

state. The Commission found that Verizon's provision of interconnection in Massachusetts satisfies the Act and the Commission's rules, and the same is therefore true here. See Massachusetts Order ¶¶ 182-193. As in Massachusetts, real-world experience in Vermont proves that Verizon is able to meet the large and increasing demand for interconnection. And Verizon's performance in providing interconnection to CLECs in Massachusetts, where volumes are even higher than in Vermont, also continues to be excellent.

1. Interconnection Trunks.

Verizon provides competing carriers in Vermont with the same kinds of interconnection trunks that Verizon provides in Massachusetts, and provides them using the same processes and procedures that it uses in that state. See Lacouture/Ruesterholz Decl. ¶ 11. In Massachusetts, the Commission found that Verizon's provision of interconnection to competing carriers was "equal in quality to the interconnection Verizon provides to its own retail operations, and on terms and conditions that are just, reasonable, and nondiscriminatory." Massachusetts Order ¶ 183. The Commission also found that Verizon "makes interconnection available at any technically feasible point," and that it therefore demonstrates checklist compliance. Id.¹⁹ The same is true in Vermont.

Through November 2001, Verizon has provided five competing carriers with approximately 15,000 interconnection trunks in Vermont. See Lacouture/Ruesterholz Decl. ¶ 12. This is *more* than the number of trunks Verizon has connecting its switches in the entirety of its

¹⁹ Verizon provides interconnection trunks under interconnection agreements and the SGAT. See Lacouture/Ruesterholz Decl. ¶ 11. Verizon provides interconnection to the trunk sides of end office and tandem switches, and to Verizon's signaling network, and provides both one-way and two-way trunks, 64 Kbps Clear Channel trunks, and traditional 56 Kbps trunks. See id. ¶ 17. Verizon also will accept requests from CLECs for interconnection at other technically feasible points. See id. ¶ 11.

own interoffice network in the state. See id. Through these trunks, CLECs are exchanging an average of approximately 103 million minutes of traffic per month with Verizon. See id. ¶ 14.

Verizon provides interconnection trunks on time, even in the face of strong commercial demand. From September through November 2001, Verizon met the applicable intervals for providing interconnection trunks to CLECs 100 percent of the time in Vermont. See id. ¶ 22. In Massachusetts, Verizon completed more than 97 percent of CLEC orders for interconnection trunks on time from September through November 2001. See id. ¶ 23.²⁰

Verizon also has undertaken extraordinary efforts to accommodate the demand for interconnection trunks. For example, Verizon added more than 3,000 trunk terminations in 2000, which increased by more than half the number of trunks between Verizon's network and CLEC networks. See id. ¶ 13. Verizon also continued to add new interconnection trunks in 2001. See id. & Brief Att. A, Ex. 2. Moreover, Verizon has adopted the same trunk forecasting process that it uses in Massachusetts. See Lacouture/Ruesterholz Decl. ¶¶ 19-21.

Finally, Verizon provides trunks to competing carriers that are of equal or better quality than those it provides to itself. For example, from September through November 2001, none of the dedicated final trunk groups provided to CLECs in Vermont exceeded their engineering blocking design. See id. ¶ 30. In Massachusetts, during this same period, 0.00 percent of the final trunk groups provided to CLECs exceeded their engineering blocking design. See id. ¶ 31.

²⁰ Beginning with the November 2001 report month, Verizon stopped reporting its average interval completed for interconnection trunks and all other checklist items. See Lacouture/Ruesterholz Decl. ¶ 24. As Verizon has explained previously, in the carrier working group, Verizon and CLECs agreed that these measurements were flawed and should be eliminated; based on their consensus proposal, the New York PSC issued an order eliminating these measurements from the Carrier-to-Carrier Performance Reports. See id. Accordingly, the Commission should not rely on Verizon's performance under the average completed interval measurements for purposes of this Application.

2. Collocation.

Verizon provides competitors in Vermont with the same forms of collocation as it provides in Massachusetts, using the same processes and procedures. See id. ¶ 33. In Massachusetts, the Commission found that Verizon's collocation offerings "satisfy the requirements of sections 251 and 271 of the Act," and that Verizon has taken "steps necessary to implement the collocation requirements contained in the [Collocation Order] and the Collocation Reconsideration Order."²¹ Massachusetts Order ¶ 194. The same is therefore true in Vermont. Verizon also has modified its collocation offerings and processes since the Massachusetts Order to comply with the Collocation Remand Order.²² See Lacouture/Ruesterholz Decl. ¶ 33.

Through November 2001, Verizon has placed in service approximately 26 collocation arrangements in central offices located throughout Vermont. See id. ¶ 39. As in Massachusetts, Verizon provides in Vermont every form of collocation that is required by the Commission's rules.²³ *First*, in addition to standard physical arrangements, Verizon provides mini, shared,

²¹ Deployment of Wireline Services Offering Advanced Telecommunications Capability, First Report and Order and Further Notice of Proposed Rulemaking, 14 FCC Rcd 4761 (1999) ("Collocation Order"); Deployment of Wireline Services Offering Advanced Telecommunications Capability, Order on Reconsideration and Second Further Notice of Proposed Rulemaking in CC Docket No. 98-147 and Fifth Further Notice of Proposed Rulemaking in CC Docket No. 96-98, 15 FCC Rcd 17806 (2000) ("Collocation Reconsideration Order").

²² Deployment of Wireline Services Offering Advanced Telecommunications Capability, Fourth Report and Order, 16 FCC Rcd 15435 (2001) ("Collocation Remand Order").

