

trunks, CLECs are exchanging an average of more than two billion minutes of traffic per month with Verizon. See id. ¶ 11.

Verizon provides interconnection trunks on time, even in the face of strong commercial demand. From February through April, Verizon met the various intervals for providing interconnection trunks to CLECs approximately 99 percent of the time. See id. ¶ 21. Moreover, it has provided interconnection trunks in intervals that are comparable to the intervals it has provided Feature Group D trunks for its own interexchange carrier customers. See id. ¶ 22; see also Massachusetts Order ¶ 187 (relying on comparable interconnection trunk performance); New York Order ¶¶ 70, 72 (same).

Verizon also has undertaken extraordinary efforts to accommodate the demand for interconnection trunks. For example, Verizon added 137,000 trunk terminations in 2000, and an additional 33,000 terminations in the first quarter of this year. See Lacouture/Ruesterholz Decl. ¶ 13. Verizon also has adopted the same trunk forecasting process that it uses in New York and Massachusetts. See id. ¶ 19.

Finally, Verizon provides trunks to competing carriers that are of equal or better quality than those it provides to itself. For example, from February through April, 4 percent of both the dedicated final trunk groups provided to CLECs as well as Verizon's own common final trunk groups exceeded their engineering blocking design. See id. ¶ 29. In addition, the ratio of "trunks required" to "trunks in service" is even better for competing carriers (currently 51 percent) than it is for Verizon's own common final trunk groups (currently 63 percent). See id. ¶ 28.

2. Collocation.

Verizon provides competitors in Pennsylvania with the same forms of collocation as it provides in Massachusetts and New York, using the same processes and procedures as it uses in those states. See id. ¶ 35. In both of those cases, the Commission has 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.” Massachusetts Order ¶ 194; see New York Order ¶ 73.²¹

Through April of this year, Verizon has placed in service approximately 2,000 collocation arrangements in central offices located throughout Pennsylvania. See Lacouture/Ruesterholz Decl. ¶ 43. Competitors are now collocated in central offices that serve 90 percent of Verizon’s access lines in Pennsylvania — 94 percent of its business lines and 88 percent of its residential lines. See id.

As in New York and Massachusetts, Verizon provides every form of collocation that is required by the Commission’s rules. See id. ¶ 35.²² *First*, in addition to standard physical arrangements, Verizon provides mini, shared, and “cageless” forms of collocation in accordance with the Commission’s rules. See Lacouture/Ruesterholz Decl. ¶ 62; Collocation Order ¶¶ 41-42. Indeed, “cageless” collocation arrangements, which have more than doubled this year, represent more than 40 percent of the collocation arrangements in Verizon’s central offices. See Lacouture/Ruesterholz Decl. ¶ 44; Br. Att. A, Exh. 2. *Second*, Verizon permits CLECs the option of establishing controlled-environment vaults or similar structures adjacent to Verizon

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, 15 FCC Rcd 17806 (2000) (“Collocation Reconsideration Order”).

²² Verizon also has recently amended its collocation rates to charge CLECs for power based on the quantity of load amps they request rather than the quantity of fused amps. See Lacouture/Ruesterholz Decl. ¶ 81. CLECs in Pennsylvania also may determine for themselves the quantity of load amps they desire for each feed. See id. ¶ 82. These are the same practices as in Massachusetts, where the Commission found that Verizon’s collocation power charges were “just, reasonable, and nondiscriminatory.” Massachusetts Order ¶ 199.

central offices in which physical collocation space is unavailable. See Lacouture/Ruesterholz Decl. ¶ 63; Collocation Order ¶ 44; Collocation Reconsideration Order ¶¶ 45-47. *Third*, Verizon provides virtual collocation, and has provided more than 350 such arrangements. See Lacouture/Ruesterholz Decl. ¶¶ 35, 36, 38, 44. *Finally*, Verizon provides collocation at remote terminals in the same manner as the Commission found compliant in Massachusetts. See id. ¶¶ 35, 69.²³

Verizon is providing collocation in a timely manner despite the fact that requests for collocation have grown enormously. For example, from February through April 2001, Verizon met the standard or agreed-upon interval 100 percent of the time for physical collocation arrangements provided to CLECs. See Lacouture/Ruesterholz Decl. ¶ 46.²⁴ And in the event volumes grow further, KPMG confirmed that Verizon “has processes in place to forecast workload to ensure resources are available.” See KPMG Consulting, Verizon Pennsylvania, Inc. OSS Evaluation Project Final Report 148 (PPR7) (Dec. 22, 2000) (“KPMG Final Report”) (App. B, Tab F-2); Lacouture/Ruesterholz Decl. ¶ 36.

²³ See Massachusetts Order ¶ 196 (finding Verizon in compliance with requirements from the UNE Remand Order); Implementation of the Local Competition Provisions of the Telecommunications Act of 1996, Third Report and Order and Fourth Further Notice of Proposed Rulemaking, 15 FCC Rcd 3696 (1999) (“UNE Remand Order”).

