REDACTED – FOR PUBLIC INSPECTION

Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of

Application by Verizon New England Inc., Bell Atlantic Communications, Inc. (d/b/a Verizon Long Distance), NYNEX Long Distance Company (d/b/a Verizon Enterprise Solutions), and Verizon Global Networks Inc., For Authorization Under Section 271 of The Telecommunications Act of 1996 To Provide In-Region, InterLATA Services in Massachusetts	)	CC Docket No. 00-176

EVALUATION OF THE
MASSACHUSETTS DEPARTMENT OF TELECOMMUNICATIONS AND ENERGY

VOLUME I OF II

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Dated: October 16, 2000

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EXECUTIVE SUMMARY

The Massachusetts Department of Telecommunications and Energy ("Department") recommends that the Federal Communications Commission ("FCC") grant Verizon's application to provide long distance services in the Commonwealth of Massachusetts. Verizon filed its application with the FCC on September 22, 2000, for authorization under § 271 of the Telecommunications Act of 1996 ("Act"). The Department has been investigating Verizon's compliance with § 271 of the Act for over 16 months in docket D.T.E. 99-271, in addition to the extensive work the Department has done in implementing the requirements of the Act, ever since its passage on February 8, 1996. The Department's investigation in D.T.E. 99-271 included five days of public hearings across Massachusetts, almost 30 days of technical sessions, over a thousand information and record requests, and thousands of pages of filings and testimony. The Department's § 271 proceeding was open to participation by all interested parties.

In the Department's recommendation to the FCC, we provide a detailed analysis of Verizon's compliance based on what was discovered in the Department's investigation. The Department advises the FCC that Verizon has met its obligations under § 271 of the Act. Specifically, Verizon demonstrates its compliance with the requirements of § 271(c)(1)(A) by being a party to more than 70 binding, Department-approved interconnection agreements with competitive local exchange carriers ("CLECs"). In addition, Verizon shows that it has a legal obligation, under interconnection agreements and Department-approved tariffs, to provide the 14 items required under the checklist of § 271(c)(2)(B), and that Verizon is meeting its legal obligation to provide those 14 items.

As part of its 16-month investigation, the Department has conducted a review of Verizon's operations support systems ("OSS"). This review included a comprehensive OSS test, conducted by a third-party evaluator, KPMG Consulting, L.L.C. ("KPMG"), acting under the supervision of the Department. KPMG analyzed and verified Verizon's performance in 804 individual test points across five test domains (pre-order, order, and provisioning; maintenance and repair; billing; relationship management and infrastructure; and performance metrics). KPMG's evaluation within each domain was conducted through both reviews of Verizon's policies and procedures and KPMG's simulation of a CLEC conducting business in Massachusetts. The KPMG test, culminating in a 700-page report, demonstrates that Verizon's OSS provide the functions required by § 271.

In addition, in order to ensure that Verizon has adequate financial incentives to continue to meet its obligations after it has been approved to enter the long distance market, the Department has approved a Performance Assurance Plan ("PAP"), under which Verizon is required to meet specified performance standards or face up to over $147 million per year in financial penalties.

The Department has concluded that the Massachusetts local telephone markets are irreversibly open to competition. The Department further concludes that allowing Massachusetts customers the option of choosing Verizon for long distance service is likely to result in consumer benefits. Thus, with open markets in Massachusetts and the prospect for additional choices in the long distance market, the Department concludes that approval of Verizon's application is in the public interest. Therefore, the Department recommends that the FCC approve Verizon's

application to offer long distance services in the Commonwealth of Massachusetts.

I. INTRODUCTION

The Massachusetts Department of Telecommunications and Energy ("Department" or "DTE") finds that Verizon New England, Inc. d/b/a Verizon Massachusetts[1] ("VZ-MA") has met the requirements of § 271(c) of the Telecommunications Act of 1996 Act ("Act") in Massachusetts, and that the local exchange market in Massachusetts is irreversibly open to competition. With the structural conditions for local exchange competition irreversibly in place in Massachusetts, VZ-MA is not able to use its position in the local exchange market to unfairly advantage its affiliate in the interLATA market, and the addition of VZ-MA as a significant competitor in the interLATA market promises to provide customers with additional benefits from competition in that market. Therefore, giving Massachusetts customers the ability to choose VZ-MA's interLATA long-distance service is unquestionably in the public interest, and we recommend that the Federal Communications Commission ("FCC" or "Commission") grant VZ-

[1] New England Telephone and Telegraph Company d/b/a Bell Atlantic-Massachusetts ("BA-MA") was the name of the incumbent local exchange carrier operating in Massachusetts until federal approval of the merger between Bell Atlantic Corporation and GTE Services Corporation on June 16, 2000. All references to "BA-MA" should be understood as applying to the successor company. Similarly, the Department refers to the entity formerly known as Bell Atlantic-New York (or "BA-NY") as "Verizon-New York" or "VZ-NY."

MA's application for authorization to originate interLATA services in Massachusetts.

II. BACKGROUND ON TELECOMMUNICATIONS COMPETITION IN MASSACHUSETTS

The Department has long been committed to competitive markets and incremental cost-based rates in telecommunications.[2] In response to the divestiture of the Bell Operating Companies ("BOCs") from AT&T in 1984, the Department opened an investigation to determine whether it should allow intraLATA competition in Massachusetts.[3] In its IntraLATA Competition proceeding, the Department investigated whether its policy goals for telecommunications would be best achieved by a monopoly provider of intraLATA service, or by competition in that market.[4] The Department concluded "that there are benefits inherent in a

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[2] In early 1996, the Commission noted that Massachusetts was one of only seven states where competing firms were offering switched local service. See CC Docket No. 96-98, Notice of Proposed Rulemaking, FCC 96-182, at ¶ 5 n.10 (rel. April 19, 1996).

[3] See IntraLATA Competition, D.P.U. 1731 (1985).

[4] Id. at 25.

competitive marketplace that encourage greater levels of economic efficiency and fairness than does a regulated monopoly environment," and authorized intraLATA competition, starting on December 1, 1986.[5]

[5] Id. at 26, 44.

With the endorsement of competition as the best way to achieve its policy goals, it became necessary for the Department to confront the problems associated with the traditional policy of pricing retail services without regard to underlying cost levels or structure. The Department addressed the pricing issue in IntraLATA Competition, where it determined that "properly defined incremental costs should be used as the primary basis for pricing all services, including local exchange service," and also found that "to the extent that current rates do not reflect an appropriate allocation of costs, the Department will, consistent with the need to avoid major discontinuities in rate levels, move toward that goal."[6]

Subsequently, the Department conducted a multi-phase investigation into the costs and rates of New England Telephone and Telegraph Company ("NET") (now VZ-MA), including approval of a marginal cost study. The Department then began a series of annual, revenue-neutral "rate-rebalancings" to bring NET's retail rates more in line with the underlying cost structure. Those rate-rebalancings took place from 1989 to 1994. In that process, the Department significantly reduced rates for business customers and toll, local usage, and switched access services, as well as eliminated message units and different rate groups for local unlimited service. The Department also increased rates for some basic residential services, including the fixed rate for a dial-tone line, and for analog private line services.

The Department also has taken several other steps to promote competitive markets

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[6] Id. at 36-38.

between the divestiture of AT&T in 1984 and the passage of the Act, including the following:

- The Department approved the entry of competitive access providers in the late 1980s (see Yankee Microwave, D.P.U. 87-201 (1988); Teleport Communications – Boston, D.P.U. 88-60 (1988); MFS-McCourt, D.P.U. 88-229 (1989)).

- The Department granted pricing flexibility for competitive services offered by the carriers classified as "dominant" (VZ-MA for intraLATA and AT&T for interLATA) (see NET-Centrex, D.P.U. 84-82 (1984); NET-Centrex, D.P.U. 85-275/276/277 (1985); NET-Intellidial, D.P.U. 88-18-A (1988); AT&T-Customer-specific Pricing, D.P.U. 90-24 (1991); AT&T Alternative Regulation, D.P.U. 91-79 (1992)).

- Massachusetts became the second state in the country (after New York) to approve collocation of competitors' facilities in the incumbent's central offices (see Collocation, D.P.U. 90-206/91-66 (1991)).