²³ As in Massachusetts, Verizon's charges CLECs in Vermont for power based on the quantity of load amps they request rather than the quantity of fused amps. See Lacouture/Ruesterholz Decl. ¶ 75. CLECs in Vermont also may determine for themselves the quantity of load amps they desire for each feed. See id. These are the same practices as in Massachusetts and Pennsylvania, where the Commission found that Verizon's collocation power charges were "just, reasonable, and nondiscriminatory." Massachusetts Order ¶ 199; Application of Verizon Pennsylvania Inc., et al., for Authorization To Provide In-Region, InterLATA Services in Pennsylvania, Memorandum Opinion and Order, 16 FCC Rcd 17419, ¶ 104 (2001) ("Pennsylvania Order"). Moreover, the Vermont PSB has reviewed and approved these rates. See Letter from Susan M. Hudson, Vermont PSB, to Joanne Fenoff, Verizon (July 31, 2001)

adjacent, and “cageless” forms of collocation in accordance with the Commission’s rules. See Lacouture/Ruesterholz Decl. ¶¶ 51, 53-54; Collocation Order ¶¶ 41-42. Cageless collocation arrangements now represent approximately two-thirds of the collocation arrangements in Verizon’s central offices. See Lacouture/Ruesterholz Decl. ¶ 39. *Second*, Verizon permits CLECs the option of establishing controlled-environment vaults or similar structures adjacent to Verizon central offices in which physical collocation space is unavailable. See id. ¶ 55; Collocation Order ¶ 44; Collocation Reconsideration Order ¶¶ 45-47. *Third*, Verizon provides virtual collocation; however, no CLEC in Vermont has ordered a virtual arrangement. See Lacouture/Ruesterholz Decl. ¶¶ 34, 36, 39. *Fourth*, Verizon offers collocation at remote terminals in the same manner as the Commission found compliant in Massachusetts. See id. ¶ 62; Massachusetts Order ¶ 196. *Finally*, Verizon provides collocation within intervals adopted by the Vermont PSB (76 business days for physical arrangements, and 105 business days for virtual arrangements). See Lacouture/Ruesterholz Decl. ¶ 40; Letter from Susan M. Hudson, Vermont PSB, to Bryan L. Macklin, Verizon (Jan. 4, 2001) (App. L, Tab 4); see also Massachusetts Order ¶ 195 (finding that comparable intervals satisfied the checklist); New York Order ¶¶ 73-75 (same).

Verizon also has modified its collocation offerings in Vermont to comply with the Commission’s recent Collocation Remand Order. On September 28, 2001, Verizon filed amendments to both its federal and state collocation tariffs to incorporate the requirements of that order. See Lacouture/Ruesterholz Decl. ¶ 50. For example, Verizon’s tariffs now permit CLECs to collocate all the kinds of equipment that the Commission in that order held are

(App. L, Tab 6).

necessary for interconnection or access to UNEs within the meaning of 47 U.S.C. § 251(c)(6).

See id. Verizon also has made cross-connects available to CLECs. See id. ¶¶ 56-59.

Verizon is providing collocation in a timely manner. For example, from September through November 2001, Verizon completed only three new physical collocation arrangements and four augments to existing arrangements, see id. ¶ 40, which is too few to provide meaningful results, see Kansas/Oklahoma Order ¶ 36. Nonetheless, Verizon completed all of these new arrangements and augments on time in Vermont. See Lacouture/Ruesterholz Decl. ¶ 40. In Massachusetts, where volumes were greater, Verizon also completed all physical collocation arrangements and augments on time from September through November. See id. ¶ 41.

Finally, Verizon has taken the same extraordinary steps as in Massachusetts to make collocation space available in its central offices. For example, Verizon will allow CLECs to tour a central office within 10 days in those rare instances where it cannot accommodate a request for physical collocation, and it will file space exhaustion notifications as required by the Vermont PSB upon determining that space is not available. See id. ¶¶ 44, 48. Verizon also has implemented methods and procedures to identify when a central office runs out of space for physical collocation, and to post this information on its Website within 10 days of when this occurs. See id. ¶¶ 44-46.²⁴

²⁴ During the course of the state proceedings, CTC claimed that Verizon improperly billed CTC for non-recurring charges associated with two collocation arrangements. As the Commission has held, this proceeding is not the appropriate forum for addressing individual billing disputes such as this. See, e.g., Massachusetts Order ¶ 203; Texas Order ¶ 383. In any event, there is no basis to CTC's claim, which relates to collocation arrangements that CTC ordered, Verizon built, and that, once completed, CTC attempted to cancel after the fact. See Lacouture/Ruesterholz Decl. ¶¶ 68-74.

B. Unbundled Network Elements (Checklist Items 2, 4, 5, and 6).

Verizon provides competing carriers in Vermont with commercial volumes of unbundled network elements, including unbundled local loops, local switching, and local transport. Moreover, it does so using the same processes and procedures that it uses in Massachusetts, where the Commission found that Verizon satisfies the requirements of the Act. See Massachusetts Order ¶¶ 20, 124, 208, 222. Through November 2001, Verizon has provided more than 1,500 unbundled loops to CLECs, including approximately 790 that were provided as part of an unbundled element platform that also included switching and transport. See Lacouture/Ruesterholz Decl. ¶ 81. Moreover, Verizon has kept pace with rapidly increasing demand; it consistently delivers unbundled elements on time, when competing carriers request them.

1. Unbundled Local Loops.

Verizon makes available to competing carriers in Vermont the same types of unbundled loops it makes available in Massachusetts, and provides them using substantially the same processes and procedures as it uses in that state. See id. ¶¶ 78-79; see also Massachusetts Order ¶ 124 (finding that Verizon's provision of unbundled loops satisfies the Act).²⁵ Through November 2001, Verizon has provided competing carriers in Vermont with more than 1,500 loops (including DSL loops and platforms). See Lacouture/Ruesterholz Decl. ¶ 81. Moreover, Verizon's performance in Vermont has been excellent across the board.²⁶ Verizon's

²⁵ Verizon provides unbundled loops pursuant to interconnection agreements and its SGAT. See Lacouture/Ruesterholz Decl. ¶ 79. Verizon provides analog and digital, two-wire and four-wire loops, which permit CLECs to offer a full range of services including Integrated Services Digital Network ("ISDN"), Asymmetrical Digital Subscriber Line ("ADSL"), High-bit-rate Digital Subscriber Line ("HDSL"), 1.544 Mbps digital ("DS1") transmission, and 45 Mbps digital ("DS3") transmission. See id.

