STATE OF NEW YORK
PUBLIC SERVICE COMMISSION

OPINION NO. 00-12

CASE 00-C-0127 - Proceeding on Motion of the Commission to Examine Issues Concerning the Provision of Digital Subscriber Line Services

OPINION AND ORDER CONCERNING VERIZON'S WHOLESALE PROVISION OF DSL CAPABILITIES

Issued and Effective: October 31, 2000

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BY THE COMMISSION:

INTRODUCTION

The issues before us concern obligations of Verizon New York, Inc. f/k/a New York Telephone Company (Verizon) to open its network further to facilitate the provision of high-speed data services over its telephone lines by competitors. The Digital Subscriber Line (DSL) collaborative, commenced in New York in August 1999, has been negotiating and resolving numerous operational issues concerning the provision to New Yorkers of high-speed data services, and the entry into the New York market of new competitive providers of these services. We

instituted this litigation track to consider those issues that have eluded collaborative resolution.[1]

These issues arise from a market that has the rudiments of business rules, tariffs, and interconnection agreements allowing New Yorkers access to DSL services from a range of providers. However, Verizon still maintains a virtual monopoly over the last mile--the copper loops into the premises of the retail customers. The competitive providers of voice and data services challenge Verizon's provision of a range of wholesale services they need to serve their customers. The challenges concern timeliness in putting competitors' facilities into operation, line splitting for voice competitors providing service using the unbundled network element platform (UNE-P), and affording competitors access to customers served by digital loop carrier technology. Consistent with our ongoing policies aimed at ensuring a competitive market for all telecommunications services for New Yorkers, our concern is to ensure that Verizon continues to employ its local network in such a way as to maximize customers' access to new services and to competitive choices.

This phase of this proceeding was initiated by notice consolidating issues raised by parties in various venues for full factual examination in a technical conference, and for resolution by the Commission based on the record of that conference, the relevant comments filed by the parties in the

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[1] Based on a combination of collaboration and Commission action, parties in this proceeding have resolved the preliminary issues allowing provision of DSL in New York: methods for cooperative testing and provisioning of stand-alone DSL-capable loops, certain standards and measures of performance, and line sharing for customers that enjoy voice service from Verizon but seek data service from a competitor.

related proceedings, and parties' briefs.[1] Some of the issues consolidated here for consideration had been raised in comments in the proceeding concerning the transfer of assets from Verizon to its data subsidiary, VAD;[2] on the Verizon line sharing tariff;[3] and on the May 2000 Verizon filing of further revisions to its No. 914 and No. 916 tariffs to comply with the FCC UNE Remand Order.[4]

The parties conducted discovery, filed initial and rebuttal testimony, and participated in an on-the-record technical conference held in July 2000. A stenographic transcript of 489 pages was compiled, and initial and reply briefs were filed by Verizon, AT&T, WorldCom, Covad, Rhythms, the Attorney General, Sprint, and the Association of Communications Enterprises (Ascent). Although other parties questioned witnesses, factual evidence was presented by Verizon, VAD (Verizon's data affiliate), by DSL providers—Covad and Rhythms—and by competitive local exchange (voice) providers AT&T and WorldCom.

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[1] Notice of Consolidation of Issues (issued June 21, 2000).

[2] Case 00-C-0725, Petition of Bell Atlantic-New York for Approval of the Transfer of Certain Assets Associated with Advanced services to Bell Atlantic-Network Data, Inc. (Asset Transfer Proceeding).

[3] Case 99-C-1806.

[4] Implementation of the Local Competition Provisions of the Telecommunications Act of 1996, Third Report and Order and Fourth Further Notice of Proposed Rulemaking, (rel. November 5, 1999) (UNE Remand Order).

OPERATIONAL ISSUES CONCERNING THE VERIZON CENTRAL OFFICE PROVISION OF DSL-RELATED CAPABILITIES

Intervals

Several issues relate to the provision of DSL service to customers served by copper loops that run from the Verizon central office to the customer premises. To provide line sharing service, Verizon's affiliate or a competitor data carrier must have installed collocated equipment in the Verizon central office, including a splitter[1] and a DSLAM.[2] The competitors challenge how long Verizon takes to complete certain work on their behalf.

1. The Provisioning Interval

The first issue is to what time period Verizon is entitled to accomplish the central office work necessary for line sharing for a competitive data carrier's customer. The provisioning interval is the time Verizon may take to complete a customer order for line-shared DSL service and make the line sharing available on the customer's loop. Verizon currently offers a six-day provisioning interval, not including the time required for loop qualification. This interval includes one day to process the order, two days for dispatch, one day for assignment of facilities, one day to test the service, and one day to turn over the circuit to the data CLEC. Verizon asserts

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[1] A splitter is an electronic filtering device that separates an analog transmission signal in a copper loop facility into high (data) and low (voice) frequency signals.

