharing Order, ILECs may recover line conditioning costs, where applicable; but states "may require that the conditioning charges for shared lines not exceed the charges the incumbent LECs are permitted to recover for similar conditioning of stand-alone loops for xDSL services. Furthermore, if the incumbent LEC is providing, or has already provided, xDSL service over a particular shared loop, a competitive LEC should not be charged with any line conditioning costs if it wins that customer and seeks access to that shared loop for providing xDSL service." Line Sharing Order, at ¶ 148.

Loop conditioning provides CLECs with the option of requesting that Verizon-MA remove load coils and bridged taps from their loops to enable them to obtain xDSL based services. Exh. VZ-MA 2, at 27. Nonrecurring charges would apply for the two activities, in addition to the Engineering Work Order request that precedes both activities. The applicable Load Coil and Bridged Tap Removal Rates vary based on the loop length and quantities. See Exh. DTE-BA-MA 1 (Errata). The Engineering Work Order Charge is $671.23 per link ($905.75 expedited). Exh. DTE-BA-MA 1 (Errata).

The Engineering Work Order process includes certain general preliminary functions associated with loop conditioning activities. Exh. VZ-M 2, at 28-29. These include verifying facilities availability, writing the work order, preparing the special bill generated as a result of construction, and updating records. The Engineering Work Order captures work performed exclusively by FMC personnel. Exh. VZ-MA 2, at 28. Likewise, the non-recurring costs study methodology identified only those costs pertaining to the functional groups (i.e., FMC) involved and the discrete work activities performed. Exh. VZ-MA 2, at 75. The conditioning costs also take into account the occurrence factor, i.e., how frequently a particular activity is performed based on subject matter experts determination in a forward-looking environment. Exh. VZ-MA 2, at 73.

Contrary to Rhythms and Covad's claims, none of the loop qualification activities included in the Manual Loop Qualification or Engineering Query processes duplicate the loop conditioning activities included in the Engineering Work Order. This work is necessary to ensure that facilities are still available, billing is completed, and database and cable plat records are properly updated to ensure that the most current loop qualification information is provided to CLECs in the future. Therefore, it is appropriate that the cost causer -- i.e., the carrier that requested that the work be done -- be billed for this cost. Exh. VZ-MA 2, at 30.

The removal of load coils is an extremely difficult and complex process. Exh. VZ-MA 2, at 32-34. In determining the costs of Load Coil Removal, Verizon-MA used a weighting for underground versus aerial environment derived by applying the distribution of loop plant by density cell (Metropolitan, Urban, Suburban and Rural) to the average total loop length (feeder + distribution) split between aerial and underground. The distribution of loop plant by density cell was obtained from Loop Analysis And Reporting (LART) system data. The average total loop length by density cell and the portions of aerial versus underground cable by density cell were obtained from Outside Plant Planning Engineers.

It was assumed that the cost to remove load coils from buried facilities approximates the cost to remove them from aerial facilities. Exh. VZ-MA 2, at 78-79. Likewise, the costs of Bridged Tap Removal from buried facilities is assumed to be the same as aerial. This is a very conservative assumption given the fact that locating and exposing splices and/or buried load coil cases can require contract workers with backhoes and trucks, plus police details to direct traffic, before a splice technician can even set up to perform the required work activities. Exh. VZ-MA 2, at 79 n.35.

Rhythms and Covad argue that bridged taps and load coils can be removed from multiple pairs simultaneously. That is wrong. It would be a rare situation in which conditioning work had been requested for multiple loops at the same splice point at the same time. Therefore, the efficiencies alleged by Rhythms and Covad are not attainable on a routine basis.(44) Moreover, to randomly remove load coils or bridged taps where no request exists is imprudent. Random removal of load coils can result in degradation of voice service, and random removal of bridged taps can result in service disconnection and reduced utilization of loop plant. Exh. VZ-MA 2, at 80. The only circumstance where this may be feasible is where there are multiple pairs loaded and bridged at the same location that are not in use or needed for voice service.(45) Even if this rare instance occurs, conditioning of the additional loops would not necessarily be simple or inexpensive.

In addition to posing service degradation and disconnection problems, the sort of mass conditioning program proposed by Rhythms and Covad does not make economic sense. This is true because it is highly unlikely that there would be even 25 spare pairs in a single binder group that could simply be disconnected from load coils in a route. Likewise, while this scenario may play out logically with regard to end section bridge tap, its application to bridged tap in sections prior to the served address, or especially to load coils, is virtually impossible to envision. Exh. VZ-MA 4, at 66.

As noted by Rhythms and Covad, the use of load coils is restricted to loops generally longer that 18,000 feet. All pairs working on copper back to the wire center at or beyond 18,000 feet have to be loaded for the circuits to function at standards for voice grade purposes. The geographic distribution of working customer distance from the central offices results in only small percentages of customers located at or greater than 18,000 feet. This results in cable cross section sizes due to tapering at these extreme distances being substantially smaller than those closer to the office and certainly less likely to have completely spare 25 pair loaded cable complements that could be unloaded at the same time.

Unless pairs are unloaded on an as-needed basis, the assumption that removing loads on 25 pairs is possible would necessitate considerable capital expenditures or rearrangement costs to provide relief facilities to serve the customers beyond

18,000 feet who continue to desire to have functioning voice service. Accordingly, it is highly unlikely that Verizon-MA would encounter in its network the scenario described by Rhythms and Covad. Exh. VZ-MA 4, at 66-67.

Even if service degradation or disconnection problems could be avoided, routinely performing unrequested bridged tap removal or load coil removal work on additional loops would increase the cost of each individual conditioning job based on the somewhat speculative assumption that the additional loops may be used for DSL-based services at some point in the future, thus possibly resulting in some long term cost savings. The increase in current costs would be certain and immediate, while the long-term cost savings would be speculative and undeterminable. It would thus be inappropriate to adopt such a practice, or to build such a "multiple loop" assumption into the cost study process for loop conditioning. Exh. VZ-MA 2, at 81-82.

Finally, Rhythms and Covad are wrong in stating that removal costs should not apply because Verizon should have removed bridged taps long ago. First, the FCC's UNE Remand Order has rejected similar claims of CLECs, concluding that "in costing DSL, one must take account of the network on account of which it is being used." That network is a largely copper network, which properly includes the presence of both load coils and bridge taps. Second, current loop design guidelines permit the continued presence of bridged tap in loops, even in redesigned or newly constructed plant, which directly contradicts Rhythms and Covad's remarks that bridged tap should have been designed out of the loop, or in other words, that bridged tap should not exist at all. The fact is that bridged taps are a permissible and necessary network component, and the need to deal with bridged tap is a normal cost of doing business for all carriers, both ILECs and CLECs.