²⁶ The Commission has correctly concluded that its "analysis of this checklist item cannot

performance also has continued to be excellent in Massachusetts, where volumes are higher than in Vermont.

a. Stand-Alone Voice-Grade Loops.

Through November 2001, Verizon has provided competing carriers in Vermont with approximately 500 voice-grade (i.e., POTS) loops on a stand-alone basis, and approximately 790 additional loops as part of unbundled network element platforms. See Lacouture/Ruesterholz Decl. ¶¶ 81, 83. Verizon's processes for providing stand-alone voice-grade loops have earned the prestigious ISO 9000 certification from the International Organization for Standardization, an independent, worldwide federation of national standards bodies that awards this certification to companies that demonstrate they meet the expectations of their customers. See id. ¶ 84.

As demand has increased, Verizon has continued to provide voice-grade loops on time, when competitors ask for them. In Vermont, the number of stand-alone loops and platforms provided to CLECs from September through November is too small to provide meaningful results. See id. ¶¶ 85, 196; Kansas/Oklahoma Order ¶ 36. Nonetheless, during that period Verizon met all of its appointments for CLECs' stand-alone voice-grade loops and platforms in Vermont. See Lacouture/Ruesterholz Decl. ¶¶ 85, 198; see also Massachusetts Order ¶ 162 (finding 93-percent performance acceptable). In Massachusetts, where volumes were much higher, Verizon met more than 98 percent of its installation appointments for stand-alone voice-grade loops from September through November 2001, compared to approximately 94 percent of its appointments for the retail comparison group. See Lacouture/Ruesterholz Decl. ¶ 86. During

focus on [Verizon's] performance with respect to any single metric or any single type of loop," but rather should be based on a "comprehensive picture of whether [Verizon] is providing unbundled local loops in accordance with the requirements of checklist item 4." New York Order ¶ 278; see also AT&T Corp. v. FCC, 220 F.3d 607, 624 (D.C. Cir. 2000) (affirming determination that the checklist focus is on "overall provisioning of loops, as opposed to mandating pass-fail analysis with respect to" a single category).

that same period, Verizon met more than 99.5 percent of its installation appointments for platform orders in Massachusetts. See id. ¶ 197.

Verizon also provides stand-alone voice-grade loops to competitors with a high degree of quality. Again, while volumes in Vermont are too small to provide meaningful results, from September through November, CLECs reported installation troubles within 30 days on only 0.56 percent of stand-alone voice-grade loops in Vermont compared to 2.30 percent for the retail comparison group. See id. ¶ 90. In Massachusetts, the rate of installation troubles within 30 days during this same period was 1.49 percent for CLECs, compared to 3.52 percent for the retail comparison group. See id. ¶ 91.

Verizon's performance in maintaining and repairing stand-alone voice-grade loops also is excellent. From September through November 2001, fewer than 1 percent of CLEC voice-grade loops had any reported troubles at all in both Vermont and Massachusetts. See id. ¶¶ 92-93. Moreover, for the small number of these loops that did experience troubles, Verizon's maintenance and repair performance is excellent. With respect to most maintenance and repair performance measurements for stand-alone voice-grade loops — including both the missed repair appointment rate and the mean time to repair — Verizon's reported performance for CLECs in Vermont and Massachusetts is comparable to or better than Verizon's reported performance for the retail comparison group. See id. ¶¶ 94-97. In September and October, for the single measurement that shows a difference in reported results in Massachusetts (though not in Vermont) — the repeat trouble report rate — Verizon's performance for CLECs also is in parity when calculated under the business rules that have recently been adopted in New York. See id. ¶ 99. In November, when these new business rules went into effect, Verizon's performance was in parity in both Vermont and Massachusetts. See id. ¶¶ 98-99.

b. Hot Cuts.

Just as Verizon's performance in providing new stand-alone voice-grade loops has been strong overall, so has its performance on the subset of voice-grade loops provisioned through hot cuts. Verizon uses the same methods and procedures to perform hot cuts in Vermont as it uses in Massachusetts, see id. ¶ 100, and its performance in Vermont and Massachusetts has been and continues to be excellent. As with Verizon's processes for stand-alone voice-grade loops, its hot-cut processes have earned the prestigious ISO 9000 certification. See id. ¶ 101.

From September through November 2001, the number of hot cuts in Vermont was too small to provide meaningful results. See id. ¶ 105. Nonetheless, during that period Verizon completed 100 percent of CLECs' hot-cut orders on time. See id.; Massachusetts Order ¶ 160 (finding 96-percent performance acceptable); New York Order ¶¶ 291-296 (finding 91- to 94-percent performance acceptable); see also AT&T Corp., 220 F.3d at 625-28 (upholding Commission's decision in New York). Verizon also completed nearly 98 percent of CLECs' hot-cut orders on time in Massachusetts, where volumes are higher. See Lacouture/Ruesterholz Decl. ¶ 106. Moreover, in its Massachusetts test, KPMG confirmed that Verizon satisfied all the evaluation criteria with respect to the hot-cut process. See KPMG MA Report at 400-03.²⁷

Verizon also continues to provide hot cuts at a very high level of quality. Although volumes from September through November 2001 were too small to provide meaningful results, CLECs did not report any troubles within seven days of installation in Vermont. See Lacouture/Ruesterholz Decl. ¶ 108. In Massachusetts, CLECs reported troubles within seven days of installation on only 0.39 percent of their hot cuts, which is better than the 2-percent benchmark. See id. ¶ 109.

²⁷ KPMG, Bell Atlantic OSS Evaluation Project, Version 1.4 (Sept. 7, 2000) ("KPMG MA Report") (App. D, Tab 2).

c. DSL-Capable Loops.

Verizon's performance in providing access to the subset of loops used to provide DSL services also is strong.

Through November 2001, roughly 210 of the approximately 750 stand-alone unbundled loops that Verizon provided to competing carriers in Vermont were DSL-capable loops. See Brown Decl. Att. 1 ¶ 20. Verizon uses the same processes and procedures to provide competing carriers access to DSL loops in Vermont as those used in Massachusetts, see Lacouture/Ruesterholz Decl. ¶ 123, where the Commission found that Verizon satisfies the checklist, see Massachusetts Order ¶¶ 60, 130, 133, 136, 142, 149. And, as with Verizon's processes for stand-alone POTS loops and hot cuts, Verizon's DSL processes have earned the prestigious ISO 9000 certification. See Lacouture/Ruesterholz Decl. ¶ 125.

