COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF TELECOMMUNICATIONS AND ENERGY

Investigation by the Department on its own motion as to the propriety of the rates and charges set forth in the tariff filings by Verizon – New England, Inc., d/b/a Verizon – Massachusetts	DTE 98-57, Phase III

AT&T'S INITIAL COMMENTS REGARDING THE NEED FOR PROMPT RESOLUTION OF ISSUES CONCERNING CLEC ACCESS TO AND INTERCONNECTION WITH FIBER-FED LOOPS

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I. INTRODUCTION.

The Department reopened this proceeding to examine Verizon's March 7, 2002, announcement that it will be rolling out a "PARTS-like" wholesale data packet service. As was recognized in the Hearing Officer's May 24, 2002, order reopening the record in this proceeding, Verizon's decision to introduce this Packet At the Remote Terminal Service ("PARTS") has brought a range of new considerations to the table. Verizon's newly announced deployment plans will introduce an updated network architecture for fiber-fed loops in Massachusetts through the adoption of Next Generation Digital Loop Carrier (NGDLC) equipment involving Asynchronous Transfer Mode ("ATM") technology and Optical Concentration Device ("OCD") equipment. Verizon has proposed using this revised network architecture to offer packetized data services on a wholesale basis.

AT&T respectfully urges the Department to investigate the implications of Verizon's "PARTS-like" rollout regarding how CLECs may access and interconnect with unbundled loops, and to do so without delay. Without prompt investigation and oversight by the Department, we run the risk that Verizon will begin altering its network in a manner designed to impede more efficient loop unbundling and to maintain Verizon's monopoly share of the residential local exchange market.

The state commissions in Wisconsin (in an order released March 22, 2002), Illinois (September 26, 2001), and Texas (September 21, 2001) have all ordered SBC to unbundle end-to-end fiber-fed loops using SBC's "Project Pronto" architecture, which is closely analogous to Verizon's "Project PARTS" architecture. These commissions found that they had full authority to enforce the requirement to continue unbundling loops even when they are served using NGDLC, and that the public interest requires that this unbundling obligation be enforced without awaiting any further action by the Federal Communications Commission ("FCC"). AT&T

respectfully urges the Department to move ahead expeditiously in this reopened proceeding to consider these same issues in the context of Verizon's newly announced plans to begin its PARTS-related network upgrades in Massachusetts. Now is the best possible time to ensure that Verizon's implementation plans and schedule comport with Verizon's obligation to provide non-discriminatory access to unbundled loops, and to permit access and interconnection in any technically feasible manner.

Now that Verizon has conceded the technical feasibility of using ATM and OCD technology to packetize signals over fiber-fed loops, the Department must decide how Verizon will deploy this upgrade to the digitized signals that are already part and parcel of all fiber-fed loops, and determine how CLECs will be able to access and interconnect with such loops. Resolution of these key issues is not affected by the D.C. Circuit Court of Appeals' decision in *U.S. Telecom Ass'n* v. *FCC*, 290 F.3d 415, 426 (D.C. Cir. 2002). The D.C. Circuit's opinion in *U.S. Telecom* did nothing to change the clear federal precedent that loops remain a network element that is essential to local competition, requiring their unbundling and the broadest possible access on behalf of CLECs. *See id.* Even if there were any doubt as to this position, which there is not, the Department has authority independent of the FCC, under both Massachusetts and federal law, to ensure that Verizon provides truly non-discriminatory access to unbundled loops and attached electronics in order to facilitate local exchange competition in Massachusetts. *See* 47 U.S.C. §§ 251(d)(3), 252(e)(3), 261(c).

Furthermore, the D.C. Circuit's decision to remand the FCC's Line Sharing Order is irrelevant to this proceeding as the issue currently before the Department is not one of line sharing. Line sharing occurs when a CLEC seeks the stand-alone unbundling of the high-frequency portion of the loop. In this proceeding, the Department must determine the most pro-

competitive and efficient means by which CLECs can interconnect with the entire loop, or "unified loop" – including both voice and data signals.

Verizon's decision to introduce an NGDLC architecture in Massachusetts – its first rollout of such technology in the country – provides the Department with a unique opportunity. By implementing a minor variation of this NGDLC technology, significant progress toward true facilities-based local competition can easily be achieved. All that is required is an incremental improvement to Verizon's deployment plans, so that the NGDLC architecture it is already beginning to roll out can support Electronic Loop Provisioning ("ELP"). As explained in further detail below, ELP will permit the electronic transfer and provisioning of the voice and data portions of the loop and eliminate the current clunky, expensive, and inefficient system of manual service transfer and hot cuts. Such electronic provisioning of both voice and data signals would significantly reduce customer transfer costs, make transfer and provisioning more accurate and quick, increase consumer satisfaction, and lead to greater facilities-based investment and competition, and promote the deployment of advanced services and converged, packetized networks.