²⁴ During the period covered by this application, there was a PUC-established interval for traditional cage arrangements of 90 calendar days, intervals for cageless arrangements of between 76 and 105 business days (90 calendar days for SCOPE), and intervals for virtual arrangements of 60 business days. See Lacouture/Ruesterholz Decl. ¶ 45. On May 24, 2001, the PUC adopted new calendar-day intervals. See id. ¶ 57; Pennsylvania PUC v. Verizon Pennsylvania Inc., Docket Nos. R-00994697 & R-00994697C0001 (Pa. PUC May 24, 2001) (“PUC Collocation Order”) (App. Z, Tab 2). The new intervals, which are shorter than those the Commission previously found satisfy the checklist, have not yet taken effect. See New York Order ¶¶ 73-75 (finding that 76 business day (106 calendar day) interval for physical and virtual collocation satisfied the checklist); Massachusetts Order ¶¶ 194-195; Lacouture/Ruesterholz Decl. ¶ 57. The PUC also has deferred to an industry collaborative to propose an interval for cable-only augments to existing collocation arrangements. See Lacouture/Ruesterholz Decl. ¶ 58.

Finally, as in New York and Massachusetts, Verizon has taken the same extraordinary steps to make collocation space available in its central offices. Verizon allows CLECs to tour the central offices within 10 days in those rare instances where it cannot accommodate a request for physical collocation, and files space exhaustion notifications as required by the Pennsylvania PUC upon determining that space is not available. See Lacouture/Ruesterholz Decl. ¶¶ 52-53.²⁵

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

Verizon provides competing carriers in Pennsylvania with large commercial volumes of unbundled network elements, including unbundled local loops, local switching, and local transport. Moreover, it does so using substantially the same processes and procedures that it uses in Massachusetts and New York, where the Commission found that Verizon satisfies the requirements of the Act. See Massachusetts Order ¶¶ 124, 208, 222; New York Order ¶¶ 82, 231, 273, 338, 346. Through April 2001, Verizon has provided approximately 387,000 unbundled loops, including more than 220,000 that were provided as part of an unbundled element platform that also included switching and transport. See Lacouture/Ruesterholz Decl. ¶ 102. 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 Pennsylvania the same types of unbundled loops it makes available in New York and Massachusetts, and provides them using substantially the same processes and procedures as it uses in those states. See id. ¶¶ 99-100; see

²⁵ As described in the Lacouture/Ruesterholz declaration, Verizon also has taken steps to address the few issues regarding its collocation practices that were identified in the audit that Arthur Anderson recently conducted in connection with the Bell Atlantic/GTE merger conditions. See Lacouture/Ruesterholz Decl. ¶¶ 86-96. However, the Commission has made clear that this is not the appropriate proceeding in which to address those issues. See Kansas/Oklahoma Order ¶ 229 n.676.

also Massachusetts Order ¶ 124 (finding that Verizon's provision of unbundled loops satisfies the Act); New York Order ¶¶ 273, 275 (same).²⁶ Through April 2001, Verizon has provided competing carriers in Pennsylvania with approximately 387,000 loops. See Lacouture/Ruesterholz Decl. ¶ 102. Moreover, even in the face of large and rapidly increasing demand for unbundled loops, Verizon's performance in Pennsylvania has been strong across the board.²⁷

a. Stand-Alone Voice-Grade Loops.

Through April 2001, Verizon has provided competing carriers in Pennsylvania with more than 365,000 unbundled voice-grade loops. Approximately 145,000 of these loops were provided on a stand-alone basis, and approximately 220,000 additional loops were provided as part of network element platforms. See Lacouture/Ruesterholz Decl. ¶¶ 106, 308. The demand for platforms in particular continues to grow at a rapid rate, as competitors added approximately 84,000 platforms from February through April of this year alone, an average of 28,000 new platforms each month. See id. ¶ 308. And Verizon's processes for providing stand-alone voice-grade loops have even earned the prestigious ISO 9000 certification from the International

²⁶ Verizon provides unbundled loops pursuant to interconnection agreements and its generally available tariff. See Lacouture/Ruesterholz Decl. ¶¶ 100, 139, 157. 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. ¶ 100.

²⁷ The Commission has correctly concluded that its "analysis of this checklist item cannot 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." See New York Order ¶ 278; see also AT&T Corp. v. FCC, 220 F.3d at 624 (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). As explained in text below, however, Verizon's loop performance in Pennsylvania is excellent both for loops overall and for the various subsets of loops.

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. ¶ 107.

As demand has increased, Verizon has continued to provide stand-alone voice-grade loops on time, when competitors ask for them. For example, from February through April, Verizon completed 99 percent of platform orders, and 96 percent of stand-alone voice-grade loop orders, on time. See id. ¶¶ 108, 308; see also Massachusetts Order ¶ 162 (finding 93 percent performance under missed appointment measurement for POTS loops acceptable). And during this same period, the average completion interval for CLEC platform orders was shorter than the interval for Verizon's retail customers, and the average completion interval for CLEC stand-alone loop orders was at parity. See Lacouture/Ruesterholz Decl. ¶¶ 109-110, 261.

Verizon also provides stand-alone voice-grade loops to competitors with a high degree of quality. Although the reported results on stand-alone voice-grade loops reflect a small difference when compared to retail, this merely reflects the fact that the retail analogue includes simple orders (such as number and feature changes) that do *not* require a dispatch, whereas virtually all of the stand-alone voice-grade loops provisioned to CLECs *do* require a dispatch. See id. ¶¶ 115-116. A more apples-to-apples comparison is the revised measurement adopted in New York and that all parties agree should be adopted in Pennsylvania. See id. ¶ 117. That measurement compares Verizon's retail performance to Verizon's wholesale performance on both stand-alone voice-grade loops and loops provided as part of platforms. See id. Applying that approach here shows that Verizon's performance is at parity: from February through April, CLECs reported installation troubles within 30 days on only 1.74 percent of stand-alone voice-grade loops and platforms compared to 1.72 percent for Verizon's retail services. See id. ¶ 115.