[2] A DSLAM (digital subscriber line access multiplexer) is a powered electronic device that, using multiplexing technology, combines multiple DSL signals and transmits them in a single broadband channel over a high-speed packet switched network.

this interval is necessary, even to provision line sharing, to deploy its workforce reliably and efficiently.

Covad and Rhythms suggest a much shorter interval based upon the actual work required to complete the provisioning. Covad and Rhythms reason that since most provisioning entails no dispatch, except to Verizon's own central offices, and the work is neither complicated nor time-consuming, Verizon can actually complete the provisioning work for a line sharing arrangement in one day. Nevertheless, Covad and Rhythms propose provisioning intervals of three days, decreasing to two days and one day after three-month intervals.

WorldCom supports Covad and Rhythms in the need for shorter intervals, but urges a two-day interval consistent with Verizon's Product Interval Guide for UNE-P voice migrations which do not involve dispatch, and WorldCom's interconnection agreement with Verizon which establishes a two-day interval for business POTS orders with no dispatch.

The Attorney General urges the Commission to adopt reasonable intervals, which are not represented by either Verizon (too long) or Covad/Rhythms (unrealistically short). The Attorney General supports, at most, a five day interval until Verizon's OSS automation is completed, when the interval can be shortened.

Verizon offers one interval to accommodate all DSL orders, regardless of the operational differences line sharing entails. In a line sharing arrangement voice service, and therefore dial tone, is present and outside plant dispatch is required less often than for stand-alone DSL. Verizon need only dispatch within its own central office. In these instances the total work required of Verizon, once the local service request is processed, is to assign a frame technician and perform the cross connections to the data CLEC collocation arrangement.

This work, Rhythms and Covad testified, should take minutes, not days.

Verizon acknowledged on the record that the interval could be reduced to five days for all loops. Verizon's monthly reports for inter-carrier service quality performance demonstrate that the non-dispatch intervals have begun to decrease with provisioning experience.[1]

The FCC urges states to adopt line sharing provisioning intervals "based on" the time it takes to provision stand-alone loops.[2] But, "states are free to adopt more accurate provisioning standards for the high frequency portion of the loops . . . ."[3] Consistent with this suggestion the line sharing provisioning interval will be reduced from six days.

Recent Verizon performance data on intervals for provisioning DSL to line-shared loops for Verizon's retail customers demonstrate a downward trend. These data and the record support an interval which is the lesser of four days or parity with that achieved by VAD. These intervals will become effective immediately. We expect Verizon to improve performance

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[1] Cases 97-C-0139 - Proceeding on Motion of the Commission to Review Service Quality Standards for Telephone Companies and 99-C-0949 and 97-C-0271 - Petition Filed by Bell-Atlantic-New York for Approval of a Performance Assurance Plan and Change Control Assurance Plan. Carrier to Carrier Performance Standards Reports for May, June and July 2000.

[2] Deployment of Wireline Services Offering Advanced Services Telecommunications Capability, CC Docket No. 98-147 et al., 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 (released August 10, 2000)(Advanced Services and Collocation Remand Order), ¶174.

[3] Id., ¶175.

in the near term and to decrease the required interval to the lesser of parity with VAD or three days by March 2001.

2. The Cable and Splitter Capacity Intervals

Other interval issues concern the time Verizon takes for augmenting the cabling and splitter capacity between Verizon's main distribution frame and the competitor's collocation arrangement.

The provisioning intervals for augment cable and splitter capacity reflect how long Verizon may take to add additional cabling between a CLEC's cage and Verizon's Main Distributing Frame (MDF) and to install additional splitters, respectively. These are additional installations (augments) to existing collocation arrangements and could include: (a) adding cable, (b) adding cable or splitter, or (c) adding a splitter. Verizon currently offers the same 76 business-day interval for all augments and the initial construction and installation of the collocation arrangement. Verizon claims it needs 76 business days for augments to complete the site survey, engineering review, vendor selection and coordination, and sign-off with the CLEC.

Covad and Rhythms propose an overall interval of 30 calendar days, regardless of the type of augmentation work, though they argue work for some scenarios may only require a few days to complete. They cite problems experienced by the long augment interval, since less work is required to augment than to do the initial build. Verizon claims it cannot shorten the interval because: it does not know what work is needed for the augment until the order is placed, it does not want to replenish certain "plug-in" equipment on short notice, and it will disturb its work force management trend-lines if it must set shorter intervals. Verizon states it is unrealistic to expect cabling

and frame augmentation to be completed in 19 work days (which it translates from Covad/Rhythm's 30 calendar day request). Covad and Rhythms recognize the need for these planning and scheduling aspects, but stress that the actual work should take only one or two days.