As with other costs filed in this case, Rhythms and Covad believe that they should not incur any costs, and then proceed to shift the costs to Verizon-MA . It is unreasonable for CLECs to expect BA-MA to absorb the cost of modifying its network components that rely on copper as a transmission medium in order to support a CLEC's provision of DSL services. This directly contradicts the principle of cost-causer, and must be rejected.

3. Splitter Installation and Maintenance

Under the Line Sharing Order, an ILEC may recover the cost of the splitter,(46) if it purchases it itself, or, alternatively, the CLEC may "purchase a splitter that complies with industry standards, and transfer it to the incumbent LEC." Line Sharing Order, at ¶ 147. Moreover, a "state may also allow the incumbent LEC to include in its rate structure a charge to recover the cost of installing the splitters." Id.

As previously stated, there are two options - Scenario A and Scenario C. Although many of the rates are the same, there are some pricing differences based on the distinctions between the two Scenarios.

In Scenario C, the splitter is mounted on a relay rack located in Verizon-MA's own central office space. From there, it is connected as follows: (a) the data port is connected to the CLEC's POT Bay; (b) the voice/data port is connected, through a Metallic Test Access Unit ("MTAU"), to the appearance of the loop on the Main Distribution Frame ("MDF"); and (c) the voice port is connected to the appearance of the assigned switch port on the MDF.

In Scenario A, the splitter is located in CLEC collocation space in Verizon-MA's central office. It is connected as follows: (a) the data port is connected to the CLEC's DSLAM or similar equipment (this connection is wholly within the CLEC's

collocation space, and does not result in any Verizon-MA charges); (b) the voice port is connected, through the CLEC's POT Bay, to the appearance on the MDF of the digital switch port serving Verizon-MA's customer; and (c) the voice/data port is connected, through the POT bay and an MTAU, to the loop's appearance on the MDF.

Since in both Scenarios the CLEC (not Verizon-MA) will be purchasing the splitter, Verizon-MA proposes no charge to recover the materials cost of the splitter. Verizon-MA has, however, proposed a one-time splitter installation charge of $1,215, that applies when "Verizon-MA install the splitter in Scenario C.(47) By contrast, in Scenario A, the splitter is located in the CLEC's collocation space, so the CLEC will be required to do its own installation work, and there will be no installation charge.

The term "installation" charge under Scenario C is really a misnomer since the charge is intended to recover all EF&I (Engineer, Furnish, and Install) costs for the splitter equipment, which include, but are not limited to, installation costs. This includes such items as vendor engineering, Verizon-MA engineering, transportation, warehousing, vendor installation, Verizon-MA installation, and acceptance testing. Exh. VZ-MA 2, at 52.

As shown on the Cost Study Workpaper, Section 1, Page 1, Verizon-MA calculates the installation cost for the shelf and splitter cards by applying the EF&I factor (installation factor) to a material investment. While the CLEC provides the actual material, Verizon-MA uses the material cost of the same type of equipment installed for its own use as a reasonable surrogate for the value of the CLEC equipment. The Department approved installation factor is then applied to the material cost to produce the non-recurring installation cost. The installation factor includes engineering, transportation and warehousing, sales tax, as well as the actual installation hours. Exh. VZ-MA 4, at 53.

Verizon-MA's use of its material investment as a surrogate for CLEC-provided material is also an acceptable Department cost practice. Verizon-MA used the exact same methodology used in D.T.E. 98-57 to calculate the installation cost for a Point of Termination (POT) Bay for a CLEC-provided POT Bay. In that case, Verizon-MA took the material cost of a relay rack that it normally purchases for its own use and applied an installation factor. The installation cost was determined by subtracting the material cost of the relay rack from the total installed cost. Exh. VZ-MA 4, at 53.

No party contested that methodology during the proceeding, and the Department notes in the DTE 98-57 Order, "[a]fter reviewing the cost study in this case, we find that the methodology is consistent with the FCC's TELRIC methodology and Department's findings in the Phase 4-G Order and the Phase 4-I Order. Bell Atlantic has provided complete documentation identifying the source of all of its collocation costs in the work papers accompanying Tariff No. 17." DTE 98-57 Order, at 188. Accordingly, that approach should be adopted in this case.

Verizon-MA is also proposing a splitter and administration maintenance cost of $24.85 and $26.28 per month (per 96 unit shelf) for Scenario A and C, respectively. Exh. DTE-BA-MA 1-1 (Errata). The charge recovers actual maintenance of the splitter (including testing, repairs, moves, changes, and upgrades) in Scenario C, as well as, an allocation of administrative/wholesale marketing costs (e.g., product management), "other support" expenses, and common costs in both scenarios. It is these allocations that make it appropriate to apply the "maintenance" charge to Scenario A as well as Scenario C, even though in the former it is the CLEC that will be responsible for the physical maintenance of the splitter.

Rhythms and Covad contend that splitter costs and prices should be based on the MDF mounted splitter method because it is most efficient, regardless of what method is actually used by the ILEC. This contradicts the FCC's Line Sharing Order (¶145). In that Order, the FCC "[found] it reasonable to establish a presumption that, where the splitter is located within the incumbent LECs' MDF, the cost for a cross connect for entire loops and for the high frequency portions of loops should be the same".

If, however, the splitter is not located in the MDF, then the incumbent LEC should be allowed to adjust the cross-connection charge "to reflect any cost differences arising from the different location of the splitter, compared to the MDF. We would expect that this amount would be only minimally higher than for cross connecting a splitter located within the MDF to the competitive LEC's xDSL equipment".

Verizon-MA's rate proposal meets this standard. Verizon-MA's proposal calls for splitters to be mounted on racks, rather than in the MDF. Verizon-MA also requires only two frame cross-connects for Scenario A or C and a reasonable amount of cabling for connecting the splitter. For example, other methods may call for a splitter mounted on a cross-connect, which would require many more cross-connects.