- The Department eliminated the requirement for most competitive carriers to obtain certificates of public convenience and necessity for market entry (see Entry Deregulation, D.P.U. 93-98 (1994)).

In early 1994, the Department opened an investigation "to determine and put in place the structural components necessary to ensure continued development of open markets in Massachusetts, relying on competitive forces wherever possible, in order that the benefits associated with competition will be realized by all telecommunications customers in the Commonwealth."[7] That investigation focused on many of the issues that were subsequently addressed in the Act, including: (1) interconnection of networks, including local and interoffice, signaling, and associated databases; (2) provisioning of number resources; (3) telephone number portability; (4) cooperative engineering, operations, and maintenance practices and procedures;

[7] Order Opening Investigation into Local Competition, D.P.U. 94-185, at 3 (January 6, 1995).

(5) billing arrangements; (6) compensation arrangements; (7) directory and directory assistance provisioning; (8) provisioning of access to emergency services; (9) universal service funding; (10) intraLATA toll presubscription; (11) resale of [VZ-MA's] unlimited services; and (12) unbundling and pricing of [VZ-MA's] network elements.[8] The Act was enacted prior to completion of the Department's local competition investigation, so, at the time of passage of the Act, the Department shifted its focus to implementation of the federal requirements.

Since the passage of the Act, the Department has focused intensely on implementing the provisions of the Act and the FCC's local competition rules through the following investigations:

- Consolidated Arbitrations proceeding:[9]

  -- **Phase 1–Non-cost issues** (Phase 1 Order (1996)).

  -- **Phase 2– Resale Discounts**
  Phase 2 Order (1996) (adopted avoided cost methodology); Phase 2-B Order (1997) (set interim resale discounts).

  -- **Phase 3–Other non-cost issues, including Wholesale Performance Standards and Penalties**

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8 Id. at 3-4.

9 In 1996, the Department received the arbitration petitions of AT&T, MCI, Sprint, Teleport and Brooks Fiber. The petitions were consolidated into the docket D.P.U./D.T.E. 96/73-74, 96-75, 96-80/81, 96-83, 96-94. In late 1996, the Department began issuing its series of orders addressing the consolidated petitions.

Phase 3 Order (1996); Phase 3-B Order (1997); Phase 3-C Order (1997); Phase 3-D Order (1998); Phase 3-E Order (1998); Phase 3-F Order (1999); Phase 3-G Order (2000).

-- **Phase 4–TELRIC Rates, UNE-P, HARC, Dark Fiber**
Phase 4 Order (1996); (adopting TELRIC methodology for UNE rates); Phase 4-B Order (1997) (setting interim UNE rates, transport and termination charges); Phase 4-J Order (1999); Phase 4-P Order (2000) (establishing requirements for UNE-P); Phase 4-G Order (1998); Phase 4-H Order (1998), Phase 4-I Order (1999) (setting collocation rates); Phase 4-L Order (1999); Phase 4-O Order (2000); Phase 4-S Order (2000) (setting non-recurring charges, including OSS charges); Phase 4-Q Order (2000) (setting rates, terms and conditions for HARC); Phase 4-N Order (1999); Phase 4-R Order (2000) (setting dark fiber rates, terms and conditions).

- Department Approval of Interconnection Agreements:[10]
See MFS Intelenet, D.P.U. 96-72 (1996); Brooks Fiber, D.P.U. 97-90 (1997); ACC National Telecom, D.P.U. 97-85 (1997); AT&T, D.T.E. 98-35 (1998); MCI, D.T.E. 98-104 (1998), D.T.E. 96-83 (1998); Sprint, D.P.U. 96-94 (1997); Covad, D.T.E. 98-74 (1998), D.T.E. 98-21 (1998).

- MediaOne/Greater Media Arbitration, D.T.E. 99-42/43 (1999), D.T.E. 99-52 (1999) (addressing issues important to cable CLECs such as establishing points of interconnection, and standards and remedies for LNP).

- VZ–MA Interconnection Tariff No. 17, D.T.E. 98-57 (2000); D.T.E. 98-57-Phase I (2000) (determining collocation provisioning intervals, rates, transport costs, EELS), D.T.E. 98-57-Phase II (2000) (UNE-P/HARC tariff approval), D.T.E. 98-57-Phase III (2000) (setting rates, terms and conditions for line sharing).

- VZ–MA Resale Tariff No. 14, D.T.E. 98-15 Phase I (1998) (approving VZ–MA's resale tariff), D.T.E. 98-15 Phase II/III (1999) (adopting as permanent the interim resale discounts and UNE rates).

- AT&T Collocation Petition, D.T.E. 98-58 (1999) (establishing streamlined procedures for VZ–MA's collocation provisioning process).

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[10] In 1997, the Department streamlined the approval of negotiated agreements and no longer issues a written decision on such agreements.

- Enforcement Actions/Complaint Proceedings:
  MCI WorldCom, D.T.E. 97-116 (1998); D.T.E. 97-116-A (1999); D.T.E. 97-116-B (1999); D.T.E. 97-116-C (1999); D.T.E. 97-116-D (2000); D.T.E. 97-116-E (2000) (discussing reciprocal compensation for ISP-bound traffic); NEVD, D.T.E. 99-87 (2000) (concerning access to VZ–MA conduits); RCN, D.T.E. 97-101 (1998) (finding voicemail not a required VZ–MA resale service); GNAPS, D.T.E. 98-116 (2000) (concerning provisioning of dark fiber across LATAs); Accelerated Docket Rulemaking, D.T.E. 00-39 (2000) (establishing expedited complaint procedures for inter-carrier disputes based on the FCC's "Rocket Docket").

III. PROCEDURAL HISTORY

On May 24, 1999, VZ-MA filed with the Department a copy of a preliminary application ("Compliance Filing") that VZ-MA intended to submit to the FCC for its consideration.[11] Under § 271 of the Act, VZ-MA must demonstrate to the FCC its compliance with a 14-point checklist of market-opening requirements.[12] The Act requires the FCC to consult with the Department to verify VZ-MA's compliance with the competitive checklist,[13] and, in previous § 271 Orders, the FCC has emphasized the importance of state commission proceedings to develop a comprehensive factual record on a BOC's compliance with the checklist and the status of local competition prior to the BOC's filing with the FCC.[14] The Department docketed VZ-MA's filing as D.T.E. 99-271

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[11] VZ–MA Application, Appdx. B, Vol. 1a-aa, Tab 2 (VZ–MA 271 Compliance Filing).

[12] 47 U.S.C. § 271 (c)(2)(B).

[13] 47 U.S.C. § 271(d)(2)(B).

[14] See e.g., Application by SBC Communications Inc., Southwestern Bell Telephone Company, and Southwestern Bell Communications Services, Inc. d/b/a Southwestern Bell Long Distance Pursuant to Section 271 of the Telecommunications Act of 1996 to Provide In-Region, InterLATA Services in Texas, CC Docket No. 00-65, Memorandum Opinion and Order, FCC 00-238, at ¶¶ 11, 51 (2000) ("SBC Texas Order"); Application

and, on June 29, 1999, issued a Notice of Filing and Public Hearings on VZ-MA's Compliance Filing.[15] From July 19 through August 5, 1999, the Department held five public hearings throughout the state[16] and held its first procedural conference on July 22, 1999.

The participants in the Department's § 271 proceeding are as follows: United States

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by Bell Atlantic New York for Authorization Under Section 271 of the Communications Act to Provide to Provide In-Region, InterLATA Service in the State of New York, CC Docket No. 99-295, Memorandum Opinion and Order, FCC 99-404, at ¶¶ 20, 51 (1999) ("Bell Atlantic New York Order").