WorldCom concurs with Covad and Rhythms. By definition, WorldCom asserts, the work involved in an augment is less than for a new collocation arrangement. WorldCom further urges the Commission to establish shorter intervals than the current 76-day interval to all collocation augments, including those for voice-only service. The Attorney General urges the establishment of criteria for classifying two or three categories of augment requests according to complexity, and assign separate intervals for each category. Again, the Attorney General suggests Verizon's 76-day interval may unduly delay simple CLEC requests, while a 30 calendar day interval may be insufficient for complex requests.

Although we have addressed the intervals for initial construction and installation of collocation arrangements,[1] we have not established intervals for augments. We did order Verizon to track its performance in provisioning all types of collocation augments with a view to further consideration of this issue.[2] Verizon has not established that the 76 day

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[1] Cases 94-C-0577 et al., Petition of ACC Syracuse Telecom Corporation for the Creation of an ONA Task Force, Order Resolving O&A Task Force Issues (issued December 28, 1994) and 96-C-0036, Complaint of AT&T Communications of New York, Inc. Against New York Telephone Company, Order to Resolve Complaint and Clarify O&A Order (issued September 30, 1996).

[2] Case 97-C-0139, Telephone Service Quality Proceeding, Order Establishing Additional Inter-Carrier Standards (issued February 16, 2000). The Carrier Working Group continues to monitor the development and reporting of metrics and standards.

interval is necessary or reasonable. Because augments involve far fewer steps than complete collocation installations, it is reasonable to shorten the overall interval for augments at this time. A 45 business day interval is appropriate for all augments--cable and splitter--for line sharing and line splitting. Verizon's work force management argument is not compelling, as it has not demonstrated that more efficient scheduling and operation is overly burdensome. Verizon will have to alter the way such work is scheduled to meet this new interval.[1]

The shorter interval is supported by the FCC's Collocation Remand Order issued August 10, 2000. The FCC, in response to the decision of the U.S. Court of Appeals for the D.C. Circuit,[2] established a 90-calendar day interval for physical collocation installation, if a state does not adopt an interval;[3] and sought comment on whether shorter intervals should be specified for augments or collocations within remote terminals.[4] The FCC has set a 90-calendar day (about 66 business days) interval for initial construction of collocation arrangements. Thus, a longer interval of 76 business days for

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[1] In addition, because Verizon has already been ordered to shorten this interval to 45 business days in another state in its footprint, Pennsylvania, workforce accommodations will have to be made in any event. Petition of Covad Communications Company for an Arbitration Award Against Bell Atlantic-Pennsylvania, Inc., Implementing the Line Sharing Unbundling Network Element, Docket No. A-310686F0002; Petition of Rhythms Links, Inc. for an Expedited Arbitration Award Implementing Line Sharing, Docket No. A-310698F0002, Opinion and Order (August 17, 2000)(Pennsylvania PUC Order).

[2] GTE v. FCC, 205 F.3d 416 (D.C. Cir. 2000).

[3] FCC Order on Reconsideration and Order, ¶29.

[4] Id. at ¶6.

augments, as proposed by Verizon, is inconsistent with the FCC's approach. Furthermore, the 45-day interval for augments we adopt here is consistent with the FCC's intent to have shorter intervals where the nature of the modification to the collocation arrangement is appropriate.[1] Parties may propose refinements of these intervals to specify sub-intervals for certain tasks, and submit such modifications to us for review, after further discussion of the operational issues in the DSL collaborative and the Carrier Working Group.

Provision of Access to the High Frequency Spectrum for Carriers Providing Voice Over UNE-P

The second issue is whether Verizon should be required to facilitate an offering comparable to line sharing for voice competitors serving customers using the Unbundled Network Element Platform (UNE-P) and, if so, on what timetable must its wholesale offering be available to competitors. Verizon has been providing DSL services to retail customers using line sharing since the inception of its DSL offering, first by itself and after July 2000 through a data affiliate. Verizon's voice customers may also enjoy line shared DSL from other data providers. Competitors offering voice and data service now propose that customers served by voice carriers other than Verizon, for whom service is provided via the UNE-P, must have access to DSL over their voice lines. The DSL collaborative group named this process "line splitting," to distinguish it from line sharing.

[1] PCC Order on Reconsideration, §114 and footnote 241.

1. Parties' Legal and Policy Arguments

At the technical conference and in brief, Verizon asserted it had no legal obligation to provide line sharing over UNE-P or resold lines or to provide splitters to accomplish these ends for UNE-P or resale providers. However, Verizon asserted it would continue to work with CLECs and DLECs to facilitate access to the high frequency portion of loops provided to CLECs.