Verizon's performance in maintaining and repairing stand-alone voice-grade loops also is strong. In fact, from February through April, fewer than *1 percent* of CLEC voice-grade loops had any reported troubles at all. See id. ¶ 119. 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 Pennsylvania is comparable to or better than Verizon's reported performance for its own retail operations. See id. ¶¶ 119-121. And for the single measurement that shows a difference in reported results — the repeat trouble report rate — Verizon's performance for CLECs also is in parity when CLECs' own practices are taken into account. See id. ¶¶ 122-128.

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 Pennsylvania as it uses in Massachusetts and New York, see id. ¶ 129, and its performance in Pennsylvania has been and continues to be excellent. And as with Verizon's processes for stand-alone POTS loops, its hot-cut processes have even earned the prestigious ISO 9000 certification. See id. ¶ 130.

From February through April 2001, Verizon completed nearly 97 percent of CLECs' hot-cut orders on time, and completed them within the standard intervals. See id. ¶ 134-137; Massachusetts Order ¶ 160 (finding 96 percent performance acceptable); New York Order ¶¶ 291-296 (finding 91 to 94 percent performance acceptable), aff'd, AT&T Corp., 220 F.3d at 625-28 (upholding Commission's decision). Moreover, KPMG has confirmed that Verizon

satisfied all the evaluation criteria with respect to the hot-cut process. See Lacouture/Ruesterholz Decl. ¶ 129; KPMG Final Report at 400-03.

Verizon also continues to provide hot cuts at a very high level of quality. Although the measurements established by the PUC do not separately report installation quality for hot cuts, Verizon's performance calculated under the measurements adopted by the New York commission is excellent. From February through April, CLECs reported troubles within seven days of installation on less than 0.33 percent of their hot cuts, which is substantially better than even the New York benchmark of 2 percent. See Lacouture/Ruesterholz Decl. ¶ 138.

c. DSL-Capable Loops.

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

Through April 2001, Verizon has provided more than 15,000 DSL-capable loops to competing carriers in Pennsylvania. See id. ¶ 161. Verizon uses substantially the same processes and procedures to provide competing carriers access to DSL loops in Pennsylvania as those used in Massachusetts, see id. ¶ 158, where the Commission found that Verizon satisfies the checklist, see Massachusetts Order ¶¶ 60, 130, 133, 136, 142, 149.

Verizon reports its performance in providing access to DSL-capable loops in Pennsylvania using measurements that track those used in New York and Massachusetts. See Guerard/Canny/DeVito Decl. ¶ 19. The reported results under these measurements show that Verizon's performance has been and continues to be excellent.

Pre-ordering. Verizon provides CLECs with the same four ways of obtaining access to loop qualification and make-up information as in Massachusetts, 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; see McLean/Wierzbicki/Webster Decl. ¶ 43; Lacouture/Ruesterholz Decl. ¶ 162.

First, a CLEC may obtain access to the same electronic loop-qualification database that is available to Verizon's separate data affiliate to qualify an end user customer's line for DSL service. See McLean/Wierzbicki/Webster Decl. ¶ 44; Massachusetts Order ¶ 56.²⁸ This database contains loop qualification information for more than 95 percent of the central offices in Pennsylvania with collocation arrangements in place. See McLean/Wierzbicki/Webster ¶ 45. And CLECs in Pennsylvania are now using Verizon's database to pre-qualify the majority of their DSL-loop orders. See id. ¶ 48.²⁹ *Second*, Verizon will perform a manual loop qualification for a CLEC upon request. This gives the CLEC the same type of information about a loop that it would get from the loop-qualification database, and Verizon also will perform a mechanized line test to verify the loop length. See McLean/Wierzbicki/Webster ¶ 50; Massachusetts Order ¶ 58. *Third*, if a CLEC wants even more information about a loop, Verizon will perform an engineering query on request, even though Verizon has not performed such requests for its own DSL operations. See McLean/Wierzbicki/Webster Decl. ¶ 55; Massachusetts Order ¶ 59. This enables CLECs to get access to information contained in Verizon's back-office systems and paper records. See McLean/Wierzbicki/Webster Decl. ¶ 55. *Finally*, Verizon provides CLECs with electronic access to the limited loop make-up information currently in Verizon's Loop

²⁸ Verizon has made the same enhancements to its loop qualification database in Pennsylvania as it made to its database in Massachusetts, which the Commission found satisfied the Act and the UNE Remand Order. See McLean/Wierzbicki/Webster Decl. ¶ 47; Massachusetts Order ¶¶ 60, 67-69; UNE Remand Order ¶ 426.

²⁹ Verizon also makes available an alternative for mechanized loop qualification whereby CLECs may download from a computer server the working telephone numbers of loops that have been listed in the loop qualification database as qualified for DSL along with loop-length information. See McLean/Wierzbicki/Webster Decl. ¶ 49. This alternative allows CLECs to perform bulk loop qualifications. See id.