In addition, Verizon-MA has several reasons for not allowing MDF mounted splitters. First, there are presently no NEBS compliant MDF mountable splitters on the market. Second, and more importantly, Verizon-MA needs to conserve space on its MDFs for providing basic local exchange service, especially in the more congested and dense urban areas.(48) In its March 17, 2000, vacating and remanding the FCC's Advanced Services Order, the District Court of Appeals for the District of Columbia Circuit supported this decision by enabling an incumbent LEC, acting as a landlord, to determine where in its central offices a CLEC can place its equipment.(49) Accordingly, use of a rack-mounted splitter is consistent with the FCC's Order, and the costs associated with that alternative are proper and should be recovered by Verizon-MA

4. Wideband Testing

Verizon-MA is proposing to include in all line sharing arrangements a Wideband Test System ("WTS") that will allow the Company to minimize its forward-looking incremental costs for trouble shooting on shared loops. Without this enhanced capability, Verizon-MA (and CLECs) would incur increased costs and dispatches as the volume of this type of service arrangement increases. In order to recover the costs of the WTS, Verizon-MA proposes a WTS charge of $1.90 per line per month. Exh. DTE-BA-MA 1-1 (Errata). This charge would apply to all line sharing arrangements, whether Scenario A or Scenario C. It recovers the costs associated with a MTAU that provides test access to the shared loop, and with the system that will perform the necessary testing through the MTAU. Exh. VZ-MA 4, at 58.

Rhythms and Covad challenge Verizon-MA's showing that its proposed WTS serves important and legitimate cost reduction and service quality improvement functions, and that its costs are therefore properly recoverable from wholesale customers. The CLECs' arguments concerning the WTS rely heavily on a "network assessment" that was prepared in late 1999 to analyze the costs and benefits of WTS implementation. That document concerned the Company's provision of retail services. It is not relevant to, and was not intended to determine, the costs and benefits of a WTS to a wholesale provider.

The need for wideband testing was predicated on internal cost studies relating to the cost of physical dispatches responding to problems in the data portion of a DSL/LS customer complaint. The partial contract refund of $11.2 million from Alcatel relates to Alcatel's failure to build the functionality of the actual test head (MTAU) into each Alcatel DSLAM. Since CLECs would be providing their own DSLAMs, this refund has nothing to do with the costs for testing to provide the wholesale service via the Heikmian system, as reflected in BA-MA's cost studies. There is no relationship between these two costs, and RLI/Covad's argument is an "apples and oranges" comparison.

Verizon-MA's contention that WTS implementation is cost effective for a wholesale service provider does not depend in any respect on the network assessment, and it is thus irrelevant to say that the assessment does not prove anything about wholesale costs and benefits. It was not meant to.

Nor does the study demonstrate that the Hekimian system that Verizon-MA is now proposing to adopt in connection with line sharing is designed to support retail

service. The Hekimian test system includes a variety of functionalities. Only those those functionalities that are relevant to testing in a wholesale, line sharing environment are reflected in Verizon-MA's cost study.

Contrary to Rhythms and Covad's claims, WTS is critical for quality assurance. In the past, especially with regard to the physical loops, simple MLT testing would normally be adequate to insure the integrity and quality of voice service. With the addition of modems and other electronic devices to the loop, and especially with the advent of line sharing, the simple MLT test no longer permits either a qualitative evaluation of the loop for provisioning purposes or the ability to accurately sectionalize and assign problem responsibility from a service assurance perspective. Complications in trouble isolation are introduced by the fact that there is no standard test signature for ADSL modems. In addition, standard MLT tests cannot identify spectrum or cross-talk problems induced by a variety of unknown different DSL service offerings introduced in unshielded central office cross-connect arrangements.

What Rhythms and Covad's argument ignores is that testing -- while it has important benefits for a retail service -- is also a legitimate and indeed necessary function of a wholesale service provider. Therefore, although WTS was first explored by Verizon-MA in the context of improving its retail services, its subsequent analysis established that Verizon-MA would need to continue to deploy the system, regardless of whether similar systems were separately deployed by CLECs (or by Verizon-MA) for their own retail data services.

Absent a wideband testing capability, trouble sectionalization, isolation, and repair on shared lines would require multiple dispatches of service technicians to central offices and customers' premises. As a result, Verizon-MA would incur (and to a significant extent would pass on to CLECs through dispatch charges) even greater costs that would be avoided through the use of a WTS. In addition to reducing Verizon-MA's overall wholesale costs, a WTS will help Verizon-MA to achieve a higher level of service to its wholesale customers. Indeed, as the Department has made amply clear, Verizon-MA will be held accountable for the performance, maintenance, and repair of its wholesale services. Accordingly, it must have the tools needed to accomplish this, and must be allowed to recover the costs associated with those tools. Exh. VZ-MA 4, at 69-70.

In both of these respects, wideband testing is a reasonable and necessary wholesale function. Such testing supports Verizon-MA's obligations with respect to provisioning and service assurance on loops used for both voice and data services. In opposing these charges, CLECs would seem to be seeking to hold Verizon-MA to high wholesale service standards while refusing to contribute to the cost of achieving such standards. Absent WTS, Verizon-MA would incur (and to a significant extent would pass on to CLECs through dispatch charges) even greater costs that would be avoided through the use of a WTS. Thus, wideband testing supports an efficient network model. Exh. VZ-MA 4, at 61.

Rhythms and Covad also challenge Verizon-MA's proposed WTS charge on the grounds that the costs are not based on a "forward looking" study. Essentially, this is based on the contention that in an efficient WTS implementation, some or all of the testing functionality would be integrated into the DSLAM. Even if an integrated DSLAM/testing solution were optimally efficient for a retail service, the same is not true in a wholesale environment in which multiple service providers would each be free to choose its own splitter and DSLAM equipment.

An integrated system presupposes: (a) that there is a single type of DSLAM functionality integrated into Verizon-MA's testing system, and (b) that Verizon-MA, and not the individual retail providers, would have control over the selection of the DSLAM. But these presuppositions are not correct. CLECs in fact choose their own DSLAMs -- to match the characteristics of their retail services -- and multiple CLECs will inevitably choose multiple DSLAMs. In this environment, Verizon-MA would not be able to engage in efficient wholesale service testing if it were required to utilize multiple WTSs (and indeed multiple types of WTS), each integrated into a

separate CLECs DSLAMs. In short, DSLAM/WTS integration is only possible for retail testing.

The CLECs also argue -- incorrectly -- that Verizon-MA should not be permitted to charge them for a WTS unless it provides them with direct access to that system. Whether Verizon-MA should be entitled to recover the costs of a WTS depends upon whether wideband testing is regarded as a legitimate cost of providing access to the high-frequency portion of a loop -- i.e., whether it is a legitimate function of a wholesale service provider. Direct access to the WTS is a separate issue, and one not related to the costing and pricing issues that are at the heart of this proceeding.