Much of the recent progress toward local competition in Massachusetts will be for naught if CLECs are not given broad and efficient access to fiber-fed loops in this proceeding. As the *U.S. Telecom* decision confirms, CLEC access to loops and their attached electronics are essential to competitive development. Indeed, the D.C. Circuit rightly refers to unbundled loops as "essential facilities" without which CLECs are unable to offer service to most customers. *U.S. Telecom,* 290 F.3d at 426. In several recent decisions, including orders made in the alternative regulation and special access dockets, the Department has begun to establish a new paradigm for local competition in Massachusetts. To fully realize the progress made by the Department in

those decisions and others CLECs must be allowed efficient access to and connections with fiber-fed loops.

II. THE D.C. CIRCUIT'S *U.S. TELECOM* DECISION DOES NOT AFFECT THIS PROCEEDING.

A. This Proceeding is Concerned With CLEC Access to and Interconnection with Unified Loop Functionalities.

1. The *U.S. Telecom* decision, like related decisions, leaves no doubt that a loop is an essential facility which must be unbundled.

This proceeding will help determine whether CLECs are given a fair opportunity to access local loops on a nondiscriminatory basis in Massachusetts. Whether a loop is used to carry voice communications via an analog signal, a digitized signal, or a combination of the two, or is used to carry data via an ADSL signal or otherwise, or is used to support both voice and data services, it remains a local loop. Its basic functionality is the establishment of a connection between a defined demarcation at the customer premise and the Verizon central office, or in the case of an unbundled loop between the customer premise and the CLEC point of interconnection.

As the FCC has stated, access to unbundled local loops is "critical to encouraging market entry" among CLECs. *First Local Competition Order,* ¶ 377. The D.C. Circuit Court of Appeals has repeatedly echoed this sentiment. In 2001, the D.C. Circuit observed that the loop element remains "a natural monopoly," and that the ILECs' continued control of the local loops allows them "to control telecommunications access to most homes and businesses." *Ass'n of Communications Enterprises* v. *FCC,* 235 F.3d 662, 663 (D.C. Cir. 2001). The D.C. Circuit's recent opinion regarding the UNE Remand Order reiterated this commonsense and well-supported observation that the loop is an "essential facility" over which Verizon and other ILECs have a natural monopoly, meaning that local exchange competition is not feasible unless loops remain available to competitors on an unbundled basis. *U.S. Telecom,* 290 F.3d at 426; *see also Verizon Communications Inc* v. *FCC,* ___ U.S. ___ n.27, 2002 WL 970643 at *23 n.27, slip op.

at 38 n.27 (2002). It would be "an obvious burden to market entry" if a CLEC had to "construct an entire network of its own" before being able to offer local exchange service. *Petition of Verizon New England Inc.*, ___ Vt. ___, 795 A.2d 1196, 1201 (2002). Indeed, just days ago the Second Circuit found that under the Sherman Antitrust Act Verizon could face liability to retail customers of CLECs if Verizon does not provide reasonable access to unbundled loops, under the essential facilities doctrine. *Law Offices of Curtis V. Trinko, L.L.P.* v. *Bell Atlantic Corporation*, ___ F.3d ___, 2002 WL 1339131, *14-*18, Docket No. 01-7746 (2d Cir. June 20, 2002). While the D.C. Circuit may have questioned the methodology used to formulate the FCC's UNE Remand Order with respect to other elements, its opinion raised no question as to the necessity of unbundling loops.

Unbundled access to the loop includes non-discriminatory access to all of the loop's features and functionalities, including attached electronics. Indeed, separate and apart from FCC regulations, this obligation is implicit in the language of the Telecommunications Act itself. Verizon must provide "just, reasonable, and nondiscriminatory" access to unbundled elements. 47 U.S.C. § 251(c)(3). Verizon cannot do so by denying CLECs access to certain loop features or functionalities that Verizon makes available to itself or its own retail customers. That would be the epitome of discriminatory access, in violation of Verizon's express statutory obligations. *See* 47 C.F.R. § 51.313(b) ("the terms and conditions pursuant to which an incumbent LEC offers to provide access to unbundled network elements … shall, at a minimum, be no less favorable to the requesting carrier than the terms and conditions under which the incumbent LEC provides such elements to itself.").