Facility Assignment Control System (“LFACS”). See id. ¶ 56; Massachusetts Order ¶¶ 55, 61 (“Verizon’s offering for LFACS loop make-up information complies with the checklist.”).³⁰ To date, however, Verizon has received only 16 requests for this information across all 14 of the former Bell Atlantic states. See McLean/Wierzbicki/Webster Decl. ¶ 59.

Verizon not only provides access to the required loop information, but also does so on a timely basis. For example, from February through April 2001, Verizon consistently met or bettered the relevant standards for responding to mechanized and manual loop qualification requests in Pennsylvania. See id. ¶¶ 61-62; see also Massachusetts Order ¶¶ 133-134 (relying on comparable performance under similar measurements). And Verizon generally responds to the few requests for information from LFACS within two hours. See McLean/Wierzbicki/Webster Decl. ¶ 59.

Ordering. Verizon is providing CLECs in Pennsylvania with access to ordering systems in a timely manner. Specifically, CLECs in Pennsylvania 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 interface. See Lacouture/Ruesterholz Decl. ¶ 164. And Verizon’s performance has been and continues to be excellent for all ordering categories that include unbundled DSL-loop orders. For example, from February through April 2001, Verizon returned 99 percent of all order confirmation and order rejection notices on time. See id. ¶ 167; see also

³⁰ As in Massachusetts, Verizon enables CLECs to request the limited-loop information in LFACS electronically using any of Verizon’s existing pre-ordering interfaces, and Verizon is in the process of developing a longer-term arrangement to replace the current mechanism for obtaining access to the information in LFACS. See McLean/Wierzbicki/Webster Decl. ¶ 60; see also Massachusetts Order ¶ 62 (Verizon’s current process for accessing LFACS “provid[es] competing carriers with an adequate process for obtaining LFACS loop information quickly and electronically”); id. (Verizon’s proposal to develop a long-term capability for accessing LFACS is “detailed, well-developed, and subject to a prioritized time frame,” and “Verizon has initiated concrete and irreversible steps to implement these changes through its formal change

Massachusetts Order ¶ 135 & n.424 (relying on comparable performance under these same measurements).

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

First, Verizon consistently is meeting its installation appointments for CLEC DSL loops. For example, from February through April 2001, Verizon met more than 97 percent of its installation appointments for CLECs in Pennsylvania. See Lacouture/Ruesterholz Decl. ¶ 169. These results are even better than what the Commission has found acceptable in the past. See, e.g., Massachusetts Order ¶ 137 & n.429 (finding 93.6 percent missed appointment rate for CLECs acceptable). Moreover, KPMG has confirmed that Verizon provides DSL loops when CLECs want them, concluding that, during the period it examined, “Verizon PA provisioned 100% of the circuits where facilities were available, on the agreed-upon due date.” KPMG Final Report at 415 (TVV-4-3); see Lacouture/Ruesterholz Decl. ¶ 170.

Second, Verizon’s performance under the average completion interval measurement also shows that Verizon is installing loops on time. From February through April, Verizon installed CLEC DSL loop orders where a dispatch was required in an average of 5.71 days. See Lacouture/Ruesterholz Decl. ¶ 171. This is even better than the standard six-day interval, see id., and better than what the Commission previously has found acceptable, see Massachusetts Order ¶ 139 & n.434 (finding acceptable average completion interval for CLECs that was “one and one-half days longer than the standard six-day interval”).

Finally, while the Commission has not relied on these two additional measurements, Verizon’s performance is strong under the measurements that track how often Verizon meets the management process”).

six-day interval for DSL loops that have been pre-qualified and the nine-day interval for DSL loops where a CLEC requested a manual loop qualification. For example, from February through April, Verizon completed within these respective intervals approximately 97 percent of CLEC orders for pre-qualified DSL loops and more than 99 percent of CLEC orders for DSL loops that required a manual loop qualification. See Lacouture/Ruesterholz Decl. ¶¶ 173-174.

Installation Quality. Verizon provides unbundled DSL-capable loops to competing carriers that are equal in quality 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"). Because virtually all unbundled DSL loop orders require a dispatch, the CLECs in the New York Carrier Working Group recently agreed that the retail analogue for this measurement should include only dispatched retail POTS services, instead of a combination of dispatched and non-dispatched retail POTS services. Verizon's performance under this agreed-upon measurement shows that it is providing better services to CLECs than to itself. See id. ¶ 181; see also Massachusetts Order ¶ 146 (relying on adjusted performance data for this measurement demonstrating parity).³¹ From February through April, CLECs had I-codes on 5.94 percent of their DSL loop orders, whereas Verizon's retail POTS customers had I-codes on 6.20 percent of their dispatch orders. See Lacouture/Ruesterholz Decl. ¶ 181. Or, to put it another

³¹ In March 2001, the Carrier Working Group in New York agreed to change this measurement in two ways. *First*, it agreed that I-codes from all carriers would be included in the measure. See Lacouture/Ruesterholz Decl. ¶ 180; Guerard/Canny/DeVito Decl. ¶ 89; see also Massachusetts Order ¶ 144 n.450 (finding this modification provides more accurate results). *Second*, the group changed the retail analogue to retail POTS orders requiring a dispatch (rather than all POTS orders as before). The group agreed to this change since nearly all DSL loop orders require a dispatch and, therefore, should be compared to POTS orders that also require a dispatch. See Lacouture/Ruesterholz Decl. ¶ 180.

way, CLECs experienced no problems within the first 30 days on more than 94 percent of their unbundled DSL loops.