Verizon reports its performance in providing access to DSL-capable loops in Vermont using measurements that are identical to those used in Massachusetts. See Guerard/Canny/Abesamis Decl. ¶¶ 13-14. While volumes in Vermont are too low to provide meaningful results, its reported results under these measurements nonetheless show that Verizon's performance has been and continues to be excellent. And the same is true in Massachusetts, where volumes are significantly higher.

Pre-ordering. Verizon provides CLECs with the same ways of obtaining access to loop qualification and make-up information as in Massachusetts, see McLean/Wierzbicki Decl. ¶ 39 & Att. 2, where the Commission found that Verizon provides "nondiscriminatory access to OSS pre-ordering functions associated with determining whether a loop is capable of supporting xDSL advanced technologies," Massachusetts Order ¶ 60.

Moreover, since the time of the Massachusetts application, Verizon has implemented several new pre-ordering capabilities for CLECs.²⁸ In October 2001, Verizon implemented a new pre-ordering transaction for manual loop qualifications, which enables CLECs to request a manual loop qualification through their existing pre-ordering interface rather than by submitting a Local Service Request (“LSR”) (which they may still do, if they choose). See McLean/Wierzbicki Decl. ¶ 40; see also Massachusetts Order ¶ 58 (noting that “Verizon has begun implementing access to manual loop qualification as a pre-order function,” “with complete implementation expected in October 2001”). Since Verizon implemented this new capability, CLECs have used it for fewer than 140 transactions across the entire former Bell Atlantic footprint (only one of which was for Vermont). See McLean/Wierzbicki Decl. ¶ 40.

In addition, Verizon has implemented a long-term arrangement for CLECs to obtain electronic access to the limited loop make-up information available in its Loop Facility Assignment and Control System (“LFACS”). See id. ¶ 41; see also Pennsylvania Order ¶ 45 (noting that Verizon was “on track to provide access to loop qualification information through the permanent fix described in its Massachusetts application by October 2001”). This new capability enables CLECs to use any of the three pre-ordering interfaces (EDI, CORBA, Web GUI) to access LFACS, and to submit requests using either the telephone number or the service address of the line for which they seek loop make-up information. See McLean/Wierzbicki Decl. ¶ 41. In November and December, there were approximately 560 transactions using this new capability across the former Bell Atlantic footprint, none of which were for Vermont. See id. ¶ 42.

²⁸ Verizon implemented these new capabilities in conformance with the Change Management process. See McLean/Wierzbicki Decl. ¶¶ 40-41.

Verizon not only provides access to the required loop make-up information, but does so on a timely basis. For example, from September through November 2001, Verizon consistently met or bettered the relevant standards for responding to mechanized and manual loop qualification requests in Vermont. See id. ¶¶ 44-46; see also Massachusetts Order ¶¶ 133-134 (relying on comparable performance). And Verizon has responded to requests for the information from LFACS in a timely manner, although there have been no such requests in Vermont. See McLean/Wierzbicki Decl. ¶ 42.

Ordering. Verizon is providing competing carriers in Vermont with access to ordering systems in a timely manner. Specifically, CLECs in Vermont have a choice of submitting unbundled DSL loop orders using the same two interfaces that Verizon makes available in Massachusetts: the Web GUI and EDI interfaces. See id. Att. 2. And Verizon's performance has been and continues to be excellent for all ordering categories that include unbundled DSL-loop orders. See id. Att. 2, Ex. D; see also Massachusetts Order ¶ 135 & n.424 (relying on comparable performance).

Provisioning. Verizon also installs DSL loops on time, as demonstrated by the same New York and Massachusetts measurements that have been adopted in Vermont.

For example, Verizon consistently is meeting its installation appointments for CLEC DSL loops. In Vermont, from September through November 2001, Verizon met all of its installation appointments for CLECs. See Lacouture/Ruesterholz Decl. ¶ 128. In Massachusetts, where volumes were higher, Verizon met more than 99 percent of its installation appointments for CLECs' DSL loops. See id. ¶ 129. These results are even better than what the Commission

has found acceptable in the past. See, e.g., Massachusetts Order ¶ 137 & n.429 (finding 6.4-percent missed appointment rate for CLECs acceptable).²⁹

Installation Quality. Verizon provides unbundled DSL-capable loops to competing carriers that are equal in quality to those provided to Verizon's retail services.

The measurement that the Commission previously has used to evaluate installation quality is the subset of total trouble reports that are reported within 30 days of installation (so-called "I-codes"). As Verizon has explained in previous applications, Verizon and the CLECs reached a consensus to change the business rules for this measurement in two ways: the retail comparison group will be POTS orders that require a dispatch; and trouble reports for all CLECs will be counted, not just the trouble reports of CLECs that participate in cooperative acceptance testing with Verizon. See Massachusetts Order ¶ 146; Pennsylvania Order ¶ 81 & nn.282 & 284. The New York PSC has recently approved this revision to the installation quality measurement, which went into effect in Vermont and Massachusetts beginning with the November performance data. See Lacouture/Ruesterholz Decl. ¶ 136. Verizon reported its performance in Vermont under these new guidelines beginning with the November reporting month, and has calculated its performance for September and October under these guidelines as well. See id. These results show that Verizon's performance is at parity. For example, from September

²⁹ Verizon's performance also is strong under two measurements that the Commission has not relied on in the past (and need not rely on here): the measurement that tracks how often Verizon meets the six-day interval for DSL loops that have been pre-qualified; and the measurement that tracks how often Verizon meets the nine-day interval for all DSL loops, including both loops that have been pre-qualified and those for which a CLEC requested a manual loop qualification. While the volumes from September through November 2001 in Vermont were too small to provide meaningful results, Verizon completed within these respective intervals more than 95 percent of CLEC orders for pre-qualified DSL loops and nearly 99 percent of CLEC orders for DSL loops as a whole. See Lacouture/Ruesterholz Decl. ¶¶ 132-133. Moreover, after correcting for a programming error in October that incorrectly scored orders missed for customer reasons as orders missed for Verizon reasons, Verizon completed 100 percent of CLEC DSL loop orders in Vermont within six days. See id. ¶ 132.