Verizon's overdue decision to deploy Next Generation Digital Loop Carrier technology necessary to support its proposed PARTS offering will still result in loops that carry voice and data signals from the end user to the Central Office (CO). This natural upgrade to the local

network architecture should not cloud the issue before the Department. Whether data or voice or both are being packetized over fiber fed loops by NGDLC, or transmitted via older digital or analog means, there remains no doubt that CLECs are entitled to access those loop functionalities on a nondiscriminatory basis.

2. A loop is a loop, whether it is an entirely copper facility, includes older fiber-feeder technology, or incorporates next-generation digital loop carrier ("NGDLC") and asynchronous transfer mode ("ATM") technology.

This proceeding was reopened to examine Verizon's offering of a "PARTS-like" wholesale service in Massachusetts. Verizon itself has described this service as an "end to end" packetized data transmission service "between a Network Interface Device (NID) at an end user location and a data carrier's Point of Termination (POT) in the end user's serving central office (CO)." *See attachment to Verizon's Letter dated March 7, 2002*, filed in Docket DTE 98-57-III. Verizon indicates that it will be deploying Next Generation Digital Loop Carrier ("NGDLC") technology in order to transmit packetized data communications between the end user and the CO. *See id.* Specifically, Verizon has stated that it will be using Asynchronous Transfer Mode (ATM) technology with a CO interface at an Optical Concentration Device (OCD) in order to provide wholesale ADSL service over fiber-fed loops. *See id.* Verizon is attempting to limit use of this technology to the data portion of the signal, though there is no reason why it cannot be made available for the voice portion of the signal at the same time. Verizon can and should packetize low frequency spectrum (LFS) communications traffic (e.g. voice) – a capability easily within reach using existing DLC equipment and ATM communications protocol.

Verizon's decision to upgrade network architecture through the deployment of NGDLC does not change the fact that CLECs must be allowed nondiscriminatory access to the loop as a UNE. The transmission of packetized data and voice is within the FCC's definition of the loop, "[the] features, functions and capabilities of the transmission facilities . . . and attached

electronics . . . owned by the incumbent LEC, between an incumbent LEC's central office and the loop demarcation point at the customer premises." 47 C.F.R. § 51.319(a)(1). In its *First Local Competition Order*, the FCC noted that ILECs "must provide competitors with access to unbundled loops regardless of whether the incumbent LEC uses integrated digital loop carrier technology, or similar remote concentration devices . . ." ¶ 383. *See also* Section III.A, beginning at page 10 below.

NGDLC-enhanced loops provide precisely what "traditional" analog loops have always provided: transmission functionality for telecommunications signals between customers' premises and Verizon's central offices. NGDLC systems convert analog signals into digital signals, perform concentration functions, multiplex signals onto a single fiber facility and may perform protocol conversion and buffering functions for the purposes of forwarding signals through the network. None of these functionalities involve "packet switching" or "switching" of any kind. DLC components merely make the transmission of telecommunications signals over the network more efficient. This is not a new functionality; rather, it is a natural evolution of the technology used to provide the functionality of the loop to provide the same transmission functionality in a more efficient manner.

In recent decisions addressing SBC's rollout of PARTS-like technologies (which SBC refers to as its "Project Pronto" architecture), state commissions have concluded that NGDLC components do not change the essential character of the network and that a loop remains a loop. Wisconsin's Public Service Commission recently found a packet-switching analysis inapplicable to Ameritech's implementation of NGDLC technology in its "Project Pronto". The Wisconsin Commission rejected Ameritech's claims that its NGDLC-enhanced network represented an "overlay" network, finding instead that the NGDLC architecture represented a "replacement network" upon which Ameritech would eventually offer voice services. *See* Final Decision,

Wisconsin PSC docket 6720-TI-161, at 113 (March 22, 2002). Furthermore, the Commission found that whether a fiber-fed loop was carrying voice or data services over the Project Pronto architecture, it remained a loop to which CLECs are entitled access on an unbundled basis. *See id.*

The Texas Public Utilities Commission and Illinois Commerce Commissions have seconded this analysis in recent proceedings involving SBC Communications, again concluding that SBC must offer access to unbundled loops that have been modified under Project Pronto to incorporate NGDLC technology in the fiber-feeder portion of the loop. In the words of the Texas arbitration decision:

> [A] loop is a loop, regardless of whether it is all copper or a combination of copper and fiber. … [Thus,] the transmission facility, whether it is end-to-end copper, or a configuration of copper and fiber with a remote terminal and remotely located electronics, is within the definition of an unbundled loop. Consequently, SWBT must provide CLECs access to the unbundled loop element from the demarcation point at the customer's premises to the terminal (port) on the OCD in the central office, including the associated electronics at the RT and CO.