Contrary to Rhythms and Covad's claims, it is irrelevant if Verizon-MA is deploying this system entirely for its own use. That would be equally true of a wide variety of Verizon-MA's network testing, maintenance, and repair equipment. Verizon-MA does not necessarily turn over such equipment to CLECs; indeed, it generally does not even give them access to it; yet it is undisputed that the cost of such equipment is a legitimate and recoverable cost of providing wholesale service. CLECs are the ultimately beneficiaries of the deployment of any equipment that improves the quality or efficiency of Verizon-MA's wholesale service offerings. The WTS clearly meets that test. Further, because WTS is a truly incremental cost that would not be incurred absent line sharing, Verizon-MA must be allowed to recover its costs.(50)

Rhythms and Covad also argue that the WTS should be "optional" for CLECs, i.e., Verizon-MA should only be permitted to assess a WTS charge on those CLECs that request testing and are able to access Verizon-MA's testing system. This is imprudent for a number of reasons.

First, if WTS is only an option, it would most certainly lead to reduced service quality levels and higher dispatch costs that would result from disconnecting CLEC lines from the system. Second, offering optional testing charges is impractical and would create provisioning and billing problems nightmare. Although conceptually it sounds plausible, Verizon-MA cannot believe that CLECs would accept lower service quality levels, even if they were able to avoid the WTS charge. Indeed, the likely result of providing such an option is that CLECs would decline the charge and still seek to hold Verizon-MA to strict service quality standards. This is an untenable situation, and would hardly facilitate the smooth implementation of this new service.

Although the NYPSC ruled that the WTS charge should be at the option of each CLEC, the NYPSC did state that (1) BA-NY could charge for dispatches, and (2) could apply a lower standard for service metrics to such CLECs. Exh. VZ-MA 4, at 63. Thus, if the Department follows the NYPSC's ruling on the issue of charging for WTS, the Department must also adopt these two corollary rulings as well. Then the CLECs will appropriately bear the consequences of their decision.

However, as Verizon-NY pointed out in its Petition for Reconsideration to the NYPSC on this issue, there are still hidden costs that the ILEC cannot recover under this approach. Exh. VZ-MA 4, at 63. For example, dispatch charges only recover what might be described as the "primary" costs of a dispatch -- that is, the costs associated with the time of the technician who must is dispatched and who performs the necessary work at the central office or in the field. In addition, dispatches, and the troubles that underlie them, involve a variety of secondary costs that cannot be readily measured and incorporated into a Department-approved rate. These include the disruption of routine that dispatches entail, the customer dissatisfaction they cause, and the likelihood of disputes between Verizon-MA and its carrier customers over the appropriateness of imposing the charge in particular cases (disputes that not infrequently may have to be resolved by the Department). A CLEC will not "internalize" these costs, even though they are caused by the CLEC's decisions to forego WTS; rather, Verizon-MA will. The fact that Verizon-MA will bear the costs of the CLECs' decision to "opt out" of WTS is a legitimate concern for Verizon-MA.

5. Collocation Application - Augment Fee and Other Related Charges

Verizon-MA proposes a non-recurring collocation application-augment fee of $1500 for splitter installation. Exh. DTE-BA-MA 1-1 (Errata). Rhythms and Covad argue that because Verizon New York ("Verizon-NY") has simplified the collocation application form for splitters, the costs - and hence the charges - should decrease as well. Their conclusion is unfounded. Exh. VZ-MA 4, at 57. In fact, Verizon-NY has clearly not conceded that costs have declined because of a shorter application form, as indicated in its statement in response to that question in its April 10, 2000, filing in Case No. 98-C-1357 (p.35):

The Collocation Application - Augment fee recovers BA-MA's costs for processing and engineering the request to augment an existing collocation arrangement. This is precisely the type of activity necessary to facilitate the planning and engineering of cable route, cable terminations, splitter bay, splitter shelves and connector blocks to accommodate line sharing to an existing collocation arrangement. BA-MA still has to process the application, update billing accounts, establish CFAs in BA-MA OSSs, and establish SBNs. The BA-MA Local Collocation Coordinator must still facilitate operational meetings with real estate, central office engineering, and vendor management experts who do site surveys to find appropriate locations; and must plan cable routes, order cables, etc. There is no significant difference in the scope and magnitude of work activities and work function necessary to implement a line sharing arrangement as compared to those required to augment an existing physical collocation arrangement.

Verizon-NY reviewed these functions in detail with CLECs representatives during the Technical Engineering committee meetings at the New York Line Sharing Collaborative and reviewed them at these hearings. The CLECs are fully aware of the scope and magnitude of the work activities required. As for the "streamlined" modifications to the application form, the "streamlining" is entirely one-way; that is, it was intended to simplify the paperwork required of CLECs. It has absolutely no impact on the work functions Verizon-NY must perform in processing and engineering the collocation augment.

Rhythms and Covad, as participants in the Collaborative process in New York, as fully aware of the origins of the streamlined application form. It was to address concerns raised by CLECs during the collaborative that there would be a massive work effort required on their part due to the magnitude of collocation requests they intended to submit for establishing line sharing at the existing collocation arrangements. Accordingly, Verizon-NY was asked by the NYPSC and the CLECs to determine whether the application could be simplified. Exh. VZ-MA 4, at 57.

Verizon-NY worked diligently over a four-day period to create a streamlined spreadsheet that included only the required information from the 14-page application that was necessary to engineer and plan a line sharing arrangement. It was also agreed during the New York Collaborative that this streamlined application would be used only for the initial push of line sharing arrangements, and would not be a permanent change. This streamlined spreadsheet was created with self-populating fields that further reduced the amount of work required by the CLEC to complete an application. It in no way simplified the scope and magnitude of work required by Verizon-NY, as Rhythms and Covad erroneously assert. Likewise, it would have no effect on Verizon-MA and the costs and rates proposed for this function.

Another unfounded criticism made by Rhythms and Covad concerns Verizon-MA's requirement for a POT Bay. Because direct connection to Verizon-MA's network at the MDF remains technically feasible, Rhythms and Covad argue that a POT bay is not necessary. They also contend that, to the extent, the Application-Augment fee was applicable under Option A, it should only relate to CLEC augmentation of the number of cross connection pairs from Verizon-MA's frame to their collocation space. Further, Rhythms and Covad take the position that a CLEC should be able to use its existing cross-connects to provide the necessary terminations without incurring new charges. Those arguments are without merit.

A POT bay is the demarcation point between the CLEC's network and Verizon-MA's network. It is a necessary component because it provides an appropriate point for testing and isolating troubles to each party's network. Likewise, Rhythms and Covad are wrong in arguing relating to the use of existing cross-connects in a line sharing arrangement. Existing cross-connects do not provide the necessary termination for line sharing. Cables required for line sharing under Option A are provide in accordance with Mass. D.T.E. Tariff No. 17. Moreover, the application augment fee applies for augmentation of the number of cross-connect pairs for line sharing for both Option A and Option C.