The competitors, both voice providers of local exchange service and data service providers, point out that Verizon's position falls short of a binding commitment to provide line splitting, and that Verizon has refused to offer line splitting pursuant either to tariff or contract. Competitors fear the incumbent will delay the splitting of lines for which voice service is provided by others, while moving aggressively to build out its own line sharing customer base, as evidenced by the proposed Verizon merger with NorthPoint Communications Group, Inc.[1]

There is no dispute that the engineering processes entailed in splitting a line for a UNE-P voice customer and sharing a line for a Verizon voice customer are identical: there is no physical difference. The record evidence to this effect is unambiguous. The differences arise in the operation of the OSS, which must be modified to reflect the different business relationships among the end-user, the voice provider, the data service provider, and Verizon. According to Verizon, its software vendor, Telcordia, expects to release new software by November 30, 2000, reflecting a two-wholesaler environment. Verizon expects the testing and modification of that software to

[1] Verizon's petition seeking merger approval is pending in Case 00-C-1487.

conclude no later than March 2001. Verizon points out, however, that competitors bear a considerable burden to address and agree to the business rules that will govern in this new environment.

Verizon asserts it has no legal obligation to line split, and that New York cannot require it to do so consistent with FCC rulings. It relies on the FCC Line Sharing Order which noted that the record before the FCC did not support extending line sharing requirements to loops other than those on which an incumbent LEC provides voice band service. The FCC concluded that "incumbent LECs must make available to competitive carriers only the high frequency portion of the loop network element on the loops on which the incumbent LEC is also providing analog voice 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".[1] Verizon points out that the conclusions found in the Line Sharing Order are also embodied in FCC Rule 319(h).[2]

Competitors respond that the FCC is presently reconsidering those portions of its Line Sharing Order, and that in its approval of the SBC/Texas §271 application, it indicates that purchase of UNE-P may be construed to imply purchase of the

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[1] Deployment of Wireline Services Offering Advanced Telecommunications Capability and Implementation of the Local Competition Provisions of the Telecommunications Act of 1996, Third Report and Order in CC Docket No. 98-147 and Fourth Report and Order in CC Docket 96-98(Line Sharing Order), ¶72.

[2] The regulation requires an incumbent LEC only to provide a requesting carrier with access to the high frequency portion of the loop if the incumbent LEC is providing, and continues to provide, voiceband services on that loop. 47 CFR 51.319(h).

full capability of the loop including its capacity to be split to accommodate DSL service.[1] Competitors urge the requirement of line splitting under state law, citing Public Service Law §§91, 94, and 97, and this Commission's long history of requiring unbundling. VAD adds its voice to that of data competitors, asserting that data providers should be able to provide data services over loops used by other CLECs to provide voice services.

2. Discussion

Over two million lines are being served by Verizon's competitors in the New York local exchange market; the majority of these are lines served using the UNE-P mode of entry.[2] Currently, this group of customers is ineligible for DSL services provided by line sharing. These customers may, however, obtain line sharing DSL by migrating their voice service back to the incumbent. Thus, this restriction operates to advantage Verizon in its capacity as a voice local exchange service provider: it alone can provide customers with a full range of desirable associated services.

Conversely, competitors submitted evidence that customers were precluded from replacing Verizon as their local exchange service provider without also terminating their line shared DSL service. Accordingly, this restriction prevents free

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[1] CC Docket No. 00-65, Application by SBC Communications In. Pursuant to Section 271 of the Telecommunications Act of 1996 to Provide In-Region, InterLATA Services in Texas, Memorandum Opinion and Order (released June 30, 2000)(SBC/Texas 271 Approval Order), ¶325.

[2] Over 1.1 million customers receive local exchange service over UNE-P; over a quarter of million UNE-P orders were filled in July 2000 alone. Verizon Carrier-to-Carrier Report for July 2000.

migration by customers to their voice provider of choice. Competitive voice providers using UNE-P constitute a substantial segment of the local exchange market and their share is steadily increasing. Access to the high frequency portion of the UNE-P loop will allow voice CLECs the capacity to provide the same range of advanced services to residential and business customers as are now available to Verizon customers.

The Commission has broad authority to review the rules, regulations, and practices of telephone companies to ensure, consistent with federal law, that that they are just, reasonable, and nondiscriminatory.[1] This authority encompasses requiring Verizon to facilitate line splitting for customers served by competing voice carriers using UNE-P to promote competition and avoid discrimination. We find that a restriction on line splitting would unreasonably hinder the deployment of advanced services to New York's consumers and would discriminate against competitor carriers' voice offerings. Thus, we require Verizon to provide access to the full functionality of the UNE-P loop, including the high frequency spectrum.

Requiring line splitting is also consistent with federal law and FCC regulations. First, the FCC designated the high frequency loop spectrum of an ILEC voice loop an unbundled network element.[2] In so doing, it also expressly invited states to add to its line sharing requirements, recognizing state markets may develop differently and more quickly than the national market;[3] and it is currently reconsidering the UNE-P

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[1] Public Service Law §§94 *et seq.*

[2] Line Sharing Order, ¶¶13, 25.