Revised Arbitration Award at 69, Texas P.U.C. Docket No. 22469 (September 21, 2001); *see also* Order on Rehearing at 37, Illinois Commerce Commission Docket No. 00-0383 (September 26, 2001) (adopting Texas's approach and requiring the unbundling of the Project Pronto architecture as an end-to-end NGDLC loop).

AT&T respectfully suggests that the facts will support similar findings and conclusions in Massachusetts.

B. The D.C. Circuit Opinion Concerning FCC Rules Does Not Limit the Department's Prerogative to Foster Local Competition in Massachusetts.

Even under the assumption that the D.C. Circuit's *U.S. Telecom* opinion creates some uncertainty regarding the loop unbundling obligations of Verizon, which it does not, the decision in no way limits the Department's authority to promote local competition in Massachusetts. The

Department has broad authority under M.G.L. c. 159 to regulate the manner in which Verizon operates its network. *See, e.g.,* D.P.U. 94-50 at 116; D.P.U. 89-20 at 17; *see also* D.T.E. 01-34, *Vote and Order to Open Investigation* at 2-3 (March 14, 2001). The Department has previously found that has the power to investigate the unbundling of and interconnection with Verizon's network elements. *See* D.P.U. 94-185, *Vote to Open Investigation* at 3-5 (Jan. 6, 1995).

Congress has specifically provided that the Department may exercise its authority under state law to impose additional requirements upon Verizon, so long as they are "not inconsistent" with any federal rules. 47 U.S.C. § 261(c); s*ee also* § 251(d)(3), 252(e)(3). Thus, "the language of the 1996 Act compels the conclusion that Congress did not intend to occupy the field of telecommunications regulation, and that it took explicit steps to maintain the authority of state regulatory bodies to enforce and work within the Act." *Petition of Verizon New England, Inc.*, ___ Vt. ___, 795 A.2d at 1200. Under these circumstances, federal regulations established by the FCC only set the floor for unbundling and access requirements. *E.g., Goodrow* v. *Lane Bryant, Inc.*, 432 Mass. 165, 170-171 (2000). There is no conflict between state and federal law, and thus no preemption, when it is possible to comply with both sets of regulations. *E.g., Arthur D. Little, Inc.* v. *Comm'r of Health and Hospitals of Cambridge*, 395 Mass. 535, 550 (1985).

This principle was recently confirmed by the Vermont Supreme Court, which affirmed an order by the Vermont Public Service Board requiring Verizon to offer CLECs combinations of UNEs that were ordinarily combined and to resell voice mail as a telecommunications service. *See Petition of Verizon New England*, 795 A.2d at 1204, 1207-08. Significantly, the Court stressed that the Board's order would be lawful even if "federal law does not require such combinations" of UNEs. *Id.* at 1204. Because nothing in federal statutory or regulatory provisions *prohibits* an ILEC from offering the type of combined UNEs at issue, no conflict between federal and state law could exist. *Id.* As the Court explained, "the federal scheme does

not outline any limitations on state authority to regulate above and beyond the minimum requirements of the Act." *Id.* at 1204. So long as Verizon is capable of complying with state and federal requirements simultaneously, state regulations are valid and not preempted by federal law. *Id.* at 1204-1205.

The Department's prerogatives are just as broad as those of the Vermont Board. Here, there is no question that Department action requiring Verizon to provide broad access to fiber fed loops is not inconsistent with federal law. As explored in detail above, the *U.S. Telecom* decision adds further support to the conclusion that loops are an essential network facility to which CLECs must have access in order to make local competition a reality. *See* 290 F.3d at 426. Nothing within the *U.S. Telecom* decision could support the argument that federal law currently *prohibits* the provision of unbundled loops and attached electronics. *See id.*

III. THE DEPARTMENT SHOULD PROCEED WITH ITS INVESTIGATION AND NEED NOT WAIT FOR THE FCC TO ADDRESS PACKET SWITCHING IN ITS TRIENNIAL REVIEW.

A. This Case Concerns Access to the Loop, Not Access to Packet Switching.

We believe that the evidence will show that Verizon's rollout of NGDLC using ATM technology will not involve packet switching, even as defined in current FCC regulations. For example, the Wisconsin commission has found that in this technology the DSLAM functionality is only performed in part through electronics at the RT, but also uses additional equipment in the CO. As the commission noted, this is something materially different from the DSLAM technology that the FCC has for the present labeled as packet switching. *See* Final Decision, Wisconsin PSC docket 6720-TI-161, at 92-93 (March 22, 2002). Indeed, we expect the evidence to show that unbundled access to the unified NGDLC loop will facilitate the deployment of both packet and circuit switches by CLECs. Verizon's NGDLC architecture, as currently envisioned or as it may be slightly modified after Departmental review, cannot reasonably be construed as constituting packet switching if it complements and encourages the development of, rather than

substitutes for, CLEC-owned packet switches. A CLEC that purchases an unbundled NGDLC loop and provides data service over it will have to connect the loop to its own packet switch and router. The electronics in the NGDLC loop in no way obviate the need for packet switching.