through November, CLECs in Vermont reported I-codes on 1.94 percent of their DSL loop orders requiring a dispatch, whereas the I-code rate for the retail comparison (POTS service) was 3.58 percent. See id. In Massachusetts, the I-code rate for CLECs during this same period was 8.02 percent, compared to 6.49 percent for the retail comparison group. See id. ¶ 137; see also Pennsylvania Order ¶ 81 & n.284 (finding comparable performance acceptable); Massachusetts Order ¶ 146 (finding acceptable I-code rate of 7 percent for CLECs compared to 2.3 percent for Verizon retail).

Maintenance and Repair. As described above, competing carriers experience troubles on a very small fraction of their unbundled DSL loops, and therefore generally do not need Verizon to provide them with maintenance and repair. On the small fraction of DSL loops for which Verizon does need to provide maintenance and repair, however, it does so in a nondiscriminatory manner.

First, the total trouble report rate for unbundled DSL loops confirms that Verizon provides reliable loops to CLECs. From September through November 2001, only 0.42 percent of CLECs' DSL loops in Vermont and fewer than 1 percent of CLECs' DSL loops in Massachusetts had reported troubles found in either the outside plant or the central office. See Lacouture/Ruesterholz Decl. ¶¶ 138-139; see also Pennsylvania Order ¶ 80 & n.278 (relying on comparable performance under this measurement).

Second, Verizon meets the scheduled repair appointments for CLECs. See Pennsylvania Order ¶ 80 (relying on similar performance under this measurement); Massachusetts Order ¶ 150 n.471 (noting as relevant Verizon's performance under this measurement). In Vermont, Verizon received only five trouble reports for CLEC DSL loops from September through November, and met all repair appointments. See Lacouture/Ruesterholz Decl. ¶ 140. In Massachusetts, during

that same period, Verizon met approximately 92 percent of its repair appointments for competing carriers' customers, compared to approximately 91 percent of the appointments for the retail comparison group. See id. ¶ 141.

Third, Verizon's mean time to repair competing carriers' DSL loops is shorter than the mean time to repair for the retail comparison group adopted by the Vermont PSB. For example, from September through November 2001, the mean time to repair CLEC DSL loop troubles in Vermont was 2.25 hours for troubles outside the central office (of which there were only four) and 1.60 hours for the single trouble reported within the central office, compared to 17.71 hours and 6.25 hours, respectively, for the retail comparison group. See id. ¶ 142. In Massachusetts, the mean time to repair CLEC DSL loop troubles from September through November 2001 also was comparable to the mean time to repair for the retail comparison group. See id. ¶ 143. Moreover, these results are better than what the Commission has found acceptable in the past. See, e.g., Massachusetts Order ¶ 150 (finding eight-hour disparity in mean time to repair performance acceptable).

Finally, Verizon's repeat trouble report rate is comparable for CLECs and the retail comparison group. Although volumes in Vermont are too small to provide meaningful results, in Massachusetts Verizon's performance is at parity when calculated under the consensus business rules agreed to in the New York carrier working group and recently approved by the New York PSC. See Lacouture/Ruesterholz Decl. ¶¶ 144-145.

d. Line Sharing.

Just as Verizon's performance in providing access to DSL-capable loops is excellent, so is its performance in providing access to the "high frequency portion of the loop" through so-called "line sharing." Through line sharing, a competing carrier may provide high-speed data

service over the same loop on which a customer receives basic local voice service from Verizon.³⁰

As is the case with DSL-capable loops overall, Verizon provides line sharing in Vermont using the Massachusetts processes and procedures. See Lacouture/Ruesterholz Decl. ¶ 147. As the Commission found, these processes and procedures “provide[] nondiscriminatory access to the high-frequency portion of the loop.” Massachusetts Order ¶ 165.³¹ Verizon also reports its line-sharing performance in Vermont using the same line-sharing specific measurements as in Massachusetts, see Lacouture/Ruesterholz Decl. ¶ 156, which the Commission found “adequately show that Verizon has met its line sharing obligation,” Massachusetts Order ¶ 168.

Verizon has not provisioned any line-shared loops for CLECs in Vermont, although Verizon has provisioned commercial volumes of such loops for CLECs in Massachusetts. See Lacouture/Ruesterholz Decl. ¶¶ 154-155.³² Through November 2001, Verizon has completed

³⁰ The Vermont PSB has reviewed and approved Verizon’s line-sharing terms and conditions. See Investigation into New England Telephone and Telegraph Company’s (NET’s) Tariff Filing re: Open Network Architecture, Including the Unbundling of NET’s Network, Order Allowing SGAT To Take Effect, Addressing Future Procedures, Correcting February 4, 2000 Order and Closing Investigation, Expanded Interconnection, and Intelligent Networks in re: Phase II, Module 2 — Cost Studies, Docket No. 5713 (VT PSB Aug. 23, 2000) (“August 23 Order”) (App. E, Tab 8); see Lacouture/Ruesterholz Decl. ¶ 147.

³¹ Through interconnection agreements and its SGAT, Verizon makes available in Vermont the same two types of line-sharing arrangements that it provides in Massachusetts. See Lacouture/Ruesterholz Decl. ¶ 148; Massachusetts Order ¶¶ 164 n.512, 165 n.519.