[3] Line Sharing Order, ¶¶223-225.

line splitting issue. Further, although CLECs generally take the position that the SBC/Texas 271 Order obligates ILECs to provide line splitting over UNE-P, the FCC noted that line splitting issues had not been fully developed at the time the Texas Commission was considering SBC's Section 271 application. Unlike the record before the Texas Commission, line splitting issues have been thoroughly presented in this proceeding. Based on the record before us, we find that line splitting over UNE-P purchased from Verizon is technically feasible, and necessary for competitors to provide their services to customers.

Second, viewing the requirement that Verizon facilitate CLEC access to the high frequency portion of the loop as a further unbundling is also consistent with federal law.[1] In its UNE Remand Order, the FCC stated that "Section 251(d)(3) grants state commissions the authority to impose additional obligations upon incumbent LECs beyond those imposed by the national list, as long as they meet the requirements of Section 251 and the national policy framework instituted in this Order."[2] Requiring Verizon to facilitate line splitting access to the high frequency portion of the loop meets the criteria in §251. States may require the unbundling of additional network elements upon a determination that lack of access to a non-proprietary network element impairs a CLEC's ability to provide the service it seeks to offer. We find that lack of access to line splitting would impair both voice and data competitors' ability to provide customers with desired services. Lack of such access

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[1] Telecommunications Act of 1996 (the 1996 Act)(47 U.S.C. §251(d)(3)) provides for state regulations, orders, and policies establishing access and interconnection obligations of local exchange carriers, where consistent with the Act.

[2] UNE Remand Order §154; see, also, Line Sharing Order §§221-225.

would materially diminish voice service providers' ability to offer a package of services comparable to that offered by Verizon, as a practical, economic, and operational matter. Further, lack of access to UNE-P customers on a line-splitting basis would materially diminish data competitors' capacity to offer all DSL services to a significant customer base. The alternative, providing DSL on a dedicated line basis, is qualitatively more costly, more technically cumbersome, and more time-consuming to provision.

Additional consideration must be given to whether the CLEC can provide the element or whether an alternative element can be obtained from outside the ILEC's network.[1] If the lack of access impairs the CLEC's ability to offer the service it wishes to provide, we may require the unbundling of that element. States may take into consideration whether unbundling of a network element promotes the rapid introduction of competition, promotes facilities-based competition, investment, and innovation; promotes reduced regulation; provides certainty to requesting carriers regarding the availability of the element; and is administratively practical.[2]

Based on the record before us, we find that denial of access to line splitting significantly impairs both the voice and the data CLECs' ability to offer services to customers; there is no comparable resource available outside the ILEC system. In addition, we find that line splitting will promote competition, for the competitive (voice) local exchange carriers, and the data CLECs, opening a large segment of the market for the provision of their services. Provision of line splitting will increase the likelihood that CLECs will begin to

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[1] 47 CFR 51.317 (b),(d).

[2] 47 CFR 51.317(c).

make investments in facilities by helping to solidify the CLECs' market share. Finally, line splitting will make advanced services available to customers of all local exchange carriers and therefore raises the possibility of less regulation.

3. Timetable for Providing Line Splitting and OSS Modifications

Substantial modification of the Verizon OSS is required to address ordering, provisioning, billing, maintenance, inventory, and repair functions. This process is underway and must be fully developed by Verizon in cooperation with the CLECs, particularly with respect to business rules.[1]

Verizon's vendor, Telcordia, is preparing a software application to be released by November 30, 2000, to interface with Verizon's OSS. Although Telcordia's effort was primarily intended for basic line sharing, Verizon indicated that the new release will include fields which will accommodate two wholesalers, one providing voice and the other data. Verizon reports that it could take as much as three months to test the new software, debug it, send it back to Telcordia for revisions, and retest it. This schedule would allow implementation of the new OSS by March 2001, which we will require.

Anticipating the successful Telcordia release, Verizon should take steps immediately to establish a pilot for line splitting to test the ordering and provisioning processes and to work through some of the problems that likely will be encountered. Line splitting must be made available as soon as practicable, whether or not a fully electronic interface is in place.

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[1] For example, parties are negotiating the OSS systems necessary to reflect the range of business relationship between data and voice CLECs.

Ownership of Splitters in
the Verizon Central Office

At issue is whether to require Verizon to purchase and own splitters located in its central offices and, if so, whether to require Verizon to provide splitter access to competitors one line at a time. The FCC has rejected CLEC attempts to impose a splitter ownership requirement upon the incumbent LEC.[1] In AT&T's view, the splitter should be viewed as an intrinsic component of the loop and should be provided with the loop by the incumbent as part-and-parcel of its loop unbundling obligations.[2] It asserts that incumbent ownership of splitters would facilitate consumer choice of Internet Service Provider and, possibly, data local exchange carrier as well. Data CLECs take a middle road and ask for an option of a Verizon owned splitter.

Verizon takes issue with these views; it points out that there are widely differing splitter designs, each with different wiring. In its view, this is a constantly changing technology in which the splitter should be matched to the DSLAM, the property of the data service provider, to ensure protection of the DSLAM.