Moreover, the fact that these measurements show that CLECs are receiving better performance than Verizon itself is all the more remarkable given that the reported results for I-codes are affected by CLECs' own behavior and do not accurately measure Verizon's performance. See Massachusetts Order ¶ 146 (relying on adjustments to Verizon's performance data that account for CLEC behavior); Lacouture/Ruesterholz Decl. ¶ 179. As Verizon has explained at length previously, this measurement is affected by the accuracy of the acceptance testing that CLECs perform themselves. See Lacouture/Ruesterholz Decl. ¶ 179; see also Massachusetts Order ¶ 145 (noting that "adjustments to [Verizon's performance] data are justified" where "the type of trouble reported: (1) could not occur post-acceptance, but rather must have existed at acceptance; and (2) would consistently be detected by the joint testing methods employed"). Verizon has devoted significant effort to help CLECs improve their acceptance testing. See Lacouture/Ruesterholz Decl. ¶¶ 183-188; see also Massachusetts Order ¶ 148 (noting that "Verizon's remedial efforts to improve the . . . acceptance testing process . . . are likely to reduce competitive LEC installation quality impairments in the future"). But the fact that competing carriers' own behavior can continue to affect this measurement merely highlights the fact that Verizon is providing them with superior performance.³²

³² As Verizon has previously explained, several CLECs have admitted submitting I-codes for loops they knew were not suitable for the service they sought to provide, or due to the fact that they employed inexperienced technicians. See Supplemental Filing of Verizon New England at 21-22, Application by Verizon New England Inc., et al. for Authorization To Provide In-Region, InterLATA Services in Massachusetts, CC Docket No. 01-9 (FCC filed Jan. 16, 2001). These practices have more recently been confirmed by a score of former employees of one major CLEC in sworn affidavits that accompany this application. See App. B, Tab BB-8; see also App. B, Tab BB-7.

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 substantially the same time and manner as it does for retail lines.

First, Verizon meets the scheduled repair appointments for CLECs more often than it does for itself. See Lacouture/Ruesterholz Decl. ¶ 190; see also Massachusetts Order ¶ 150 n.471 (noting as relevant Verizon's performance under this measurement). From February through April 2001, Verizon met approximately 90 percent of its repair appointments for competing carriers' customers in Pennsylvania, compared to 83 percent of the appointments for its own retail customers. See Lacouture/Ruesterholz Decl. ¶ 190.

Second, Verizon's mean time to repair competing carriers' DSL loops is slightly shorter than the mean time to repair the loops of Verizon's own retail customers. For example, from February through April, the mean time to repair CLEC DSL loop troubles was 24.90 hours for troubles outside the central office and 9.92 hours for troubles within the central office, compared to 26.54 hours and 16.16 hours, respectively, under the retail analogues established by the PUC. See id. ¶ 191. These results are considerably 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).

Third, Verizon's repeat trouble report rate also is considerably lower for CLECs than for Verizon's own retail customers. For example, from February through April, the repeat trouble rate for CLECs was 19.53 percent compared to 37.79 percent for Verizon's retail customers. See Lacouture/Ruesterholz Decl. ¶ 192.

Finally, the total trouble report rate for unbundled DSL loops confirms that Verizon provides reliable loops to CLECs. From February through April, fewer than one percent of CLECs' DSL loops in Pennsylvania had reported troubles found in either the outside plant or the central office. See id. ¶ 189.

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.

As is the case with DSL-capable loops overall, Verizon provides line sharing in Pennsylvania using substantially the same processes and procedures as it uses in Massachusetts and New York. See id. ¶ 200. As the Commission found in those states, these processes and procedures "provide[] nondiscriminatory access to the high-frequency portion of the loop." Massachusetts Order ¶ 165.³³

Verizon is now processing commercial line-sharing orders in Pennsylvania. Specifically, Verizon has completed more than 1,000 line-shared loops for CLECs, and approximately *** for its own data affiliate using the same interfaces and internal systems and processes as those used to process the orders of all other CLECs. See Lacouture/Ruesterholz Decl. ¶¶ 211-212; Massachusetts Order ¶ 165 n.518. Verizon reports its line-sharing

³³ As in Massachusetts, Verizon makes two types of line sharing arrangements available through interconnection agreements and its generally available tariff. See Lacouture/Ruesterholz Decl. ¶ 193. The first allows the CLEC to install, own, and maintain a splitter in its own collocation arrangement, and the second allows the CLEC to own the splitter, install the splitter itself or use an approved vendor, and to locate the splitter in central office space that is owned and maintained by Verizon. See id. ¶ 195; Massachusetts Order ¶ 164 n.512. CLECs may submit line sharing orders electronically using the Web-GUI or the application-to-application EDI interface. See Lacouture/Ruesterholz Decl. ¶ 219; Massachusetts Order ¶ 165 n.519.

performance in Pennsylvania using line-sharing specific measurements that track those in Massachusetts, which the Commission found “adequately show that Verizon has met its line sharing obligation.” Massachusetts Order ¶ 168; see Lacouture/Ruesterholz Decl. ¶ 214.³⁴

Pre-ordering and Ordering. As in Massachusetts, Verizon’s pre-ordering and ordering performance for line sharing are reported together with performance for unbundled DSL-capable loops. See Lacouture/Ruesterholz Decl. ¶¶ 215, 217. As described above, Verizon’s pre-ordering and ordering performance has been excellent. See id.