The essential function of the loop is to provide transmission functionality between a customer's premises and an incumbent LEC's central office, not between a customer's premises and an intermediate point such as a remote terminal. 47 C.F.R. § 51.319(a)(1) ("[t]he local loop network element is defined as a transmission facility between a distribution frame (or its equivalent) in an incumbent LEC central office and the loop demarcation point at an end-user customer premises"). Furthermore, the FCC has emphasized that the local loop, like all network elements, is defined by its functionality and is not limited to particular services or technologies. *See, e.g., UNE Remand Order* ¶ 167 ("[o]ur intention is to ensure that the loop definition will apply to new as well as current technologies, and to ensure that competitors will continue to be able to access loops as an unbundled network element as long as access is required"); *Local Competition Order* ¶ 292 ("section 251(c)(3) requires incumbent LECs to provide requesting carriers with all of the functionalities of a particular element, so that requesting carriers can provide *any telecommunications services* that can be offered by means of the element") (emphasis added); *Advanced Services Order* ¶ 53 ("section 251(c)(3) does not limit the types of telecommunications services that competitors may provide over unbundled elements to those offered by the incumbent LEC") (quoting *Local Competition Order* ¶ 382). Indeed, the FCC has recognized that such service- and technology-based distinctions would "encourage incumbent LECs to 'hide' loops from competitors." *Local Competition Order* ¶ 383; *see also Advanced Services Order* ¶ 53; *Line Sharing Reconsideration Order* ¶ 10.

There is nothing about the NGDLC-loop architecture that changes the basic characteristics of a loop. NGDLC-enhanced loops provide the same function as traditional

loops: transmission of signal between the Central Office and the end user. Because the only thing being discussed here is the means of getting a signal from an end user to the Central Office and handing it off to a CLEC at the Central Office, this case does not involve switching or anything else except transmitting the signal from an end user to the Central Office over a loop.

The Wisconsin Public Service Commission recently recognized this fact and ruled that a packet switching analysis was not applicable to Ameritech's PARTS-like offering. As the Wisconsin PSC stated: "A data loop falls equally under the unbundling obligations as a voice loop. CLECs are impaired in the provision of DSL service without access to the data loop. Accordingly, the data loop must be unbundled." *See* Final Decision, Wisconsin PSC docket 6720-TI-161 (March 22, 2002) at 113.

Because this case does not involve packet switching issues, and only involves the question of the manner in which CLECs will be afforded access to the unbundled loop, the Department should not await the FCC's review of packet switching before conducting its own investigation into these matters.

B. Even if the FCC's Current Definition of Packet Switching Were Implicated, Which It Is Not, the Department Should Proceed With Its Investigation.

In any case, even if the FCC's current definition of packet switching were implicated, the Department should investigate whether the four conditions set forth in 47 C.F.R. § 51.319(c)(5) are met. *See Initial Brief of AT&T* in DTE 98-57-III, at 5-6 (Dec. 18, 2001); *Reply Comments of AT&T* in DTE 98-57-III, at 4-10 (Apr. 25, 2002). The current regulations do require the unbundling of packet switching if these conditions are met, and the record evidence to date indicates that they have been. *Id.*

More fundamentally, the Department should not wait for the FCC to address packet switching in its triennial review because any FCC decision will merely set a floor and the Department can take additional steps to ensure competition in the local market so long as such

steps are not inconsistent with the federal rules. *See* 47 U.S.C. §§ 251(d)(3), 252(e)(3), 261(c). These rules give states the right to impose additional requirements in order to promote competition as long as those requirements are not inconsistent with federal law. *Id.* Indeed, the FCC expressly reserved to state commissions the authority to require an ILEC to unbundle packet switching technologies, even where such unbundling has not been required under FCC rules. *See UNE Remand Order*, at ¶ 312. *See also* Section II.B, beginning at page 8 above.

C. It Is Crucial that the Rollout of NGDLC in the Network of Verizon-Massachusetts Be Done Correctly From the Start.

Because Verizon is only beginning the process of rolling out its NGDLC network today, there are a number of important issues that the Department should deal with now. The Department should take steps to ensure that Verizon does the job right and implements its network upgrades in a manner that will benefit the telecommunications customers of Massachusetts and foster competition in both the DSL and voice markets. To accomplish these goals, the Department should ensure that Verizon's network will allow CLECs to access the entire functionality of fiber-fed loops through simple connections at any technically feasible point, including the OCD, in place of the unremittingly kludgy, error-prone, and expensive manual hot cut process currently used by Verizon to provision unbundled loops at the main distribution frame ("MDF").