³² On September 26, 2001, the Commission granted Verizon’s request to accelerate Verizon’s right under the Bell Atlantic/GTE Merger Order to provide advanced services without using its separate data affiliate, VADI. See Application of GTE Corporation and Bell Atlantic Corporation For Consent to Transfer Control of Domestic and International Section 214 and 310 Authorizations and Applications to Transfer Control of a Submarine cable Landing License, Order, CC Docket No. 98-184, DA 01-2203 (FCC rel. Sept. 26, 2001). While Verizon is no longer obligated to provide advanced services through a separate affiliate, during the time period covered by this Application Verizon provided DSL services in Vermont exclusively through VADI. See McLean/Wierzbicki Decl. Att. 2; Lacouture/Ruesterholz Decl. ¶ 153. On January 9, 2002, the Vermont PSB approved Verizon’s request to transfer assets from VADI to the Verizon core company. See Lacouture/Ruesterholz Decl. ¶ 153. After Verizon completes the

more than 4,000 line-sharing orders for CLECs in Massachusetts. See Lacouture/Ruesterholz Decl. ¶ 155.

Pre-ordering. Verizon uses the same Massachusetts pre-ordering interfaces, systems, and processes to provide line sharing in Vermont as it uses for providing unbundled DSL-capable loops, see McLean/Wierzbicki Decl. ¶ 17 & Att. 2, which the Commission found provide CLECs with nondiscriminatory access, see Massachusetts Order ¶ 60. As in Massachusetts, Verizon's pre-ordering performance for line sharing is reported together with its performance for unbundled DSL-capable loops. See McLean/Wierzbicki Decl. Att. 2. And, as described above, Verizon's pre-ordering performance has been strong in both Vermont and Massachusetts.

Ordering. Just as with pre-ordering, Verizon uses the Massachusetts interfaces, systems, and processes for ordering in Vermont. See id. ¶ 47 & Att. 2. The Commission found that Verizon's ordering systems and processes for line sharing fully satisfy the Act. See Massachusetts Order ¶ 135.

As in Massachusetts, Verizon reports its ordering performance for line sharing under two categories of measurements. For line-sharing orders that have been pre-qualified — which now make up the majority of line-sharing orders — Verizon reports its ordering performance together with its performance for unbundled DSL-capable loops. As described above, Verizon's ordering performance for such loops has been excellent. For line-sharing orders that require a manual loop qualification, Verizon reports its ordering performance separately. As noted above, Verizon has not received any such orders in Vermont. See Lacouture/Ruesterholz Decl. ¶ 154. In Massachusetts, however, Verizon consistently returns order confirmation and reject notices for

reintegration of VADI into the core company, Verizon will provide DSL service through a separate division that uses the same interfaces as CLECs for 75 percent of its orders. See id.

line-sharing orders in a timely fashion. See McLean/Wierzbicki Decl. Att. 2; Guerard/Canny/Abesamis Decl. Att. 2.

Provisioning. Verizon installs line-sharing orders in a timely and nondiscriminatory manner, as demonstrated by its performance under several different measurements adopted in the New York Carrier-to-Carrier proceedings. As noted above, CLECs have not placed any line-sharing orders in Vermont. See Lacouture/Ruesterholz Decl. ¶ 154. Verizon has been provisioning commercial volumes of line-sharing orders in Massachusetts, however, and its performance has been strong.

First, Verizon's performance under the missed appointment measurement demonstrates that its performance in providing line sharing to CLECs is strong. In Massachusetts, Verizon met more than 99 percent of its installation appointments for CLECs' non-dispatch line-sharing orders. See id. ¶ 157. This on-time performance is both excellent in its own right and comparable to the results for Verizon's separate data affiliate. See id.

Second, Verizon reports the percentage of line-sharing orders that it completes within three business days, which is the standard provisioning interval for line-sharing orders (in both Vermont and Massachusetts). See id. ¶¶ 154, 156. From September through November 2001, Verizon provisioned line-sharing orders in Massachusetts within three business days when that interval was requested 98 percent of the time for CLECs and its own separate data affiliate. See id. ¶ 158.

Installation Quality. Verizon also provides line sharing to its CLEC customers that is equal in quality to what it provides its own advanced services affiliate. In Massachusetts, from September through November, the rate of installation troubles reported within 30 days was 2.31

percent for CLECs, which reported a total of only 20 troubles during that period. See id. ¶ 160; Massachusetts Order ¶ 171 (finding comparable performance acceptable).

Maintenance and Repair. Just as Verizon provides line-shared loops that are equal in quality to the loops that it provides to its own affiliate, when these loops do experience troubles, Verizon repairs them just as quickly for CLECs as it does for its own affiliate.

CLECs in Massachusetts have submitted an extremely small number of trouble tickets on line-sharing orders — fewer than 30 from September through November 2001. See id. ¶ 161. Although these volumes are too small to provide meaningful results, see Kansas/Oklahoma Order ¶ 36; Massachusetts Order ¶ 93 n.296, the limited performance data available demonstrate that Verizon's performance is excellent.

The first maintenance and repair measurement tracks the percentage of time that Verizon completes repairs on the date of its scheduled repair appointments. See Massachusetts Order ¶ 172 & n.547 (relying on Verizon's performance under this measurement). In Massachusetts, from September through November 2001, Verizon met all but one CLEC repair appointment on time. See Lacouture/Ruesterholz Decl. ¶ 161.

A second maintenance and repair measurement tracks the number of repeat trouble reports within 30 days of an initial repair. Here, too, the very low volumes skew the reported results. See id. ¶ 162. From September through November 2001, Verizon received repeat trouble reports for only five CLEC orders in Massachusetts. See id.

The third measurement of Verizon's maintenance and repair performance tracks the mean time to repair line-sharing orders. Although CLECs in Massachusetts submitted only a small number of trouble tickets for central office troubles, Verizon's mean time to repair during this period was at parity — 11.82 hours for Verizon's own affiliate compared to 6.94 hours for

CLECs. See id. ¶ 163; see also Massachusetts Order ¶ 172 & n.547 (finding that 16-hour mean time to repair for CLECs compared to slightly longer than 10 hours for VADI was “nondiscriminatory”).

Finally, the total trouble report rate — which measures the overall reliability of line-shared loops — demonstrates that there were no troubles found on more than 99 percent of the CLEC line-shared loops in service in Massachusetts from September through November 2001. See Lacouture/Ruesterholz Decl. ¶ 164.