Although spare cabling may be recycled as a general matter, it is not true for line sharing purposes. Rhythms and Covad presume that the cables that the CLEC seeks to re-use are organized appropriately into binder groups and will not create interference problems if used for data services. If this were not the case, then recycling the existing cable for splitter connections either would not be available or would entail additional costs.(51) Exh. VZ-MA 4, at 57.

6. Forward-Looking Cost Methodology

In Briefing Questions, the Department asked Verizon-MA to "[e]xplain whether VZ-MA's proposal to assess monthly recurring charges for xDSL-capable loops based on an all-fiber and digital loop carrier ("DLC") network while assessing non-recurring charges for these same loops based on an all-copper network complies with TELRIC principles." The answer is yes.

The costs determined in Verizon-MA's UNE recurring cost studies are forward-looking, in the sense that they are based on the incremental costs that Verizon-MA will actually incur or plans to incur within the foreseeable future. The costs determined in Verizon-MA's UNE non-recurring cost studies are forward-looking, in the sense that they reflect the efficient provisioning practices to be used into the foreseeable future.

Likewise, the non-recurring charges for xDSL-capable loops are also forward-looking despite the fact that they assume the use of copper feeder cable, in contrast to the DLC-based, fiber-feeder technology that underlies Verizon-MA's recurring studies of UNE loops.(52) ADSL and HDSL transmission technology is inherently copper-based, and inherently based on the use of existing facilities.

The non-recurring charges that Verizon-MA proposes for its ADSL/HDSL-compatible loops are consistent with the copper-based, forward-looking technology proposed for those loops. Similarly, the non-recurring charges that Verizon-MA proposes for "POTS" loops are consistent with the fiber-based, forward-looking DLC technology proposed for those loops. The long-run costs of a DLC-based loop plant are less than the costs of an all-copper plant. Indeed, this was the very basis of the Department's decision adopting an all-DLC model for the purpose of determining recurring costs. Although DLC systems utilize more electronics than non-DLC loops require, they also result in significant reductions in maintenance costs, structure costs, and other costs associated with copper cable.

What CLECs have clearly requested from Verizon-MA, and what Verizon-MA is proposing to provide, are simple copper transmission paths to which the CLECs can attach their own xDSL electronics, provided by their own vendors and adapted to the services that they intend to offer. These electronics would not function properly over DLC systems. Thus, the use of copper reflects the most efficient technology currently available for provisioning the particular unbundled service that has been requested and that is being provided.(53)

The proposed rates for DSL Conditioning services properly reflect the most efficient ways of carrying out certain functions that are required for copper-based loops to be used for ADSL/HDSL transmission. In this respect, it is irrelevant that, for example, load coils would not be used on fiber feeder cable or on "new" copper loops specifically deployed for xDSL applications rather than for voice transmission.(54) They are utilized, for good and sufficient reasons, on existing copper loops.(55)

The Department's second briefing question to Verizon-MA raises a similar issue. It reads as follows: "[e]xplain whether VZ-MA's proposal to recover loop conditioning charges complies with TELRIC principles if the Department assumes an all fiber and DLC network." As stated above, the xDSL technologies at issue in this proceeding are, by definition, copper-based, which means that they can only be utilized over copper cables.(56) The fact that these technologies utilize copper loops enables telephone companies to extend the economic life of their embedded copper loop plant by using that plant to provision high-speed digital services. Therefore, xDSL is an interim technology -- one that will eventually be displaced by fiber-based transmission technologies. It is, moreover, a technology that is based on and largely justified by the use of embedded plant.

Verizon-MA is not deploying copper loops on a forward-looking basis in order to support xDSL transmission technologies or the advanced digital services that those technologies can support.(57) However, there may be significant implications for Verizon-MA's forward-looking costs in that VZ-MA may have to rehabilitate and maintain its embedded copper loop plant far longer than it would have absent xDSL technologies.

IV. CONCLUSION

The evidence shows that Verizon-MA's terms and conditions and proposed rates for xDSL and line sharing are reasonable and fully comply with the FCC line sharing rules and appropriate cost methodologies.

Respectfully submitted,

VERIZON MASSACHUSETTS

By its attorney,

_____

Barbara Anne Sousa

185 Franklin Street, Room 1403

Boston, Massachusetts 02110-1585

(617) 743-7331

Dated: August 18, 2000

1. 1 On June 30, 2000, Bell Atlantic Corporation completed its merger with GTE Corporation and now does business as Verizon Communications ("Verizon"). New England Telephone and Telegraph Company, which did business as Bell Atlantic-Massachusetts

is now Verizon New England, Inc., doing business as Verizon Massachusetts, and will be referred to herein as "Verizon-MA." Any quotations used herein that refer to Verizon by its former name will remain unchanged.

2. 2 See Third Report and Order in CC Docket 98-147 and Fourth Report and Order in CC Docket 96-98, released December 9, 1999 (hereinafter referred to as "Line Sharing Order").

3. 3 Rhythms, Covad and Verizon-MA reached an agreement in principle regarding issues concerning test access and line station transfers. Tr. 2:498. Verizon-MA's Errata Reply to DTE Record Request 10. Accordingly, Verizon-MA has not briefed those issues.

4.

4 Those rates include: (1) splitter installation, maintenance, administration and support charges; (2) collocation application-augment fees; (3) wideband testing access charges; (4) various non-recurring line sharing charges developed using the engineer, furnish and install factor ("EF&I") approved in the Consolidated Arbitrations proceedings; (5) loop conditioning charges (including bridged tap and load coil removals); (6) loop qualification charges (manual and mechanized and engineering query charges); (7) cooperative testing charges; (8) ISDN electronics charges; and (9) rates for qualified DSL Digital Designed Links ("DDL").

It should be noted that the recurring charges for the underlying loops are based on existing recurring rates from two-wire and four-wire analog loops approved by the Department in the Consolidated Arbitrations proceeding, and therefore are not at issue in this case. Exh. VZ-MA 2, at 9, citing D.P.U. 96-73/74, 96-75, 96-80/81, 96-83, 96-94 - Phase 4, Order (December 4, 1996). In addition, in this filing Verizon-MA does not propose to allocate any loop costs to the line sharing rates, but reserves the right to do so at a later time in accordance with FCC requirements. Exh. VZ-MA 2, at 49. Verizon-MA has, however, included a zero-rated charge as a "placeholder for recovery of OSS upgrade costs, which the Company expects to file by fourth quarter 2000.

5.