15 VZ–MA Application, Appdx. B, Vol. 2, Tab 10 (D.T.E. Order to Publish Legal Notice).

16 The Department held public hearings in Pittsfield, Worcester, New Bedford, Newton, and Gloucester.

Department of Justice ("DOJ"); Massachusetts Attorney General ("Attorney General" or "AG"); Representative Daniel E. Bosley, Co-Chairman, Massachusetts Joint Committee on Government Relations ("Rep. Bosley"); AT&T Communications of New England, Inc. ("AT&T"); Sprint Communications Company, L.P. ("Sprint"); AT&T Broadband ("AT&T Broadband"), formerly MediaOne Telecommunications ("MediaOne"); WorldCom, Inc. ("WorldCom"), formerly MCI WorldCom, Inc.; RCN-BecoCom, L.L.C. ("RCN"); Rhythms Links, Inc. ("Rhythms"), formerly ACI Corp.; New England Cable Television Association, Inc. ("NECTA"); Teligent, Inc. ("Teligent"); Level 3 Communications, L.L.C. ("Level 3"); Network Plus, Inc. ("Network Plus"); Choice One Communications of Massachusetts, Inc. ("Choice One"); Hyperion Communications of Massachusetts, Inc. ("Hyperion"); DSLNet Communications, L.L.C. ("DSLNet"); NorthPoint Communications, Inc. ("NorthPoint"); Global NAPS, Inc. ("Global NAPS" or "GNAPS"); Conversent Communications of Massachusetts, L.L.C. ("Conversent"), formerly NEVD of Massachusetts, Inc. ("NEVD"); CTC Communications Corp. ("CTC"); Norfolk County Internet, Inc. ("Norfolk County Internet"); Association of Communications Enterprises ("ASCENT"), formerly the Telecommunications Resellers Association ("TRA"); Association for Local Telecommunications Services ("ALTS"); Cablevision Lightpath–MA, Inc. ("Cablevision"); CoreComm Massachusetts, Inc. ("CoreComm"); NECLEC, Inc. ("NECLEC"); Breakthrough Massachusetts ("Breakthrough"); The Competitive Telecommunications Association ("CompTel"); Covad Communications Company ("Covad"); Qwest Communications Corporation ("Qwest"); RNK, Inc. ("RNK"); SBC National, Inc. ("SBC"); TelEnergy, Inc. ("TelEnergy");

Intermedia Communications, Inc. ("Intermedia"); Nextlink New York, Inc. ("Nextlink"); Vitts Networks ("Vitts"); Focal Communications Corporation of Massachusetts ("Focal"); Z-Tel Communications, Inc. ("Z-Tel"); Digital Broadband Communications, Inc. ("Digital Broadband"); essential.com, inc. ("essential.com"); Winstar Communications, Inc. ("Winstar"); and Log On America, Inc. ("Log On America").

On July 20, 1999, two motions were filed with the Department. First, AT&T filed a Motion to Suspend Further Proceedings Regarding the Section 271 Checklist Items.[17] Second, a Joint Petition for a Massachusetts Roadmap to Establish Local Competition in the Commonwealth was filed by WorldCom, RCN, TRA, Sprint, RNK and TelEnergy (collectively, "Joint Petitioners").[18]

In a decision issued on August 19, 1999, the hearing officers granted in part and denied in part AT&T's Motion, and denied the Joint Petition.[19] In addition, the hearing officers established

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[17] In its Motion, AT&T asked the Department to: (1) suspend its consideration of any items set forth in the 14-point checklist that VZ-MA had not certified as complete and ready for consideration; (2) prohibit VZ-MA from supplementing the record at any time; (3) use AT&T's Petition for Collaborative Process, docketed as D.T.E. 99-20, as a vehicle to resolve technical issues; and (4) commence operations support systems testing. See VZ–MA Application, Appdx. B, Vol. 3, Tab 55 (AT&T's Motion to Suspend Further 271 Proceedings).

[18] The Joint Petition requested that the Department require VZ-MA to file a baseline agreement that provides commitments to open the local market to competition as was done in Verizon New York's Pre-Filing Statement in New York's § 271 proceeding. See VZ–MA Application, Appdx. B, Vol. 3, Tab 58 (Joint Petition for a Massachusetts Roadmap to Establish Local Competition).

[19] The hearing officers granted that portion of AT&T's Motion that asked the Department to

an initial procedural schedule. The Joint Petitioners filed an appeal of the hearing officers' decision,[20] and, on September 30, 1999, the Department issued an interlocutory order affirming

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suspend its final consideration of a checklist item until VZ-MA certifies the item as complete without further supplementation. VZ–MA Application, Appdx. B, Vol. 3, Tab 82 (Hearing Officers' Decision and Procedural Schedule).

20 The Joint Petitioners appealed the following aspects of the August 19, 1999 Hearing Officers' Decision: (1) the denial of the request to order VZ-MA to provide the same commitments as were made in the New York road map; (2) the denial of AT&T's request to address the establishment of a collaborative process, which is the subject of another proceeding, in D.T.E. 99-271; and (3) the procedural schedule. VZ–MA Application, Appdx. B, Vol. 5, Tab 86 (Joint Petition for Appeal).

the hearing officers' decision with respect to the two motions as well as the procedural schedule.[21]

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[21] With regard to the road map, the Department stated that the determination of whether VZ-MA's filing meets the requirements of § 271 would be based upon the Department's review and analysis of the filing along with the record developed in this proceeding, and that VZ-MA's commitments made in another state may be useful to know but are not controlling. Next, the Department noted that it had not delegated to the hearing officers the authority to rule on the merits of other Department proceedings, and thus agreed with the hearing officers' decision not to rule in the instant proceeding on AT&T's request to

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establish a collaborative process, docketed in D.T.E. 99-20. Last, the Department upheld the procedural process set forth by the hearing officers on August 19, 1999, concluding that this process is designed to fulfill the Department's responsibility to develop, in an efficient manner, a comprehensive factual record of VZ-MA's compliance with the checklist and the status of local competition. See VZ–MA Application, Appdx. B, Vol. 6, Tab 118 (DTE Interlocutory Order on Joint Petitioners' Appeal of Hearing Officer Decision Dated 8/18/99).

On September 24, October 8, and October 29, 1999, the Department issued approximately 700 information requests to VZ-MA based upon the Compliance Filing. The first round of information requests[22] consisted of competitive local exchange carrier ("CLEC") questions that had been solicited and reviewed by Department staff for relevance to the § 271 inquiry.[23] Consistent with our § 271 consultative role, the Department made the questions its own in order to develop a record to discharge that role. In November 1999, CLECs filed statements concerning issues to be discussed during the ensuing technical sessions.

From November 1 to November 23, 1999, the Department held twelve days of technical sessions in which VZ-MA witnesses were questioned by Department staff and

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22 Information requests are a form of pre-hearing discovery in Department practice, roughly analogous to Fed. R. Civ. Proc. 33.

23 CLECs were provided an opportunity at a procedural conference to challenge Department staff's decision not to forward a particular information request to VZ-MA.

CLECs. From December 2 through December 21, 1999, the Department held seven days of technical sessions with CLEC witnesses who were questioned by Department staff, VZ-MA, and CLECs.[24] During these technical sessions, over 300 record requests[25] were issued to both VZ-

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[24] The VZ-MA and CLEC technical sessions, held in November and December 1999 were transcribed; however, the witness testimony was not provided under oath. During the technical sessions held from August 14 through September 1, 2000, the Department administered oaths to the witnesses and required the witnesses to adopt their prior unsworn testimony and, where appropriate, the prior testimony of related subject-matter witnesses.

[25] Responses to record requests are written substitutes to oral answers where fault of memory or complexity of subject precludes a responsive answer by the witness in the

MA and to various CLECs.

On March 13, 2000, AT&T filed a Petition Requesting the Department To Review and Reduce the Recurring Charges for Unbundled Network Elements ("AT&T UNE Rate Petition").[26] In a Letter Order issued on July 27, 2000, the Department denied AT&T's UNE Rate Petition.[27]

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hearing. As such, they are part of the record and the evidence, unless challenged as unresponsive and expunged in whole or part. See 220 C.M.R. § 1.06(6)(h).

[26] AT&T argued that the UNE rates in existence at that time did not comport with the total element long run incremental cost ("TELRIC") methodology.