The AT&T position is based upon the assumption that there will be a high proportion of Internet service provider churn, requiring concomitant data service provider churn. It asserts incumbent ownership of the splitter will facilitate a significantly simpler cross-connect process and result in faster and more accurate migration of data customers from one data service provider to another. Verizon countered with the

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[1] SBC/Texas §271 Order, ¶327.

[2] *Citing* the UNE Remand Order, ¶175.

assertion that incumbent splitter ownership would make high volume changes more, not less, burdensome.

Parties to the DSL collaborative discussed in considerable depth the relative merits of various configurations of splitter ownership and placement and agreed to two options, neither of which entailed incumbent ownership of the splitter. In fact, dozens of collocation installations have been put in place, and data CLECs indicated no enthusiasm for reconfiguring these for ILEC ownership.[1] In light of the heavy burden AT&T must shoulder to demonstrate that reconfiguration or change in plans adopted by the collaborative are necessary, it cannot be said to have made a convincing case. Nor is its legal argument compelling that the splitter is an intrinsic component of the loop; Verizon's response that splitters are widely available in the marketplace refutes the view that AT&T must be provided them by the incumbent or face impairment of its provision of DSL-capable loops to customers. Further, although competitors are interested in the provision by Verizon of access to the splitter function a line at a time, their evidence failed to establish that this was either a superior or a more equitable network design than that presently in place. Moreover, the FCC has not required incumbent LECs to provide access to these splitters as part of the loop, but is reviewing that determination in response to petitions for reconsideration of the UNE Remand

[1] Rhythms, for example, asserts it would be beneficial for CLECs if Verizon were to own splitters, but expresses its preference for ownership and control of splitters within its collocation space. Rhythms' Initial Brief, p. 26.

Order. Thus, splitter ownership by Verizon will continue to be at its option unless the FCC rules otherwise.[1]

LINE SHARING IN THE DIGITAL LOOP CARRIER ENVIRONMENT

Other issues relate to customers served by digital loop carrier, that is, loops consisting of fiber optic cable with electronics from the central office to a remote terminal and a feeder distribution interface point, and from there copper to the customers' premises. The issues concern whether the current Verizon tariff filing, offering competitors certain collocation opportunities at the remote terminal, comports with its legal obligations or whether additional forms of access to these customers are necessary for competitors to offer their services.

Verizon's Remote Terminals and Present Technology

Approximately 15% of Verizon's loops are served by digital loop carrier technology, entailing installation of fiber optic cable from the central office to a remote terminal, closer to the end user, with copper facilities installed from the remote terminal to the end user premises.[2] Verizon intends to expand its network, and replace faulty all-copper loops, with these part-fiber/part-copper loops, at an undetermined rate.

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[1] Parties reached agreement on a method to resolve disputes as to the source of trouble on a line shared loop (appended to this order as Attachment 1). We approve the agreement, which is reasonable. As to other testing issues, we will require Verizon to provide data competitors test access identical to, and at the same price as, the test access it provides its data affiliate, in order to ensure parity among all competitors.

[2] Tr. 381.

Because DSL is inherently a copper-based technology, in order for a data provider to serve customers whose service is carried in part over fiber optic cable, equipment necessary to provide DSL (i.e., DSLAMs and splitters) must be placed at the remote terminal.

On May 17, 2000, Verizon filed tariff revisions in compliance with the UNE Remand Order, offering options for competitors to gain access to its customers served by digital loop carriers. Verizon opines that, as a technical matter, it can not provide voice and data end-to-end over a loop served by digital loop carrier; and that, as a legal matter, line sharing is required only over copper loops. Therefore, it has no obligation to provide line sharing where digital loop carrier is in use. The tariff amendments allow competitors to collocate their equipment for providing DSL service at adjoining sites, where room in the incumbent's remote terminal has been exhausted, and the competitor can obtain the necessary rights-of-way. To transport the data traffic to the competitor's point of presence, the tariff offers dark fiber, for which competitors must supply the necessary electronics.[1]

Competitors consider this tariff offering so prohibitively expensive and burdensome as to amount to an impairment of their ability to provide services to customers and a denial of access to necessary elements unobtainable elsewhere on a reasonable, commercial basis. They ask us to require Verizon to offer commercially accessible collocation of DSLAM

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[1] Verizon will provide unbundled feeder to transport data between the central office and the remote terminal or adjoining competitor structure. Verizon offers the subloop, not the electronics or the packet transport. These would entail additional costs where available.

equipment in remote terminals where presently feasible, in particular the lease or placement of line cards in remote terminals that can accommodate DSLAMs. They also want us to assure that Verizon's roll-out plans will be based upon such next generation digital loop carrier technology as will accommodate the competitive presence at their remote terminal.