Provisioning. Verizon installs line-sharing orders in a timely and nondiscriminatory manner.

First, Verizon’s performance under the missed appointment measurement demonstrates that its performance in providing line sharing to CLECs is strong.³⁵ This measurement separately tracks Verizon’s performance on dispatch and non-dispatch orders. See Lacouture/Ruesterholz Decl. ¶ 221. From February through April 2001, Verizon met more than 96 percent of its installation appointments for CLECs’ non-dispatch line-sharing orders in Pennsylvania, which make up the overwhelming majority of such orders. See id. 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’s performance under the second line-sharing provisioning measurement — Average Interval Completed — shows that Verizon is not only installing line-sharing orders

³⁴ Prior to April 2001, the line-sharing measurements were reported in a separate report, but as of April they are reported as part of the Carrier-to-Carrier reports. See Lacouture/Ruesterholz Decl. ¶ 214; Guerard/Canny/DeVito Decl. ¶ 11 & Atts. 1-2; see also App. D.

³⁵ During the period at issue here, Verizon performed a splitter signature test in order to ensure that the splitter was working properly on the line before marking a CLECs’ line sharing order as complete. See Lacouture/Ruesterholz Decl. ¶ 204; Massachusetts Order ¶ 168 n.531.

on time, but also is installing them in a nondiscriminatory manner. See id. ¶ 222. Again, these measurements track Verizon's performance separately for non-dispatch orders — which make up virtually all line-sharing orders — and for dispatch orders. See id. From February through April, Verizon's average interval for completing non-dispatch orders was 3.86 days for CLECs and 3.19 days for Verizon's separate data affiliate. See id.; Massachusetts Order ¶ 170 & n.541 (finding comparable results acceptable).

Finally, 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 Pennsylvania. See Lacouture/Ruesterholz Decl. ¶ 223. From February through April, Verizon provisioned CLEC line-sharing orders within three business days when that interval was requested 88 percent of the time, compared to 86 percent of the time for Verizon's own separate data affiliate. See id.

Installation Quality. Verizon also provides line sharing to its CLEC customers in Pennsylvania that is equal in quality to what it provides its own advanced services affiliate. From February through April 2001, the I-code rate for both CLECs and Verizon's own separate data affiliate was less than 1 percent. See id. ¶ 225; 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 its 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.

The first measurement of Verizon's maintenance and repair performance tracks the mean time to repair line-sharing orders. See Lacouture/Ruesterholz Decl. ¶ 228. Although CLECs in Pennsylvania submitted only a small number of trouble tickets for central office troubles — the

most common kind of line-sharing troubles — the mean time to repair these troubles was nearly four times shorter than for Verizon’s separate data affiliate (4.28 hours for CLECs compared to 16.16 hours for Verizon’s separate data affiliate). See id. ¶ 228; 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”).

A second maintenance and repair measurement tracks the percentage of time that Verizon completes repairs on the date of its scheduled repair appointments. See Lacouture/Ruesterholz Decl. ¶ 226. In Pennsylvania, from February through April, Verizon met 100 percent of CLECs’ no-dispatch repair appointments, which was better than its own retail performance. See id.; Massachusetts Order ¶ 172 & n.547 (relying on Verizon’s performance under this measurement).

A third maintenance and repair measurement — the total trouble report rate — measures the overall reliability of line-shared loops. In Pennsylvania, there were no troubles found on more than 99 percent of the CLEC line-shared loops in service from February through April. See Lacouture/Ruesterholz Decl. ¶ 229.

Finally, the repeat trouble report rate — which tracks the number of repeat trouble reports within 30 days of an initial repair — was considerably lower for CLECs (8.34 percent) than for Verizon’s own advanced services affiliate (37.79 percent). See id. ¶ 227.

Line Splitting. Verizon also permits CLECs to engage in line splitting in precisely the same manner that the Commission found met its requirements in Massachusetts. See id. ¶¶ 230-231. As the Commission explained, Verizon “offers competitors nondiscriminatory access to the individual network elements necessary to provide line-split services and that nothing prevent 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 [I]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://www.bellatlantic.com/wholesale/html/clec_01/02_14.htm. Verizon also has added line splitting to its Model Interconnection Agreement. See Lacouture/Ruesterholz Decl. ¶ 235. As noted above, the Commission previously found that Verizon's line-splitting policy fully complies with the Commission's rules. See Massachusetts Order ¶¶ 176-180.

Moreover, Verizon continues to work with competing carriers to, among other things, develop a specialized ordering process to support basic line splitting, and also the migration from other arrangements such as UNE platform and line sharing to line splitting. See Lacouture/Ruesterholz Decl. ¶¶ 238-239. Participants in the collaborative proceedings have already agreed to an implementation schedule, which calls for Verizon to conduct a pilot of these new capabilities in June of this year, and to implement them by October. See id. ¶ 239; see Massachusetts Order ¶ 181. Finally, the PUC has required Verizon to participate in a line-splitting collaborative in Pennsylvania, which must be conducted in a manner consistent with the New York DSL collaborative. See Lacouture/Ruesterholz Decl. ¶ 238.³⁶

³⁶ See also Structural Separation of Bell Atlantic-Pennsylvania, Inc. Retail and Wholesale Operations, Opinion and Order at 35, Docket No. M-00001353 (Pa. PUC Apr. 11, 2001) ("Structural Separation Order") (App. B, Tab P-10).