[27] Noting that most of the concerns expressed by AT&T related to charges for local switching, the Department based its denial on the fact that VZ-MA had negotiated and contracted for significantly lower local switching charges with one carrier which other carriers may avail themselves of through the "pick and choose" rule. In addition, the Department concluded that, because the Eighth Circuit vacated and remanded the FCC rules requiring the use of TELRIC to establish UNE rates and the resulting uncertainty of the FCC's pricing methodology on a going-forward basis, it would be inefficient to conduct an investigation using the vacated and remanded FCC pricing rule. See VZ–MA

Application, Appdx. B, Vol. 40, Tab 481 (D.T.E. Letter Denying AT&T's Petition to Reduce UNE Rates).

On May 26, 2000, VZ-MA filed comments ("May Supplemental Filing")[28] describing how, based upon its Compliance Filing and the record developed during this proceeding, it meets its statutory § 271 obligations and additional requirements set forth in the FCC's Bell Atlantic New York Order.[29] On June 22, June 26 and June 28, 2000, the Department issued approximately 120 information requests to VZ-MA based upon its May Supplemental Filing. These information requests included CLEC questions that had been reviewed by Department staff for relevance.

CLECs and other participants filed written responses to VZ-MA's May Supplemental Filing on July 18, 2000, and, on July 27, 2000, the Department issued approximately 40 information requests to various CLECs based upon their comments to the May Supplemental Filing. VZ-MA, in turn, filed responses to the CLEC comments in the form of Supplemental Affidavits on August 4, 2000.[30]

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28 VZ–MA Application, Appdx. B, Vol. 32a-b, Tab 423.

29 At the time of the May Supplemental Filing, the FCC had approved only VZ-NY's § 271 application.

30 VZ–MA Application, Appdx. B, Vol. 42, Tab 494 (VZ–MA's August Supplemental

Checklist Aff.). For purposes of clarity, the Department will refer to the contents of VZ–MA's May Supplemental Filing as "VZ–MA May Checklist Affidavit," "VZ–MA May OSS Affidavit," or "VZ–MA May Measurements Affidavit." Similarly, we will refer to VZ–MA August 2000 filing as "VZ–MA August Supplemental Checklist Affidavit," "VZ-MA August Supplemental OSS Affidavit," and "VZ-MA Supplemental Measurements Affidavit."

From August 14 through September 1, 2000, the Department held six days of additional technical sessions to clarify the record with respect to factual disputes raised by the applicant and various participants. During these technical sessions, 30 record requests were issued to both VZ-MA and various CLECs. In addition, the Department held a panel hearing on September 8, 2000, where the applicant and CLECs presented oral argument to the Department on VZ-MA's compliance with the 14-point checklist contained in § 271.[31]

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[31] At the outset of the Oral Argument, the Department requested that each speaker answer the following question: "[c]iting the specific numbered item of the 271 14-point checklist,

which, if any, of the checklist items the speaker . . . believes is satisfied in Massachusetts and which, if any, of the checklist items is not satisfied." VZ–MA Application, Appdx. B, Vol. 49, Tab 565, at 5415-5416 (Transcript of Oral Argument Held 9/8/00). The first speaker, VZ–MA, stated that VZ–MA has "absolutely met every checklist item." Id. at 5418. AT&T, stated that, in its view, checklist items 1, 2, 3, 4, and 11 have not been satisfied by VZ–MA. Id. at 5436. Chairman Connelly, reminding AT&T that his question was a compound one, asked AT&T whether there was a "negative pregnant in your remark, that the [other checklist items] have been met?" Id. AT&T replied, "There is with respect to the other nine checklist items." Id. Covad indicated that VZ–MA has not satisfied checklist items 2, 4 and 5. Id. at 5494. Digital Broadband stated that VZ–MA has not satisfied checklist items 2 and 4. Id. at 5511. AT&T Broadband stated that VZ–MA has not satisfied checklist items 1, 2, 3, 5, and 11. Id. at 5523. NECTA stated that VZ–MA has not satisfied checklist items 1, 2, 3, 5, and 11. Id. at 5532. ASCENT stated that VZ–MA has not satisfied checklist items 2 and 14. Id. at 5553. RCN stated that VZ–MA has not satisfied checklist item 3. Id., at 5559. Rhythms stated that VZ–MA had not satisfied checklist item 2 and 4. Id. at 5571. Sprint stated that VZ–MA had not met checklist items 1, 2, 3, 4, and 11. Id. at 5583. MCI stated that VZ–MA had not met checklist items 1, 2, and 4. Id. at 5596. Finally, Z-Tel stated that checklist item 2 "is the only one that there's any question on, and it's the issues that we've raised in this proceeding, loss-of-line report and cut-through." Id. at 5612. Z-Tel added that "[w]e're working with Verizon, and we're confident that we can resolve the issues; but until we have come to closure on those issues, I just don't want to take a position. But all the other issues, as far as we're concerned, have been met." Id. at 5612.

In March 2000, the Department directed VZ-MA and other participants to file proposed performance assurance plans ("PAPs"). VZ-MA, AT&T, and WorldCom each filed proposed PAPs. On September 5, 2000, the Department approved VZ-MA's PAP, with modifications.[32] On September 15, 2000, VZ-MA filed a revised PAP in compliance with Department directives; the Department stamp-approved VZ-MA's revised PAP on September 21, 2000.

In August 1999, the Department contracted with KPMG Consulting, L.L.C. ("KPMG") and VZ–MA to conduct a test of VZ–MA's operations support systems ("OSS"). KPMG submitted a draft Master Test Plan ("MTP") in early September 1999; CLEC comments on the draft MTP were received on October 15, 1999. The Department approved the Final MTP on November 19, 1999. In January 2000, the Department issued a Letter Order ("Attachment A") adopting the performance metrics developed in the New York Carrier-to-Carrier ("C2C" or "C2C Guidelines") proceeding as the metrics to be used by KPMG in evaluating VZ–MA's performance and to be replicated by KPMG. On February 1, 2000, KMPG proposed a scope change to reduce the period of time for volume testing. After receiving comments from the CLECs and VZ-MA on the proposed scope change, the Department approved KPMG's proposal on February 16, 2000.

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32 VZ–MA Application, Appdx. B, Vol. 47, Tab 559 (D.T.E.'s Order Adopting VZ–MA's PAP).

On March 23, 2000, AT&T proposed a scope change to conduct a Local Service Operating Guidelines, version 4 ("LSOG-4") volume test. After receiving comments, the Department denied this proposal on May 12, 2000. KPMG submitted the first draft of its final report (Version 1.0) to the Department and VZ–MA on July 17, 2000. A revised draft (Version 1.1) was submitted to all participants on July 26, 2000. CLEC comments on the revised draft were received on August 3, 2000. On August 9, 2000, a second revised draft (Version 1.3) was submitted to all participants. The Department held technical sessions on Version 1.3 of the KPMG report on August 28 and August 29, 2000. On September 7, 2000, KPMG released its Final Report (Version 1.4).

On September 22, 2000, VZ-MA filed its § 271 application with the FCC.

IV. VZ-MA COMPLIANCE WITH § 271(C)(1)(A) – PRESENCE OF FACILITIES-BASED COMPETITION

A. Background

In order for the FCC to approve a BOC's application to provide in-region, interLATA services, a BOC must first demonstrate that it satisfies the requirements of either § 271(c)(1)(A) ("Track A") or § 271(c)(1)(B) ("Track B").[33] To qualify for Track A, a BOC must have interconnection agreements with one or more competing providers of "telephone exchange service . . . to residential and business subscribers."[34] The Act states that "such

[33] 47 U.S.C. § 271(d)(3)(A).

[34] 47 U.S.C. § 271(c)(1)(A).

telephone service may be offered . . . either exclusively over [the competitor's] own telephone exchange facilities or in combination with the resale of the telecommunications services of another carrier."[35] The FCC concluded in its Ameritech Michigan Order that, when a BOC relies upon more than one competing provider to satisfy § 271(c)(1)(A), each carrier need not provide service to both residential and business customers.[36]

B. Discussion

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35 Id.

36 Application of Ameritech Michigan Pursuant to Section 271 of the Communications Act of 1934, as amended, To Provide In-Region, Inter-LATA Services in Michigan, Memorandum Opinion and Order, 12 FCC Rcd 20543, 20589 (1997) ("Ameritech Michigan Order").