5 The background of the two scenarios is discussed in Case 00-C-0127, "Order Adopting Bell Atlantic-New York Line Sharing Schedule For Provision Of Digital Subscriber Line Service" (issued and effective April 24, 2000), at 2. As part of this Collaborative, a number of subgroups have met nearly every week and, to date, have resolved several administrative, engineering, and operational support system ("OSS") issues related to line sharing. Verizon will apply the results of many of these resolutions in Massachusetts as well, as recognized by Covad in its Arbitration Petition (p. 2, n.2). Over time, other issues may be resolved as well. Therefore, although there may be some areas in which the parties may have fundamental disagreements that cannot be resolved through the collaborative process, Verizon believes that many other line sharing implementation issues can be resolved cooperatively on a going forward basis.

6.

6 The Verizon Witness Panel ("panel") consists of David Kelly, Bruce Meacham, Amy Stern, Augie Trinchese, Jamie Virga and John White. Panel members described the various daily activities involved, from the placing of the service order to facilities assignment, wiring and testing, and updating Verizon's systems for inventory, maintenance and repair, and billing purposes. Exh. VZ-MA 4, at 9-12. The Panel also explained why many of those activities cannot be performed simultaneously, and why the interval is critical to ensuring accuracy and quality assurance. Exh. VZ-MA 4, at 13.

7.

7 In light of the time frame in which a decision here is to be issued, it is unclear whether Rhythms and Covad now would skip the three-day interval entirely, and demand immediate imposition of the two-day period.

8.

8 Another fundamental flaw in Rhythms' and Covad's proposed intervals is that they would apply regardless of the number of lines that were contained in each order. Clearly, this would be inappropriate and would be contrary to the provisioning interval principles established the C2C Guidelines, which sets forth various intervals for products depending on the number of lines on the Local Service Request ("LSR").

9.

9 The Arbitrator explained that "it would be unreasonable to adopt short intervals here . . . since the expectation is that there will be fast implementation of xDSL service, with large-scale mass-marketing. ILECs and CLECs are seeking as many customers as possible, and will continue to do so after June 6, 2000. The expected increase in demand will likely challenge any but the most liberal of preset intervals for provisioning and installation of the line sharing UNE. It would be particularly unreasonable to adopt intervals shorter than parity since failure to complete the provisioning and installation would be a breach of contract, and invite unproductive conflict." See 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 on the Commission's Own Motion Into Open Access and Network Architecture Development of Dominant Carrier Networks (Investigation 93-04-002)(Interim Arbitration, Line Sharing Phase), at 38 (issued May 26, 2000) (Hereinafter "California Arbitration Decision").

10.

10 As previously stated, the final decision supporting the six day business interval supersedes the recommended decision in Pennsylvania (Petition of Covad Communications Company for an Arbitration Award Against Bell Atlantic-Pennsylvania, Inc., Implementing the Line Sharing Unbundling Network Element, Docket No. A-310696F0002; Petition of Rhythms Links, Inc. for an Expedited Arbitration Award Implementing Line Sharing, Docket No. A-310698F0002, Recommended Decision (June 28, 2000) (hereinafter "Pennsylvania Recommended Decision")) Further, the interim decision in Texas (Petition of Covad Communications Co. and Rhythms Links Inc. Against Southwestern Bell Telephone Co. and GTE Southwest for Post-Interconnection Dispute Resolution and Arbitration under the Telecommunications Act of 1996 Regarding Rates, Terms, Conditions and Related Arrangements for Line Sharing, Docket No. 22168, Interim Award (June 6, 2000) (hereinafter "Texas Interim Award")), which was cited by Rhythms and Covad, does not demonstrate that the six business day interval is unreasonable for Massachusetts at this time.

11. 11 Even the OSS improvements that are expected to be implemented in Massachusetts in the second quarter of 2001 do not support a shorter interval at this time. The proposed one business day interval proposed by Rhythms and Covad would be implemented approximately three months before that date.

12. 12 Deployment of Wireline Services Offering Advanced Services Telecommunications Capability, 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 (rel. August 11, 2000) at ¶ 27.

13.

13 See Interim Award, Petition of Covad Communications Company and Rhythms Links,

Inc. Against Southwestern Bell Telephone Company and GTE Southwest Inc., Docket Nos. 22168 and 22469 (Tex. PUC), June 6, 2000, at 25 (hereinafter Texas Interim Award) ("the appropriate provisioning interval for tie cables, provisioned by SWBT, is equal to the intervals delineated in SWBT's collocation tariff -- no more than 30 calendar days depending on the number of tie cables.")

14. 14 See The Southwestern Bell Telephone Company Local Access Tariff, § 6.1.3(D).

15. 15 Consolidated Petitions for Arbitration filed by Covad Communications Company and Rhythms Links Inc., Case Nos. 00-0312 and 00-0313, Hearing Examiner's Proposed Arbitration Decision (July 24, 2000) (hereinafter "Illinois Arbitration Decision"), at 21.

16.

16 Implementation of the Local Competition Provisions of the Telecommunications Act of 1996, Third Report and Order and Fourth Notice of Proposed Rulemaking, FCC 99-238, CC Docket No. 96-98 (rel. Nov. 5, 1999) ("UNE Remand Order").

17. 17 This is consistent with the Act, which only imposes a duty on local exchange carriers to provide "for physical collocation of equipment necessary for . . . access to unbundled network elements at the premises of the local exchange carrier." (47 U.S.C. § 251(c)(6)(emphasis added)).

18.

18 In the Matter of Application by SBC Communications Inc., Southwestern Bell Telephone 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").

19. 19 This FCC rationale would also allow AT&T to choose to own the splitter in the case of UNE-P migration for data since AT&T would be the voice provider that may experience service degradations when partnering with a data CLEC.

20. 20 However, the FCC noted that "nothing in our rules prohibits an incumbent LEC from voluntarily providing the splitter in this line splitting situation." Id. at ¶ 325, n.902.

21. 21 California Arbitration Decision, at 20 ("the ILEC is not required to own the splitter") & 21 ("[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."); Illinois Arbitration Decision at 13 (citing both Line Sharing Order and SBC 271 decision in concluding it is clear that "Ameritech Illinois is under no legal obligation to make available Ameritech Illinois owned splitters; Pennsylvania Recommended Decision, at 22 ("BA-PA should not have to bear the financial risk and burden or owning the splitter"); Texas Interim Award, ("the most reasonable interpretation of the Line Sharing Order . . . is that the ILECs can either provide CLECs with the splitter equipment or allow CLECS to use their own splitter equipment."); the PAPUC upheld the ALJ's ruling on this point in its August 17, 2000 Final Decision in this proceeding.

22.

22 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 271 Order, at ¶ 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, at ¶ 17, n.29.

23.