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 0.14 percent of all unbundled loops provided to competitors in Pennsylvania, and from February to April 2001, Verizon provided only about 30 high-capacity loops per month. See Lacouture/Ruesterholz Decl. ¶¶ 140-141.³⁷ Nonetheless, Verizon's performance in providing high-capacity loops to competitors in Pennsylvania has been strong.

As explained in the accompanying declaration, Verizon is installing high-capacity loops for CLECS within intervals that are comparable to those for its own end-user customers. See Lacouture/Ruesterholz Decl. ¶¶ 142-144.³⁸ 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 Lacouture/Ruesterholz Decl. ¶ 145. From February through April, only 1.19 percent of the high-capacity loops and interoffice transport provided to CLECs in Pennsylvania experienced troubles in any given month (representing only four trouble reports), which was at parity with Verizon's retail performance. See id.

Verizon's performance in maintaining and repairing high-capacity loops is equally strong. From February through April, the mean time to repair CLEC high capacity loops in Pennsylvania was shorter than the mean time to repair Verizon's own retail orders once a one-

³⁷ As the Commission has found, these low volumes mean that Verizon's performance here cannot be used to support "a finding of noncompliance for all loop types." Massachusetts Order ¶ 156; see Kansas/Oklahoma Order ¶ 213 (same); see also id. ¶ 36 (where volumes are small, reported performance is "not as reliable an indicator of checklist compliance").

³⁸ Verizon's reported installation performance for high-capacity loops is skewed because it includes orders that Verizon could not complete because facilities were not available. See Lacouture/Ruesterholz Decl. ¶ 143. When those factors are taken into account, Verizon's

time incident involving a fiber cut is taken into account. See id. ¶ 147. And Verizon had no repeat trouble reports on CLEC high-capacity loops during this same period. See id.

f. Subloops.

Verizon also provides access to subloops in the same way as it does in Massachusetts, see id. ¶ 240, 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 ¶ 154.³⁹ The subloop elements that Verizon provides include access to house-and-riser cable, and access 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. ¶ 241. As in Massachusetts, “Verizon allows requesting carriers to obtain access to subloop facilities regardless of the transmission medium,” and to “gain access to subloops at technically feasible points of interconnection other than the FDI [feeder distribution interface].” Massachusetts Order ¶ 155; see Lacouture/Ruesterholz Decl. ¶ 240-242, 244.

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 Lacouture/Ruesterholz Decl. ¶ 247; UNE Remand Order ¶¶ 233-235. Verizon provides access to NIDs in the same manner as in Massachusetts and New York, see Lacouture/Ruesterholz Decl. ¶ 247, where the Commission found that Verizon satisfies the checklist. See New York Order ¶ 273; Massachusetts Order ¶ 124. Verizon permits competing

performance is in parity. See id. ¶ 144.

³⁹ Verizon provides access to subloops both through interconnection agreements and through its generally available tariff. See Lacouture/Ruesterholz Decl. ¶ 242.

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. ¶ 248. No CLEC has requested access to Verizon's NIDs on a stand-alone basis in Pennsylvania. See id.

2. Unbundled Switching.

Verizon provides unbundled local and tandem switching using substantially the same processes and procedures as in Massachusetts and New York. See Lacouture/Ruesterholz Decl. ¶ 249. Again, in both of those cases, the Commission found that Verizon satisfied the checklist. See Massachusetts Order ¶ 222; New York Order ¶ 346.⁴⁰

Through April 2001, Verizon has provided more than 220,000 unbundled local switching elements in Pennsylvania as part of network element platforms. See Lacouture/Ruesterholz Decl. ¶ 250. Verizon also has provided unbundled tandem switching in connection with each of these platform orders. See id. As with unbundled loops and transport, moreover, Verizon consistently provides unbundled switching on time. From February through April, Verizon provided over 99 percent of local switching elements by the due date. See id. ¶ 260. During this period Verizon also provisioned platform (and therefore local switching) orders more quickly for CLECs than it provisioned service to its own retail customers. See id. ¶ 261.

As in Massachusetts and New York, Verizon also provides customized routing (using line-class codes) so that CLECs can direct directory-assistance and operator-services traffic to their own platforms, to a third-party platform, or to Verizon's platform. See id. ¶ 251. Verizon

⁴⁰ Verizon makes unbundled switching available pursuant to legally binding interconnection agreements and tariffs. See Lacouture/Ruesterholz Decl. ¶ 249. 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 addition, Verizon provides CLECs with access to other features resident in its switches that Verizon does not offer its retail customers. See id.

offers the same option that it does in New York of using 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. ¶ 252. Finally, as in Massachusetts and New York, Verizon is capturing and providing usage data to CLECs that enable them to bill for exchange access. See id. ¶¶ 255-257.