Line Splitting. Verizon permits CLECs to engage in line splitting in the same manner that the Commission found met its requirements in Massachusetts. See id. ¶ 165. As the Commission explained, Verizon “offers competitors nondiscriminatory access to the individual network elements necessary to provide line-split services and . . . nothing prevents competitors from offering voice and data services over a single unbundled loop.” Massachusetts Order ¶ 175; see id. ¶ 176.

As Verizon has made clear in its formal policy statement provided to CLECs on this issue, CLECs may engage in line splitting by using Verizon’s existing systems “to order and combine in a line splitting configuration an unbundled xDSL capable [l]oop terminated to a collocated splitter and DSLAM equipment provided by a participating CLEC, unbundled switching combined with shared transport, collocator-to-collocator connections, and available cross-connects.” Verizon, Line Splitting Policy (Feb. 14, 2001), at http://128.11.40.241/east/wholesale/html/clec_01/02_14.htm. Verizon also has added line splitting to its Model Interconnection Agreement. See Lacouture/Ruesterholz Decl. ¶ 166. As noted above, the Commission previously has found that Verizon’s line-splitting policy fully complies with the Commission’s rules. See Massachusetts Order ¶¶ 176-180.

Moreover, since the Massachusetts Order, Verizon has implemented additional OSS capabilities for line splitting, including the ability for competing carriers to migrate from a UNE platform arrangement or a line-sharing arrangement to a line-splitting arrangement using a single local service request. See Lacouture/Ruesterholz Decl. ¶¶ 172-173; McLean/Wierzbicki Decl. Att. 2; Line Sharing Reconsideration Order ¶¶ 18-21.³³ Verizon began work on establishing these additional capabilities in the New York DSL collaborative, even before the Line Sharing Reconsideration Order was issued. See Lacouture/Ruesterholz Decl. ¶¶ 171-172; McLean/Wierzbicki Decl. Att. 2. Pursuant to the schedule established in the New York collaborative, Verizon began a pilot program of these new OSS capabilities in New York in June 2001, and implemented them throughout the Verizon East territory (i.e., the former Bell Atlantic footprint) — including Vermont — on October 20, 2001. See Lacouture/Ruesterholz Decl. ¶ 173.

The New York PSC has approved line-splitting measurements that Verizon began reporting in New York, Massachusetts, and Vermont beginning with the November 2001 reporting month. See id. ¶ 174. As of the end of November, Verizon had received only about 30 commercial line-splitting orders from CLECs across the former Bell Atlantic footprint, and it completed all valid orders on time. See id. ¶ 173. None of these orders were for either Vermont or Massachusetts. See id.

³³ Deployment of Wireline Services Offering Advanced Telecommunications Capability, Third Report and Order on Reconsideration in CC Docket No. 98-147, Fourth Report and Order on Reconsideration in CC Docket No. 96-98, Third Further Notice of Proposed Rulemaking in CC Docket No. 98-147, Sixth Further Notice of Proposed Rulemaking in CC Docket No. 96-98, 16 FCC Rcd 2101 (2001) (“Line Sharing Reconsideration Order”).

e. **High-Capacity Loops.**

Verizon's performance also has been strong in providing competing carriers access to high-capacity loops. These loops make up only about 1 percent of all unbundled loops provided to competitors in Vermont, and, from September through November 2001, Verizon provided only three or fewer high-capacity loops per month. See id. ¶¶ 111-112. Although these volumes are too small to provide meaningful results, Verizon's performance in providing high-capacity loops to competitors in Vermont has been strong, and the same continues to be true in Massachusetts.

From September through November 2001, Verizon met 100 percent of its installation appointments for CLEC high-capacity loop orders in Vermont. See id. ¶ 113. In Massachusetts, Verizon met more than 95 percent of its installation appointments for CLEC high-capacity loops during this period, which is better than for the retail comparison group. See id. ¶ 114.

Verizon also provides high-capacity loops with a high degree of quality. The installation quality measurements for high-capacity loops report Verizon's performance on these loops together with its performance for high-capacity interoffice facilities. See id. ¶ 116. In Vermont, CLECs reported no installation troubles on high-capacity loops and interoffice transport facilities in September 2001, only one trouble in October 2001, and only two troubles in November 2001. See id.

Verizon's performance in maintaining and repairing high-capacity loops also is strong. As noted above, from September through November, Verizon received only five trouble reports relating to high-capacity loops and interoffice facilities in Vermont, which means that there was not enough maintenance and repair activity to provide meaningful results. See id. ¶ 119; Kansas/Oklahoma Order ¶ 36. In Massachusetts, where volumes were higher, from September through November the trouble report rate for high-capacity loops and interoffice facilities was,

on average, less than 2 percent both for CLECs and the retail comparison group. See Lacouture/Ruesterholz Decl. ¶ 118. Moreover, the mean time to repair CLEC high-capacity loops and other wholesale special services in Massachusetts was shorter than the mean time to repair for the retail comparison group. See id. ¶ 120. Finally, from September through November, Verizon did not have any repeat trouble reports in Vermont, and in Massachusetts the repeat trouble report rate was better for CLECs (10.00 percent) than for the retail comparison group (17.74 percent). See id. ¶¶ 121-122.

f. Subloops.

With one minor exception, Verizon provides access to subloops in Vermont in the same way as it does in Massachusetts, see id. ¶ 175, where the Commission found that “Verizon provides nondiscriminatory access to subloops consistent with the requirements of section 271 and the UNE Remand Order,” Massachusetts Order ¶ 154.³⁴ The subloop elements that Verizon provides include access to house-and-riser cable, and to remote terminals either through collocation (where space is available) or by establishing a connection between Verizon’s remote terminal and a CLEC’s adjacent facilities. See Lacouture/Ruesterholz Decl. ¶¶ 176-177.³⁵ As in Massachusetts, “Verizon allows requesting carrier[s] to obtain access to subloop facilities regardless of the transmission medium,” and to “gain access to subloops at technically feasible

³⁴ Verizon provides access to subloops both through interconnection agreements and through its SGAT. See Lacouture/Ruesterholz Decl. ¶ 175.