23 Rhythms and Covad argue that Verizon-MA should make a variety of options available to them in the line sharing setting in order to accommodate the different business plans of all the CLECs. The mere fact that the request is based on Verizon-MA splitter ownership being only one of the "menu of options" made available to DLECs clearly demonstrates that the DLECs are not impaired in the ability to obtain splitters.

24.

24 See Texas Interim Award, at 9 (in which the arbitrators found that the DLECs' cost concern was unpersuasive since the cost per customer of a DSLAM is approximately ten times the cost per customer of a splitter).

25. 25 This is one of the factors that the FCC identified in the UNE Remand Order as militating against an unconditional obligation to unbundle packet switching equipment. UNE Remand Order, at ¶¶307-308 ("Competitive LECs and cable companies appear to be leading the incumbent LECs in their deployment of advanced services").

26.

26 They are: (1) Whether unbundling of a network element promotes the rapid introduction of competition; (2) Whether unbundling of a network element promotes facilities-based competition, investment, and innovation; (3) Whether unbundling of a network element promotes reduced regulation; (4) Whether unbundling of a network element provides certainty to requesting carriers regarding the availability of the element; and (5) Whether unbundling of a network element is administratively practical to apply.

27.

27 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.

28.

28 Elsewhere the FCC noted that it is a "[g]iven [that there are] rapid changes in technology, competition, and the economic conditions of the telecommunications market." Line Sharing Order, at ¶ 60.

29.

29 For example, the local service request (LSR) would be different for each type. The cable inventory in the system and required pair assignment information would be different, requiring dual work processes and OSS interfaces to be maintained. This would significantly delay the deployment of line sharing. Tr. 2:446.

30. 30 For instance, a CLEC such as Covad could buy the splitters, place them in Verizon-MA's central office(s), and let other CLECs use them on a line-at-a-time basis. Alternatively, if there are benefits to shared use, a consortium of CLECs interested in line sharing could buy the equipment together and share it -- an arrangement similar to collocation today, where CLECs may share their collocation cages. Exh. VZ-MA Exh. 3, at 27.

31. 31 The Illinois decision went on, however, to reject the economic claims made by Covad and Rhythms as to why an MDF mounted splitter supposedly was economically

superior, concluding that "[i]n sum, Rhythms' and Covad's arguments merely request this Commission to favor their needs over the needs of all other CLECs and of Ameritech Illinois to have sufficient space on the MDF. Rhythms' and Covad's 'mandatory menu' approach is contrary to law and, in terms of regulatory policy, unreasonable because it addresses line sharing from the narrow business perspective of Rhythms' and Covad's own economic interests." Illinois Arbitration Decision, at 15.

32.

32 These OSS changes relate to the ordering or provisioning process. They do not relate to the loop qualification database, which is essentially a pre-ordering process. Tr. 2:487.

33. 33 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). The fact that ILECs are only required to provide line sharing arrangement where the ILEC provides voice grade services on the loop in question was also recognized by a recent California Arbitration Decision (at 22-28).

34. 34 Thus, the FCC rejected AT&T's contention that ILECs will be able to "lock-up" local customers and increase the likelihood that customers who obtain xDSL services must remain with the ILEC or abandon the CLEC-provided local service and return to the ILEC. Exh. AT&T 1, Motion to Suspend at 3.

35.

35 See Iowa Utilities Board, supra, 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").

36.

36 There are significant technical issues associated with the implementation of what AT&T refers to as "line splitting" scenarios. These technical issues span a wide range of items from technical concerns regarding the wiring associated with this configuration to the methods and procedures that will be employed for repair and maintenance and billing in a multiple carrier environment. AT&T's position that there are "no technical limitations" involving line splitting, could give the impression that the process involves nothing more than a customer record change. This is simply not the case.

The various scenarios presented by AT&T would impact the work that needs to be done (e.g., billing, maintenance, etc.) and thereby drive changes in systems and physical configurations. These issues are still ongoing in the New York Collaborative, and should not be decided by the Department without further examination of the myriad of issues. Accordingly, Verizon-MA is willing to work cooperatively with AT&T, and other DLECs, on these issues.

37. 37 See Line Sharing Order, at ¶¶ 4 and 26 (defining the line sharing element as "the high frequency portion of the local loop" and in turn defining the high frequency portion as "the frequency range above the voiceband on a copper loop facility") (emphasis added).

38. 38 In the Matter of Implementation of the Local Competition Provisions of the Telecommunications Act of 1996, Third Report and Order and Fourth Further Notice of Proposed Rulemaking, CC Docket No. 96-98 (rel. Nov. 5, 1999), at ¶ 313 (hereinafter "UNE Remand Order").

39. 39 Verizon-MA is also currently prohibited from providing these items under the

Bell Atlantic/GTE merger order. See In re Applications of GTE Corporation, Transferor, and Bell Atlantic Corporation, Transferee, for Consent to Transfer Control of Domestic and International Sections 214 and 310 Authorizations and Application to Transfer Control of a Submarine Cable Landing License, CC Docket No. 98-184, Memorandum Opinion and Order (rel. June 16, 2000), Appendix D, ¶ 4.

40. 40 To the extent that any of these proposed new UNEs would require the combination of network elements, the proposal would run afoul of the Eighth Circuit's prohibition against UNE combinations.

41. 41 Verizon's data affiliate will be treated on the same terms and conditions that are available to all CLECs. It will have access to RTs and subloops in the same manner that Verizon-MA affords to nonaffiliated carriers.

42.

42 A load coil is an inductor that is connected into a loop in order to improve its voice transmission characteristics. Such coils are generally utilized on longer copper loops, specifically those longer than 18,000 feet. At such lengths, an unloaded copper loop may distort a voice signal by attenuating higher frequencies within the audible range. The load coil "flattens" the frequency/response curve in the audible range, ensuring that significant voice frequencies are not excessively attenuated. Exh. VZ-MA 2, at 30.

43.

43 In March 2000, BA-NY determined that two options were available to retrieve loop information data from the back end systems. The first utilized a technique known as "screen scraping," and the second required development work by Telcordia. At this point, BA-NY "committed" to an October - December, 2000 deployment of the "screen scraping" and a February, 2001 deployment of the "Telcordia" capability based on signing a separate contract with Telcordia by June 30, 2000. Under the second alternative, Telcordia was to deliver software to BA-NY by December, 2000. The two alternatives have a significant cost differential, and to date the DLECs have not finalized their decision as to which solution they want. Exh. VZ-MA 4, at 69.