VZ-MA seeks approval to enter the interLATA market under Track A based on the interconnection agreements it has implemented with competing carriers in Massachusetts. The Department has approved, pursuant to § 252 of the Act, more than 70 binding interconnection agreements between VZ-MA and unaffiliated, competing providers of telephone exchange service.[37] These agreements require VZ-MA to provide "access and interconnection to its network facilities for the network facilities of unaffiliated competing providers [to] . . . residential and business customers."[38] The agreements expressly provide for CLEC access to VZ-MA's facilities and network elements. In particular, VZ-MA cites its Department-approved interconnection agreements with AT&T, WorldCom, and RCN to show it has satisfied the Track A requirements.[39] VZ–MA states that competing carriers in Massachusetts serve more than 400,000 subscribers over their own facilities.[40]

The Department agrees that VZ-MA satisfies § 271(c)(1)(A) requirements. The record shows that VZ-MA's interconnection agreements provide some CLECs with access and interconnection to VZ-MA's network for service offered exclusively or predominantly over the CLECs' facilities to residential and business customers. For example, AT&T Broadband and RCN offer local telephone service to residential customers using their own networks and facilities,

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37 See VZ–MA Application, Appdx. A, Vol. 5, Tab 6, Att. A, Exh. 5 (Taylor Decl.).

38 47 U.S.C. § 271(c)(1)(A).

39 VZ–MA Application at 4-8; VZ–MA Application, Appdx. A, Vol. 5, Tab 6, Att. A at 5-8 (Taylor Decl.).

and WorldCom, among others, offers local service to business customers over its facilities. VZ–MA's interconnection agreements specify the rates, terms and conditions under which VZ-MA will provide such access and interconnection. CLECs such as AT&T, WorldCom, and RCN, among others, are currently receiving access and interconnection to VZ-MA's network facilities pursuant to their respective interconnection agreements. In addition, no participant challenges VZ-MA's assertion in this regard.

V. VZ-MA COMPLIANCE WITH § 271(C)(2)(B) - THE COMPETITIVE CHECKLIST

A. Checklist Item 1 – Interconnection

1. Trunking

a. Standard of Review

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[40] VZ–MA Application, Appdx. A, Vol. 5, Tab 6, ¶ 25 (Taylor Decl.).

The BOC's provision of interconnection trunking is one common means of interconnection. To implement the "equal in quality" requirement in § 251, the FCC requires an incumbent local exchange carrier ("ILEC") to design and operate its interconnection facilities to meet the same technical criteria and service standards that are used for the interoffice trunks within the ILEC's network.[41] The FCC has identified trunk group blockage and transmission standards as indicative of whether a BOC's interconnection facilities are "equal in quality" to the ILEC's own network.[42]

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41 Bell Atlantic New York Order at ¶ 64.

42 Id.

In order to meet the requirement that it provide interconnection on terms and conditions that are "just, reasonable, and nondiscriminatory," the FCC has found that an ILEC must provide interconnection to a competitor in a manner no less efficient than the manner in which it provides the comparable function in its retail operations.[43] The FCC looks at, among other things, the ILEC's installation intervals for interconnection service and its provisioning of two-way trunking, as well as the ILEC's repair time for troubles involving interconnection trunks.[44]

b. Discussion

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43 Implementation of the Local Competition Provisions in the Telecommunications Act of 1996, CC Docket No. 96-98, First Report and Order, 11 FCC Rcd 15499, at ¶ 209 (1996) ("Local Competition First Report and Order"), aff'd in part and vacated in part sub nom, Competitive Telecommunications Ass'n v. FCC, 117 F.3d 1068 (8th Cir. 1997) and Iowa Utils. Bd. v. FCC, 120 F.3d 753 (8th Cir. 1997), aff'd in part and remanded, AT&T v. Iowa Utils. Bd., 525 U.S. 366 (1999).

44 Bell Atlantic New York Order at ¶ 65.

VZ-MA argues that it provides interconnection trunking through interconnection agreements and through its wholesale tariff, M.D.T.E. Tariff No. 17.[45] According to VZ-MA, it provides interconnection at any technically feasible point, including mid-span meets and physical and virtual collocation.[46] Carriers may order interconnection trunks electronically via Connect:Direct, or manually by fax.[47] VZ-MA provides 64 kilobits per second ("kbps") Clear Channel interconnection trunks in addition to the traditional 56 kbps interconnection trunks, and makes two-way measured-use trunking available.[48] VZ-MA states that as of June 2000, VZ-MA had 290,000 interconnection trunks in service with 29 CLECs.[49] VZ-MA reports that these trunks were carrying an average of 1.9 billion minutes of traffic per month by July 2000.[50] VZ-MA states that it added approximately 275,000 trunk terminations to its network in 1999 in order to meet growing demand, and that it plans to further expand the trunk capacity of its switches this

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45 VZ-MA Application, Appdx. B, Vol. 42, Tab 494, ¶ 11 (VZ-MA August Supplemental Checklist Aff.).

46 In D.T.E. 98-57, the Department rejected a proposal by VZ-MA to require CLECs to establish geographically relevant interconnection points. See VZ-MA Application, Appdx. E, Vol. 16, Tab 260, at 128-135 (D.T.E.'s Order Approving Revisions to Resale Tariff No. 14 and Denying Interconnection Tariff No. 17).

47 VZ-MA Application, Appdx. B, Vol. 32a-b, Tab 423, ¶ 29 (VZ-MA May Checklist Aff.).

48 VZ-MA Application, Appdx. A, Tab 1, ¶¶ 12-13 (Lacouture/Ruesterholz Decl.).

49 VZ-MA Application, Appdx. B, Vol. 47, Tab 555, at 5257-5258 (Transcript of Technical Session held 09/01/00).

50 VZ-MA Application, Appdx. A, Tab 1, ¶ 10 (Lacouture/Ruesterholz Decl.).

year by approximately 320,000 trunk terminations.[51]

VZ-MA asserts that it provides local interconnection in Massachusetts using substantially the same processes and procedures that are employed in New York (and which were found by the New York Public Service Commission ("NYPSC") and the FCC to meet the requirements of the Act), and that it makes each type of interconnection specified by the FCC available at all technically feasible points.[52]

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51 Id. at ¶ 11.

52 Id. at ¶ 8.

VZ-MA claims that traffic utilization studies conducted in Massachusetts from August 1999 through July 2000 provide further evidence that VZ-MA is provisioning trunks to CLECs in a non-discriminatory manner. In May through July, 2000, the ratio of trunks required to operate at engineering design level B.005[53] to trunks in service was 33.4 percent for CLEC-dedicated final trunk groups, and 68.0 percent for VZ-MA's common final trunk groups.[54] According to VZ-MA, this demonstrates that VZ-MA is providing better service to CLECs in the aggregate (i.e., trunk groups provided CLECs experience blockage less frequently than VZ-MA's retail trunk groups) by having installed considerably more interconnection trunks than engineering design and traffic patterns require.[55]

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53 The B.005 blocking standard is ½ percent blocking (one call blocked out of every 200 calls attempted) during the busiest hour of the day over a four-week measurement period. VZ-MA Application, Appdx. B, Vol. 32a-b, Tab 423, ¶ 36 (VZ-MA May Checklist Aff.).

54 VZ-MA Application, Appdx. A, Tab 1, ¶ 27 (Lacouture/Ruesterholz Decl.).

55 Id.

In hearings and in written comments, several carriers raised concerns regarding VZ-MA's provisioning and maintenance of interconnection trunks. Most of the complaints were anecdotal, or concerned issues that have already been addressed to the Department's satisfaction. Two carriers, however, raised substantive complaints that will be addressed in this evaluation.

AT&T has raised numerous complaints concerning VZ-MA's provisioning of interconnection trunks. AT&T claims that its ability to serve customers has been hampered by VZ-MA's inability to provide digital equipment in the Cambridge tandem until August, 2000.[56] AT&T also claims that, despite having provided VZ-MA with a forecast of its need for trunking associated with its South Boston switch, VZ-MA has informed AT&T that it does not have sufficient interoffice facilities ("IOF") to provide enhanced 911, and that as a result AT&T has been waiting for these facilities for 14 months.[57]

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56 VZ-MA Application, Appdx. B, Vol. 38, Tab 460, at 42 (AT&T July Supplemental Comments).