1. Electronic Loop Provisioning will eliminate the inefficiencies and competitive harm caused by the manual "hot cut" process, and thus Verizon Should Packetize Both Voice and Data on Fiber-Fed Loops.

The new facts at issue in this phase of the proceeding have important implications for CLEC access to unbundled network elements and CLEC ability to interconnect with Verizon's network. Verizon has acknowledged that its "future deployment plans may relate to issues raised in [this] proceeding regarding the provision of DSL services at the Remote Terminal ('RT')." *Verizon Letter dated March 7, 2002*. In fact, however, the implications of these future

deployment plans – including both what may be in them, and what should be in them but currently are not – may be much broader, affecting general use of unbundled loops, the manner in which unbundled loops will be provisioned, and the manner in which CLECs wishing to deploy their own switching and other facilities may interconnect with Verizon's network in order to use unbundled loops.

In order to provide its new "PARTS-like" service, Verizon has announced that it will begin to make several changes to its local network configuration to facilitate the packetizing of data signals at remote terminals and subsequent transmission of those signals to Verizon central offices using ATM technology. *See attachment to Verizon's Letter dated March 7, 2002.* Once these signals arrive at the central office, they will be transferred to an Optical Concentration Device (OCD), at which point data signals will be handed off to CLECs via an OC-3 or DS-3 interface. *Id.* These packetized data signals will be routed electronically to CLECs through the OCD. *Id.*

The efficiencies inherent in the electronic transfer and routing of signals using ATM and OCD technology are available for packetized voice signals just as they are for the data portion of the loop. Yet, Verizon apparently wants to limit the packetizing of the loop signal to data transmission in order to continue the current inefficiencies of hot cuts and manual transfer that have plagued competing local providers of voice services for years. Following such a strategy, if that is indeed what Verizon intends, would unnecessarily retard the development of facilities-based competition for local voice services in Massachusetts by locking in the inefficiencies of the hot cut process.

AT&T believes that Verizon can, and should be required to, implement their NGDLC architectures to packetize the entire loop signal, including both voice and data. Doing so would

promote the development of facilities-based local competition by making much more feasible the connection of CLEC-owned switching and interoffice facilities with Verizon loops.

Taking advantage of this opportunity would bring a wealth of benefits to Massachusetts telecommunications consumers, as the transfer of voice and data signals between competitors would be made electronically. This electronic access and administration of the loop signal would eliminate the current method of costly, inefficient and inaccurate manual hot cuts that require the movement of copper wiring within central offices. Electronic Loop Provisioning would be speedy and accurate – allowing Massachusetts consumers to change carriers easily. With ELP, the transfer of voice and data signals between competitors can be done electronically, with no need for a hot cut or other physical intervention. Because ELP does not require the physical intervention required by hot cuts it avoids the scheduling issues, human error and risks of outages that make the hot cut process so unattractive.

A system by which retail customers were transferred between Verizon and CLECs electronically would facilitate facilities investment on the part of CLECs. Currently, the high non-recurring charges associated with hot cuts – and Verizon's pending proposal to increase those NRCs substantially – make a significant investment in switch facilities virtually impossible, and the efficient utilization of existing infrastructure difficult. When a CLEC must pay an exorbitant charge for a Verizon technician to enter the central office and transfer a Verizon customer from the Verizon switch to the CLEC switch, it makes little business sense for CLECs to continue to invest in switches. AT&T has presented evidence and argument in Docket 01-20 showing how and why the cost for repeated moves and rearrangements of loop facilities should be recovered through a very modest increase in recurring rates, rather than through exorbitant non-recurring charges. However, even if Verizon's hot cut NRCs were substantially eliminated, hot cuts would still serve as something of a disincentive to widespread CLEC

investment in switching and transport facilities. In addition to the out-of-pocket cost of non-recurring charges, the current hot cut methods impose very real costs of delay and error. Were ELP to become the standard, however, a significant investment in switches and other electronics makes sense, and facilities-based competition would become much more feasible. The Department should move forward with an examination of ELP and how Verizon's PARTS proposal provides the vehicle for such electronic loop provisioning.

ELP, however, will not be possible if Verizon refuses to packetize voice transmissions and terminate them at the OCD in the same manner that it will be doing with data transmissions. While Verizon is developing its network to transport packetized data over fiber, there is no reason that Verizon also prepare its network to transport voice signals in the same manner.