³⁵ Verizon will provide CLECs in Vermont and throughout the former Bell Atlantic footprint information about the location of remote terminals through its Central Office Remote Terminal (“CORT”) Inquiry Service. See Lacouture/Ruesterholz Decl. ¶ 181. Verizon has agreed to provide information regarding the availability of this service by no later than March 1, 2002, and to amend the form that CLECs must use to request a CORT inquiry to include specific provisions for marking a CORT inquiry request. See id. ¶ 182; Vermont PSB Approval Letter at 4. In addition, Verizon has agreed to limit the charges for a CORT inquiry to the fee Verizon charges in Pennsylvania, until such time as the Vermont PSB approves charges for this new service. See Lacouture/Ruesterholz Decl. ¶ 182; Vermont PSB Approval Letter at 4.

points of interconnection other than the FDI [feeder distribution interface].” Massachusetts Order ¶ 155; see Lacouture/Ruesterholz Decl. ¶¶ 176-177. The one minor difference between Verizon’s unbundled subloop offering in Massachusetts and Vermont is that, in Massachusetts, the DTE has determined that CLECs who have collocated equipment in a remote terminal equipment enclosure serving the Feeder Distribution Interface do not need to establish an outside interconnection cabinet to house a cross connect panel between Verizon’s network and the CLEC’s equipment. See Lacouture/Ruesterholz Decl. ¶ 179.

g. Network Interface Devices.

Verizon provides CLECs with access to Network Interface Devices (“NIDs”), either as part of an unbundled loop or on a stand-alone basis to CLECs that deploy their own loop facilities. See id. ¶ 183; UNE Remand Order ¶¶ 233-235. Verizon provides access to NIDs in Vermont in the same manner as in Massachusetts, see Lacouture/Ruesterholz Decl. ¶ 183, where the Commission found that Verizon satisfies the checklist, see Massachusetts Order ¶ 124. Verizon permits competing carriers that deploy their own loop facilities to connect their loops directly to Verizon’s NIDs, or to connect indirectly through their own adjacent NIDs. See Lacouture/Ruesterholz Decl. ¶ 183. No CLEC has requested access to Verizon’s NIDs on a stand-alone basis in Vermont. See id. ¶ 184.

2. Unbundled Switching.

Verizon provides unbundled local and tandem switching using the same processes and procedures as in Massachusetts, see id. ¶ 185, which the Commission found satisfy the checklist, see Massachusetts Order ¶ 222.³⁶

³⁶ Verizon makes unbundled switching available pursuant to legally binding interconnection agreements and its SGAT. See Lacouture/Ruesterholz Decl. ¶ 185. Unbundled local switching is available as a line side or a trunk side port (shared and dedicated) and includes the vertical features available to Verizon’s retail customers on a line-by-line basis. See id. In

Through November 2001, Verizon has provided approximately 790 unbundled local switching elements in Vermont as part of network element platforms. See Lacouture/Ruesterholz Decl. ¶ 186. Verizon also has provided unbundled tandem switching in connection with each of these platform orders. See id. Moreover, Verizon consistently provides unbundled switching on time. While the volumes in Vermont from September through November are too small to provide meaningful results, see Kansas/Oklahoma Order ¶ 36, Verizon provided 100 percent of local switching elements in Vermont on time during that period, see Lacouture/Ruesterholz Decl. ¶ 196. In Massachusetts, Verizon provided more than 99.5 percent of local switching elements from September through November by the due date. See id. ¶ 197. Moreover, during that same period, the platforms that Verizon installed for CLECs in Vermont and Massachusetts experienced fewer installation-related troubles than the retail comparison group. See id. ¶¶ 199-200.

As in Massachusetts, Verizon also provides customized routing (using line-class codes) so that CLECs can route directory-assistance and operator-services traffic to their own platforms, to a third-party platform, or to Verizon's platform. See id. ¶ 187. As in Massachusetts, Verizon offers a standardized local switching configuration that gives CLECs the same local call routing as Verizon itself, but with the option of branding their directory-assistance and operator-services traffic as they choose. See id. ¶ 188. Finally, as in Massachusetts, Verizon is capturing and providing usage data to CLECs that enable them to bill for exchange access. See id. ¶¶ 191-193.

3. Unbundled Local Transport (Including Interoffice Facilities).

Verizon provides unbundled dedicated and shared transport using the same processes and procedures that it uses in Massachusetts. See id. ¶ 209. The Commission found that, in

addition, Verizon provides CLECs with access to other features resident in its switches that Verizon does not offer its retail customers. See id.

Massachusetts, Verizon “provides both shared and dedicated transport in compliance with the requirements” of the Act. Massachusetts Order ¶ 208.³⁷ The same conclusion therefore applies here.

Through November 2001, Verizon has provided shared transport on each of the approximately 790 platforms it has provided. See Lacouture/Ruesterholz Decl. ¶ 219. Moreover, because shared transport is provided as part of network element platforms, it has been delivered at the same time as the accompanying loops and unbundled switching. As discussed above, Verizon provides platforms on time 100 percent of the time in Vermont and 99.5 percent of the time in Massachusetts, and the same is true of unbundled shared transport. See id. ¶¶ 196-197.

Verizon also has provided dedicated local transport facilities to competing carriers in Vermont; however, the volume of such orders has been very small. See id. ¶ 211. From September through November 2001, Verizon received a total of only six orders for unbundled dedicated transport, see id. ¶ 212, which is too few to provide meaningful results, see Kansas/Oklahoma Order ¶ 36; Massachusetts Order ¶ 93 n.296. In Massachusetts, where volumes have been significantly greater, Verizon met more than 96 percent of its installation appointments for CLECs’ unbundled dedicated transport orders from September through November 2001. See Lacouture/Ruesterholz Decl. ¶ 213.

4. Dark Fiber.

Verizon provides “dark fiber” — that is, fiber that has not been activated through the connection of the electronics used to carry communications services — in Vermont. See id.

³⁷ Verizon provides shared and dedicated transport under interconnection agreements and its SGAT. See Lacouture/Ruesterholz Decl. ¶ 209. This includes shared transport between Verizon’s end office switches, between end office and tandem switches, and between tandem switches. See id. ¶ 210.