57 Id.

Concerning the availability of 64 kbps Clear Channel trunks at the Cambridge tandem, VZ-MA admits that this older switch has reached its physical installed capacity for Clear Channel trunks, and that nearly all of those trunks are in use.[58] VZ-MA provided a copy of an industry letter dated July 6, 1999, informing CLECs of the constraints in the Cambridge tandem, and informing CLECs that new carrier customers without any Clear Channel trunks would be provided with a maximum of 24 64 kbps trunks (i.e. one DS1) if traffic demands require it.[59] VZ-MA noted that it is not provisioning Clear Channel trunks to itself while denying them to CLECs, and that the "as required" allocation applies to the entire industry including VZ-MA.[60] VZ-MA indicated that this "as required" allocation of Clear Channel trunks in Cambridge was instituted in order to manage traffic pending the completion of a new access tandem in Newton; and, now that the Newton tandem is complete, CLECs can obtain 64 kbps Clear Channel trunks from Newton and reduce the number of Clear Channel trunks they have in Cambridge.[61]

AT&T also claims that VZ-MA misses or arbitrarily changes due dates. AT&T claims that out of 422 orders submitted between March and June of 2000, VZ-MA was the sole cause of

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58 VZ-MA Application, Appdx. A, Tab 1, ¶ 13 (Lacouture/Ruesterholz Decl.).

59 VZ-MA Application, Appdx. B, Vol. 32a-b, Tab 423, ¶ 25 (VZ-MA May Checklist Aff., Exhibit A).

60 VZ-MA Application, Appdx. B, Vol 42, Tab 494, ¶ 17 (VZ-MA August Supplemental Checklist Aff.).

61 VZ-MA Application, Appdx. A, Tab 1, ¶ 13 (Lacouture/Ruesterholz Decl.).

64 missed due dates, a 15 percent failure rate.[62] AT&T also reports that in March 2000, VZ-MA changed the due dates for seven VZ-MA-initiated orders 18 times because VZ-MA was unable to test the trunks.[63] AT&T notes that when ILEC-ordered trunks are not provisioned in a timely fashion, ILEC customers may be unable to complete calls to CLEC customers, thus hampering the spread of competition.[64]

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62 VZ-MA Application, Appdx. B, Vol. 38, Tab 460, at 42 (AT&T July Supplemental Comments).

63 Id.

64 Id.

Responding to AT&T's complaint concerning the 64 missed due dates on 422 orders, VZ-MA contends that AT&T only submitted 19 orders between March and June of 2000, eight of which were actually initiated by VZ-MA.[65] VZ-MA asserts that AT&T raised a similar complaint in New York, where it was ultimately determined that AT&T had included special access services in its count of total orders.[66] VZ-MA also claims that of the eleven remaining orders not initiated by VZ-MA, AT&T made supplements or other changes to seven of those orders, which extended the due dates.[67] In addition, VZ-MA claims that the provisioning of six of the eleven orders was delayed due to instances of "customer not ready" ("CNR").[68] With regard to AT&T's allegation of arbitrarily changed due dates, VZ-MA claims it is unable to respond because it has not received specific order information from AT&T, but that it completed 47 VZ-MA-initiated trunk orders in March 2000, many of which had AT&T-generated supplements, and 32 of which involved

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65 VZ-MA Application, Appdx. B, Vol. 42, Tab 494, ¶ 36 (VZ-MA August Supplemental Checklist Aff.).

66 Id.

67 Id. at ¶ 37.

68 Id. at ¶ 38.

instances of CNR.[69]

[69] Id. at ¶ 40.

Winstar argues that VZ-MA's performance in the maintenance and repair of interconnection trunks is deficient, and has adversely affected its ability to compete. Winstar states that in September, 1999, VZ-MA (without providing notice to Winstar) moved the terminating end of a trunk group to a switch that did not work.[70] Winstar claims that VZ-MA did not test the switch prior to moving the trunk group, and that Winstar's customers were unable to place or receive calls as a result of the reconfiguration to the malfunctioning switch.[71] Winstar claims that its customers suffered this outage longer than necessary because of VZ-MA's decision to leave the trunk group in its new configuration and try to repair the switch rather than to restore the trunk group to its original configuration pending the repair of the switch.[72]

Winstar also complains that VZ-MA's method of reporting its performance concerning

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70 VZ-MA Application, Appdx. B, Vol. 38, Tab 464, at 3 (Winstar July Supplemental Comments)

71 Id. at 3-4.

72 Id. at 4.

outages does not capture the true extent of VZ-MA's responsibility for the length of outages.[73] Winstar disagrees with VZ-MA's practice of "stopping the clock" when VZ-MA refers a CLEC-reported problem back to the CLEC for a further check of the CLEC's systems, arguing that it artificially reduces the length of the outage for which VZ-MA is held responsible.[74] Winstar argues that VZ-MA remedies many outages and scores them as "cleared while testing," further obscuring its own responsibility for the outages.[75]

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73 Id.

74 Id.

75 Id. at 5.

Winstar complains that VZ-MA is provisioning 64 kbps Clear Channel trunks in a discriminatory manner, because VZ-MA has not had capacity in its Cambridge switch to provide Clear Channel trunks since July 1999 and is not making additional Clear Channel trunks available until the fourth quarter of 2000.[76] Winstar further argues that VZ-MA is not provisioning available trunks for CLECs in a timely fashion, resulting in Winstar's customers' calls being blocked due to inadequate trunking capacity.[77]

In response to Winstar's comments concerning the September 1999 outage, VZ-MA admitted responsibility for the outage, which it attributed to human error.[78] In addition, in order to prevent this type of outage in the future, VZ-MA implemented a "Winstar Service Improvement Action Plan," which indicated VZ-MA's willingness to enter into additional dialogues with Winstar in order to jointly identify network capabilities and requirements.[79]

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76 Id. at 6.

77 Id.

78 VZ-MA Application, Appdx. B, Vol. 42, Tab 494, ¶ 23 (VZ-MA August Supplemental Checklist Aff.).

79 Id.

VZ-MA argues that "stopping the clock" on its measured responsibility for an outage when it fails to find a problem and refers the outage back to the CLEC is a long-standing practice, the same practice followed when investigating trouble reports from interexchange carriers ("IXCs"), and consistent with the assumptions upon which the C2C Guidelines are constructed.[80]

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80 Id. at ¶ 24.

VZ-MA notes that Winstar is responsible for measuring its own blocking at its switch, and VZ-MA does not know when Winstar's local VZ-MA-bound traffic is exceeding the B.005 threshold at the Winstar switch.[81] VZ-MA responds that if Winstar's customers' calls are being blocked due to inadequate trunking capacity, then the remedy is for Winstar to order additional trunks to carry Winstar traffic to VZ-MA.[82]

c. Conclusions

VZ-MA provided two types of data to demonstrate its interconnection performance: (a) the C2C metrics for Massachusetts, measuring the quality of ordering and provisioning interconnection trunks, maintenance of interconnection trunks, and the performance of interconnection trunks after installation (i.e. trunk blockage); and (b) data showing VZ-MA's aggregate performance for six different categories of CLEC trunking orders.

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81 Id. at ¶ 29.

82 Id.

From May through July 2000, the C2C reports reveal that, on average, 1.08 percent of VZ-MA's final trunk groups exceeded the B.005 blocking standard, compared to 1.05 percent of CLECs' final trunk groups.[83] During the same period of time, only three CLEC dedicated final trunk groups exceeded the blockage standard for two consecutive months, and none exceeded the blockage standard for three consecutive months. Finally, during the same period, CLECs fared as well or better than IXCs when it came to the provisioning of trunks. In addition, the aggregate data reveal that VZ-MA consistently met the target and negotiated provisioning intervals except in orders involving CNR.[84] The performance data show that VZ-MA is provisioning and maintaining interconnection trunks in a non-discriminatory manner.