The incremental cost of adding packetized voice capability to Verizon's NGDLC rollout should not be an impediment. To the contrary, SBC has publicly represented to investors that this technology pays for itself in cost savings. SBC described its Project Pronto (which is essentially the same thing as the NGDLC technology that will underlie Verizon's PARTS proposal) as including $6 billion investments in network investments, 75% of which "will be directed to improvements in the basic loop infrastructure" (*i.e.*, fiber feeder and next generation remote terminals) and 25% of which "will fund other infrastructure improvements, especially in the tandem and interoffice network." SBC Investor Briefing, *SBC Announced Sweeping Broadband Initiative*, at 2 (Oct. 18, 1999). SBC stated that the "capital and expense savings" will total "$1.5 billion annual[ly] by 2004" and that such savings alone "will pay for the entire initiative on NPV [net present value] basis" – *i.e.*, irrespective of opportunities for increased DSL revenues. *Id.*

It is critical that the Department act now, while Verizon is reconfiguring its network, to ensure that Verizon's new network will packetize both data and voice signals. If the Department

does not take such steps at this point in time, Verizon will be able to establish a network configuration that will injure any future attempt to packetize voice signals, thus stifling the development of facilities based competition in Massachusetts.

2. If a customer chooses to switch its voice provider from Verizon to a CLEC and to maintain Verizon for its data service, Verizon should not be permitted to prohibit the customer from making that choice.

Just as CLECs must be ensured of nondiscriminatory access to unbundled loops, so retail customers in Massachusetts should be ensured of fair access to their choice of data providers. For example, if a current Verizon voice and data customer wished to change its voice service to a CLEC that would provide the service by leasing an unbundled loop from Verizon, the CLEC could choose to split the loop functionality with Verizon, so that Verizon would be able to continue to offer the data service. Some customers might wish to avail themselves of that option, and they should be permitted to do so.

Indeed, if Verizon were to force a retail customer to purchase voice services in order to be eligible to purchase DSL services, on its face that would constitute a tying arrangement and a violation of Section 2 of the Sherman Act, 15 U.S.C. § 2. *See, e.g., Eastman Kodak Co.* v. *Image Technical Services, Inc.*, 504 U.S. 451, 461 *et seq.* (1992); *United States* v. *Loews, Inc.*, 371 U.S. 38 (1962). It may be that individual Massachusetts consumers could challenge such anticompetitive behavior by suing Verizon under the Sherman Act. *See Law Offices of Curtis V. Trinko, L.L.P.* v. *Bell Atlantic Corporation*, ___ F.3d ___, 2002 WL 1339131, *14-*18, Docket No. 01-7746 (2d Cir. June 20, 2002). But there is, of course, no need to impose such a burden on Massachusetts consumers where the Department can remedy such anticompetitive behavior directly.

In other states, some ILECs have argued that they do not have to continue providing DSL service to a customer that wishes to switch only its voice service to a competitive carrier. If

Verizon attempts to make the same argument in Massachusetts, its position should be rejected. As the Florida Public Service Commission recently recognized, such a position is merely an anti-competitive attempt by the ILEC to leverage its control over the DSL market to enhance its monopoly control over the local loop and the local voice services market.

The Florida PSC ruled that BellSouth could not refuse to provide DSL service over a loop in those situations where the customer wishes to have another carrier provide voice service over the same loop. In that case, BellSouth had argued that it had a right, for "business reasons" to stop providing DSL services to any customer that wished to switch his or her voice service to a competitive carrier. Florida Public Service Commission Order No. PSC-02-0765-FOF-TP, issued June 5, 2002, at 5. The CLECs argued that BellSouth's position was merely an attempt by BellSouth to leverage its market power in the DSL market as a tool to injure its competitors in the voice service market. *Id.* The Florida PSC relied on its powers under state law to require BellSouth to continue to provide DSL service, even when a customer decided to switch its voice service from Bell South to a competitive carrier. *Id.*, at 8. In doing so, the Florida PSC recognized the validity of the CLECs' argument and determined that "it is incumbent upon us to promote competition." *Id.*

The Florida PSC decision is in no way undermined by the *U.S. Telcom* decision. Although that decision remanded the FCC's line-sharing order, the Florida PSC was not dealing with, and AT&T is not seeking, line-sharing. Line-sharing describes the situation where the ILEC provides voice service, and unbundles only the high-frequency portion of the loop. *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)

("SBC Texas 271 Order") at ¶ 324. Line-splitting, in contrast, is where a CLEC purchases the entire capacity of an unbundled loop and splits that capacity with another carrier, so that one of them may provide voice service and the other may provide data service over the same loop. *Id.* What AT&T is urging the Department to investigate here, and what the Florida PSC order addresed, is not line-sharing. Rather, it is merely a form of line-splitting with Verizon acting as the data provider on the high-frequency portion of an unbundled loop purchased by a CLEC. Because Verizon's line-splitting obligations were not affected by the D.C. Circuit's order in *U.S. Telcom*, that decision has no relevance to this question.