Verizon states that neither it nor its data affiliate has this equipment in any remote terminal in New York. That is, today no customer served by digital loop carrier can obtain DSL. Verizon testified, and no party contested, that most of its New York remote terminals are exceedingly compact, quite full already, and not designed for advanced services technology.[1] Verizon also indicated it intends to build out fiber into its network using next generation digital loop carrier.

Generally, competitors agreed with Verizon's assessment of the present system and focused their concerns on the planned and future upgrades. In addition, competitors seek packet switching on an unbundled network element basis where next generation digital loop carrier installations exist today, in order to link the Verizon remote terminal or their own equipment to the central office.[2]

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[1] Verizon testified that between 7 and 8 percent of its lines were served by next generation digital loop carrier, only some of which is compatible with line card collocation.

[2] Packet switching is defined as the process of routing and transferring data by means of addressed packets so that a channel is occupied during the transmission of the packet only, and upon completion of the transmission the channel is made available for the transfer of other traffic.

The Legal Requirements

In the BA/GTE Merger Order, the FCC required that to the extent a Verizon/GTE incumbent LEC allows its separate affiliate to collocate packet switches, routers, or other equipment, the nondiscrimination safeguards compel the incumbent LEC to allow unaffiliated carriers to collocate similar equipment on nondiscriminatory rates, terms and conditions.[1] To do otherwise would allow the transfer of Verizon's advanced services assets to defeat or elude its obligation to provide nondiscriminatory access to network elements and services for the provision to customers of advanced services.[2]

Further, in the UNE Remand Order, the FCC reasoned that where the incumbent has deployed digital loop carrier systems, and where no spare copper facilities are available, competitors are effectively precluded altogether from offering xDSL service if they do not have access to unbundled packet switching.[3]

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[1] BA/GTE Merger Order, ¶261.

[2] Advanced services are defined by the Federal Communications Commission (FCC) as "intrastate or interstate wireline telecommunications services...that rely on packetized technology and have the capability of supporting transmission speeds of at least 56 kilobits per second (kbps) in both directions." In re Applications of Ameritech Corp., Transferor, and SBC Communications, Inc. Transferee, for Consent to Transfer Control, CC Docket No. 98-141, Memorandum Opinion and Order (released October 8, 1999)(the Ameritech/SBC Order), ¶363.

[3] UNE Remand Order, §§304, 313.

To address this problem, the FCC required packet switching to be offered as an unbundled network element[1] under certain circumstances. More recently, the FCC noted that where technically feasible, the incumbent LEC must make physical collocation available in any of its structures that house network facilities, including remote terminals.[2]

Verizon considers its tariff amendments meet the requirements of the FCC with respect to collocation in the remote terminal and dark fiber.[3] It says it has no DSLAM capability in any of its remote terminals so that neither its advanced services affiliate nor the parent company provide advanced services through the remote terminal. Accordingly, in Verizon's view, it does not meet the preconditions the FCC listed to require provision of packet switching on an unbundled element basis.[4]

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[1] Parties also urged that Verizon be required to resell advanced services. However, since Verizon is not providing these services at retail, it is not required to provide them at retail rates (47 USC 251(c)(4)). Furthermore, VAD is not a successor or assign under 251(h)(1) (*see also* CC Docket 98-184, Application of GTE Corporation and Bell Atlantic Corporation for Consent to Transfer Control (released June 16, 2000) (BA/GTE Merger Order). Therefore, VAD is not required to resell advanced services under the FCC rules.

[2] Collocation Remand Order, ¶47.

[3] For a CLEC to use dark fiber, it must collocate and provide the electronics; Verizon then implements the cross connections necessary to connect the dark fiber. The cost and process would have to be negotiated; without more experience, Verizon is reluctant to tariff a more specific service to the central office.

[4] See 47 CFR 51.319(c)(3).

Discussion[1]

The record shows that Verizon's remote terminals are not, for the most part, presently capable of supporting ADSL and that upgrading the remote terminals can be costly and may involve repercussions to basic services provided by Verizon. It also shows that collocation by competitors on the terms offered by Verizon's tariff at these remote terminals is under many circumstances prohibitively costly and slow, and unlikely to be commercially viable.

Where and when technically feasible, customers served by digital loop carrier must have access to xDSL services offered them by data local exchange carriers. Therefore data competitors must have access to the Verizon network to serve these customers on a commercially reasonable basis. If and when Verizon's data affiliate begins to serve customers using digital loop carrier, all the opportunities afforded it by Verizon to serve those customers must simultaneously be available to all competitors. To ensure competitive parity at that starting gate, Verizon must inform the Commission and data competitors as business decisions are made to deploy next generation digital loop carrier capable of supporting DSL services.