3. Unbundled Local Transport (Including Interoffice Facilities).

Verizon provides unbundled dedicated and shared transport using substantially the same processes and procedures that it uses in Massachusetts and New York. See id. ¶¶ 249, 288. In both those cases, the Commission found that Verizon “provides both shared and dedicated transport in compliance with the requirements” of the Act. Massachusetts Order ¶ 208; see New York Order ¶ 337.⁴¹

Through April 2001, Verizon has provided shared transport on each of the more than 220,000 platforms it has provided. See Lacouture/Ruesterholz Decl. ¶ 286. 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 99 percent of the time, and the same is true of unbundled shared transport. See id. ¶ 308.

Verizon also has provided nearly 1,400 dedicated local transport facilities to competing carriers and to its separate data affiliate. See id. ¶ 272. From February through April, Verizon missed a total of only eight appointments for installing CLEC’s dedicated transport, one of

⁴¹ Verizon provides shared and dedicated transport under interconnection agreements and its generally available tariff. See Lacouture/Ruesterholz Decl. ¶ 270. This includes shared transport between Verizon’s end office switches, between end office and tandem switches, and between tandem switches. See id. ¶ 271.

which was due to the fact that Verizon had no facilities available. See id. ¶¶ 273-274.⁴² Once this no-facilities order is excluded from Verizon's reported results, its on-time performance is at 89 percent. See id. ¶ 274; Massachusetts Order ¶ 210 (88 percent on-time performance acceptable). Moreover, this is comparable to the performance on Verizon's analogous retail DS-3 services. See Lacouture/Ruesterholz Decl. ¶ 275.⁴³ This is the same retail analogue that is used in the New York performance measurements, see Lacouture/Ruesterholz Decl. ¶ 275, that all parties have agreed should be adopted in Pennsylvania, see id., and that this Commission previously found to be the appropriate retail analogue, see Massachusetts Order ¶¶ 209-210.

4. Dark Fiber.

Verizon provides "dark fiber" — fiber that has not been activated through the connection of the electronics used to carry communications services. See Lacouture/Ruesterholz Decl. ¶ 289; UNE Remand Order ¶ 165.⁴⁴ As of April 2001, Verizon had received *** ** dark fiber orders from CLECs in Pennsylvania, and where the requested facilities were available

⁴² Because the volumes here are so small, Verizon's reported performance data have been subject to "wide swings" that do not provide an accurate picture of Verizon's performance and that are "not as reliable an indicator of checklist compliance." Kansas/Oklahoma Order ¶ 36.

⁴³ The retail analogue for local transport missed installation appointments in Pennsylvania historically has been all retail "special services," which predominantly includes relatively simple voice-grade services rather than more complex DS-3 services that CLECs order. See Lacouture/Ruesterholz Decl. ¶ 276. As the Commission has held, this comparison is entitled to "little weight" because "the unbundled interoffice facilities Verizon provides to competitive LECs are predominately at the DS-3 level, rather than the voice grade level." Massachusetts Order ¶¶ 209-210.

⁴⁴ Under the terms of its interconnection agreements, Verizon provides both dark fiber interoffice facilities and dark fiber loops where spare facilities are available. See Lacouture/Ruesterholz Decl. ¶ 292. The only CLEC that complained about Verizon's provision of dark fiber has since stipulated that Verizon provides dark fiber in accordance with the requirements of the Act, see id. ¶ 290, and is working cooperatively with Verizon to develop provisioning measures to ensure at the time a CLEC submits a collocation request that dark fiber will still be available when the collocation arrangement is completed, see id. ¶ 300.

Verizon provisioned 100 percent of these orders on time. See Lacouture/Ruesterholz Decl.

¶ 297.

5. Combining Unbundled Network Elements.

As in Massachusetts and New York, Verizon provides both existing combinations of network elements and access to unbundled elements that allows competing carriers to assemble combinations of elements themselves. See id. ¶ 303.

First, Verizon provides the same preassembled combinations of elements that it provides in Massachusetts, see id., where the Commission found that Verizon satisfies the checklist, see Massachusetts Order ¶¶ 117-118. As noted above, Verizon has provided competing carriers with more than 220,000 complete preassembled platforms of network elements through April of this year. See Lacouture/Ruesterholz Decl. ¶ 308. Verizon also provides a “switch sub-platform” (local switching in combination with other shared network elements such as shared transport, shared tandem switching, and SS7 signaling), although no competitor has yet requested this combination. See id. ¶ 309. Moreover, Verizon provides loop and transport combinations in accordance with the Commission’s rules. See id. ¶ 310; Implementation of the Local Competition Provisions of the Telecommunications Act of 1996, Supplemental Order, 15 FCC Rcd 1761 (1999); Implementation of the Local Competition Provisions of the Telecommunications Act of 1996, Supplemental Order Clarification, 15 FCC Rcd 9587 (2000).⁴⁵ And KPMG has certified that Verizon’s systems are fully capable of providing loop and

⁴⁵ Competing carriers in Pennsylvania have ordered only a small number of loop and transport combinations, however, and Verizon’s reported performance data accordingly have been subject to “wide swings” that do not provide an accurate picture of Verizon’s performance. Kansas/Oklahoma Order ¶ 36. Under the circumstances here, for example, Verizon missed three fewer installation appointments for loop/transport combinations in February than it did in January, but its reported missed appointment rate in February was half the reported rate in January. See Lacouture/Ruesterholz Decl. ¶ 314.