AT&T respectfully urges the DTE to disallow any attempts by Verizon to leverage its control over the local loop and its dominance of the DSL market to also stifle competition in the voice services market. In order to do so, the DTE must make it clear that CLECs can have access to the voice portion of the loop and that Verizon cannot refuse to provide DSL to a customer solely because that customer wishes to receive its voice service from a competitive carrier.

IV. THE DEPARTMENT'S PRIMARY STANDARD OF REVIEW SHOULD BE TO ENSURE NON-DISCRIMINATORY ACCESS TO VERIZON'S NETWORK.

Consistent with the preceding discussion, AT&T suggests that the Department should apply the following standard of review as it proceeds to investigate and decide these issues.

First and foremost, the Department must ensure that Verizon offers nondiscriminatory access to all of the features and functionalities of fiber-fed loops (as required by 47 U.S.C. § 251(c)(3)), and permits interconnection in any technically feasible manner (per 47 U.S.C. § 251(c)(2)(B)). If the Department agrees that NGDLC loops of the kind proposed by Verizon or the variant described above do not involve packet switching then, in light of the D.C. Circuit's repeated acknowledgement that loops are essential facilities that RBOCs must continue to provide on an unbundled basis, then the Department's analysis may not need to go any further.

Second, if the Department were to find that the FCC's current definition of packet switching were implicated (which it should not), then the Department should investigate whether the four conditions of 47 C.F.R. § 51.319(c)(5) are met.

Third, the Department can and should also determine in the alternative whether Verizon should be required to provide unbundled access to NGDLC loops, to permit interconnection for accessing the entire loop functionality (not just the data signal) at any technically feasible point, including at an OCD, and to permit retail customers to obtain Verizon DSL service even if they do not wish to purchase Verizon voice service. In so doing, the Department need not apply the federal "impair" test. Congress has expressly reserved the Department's authority to impose additional unbundling and related obligations that are not inconsistent with federal law, and the FCC has no power to limit this authority of state commission to impose additional requirements on RBOCs going beyond the federal set of minimum obligations. *See* 47 U.S.C. §§ 251(d)(3), 252(e)(3), 261(c). However, for the sake of administrative efficiency, the Department should also evaluate application of the impair test and related considerations set forth in 47 C.F.R. § 51.317(b), in addition to applying its expressly reserved power under Massachusetts law to impose additional unbundling obligations without regard to the federal impair test.

V. THE DEPARTMENT SHOULD SEEK FURTHER EVIDENCE ON THE NEED FOR ELECTRONIC LOOP (ELP).

The Department has already reopened this proceeding to permit discovery regarding Verizon's PARTS proposal and the underlying network architecture, and to permit investigation and adjudication of the implications of the new circumstances created by Verizon's March 7 announcement. Consistent with the preceding comments, AT&T requests that the Department reinstate a schedule for doing so. In light of the scope of issues facing the Department, that schedule should provide a reasonable opportunity for discovery of Verizon, submission of testimony, cross-examination of witnesses at hearings, and briefing.

In particular, the Department should investigate the technical feasibility and practical benefits of implementing the Electronic Loop Provisioning described in very general terms above.

To the extent that Verizon contends that it should not be required to unbundled unified, end-to-end fiber-fed loops incorporating NGDLC technology – notwithstanding the repeated findings that the loops constitute an essential facility over which Verizon has a natural monopoly – Verizon should be directed to submit evidence in support of that contention, to be subject to discovery, rebuttal, and cross-examination.

VI. CONCLUSION.

For the reasons stated above, it is vitally important that Verizon not be permitted to delay the Department's investigation into nondiscriminatory access to fiber-fed loops for the provision of both voice and data services. Nothing in the D.C. Circuit's *U.S. Telecom* decision undermines the Department's authority or clouds the relevant obligations of Verizon to provide nondiscriminatory access to unbundled loops. Furthermore, there is no need to await FCC action in its triennial review, which perhaps inevitably will be followed by months or years of further litigation. The Department's authority to investigate Verizon's planned rollout of NGDLC technology – and to impose appropriate requirements for the functionality and schedule of that rollout – is clear. So is the Department's authority to ensure that retail customers are not arbitrarily denied choice of data provider merely because a CLEC has won voice service. AT&T respectfully urges the Department to restart a schedule for discovery, prefiled testimony, hearings, and briefs on these issues.

Respectfully submitted,

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