44. 44 In those rare cases where this might occur, for example where a CLEC plans to embark on a marketing campaign targeted towards a single building or other cluster of customers, then VZ-MA would be willing to negotiate a rate that reflects the efficiencies that would be achieved. Exh. VZ-MA 2, at 80.

45. 45 This is premised on the faulty assumption that large groups of pairs (e.g., 25 pair complements) of significant length are routinely bridged and then left spare is without merit. Instances where bridged tap does exceed a total length of 6,000 feet or even the individual 2,000 foot limit, are extremely rare. For example, of 254 Verizon-NY loop samples collected for a 1997 Bellcore study, there were no loops where the bridged tap exceeded 6,000 feet and only 18 instances where an individual bridged tap exceeded 2,000 feet. In fact, for the entire sample the average maximum bridged tap length for the loops that did have a bridged tap was 840 feet, and the average total of all the bridged taps on a loop was 1,038 feet. Exh. VZ-MA 2, at 81 n.36.

46. 46 A splitter has three ports: a voice port, a data port, and a combined voice/data port. All line sharing arrangements require that the splitter be connected, directly or indirectly, as follows: (a) The voice/data port must be connected to the copper loop facility serving the customer (which carries the combined traffic). (b) The data port must be connected to the CLEC's collocation arrangement (whence the data signal will be delivered to the CLEC's DSLAM and ATM switch). (c) The voice port must be connected to the incumbent's digital circuit switch (which will process and route the voice signal). These connections are effected through cabling to and cross-connections on the main distributing frame ("MDF"), as shown in the schematic provided as an Attachment to Exh. VZ-MA 4. As the schematic also shows, the loop must be connected to an MTAU, or Metallic Test Access

Unit, that provides a point of connection for the Wideband Testing System ("WTS"), which is discussed later in this brief.

47. 47 This charge applies to a splitter shelf containing a set of 24 quad splitter cards that can handle a total of 96 line-shared pairs (four per card). Verizon-MA developed its splitter installation non-recurring cost based on the purchase of splitters in increments of entire shelves, including plug-ins, because it is the most economical increment for such purchases. Breaking the purchase order into separate orders for the shelf and common equipment, and then individually purchasing the 24 splitter cards would produce greater shipping and handling costs that would ultimately be borne by the CLECs. Therefore, contrary to Rhythms and Covad's claim, this is an appropriate start-up cost in a fast-growing market. Verizon-MA Exhibit 4, at 52.

48. 48 Finding space on a frame is not the only issue; the space must be available on the correct frame for the customer in question. Placing the splitter on a different frame, potentially on a different floor of the central office, would require inter-frame cabling far beyond that assumed by BA-NY's proposed rate structure.

49. 49 GTE Services Corporation v. FCC, Nos. 99-1176, 99-1201, 200 U.S. App. LEXIS 4111 (D.C. Circuit, March 17, 2000); see also, CC Docket No. 98-147, FCC 99-48, Second Report and Order, 14 FCC Rcd 4761 (March 31, 1999) (hereinafter referred to as "Advanced Services Order").

50.

50 Nothing in the Line Sharing Order forbids incumbent LECs from engaging in wideband testing or from recovering its costs. Indeed, the order emphasizes the incumbent's responsibility for quality of its wholesale service. See Line Sharing Order, at ¶ 123 ("The record does not indicate, nor do we foresee, that incumbent LECs such as Bell Atlantic would have occasion to test a competitive LEC's xDSL equipment or products. The quality of the service that a competitive LEC provides to its customer is not the incumbent's responsibility, so long as the incumbent is providing sufficient quality of service to the requesting carrier. We agree with commenters that if they are provided with access to the high frequency portion of the loop that is of sufficient quality, competitive LECs have ample capability and incentive to ensure the quality of the services they offer to their customers, and the performance of their own equipment.") (footnotes omitted; emphasis supplied). The FCC did conclude that incumbents should not be responsible for retail testing. Verizon-MA does not seek to recover the costs of such testing through the WTS charge.

51.

51 It should also be noted that, if CLECs utilize spare cabling, Verizon-MA may incur, but not be compensated for other costs, such as costs associated with ensuring that binder group and interference requirements are met; costs of inventory management; costs associated with wiring in an MTAU, etc.

52.

52 In D.P.U. 96-73/74, 96-75, 96-80/81, 96-83, 96-94 - Phase 4, Verizon-MA submitted cost studies for two-wire analog loops, two-wire digital (ISDN-BRI capable) loops, and four-wire digital (ISDN-PRI capable) loops. The studies all assumed ubiquitous deployment of DLC technology.

53.

53 Moreover, the copper loop plant used for ADSL/HDSL-qualified loops necessarily consists of existing copper plant, since new loop deployments are made by Verizon-MA using DLC technology. It thus cannot be argued that the DSL Conditioning charges

should be based on an assumption that new copper loops are being specifically deployed (without load coils) for xDSL applications. Instead, what must be assumed as a starting point is copper loops with load coils in place where required for effective voice transmission.

54. 54 If under future regulatory requirements and equipment availability, CLECs become able to place their own DSLAM equipment in Verizon-MA's remote terminals, and thus utilize only copper distribution plant for ADSL or HDSL transmission, then the use of load coils may not be required, since it would be rare for a loop to have more than 18,000 feet of distribution cable. In such cases, Verizon-MA would not incur deloading costs, and thus no deloading charges would be imposed on CLECs. This would not, however, make it inappropriate to recover deloading charges where CLECs seek to access all-copper loops (i.e., non-DLC loops with copper feeder) from a central office.

55. 55 The FCC has specifically authorized the recovery of conditioning charges in its Advanced Services Order. Deployment of Wireline Services Offering Advanced Telecommunications Capability, CC Docket No. 98-147, "Memorandum Opinion and Order, and Notice of Proposed Rulemaking" (rel. August 7, 1998), ¶ 53 n. 98. . See also Implementation of the Local Competition Provisions in the Telecommunications Act of 1996, CC Docket No. 96-98, "First Report and Order", 11 FCC Rcd 15,499 (rel. August 8, 1996), ¶ 382.

56. 56 Certain other forms of xDSL technology, such as ISDN Digital Subscriber Line ("IDSL"), are compatible with loops incorporating fiber-based Digital Loop Carrier ("DLC") systems.

57.

57 While it may, in the near future, be possible to utilize xDSL technologies on loops equipped with Digital Loop Carrier ("DLC") technology, such applications involve the placement of DSLAMs at the remote terminal rather than at the central office. In such cases, however, the use of xDSL technology is limited to the (copper) distribution portion of the loop; the technology would not be used on the (fiber) feeder facilities between the terminal and the central office. Thus, even in such applications, the use of the technology would still be limited to copper cables.