Further, Verizon cannot impair competitors' access to these customers simply by choosing not to provide them DSL itself. Verizon must make DSL services available to these customers where competitors choose to serve them, by methods additional to those offered in its current tariffs. This can be

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[1] Parties reached agreement on an additional issue, line and station transfer. Line and station transfer provides a copper loop for DSL provisioning purposes when customers are served by digital loop carrier. The proposed settlement is appended as Attachment 2, and we adopt it.

done by a menu of methods at Verizon's election, and we will not require any particular one, but will require such accommodation on a case by case basis where the current Verizon tariff offering is not commercially viable. The simplest of these methods, of course, is for Verizon to migrate the customer currently served by digital loop carrier to an all-copper loop: parties have agreed to conditions for these pair swaps or line and station transfers, and we approve this agreement. Another method is allowing competitors virtual collocation of their line cards in the incumbent's next generation digital loop carrier terminals. Where Verizon remote terminals now are capable of accommodating this equipment, and as it becomes technically feasible due to new construction of next generation remote terminals in the future, Verizon can meet its obligations by allowing competitors to place their line cards in the remote installation and making transport available. Another option, favored by incumbents in other regions, is an offering at wholesale, as a combination of elements to competitors, access to customers served by digital loop carrier. Under recent FCC decisions, Verizon can provide a wholesale service to competitors and to its data affiliate similar to that offered by SBC.

To provide DSL to customers served by digital loop carrier, competitors need to transport data from the remote terminal to the central office or other point of presence. Verizon must modify its tariff filing to include offering dark fiber from the remote terminal to the central office. Verizon does not currently meet the FCC preconditions for us to require a general offering of packet switching as a network element, because Verizon is not currently providing this element to its data affiliate. Were it to do so, Verizon would have to offer this element to all competitors. However, on a case-by-case

basis, where it is technically feasible for competitors to place line cards in Verizon next generation digital line carrier terminals and where this is the only commercially reasonable method for them to provide customers DSL, data service competitors may request that Verizon be required to provide packet switching.

CONCLUSION

The above determinations should add reasonable and timely requirements, consistent with federal law and FCC regulation, to ensure that Verizon carries out its wholesale functions so as to continue to maximize New Yorkers' access to a competitive market for advanced services.

The Commission orders:

1. Verizon New York Inc. f/k/a New York Telephone Company (Verizon) shall provision digital subscriber line services for a competitive data local exchange carrier's customer in intervals consistent with this order.

2. Verizon shall complete augmenting of cable and splitter capacity in competitors' collocation arrangements consistent with this order.

3. Verizon shall offer comparable line sharing, or line splitting, to voice competitor local exchange carriers serving customers using the Unbundled Network Element Platform as soon as practicable. Verizon is also directed to immediately establish a pilot for the new Telcordia software application discussed in this order, with full commercial implementation no later than March 2001.

4. Verizon will be required to offer to competitors access to customers served over digital loop carrier as it

becomes technically feasible and as is necessary for competitors to offer their services, consistent with this order.

5. Verizon should modify its dark fiber tariff offering consistent with this order.

6. This proceeding is continued.

By the Commission,

(SIGNED) JANET HAND DEIXLER
Secretary

ATTACHMENT 1

TEST ACCESS PROPOSED SETTLEMENT LANGUAGE

In the event that the parties dispute the cause or source of a trouble on a line shared loop, Covad or Rhythms may request, and Verizon will agree, to a joint technician meeting, at the main distribution frame ("MDF") serving that loop, to perform testing on the loop. This joint meeting will occur within 24 hours of the request being made to the appropriate Verizon service center (currently the RCCC or RCMC). The testing will follow routine procedures for clearing and isolating troubles and will employ hand held testing devices selected, provided, and operated by Covad or Rhythms. Such testing will involve gaining intrusive access to the line shared loop to be tested (at one or more appearances on the MDF or other Distributing Frames in the Central Office upon which the line shared loop appears) and connecting the hand held testing devices thereto. Within 15 minutes of the meeting time agreed between the parties, Covad or Rhythms shall have permission to begin testing on the MDF.

In order for the parties to have a good faith dispute about the cause or source of a trouble on a line shared loop, the parties need only disagree about the cause or source of a trouble on a line shared loop. Nevertheless, to the extent that either party has facilities in place to conduct any other form of testing of the line shared loop, it must present whatever findings it has from that testing to the other party at the time of the meeting at the MDF or within 24 hours thereof.

ATTACHMENT 2

A Pair Swap or Line and Station Transfer done in conjunction with a Line Share Arrangement request involves the reassignment and relocation of an existing Verizon end user voice service from a Digital Loop Carrier ("DLC") facility that is not qualified for line sharing to a spare or freed-up qualified non-loaded copper facility.[1] Such a swap or transfer would be done in order to support the requested service transmission parameters. This new process will be applied to all cases where Verizon encounters the customer on DLC and where Verizon can automatically reassign the customer to a spare copper facility. This effort involves additional installation work including a dispatch and will require an additional charge.

[1] A freed-up pair is a qualified, copper pair already assigned.