Furthermore, the Department finds VZ-MA's replies fully responsive to AT&T's and Winstar's complaints. VZ-MA admitted responsibility for the September 1999 outage that put Winstar's customers temporarily out of service, and implemented a service plan to insure that similar problems do not arise in the future. Winstar has not suggested that VZ-MA's fix was inadequate; the record reflects that a one-time problem arose, and that VZ-MA addressed the

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83 VZ-MA Application, Appdx. B, Vol. 42, Tab 494, Exh. G1 (VZ-MA August Supplemental Measurements Aff.); Appdx. B, Vol. 47, Tab 552 (VZ-MA Performance Reports for July 2000).

84 VZ-MA Application, Appdx. A, Tab 3, Attachment F (Guerard/Canny Decl.).

problem. The Department also finds that VZ-MA is correctly measuring its proportional responsibility for outages. Furthermore, the Department finds that VZ-MA's completion of a new access tandem in Newton, and its application of the "as required" allocation standard for Clear Channel trunks to itself as well as to its competitors, was an appropriate response to the constraints at the Cambridge tandem.

Concerning AT&T's allegations, the record reflects a disagreement between AT&T and VZ-MA concerning the definition of an order. VZ-MA stated that VZ-MA considers a trunk order an "order," and that AT&T considers each individual DS1 as a separate order.[85] During the oral argument, AT&T asked for the Department's assistance in determining the provisioning interval for trunking orders, and complained that VZ-MA is able to unilaterally categorize orders as being part of complex "projects."[86] However, at a technical session, AT&T stated that it had no problem with VZ-MA's aggregation of orders into projects per se, but that it has had reason to object to the categorization of some orders as projects, and that the categorization issue is not currently a major problem for AT&T.[87] AT&T also conceded that some of the difference in the order counts reported by AT&T and by VZ-MA may be due to VZ-MA grouping orders into

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85 VZ-MA Application, Appdx. B, Vol. 47, Tab 555, at 5261-5262 (Transcript of Technical Session Held 09/01/00).

86 VZ-MA Application, Appdx. B, Vol. 49, Tab 565, at 5461 (Transcript of Oral Argument Held 09/08/00).

87 VZ-MA Application, Appdx. B, Vol. 47, Tab 555, at 5357 (Transcript of Technical Session Held 09/01/00).

projects.[88] VZ-MA stated that all projects are managed through interactions between the CLEC and VZ-MA project managers, but that because projects tend to change over time there exists a potential for mis-communication between the VZ-MA and CLEC project managers.[89] VZ-MA conceded that such mis-communications have occurred.[90] The underlying difficulty appears to be one of communication, not of provisioning performance.

The Department also notes that only two carriers alleged serious problems with VZ-MA's trunking performance. If VZ-MA's trunking performance were seriously deficient, the Department would expect to have received complaints from a greater number of carriers. This is not to minimize the difficulties encountered by Winstar and AT&T; indeed, a degree of mis-communication between VZ-MA and the CLECs is apparent regarding when an interconnection trunk is considered an individual order and when it is considered a portion of a larger project.

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88 Id. at 5352.

89 Id. at 5279, 5281-5282.

90 Id.

Because VZ-MA has been responsive to CLEC complaints concerning interconnection trunking, the Department expects that the parties will be able to work collaboratively to arrive at a mutually satisfactory definition of an "order" or, at the very least, clearly define the point at which an order for a trunk or series of trunks ceases to be treated independently and is grouped into a larger "project." Although some mis-communication continues, it is not a significant barrier to competition and is not sufficient to warrant a finding of non-compliance with the trunking portion of the interconnection requirement.

In any event, where problems have arisen, they have been sporadic or occasional -- not systemic-- and a good faith and successful effort has been made to resolve them. For the reasons stated above, the Department finds that VZ-MA has satisfied the trunking portion of the interconnection requirement.

2. Collocation

a. Standard of Review

In order to establish compliance with § 271(c)(2)(B)(i), "a BOC must demonstrate that it

can furnish collocation."[91] A BOC must have processes and procedures in place available through a state-approved tariff to ensure the availability of physical and virtual collocation arrangements in accordance with § 251(c)(6) and applicable FCC rules.[92] Generally, the FCC requires ILECs to provide competitors shared cage and cageless collocations; security requirements no more stringent than the incumbent's own requirements; around-the-clock access to equipment; and access to unused or adjacent central office space as technically feasible.[93] Moreover, the FCC notes that data showing the quality of procedures for processing applications for collocation space, as well as the timeliness and efficiency of provisioning collocation space, helps the FCC evaluate a BOC's compliance with its collocation obligations.[94]

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91 Application of BellSouth Corporation, et al., for Provision of In-region, Inter-LATA Services in Louisiana, CC Docket No. 98-271, Memorandum Opinion and Order, 13 FCC Rcd at 20640-41, at ¶ 62 (1998) ("Second BellSouth Louisiana Order").

92 47 C.F.R. §§ 51.321-23 (implementing 47 U.S.C. § 251(c)(6)).

93 Deployment of Wireline Services Offering Advanced Telecommunications Capability, CC Docket No. 98-147, First Report and Order and Further Notice of Proposed Rulemaking, FCC 99-48 (rel. March 31, 1999) ("Advanced Services Order").

94 SBC Texas Order at ¶ 64.

b. Discussion

VZ-MA states that it provides CLECs with several types of physical and virtual collocation, and other collocation alternatives, and notes that Tariff No. 17 includes comprehensive collocation terms and conditions.[95] VZ-MA indicates that through July 2000, VZ-MA has provided over 1,600 collocation arrangements (both physical and virtual) in Massachusetts, with approximately 170 collocation arrangements in progress.[96] VZ–MA states that, through July 2000, it has placed in service 759 traditional physical collocation arrangements, 850 cageless arrangements (705 Secured Collocation Open Physical Environment ("SCOPE") arrangements and 145 Cageless Collocation Open Environment ("CCOE") arrangements), and three virtual collocation arrangements.[97] VZ–MA states that through these arrangements, CLECs have access to more than 94.5 percent of VZ–MA's residential access lines and 96 percent of VZ–MA's business access lines.[98] VZ-MA also offers shared caged collocation and adjacent collocation arrangements, but has yet to receive a formal request for either of these two arrangement types.[99] In addition, VZ-MA states that it provides Collocation at Remote Terminal

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95 VZ–MA Application, Appdx. B, Vol. 32a-b, Tab 423, ¶ 64 (VZ–MA May Checklist Aff.).

96 VZ–MA Application, Appdx. A, Tab 1, ¶ 34 (Lacouture/Ruesterholz Decl.).

97 Id. at ¶¶ 35, 49. SCOPE arrangements, unlike CCOE, are located in separate, secure areas within VZ–MA's central offices.

98 Id. at ¶ 34.

99 Id. at ¶¶ 54, 55.

Equipment Enclosures ("CRTEE") under amendments to interconnection agreements and through a proposed tariff.[100]

According to VZ–MA, as of September 2000, space for some form of physical collocation was available in 224 central offices in Massachusetts.[101] Of the remaining central offices in Massachusetts, VZ–MA states that three central offices have space for virtual collocation only, two do not have space for either physical or virtual collocation, 13 are pending reevaluation, and 29 central offices have never received collocation requests.[102]

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100 Id. at ¶ 59.

101 VZ–MA Application, Appdx. A, Tab 1, ¶ 39 (Lacouture/Ruesterholz Decl.).

102 Id. In a filing dated September 28, 2000, VZ–MA notified the Department that space for physical collocation has been exhausted in an additional three central offices, but that virtual collocation is available in those locations.

Contrary to CLEC claims, VZ-MA contends that it has demonstrated the ability to satisfy CLEC requests for collocation and the ability to meet CLECs' increasing demand for collocation.[103] VZ-MA also indicates that it provisions collocation arrangements in a standard 76-business-day interval, subject to a 15-day extension if the collocation space requires special or extraordinary conditioning.[104] Verizon states that during May through July 2000, VZ–MA met the due date for 96 percent of physical collocation jobs completed in those months.[105] VZ-MA maintains that, during the same period, it met the due date for 96 percent of SCOPE arrangements and 98 percent of CCOE arrangements.[106]

AT&T and Covad challenged VZ-MA's compliance with its collocation obligations in their Pre-Filed Technical Session Statements and during the 1999 Technical Sessions. Generally, AT&T and Covad raised concerns about the timeliness of VZ-MA's collocation provisioning, the quality of the collocation arrangements, and various VZ-MA-imposed terms and conditions

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103 VZ–MA Application, Appdx. B, Vol. 32a-b, Tab 423, ¶¶ 75-77 (VZ–MA May Checklist Aff.).

104 VZ–MA Application, Appdx. A, Tab 1, ¶ 37 (Lacouture/Ruesterholz Decl.).

105 Id. at ¶ 38.

106 Id. at ¶ 47.

pertaining to collocation. In addition, during the 2000 technical sessions, Rhythms raised concerns about virtual collocation arrangements and VZ–MA power charges.

c. Conclusions

Based upon the record, the Department concludes that VZ-MA complies with the collocation portion of checklist item 1. VZ-MA has demonstrated that its collocation offering satisfies the requirements of §§ 251 and 271 of the Act by making various types of physical (e.g., cageless) and virtual collocation available through a state-approved tariff (Tariff No. 17) at just, reasonable, and nondiscriminatory rates. Specifically, Tariff No. 17 underwent a thorough investigation in docket D.T.E. 98-57, in which numerous CLECs actively participated. The Department conducted a comprehensive review of VZ-MA's proposed Tariff No. 17, and, in an Order issued on March 24, 2000, approved specific provisions of VZ-MA's collocation offering, including VZ-MA's collocation cost study,[107] and directed VZ-MA to file a compliance tariff

[107] The majority of VZ–MA's collocation rates were approved in a series of Orders in the Department's Consolidated Arbitrations proceeding, during which the Department investigated VZ–MA's TELRIC collocation cost study. See VZ–MA Application, Appdx. H, Vol. 63, Tab 522 (Phase 4-G Order); VZ–MA Application, Appdx. H, Vol. 65, Tab 541 (Phase 4-H Order); VZ–MA Application, Appdx. H, Vol. 69, Tab 593 (Phase 4-I

consistent with that Order. In a subsequent Order issued on September 7, 2000, in D.T.E. 98-57-Phase I, the Department approved Tariff No. 17, finding it in compliance with the Department's earlier Order as well as with the requirements outlined in the FCC's Advanced Services Order, but directed VZ-MA to file a further compliance tariff for specific revisions and with specific cost studies.

Order). The Department approved rates for additional collocation offerings in docket D.T.E. 98-57. See VZ–MA Application, Appdx. E, Vol. 16, Tab 260 (D.T.E. 98-57 March 2000 Order); Order, D.T.E. 98-57-Phase I (September 7, 2000). Rates for a few offerings will require further investigation, but most of this small subset are in effect subject to true-ups.

In AT&T Communications of New England, Inc., D.T.E. 98-58 (1999),[108] the Department established additional requirements for VZ–MA in processing physical collocation requests, beyond those established by the FCC in its Advanced Services Order, to ensure that CLECs are able to gain prompt entry into the local services market. Among other things, this Order addressed: (1) response times for physical collocation requests, central office inspections, and incomplete applications; (2) timing and substance of notification of a space exhaustion filing; (3) CLEC tours of VZ–MA's central offices; (4) information to be included on VZ–MA's collocation web site; (5) reclamation of unused collocation space; (6) reduction of VZ–MA's administrative space in central offices; and (7) availability of pre-application information.[109]

In addition, the Department is continuing its investigation of several VZ-MA collocation offerings, including CRTEE, adjacent collocation, and tariff provisions filed in compliance with the FCC's UNE Remand Order. Despite the continuing investigation, the Department notes that all of VZ–MA's collocation offerings are available to competitors through the tariff and under interconnection agreements subject to true-up and revision when the permanent provisions and rates are established upon completion of our review. Moreover, the Department has set a

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108 VZ–MA Application, Appdx. D, Vol. 3, Tab 53 (D.T.E. Order on TCG's Request to Establish Rules re. Collocation Requests).

109 Id. at 13-26.

procedural schedule for completing our investigation of Tariff No. 17.

Upon review of VZ-MA's collocation performance, the Department finds that VZ-MA responds to physical collocation applications within the Department's prescribed period, and that VZ-MA provisions collocation arrangements in a timely manner. The record shows that for the first seven months of 2000, VZ-MA responded within ten days to requests for physical collocation, 100 percent of the time.[110] In addition, VZ–MA's standard for on-time installation is 95 percent for both physical and virtual collocation, and the standard provisioning interval for both physical and virtual collocation is an average of 76 days.[111] For each of the first seven months of 2000, VZ-MA's on-time results for physical collocation were as follows: January, 92.59 percent; February, 100 percent; March, 98.61 percent; April, 98 percent; May, 97.56 percent; June, 95.91 percent; and July, 95.52 percent.[112] For each of the first seven months of 2000, the record shows that the average intervals in which VZ-MA provisioned physical collocation were as follows: January, 81.64 days; February, 71.69 days; March, 70.77 days;

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110 VZ–MA Application, Appdx. B, Vol. 42, Tab 494, Exh. G1 (VZ–MA August Supplemental Measurements Aff.).

111 VZ–MA Application, Appdx. E, Vol. 16, Tab 260 (D.T.E. 98-57 Order); VZ–MA Application, Appdx. D, Vol. 3, Tab 53 (D.T.E. 98-58 Order).

112 VZ–MA Application, Appdx. B, Vol. 42, Tab 494, Exh. G1 (VZ–MA August Supplemental Measurements Aff.); VZ–MA Application, Appdx. A, Tab 3, Att. E (Guerard/Canny Decl.).

April, 75 days; May, 71.41 days; June, 74.42 days; and July, 75.44 days.[113] Although VZ-MA did not meet the 95 percent standard for on-time installation in January 2000, the degree that VZ-MA's performance missed the mark was not substantial, and the Department finds that this is not indicative of any chronic provisioning problems that would hinder a finding of compliance with VZ-MA's collocation obligations. Likewise, VZ-MA did not meet the 76-day standard interval for January 2000, missing it by more than five days. However, the Department finds that there is nothing in the record to indicate that a pattern of poor installation performance exists. To the contrary, for the succeeding six months, VZ-MA met or exceeded the 76-day standard.

Finally, although AT&T initially challenged VZ-MA's collocation provisioning performance, AT&T did not raise its concerns of provisioning delays this year. Likewise, AT&T and Covad raised concerns with specific terms and conditions of VZ-MA's collocation policies during the 1999 technical sessions but did not raise the same concerns thereafter. Furthermore, the Department's March 24, 2000 and September 7, 2000 Orders in D.T.E. 98-57 have addressed many, if not all, of the issues raised, including VZ-MA's policies on reservation of space, anti-

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113 VZ–MA Application, Appdx. B, Vol. 42, Tab 494, Exh. G1 (VZ–MA August Supplemental Measurements Aff.); VZ–MA Application, Appdx. A, Tab 3, Att. E (Guerard/Canny Decl.).

warehousing, and training requirements for virtual collocation arrangements.

Rhythms, however, raised two new issues during the August 2000 technical sessions.[114] The first issue relates to problems Rhythms experienced in mid-July 2000 when VZ-MA was allegedly unable to repair equipment involving an in-place conversion of a virtual collocation arrangement to a physical collocation arrangement.[115] Rhythms indicates that it had to escalate the situation and, only after a three-day outage, was Rhythms permitted to bring in its own personnel to make the repairs.[116] Thus, Rhythms argues that a CLEC cannot compete without access to its equipment, and that VZ–MA's virtual collocation arrangements are not effective.[117] The second issue involves Rhythms' allegation that VZ-MA charges CLECs twice for power.[118]

As to the second issue, the Department notes that the power charges to which Rhythms refers have been approved by the Department as part of its Consolidated Arbitrations proceeding.[119] During the course of that proceeding, CLECs had made the same assertions that VZ–MA was double charging for power. However, the Department determined that VZ-MA's

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114 VZ–MA Application, Appdx. B, Vol. 45, Tab 520, at 4269-4277 (Transcript of Technical Session Held 8/17/00).

115 Id. at 4272, 4276.

116 Id. at 4276.

117 Id. at 4275.

118 Id. at 4272.

119 See VZ-MA Application, Appdx. H, Vol. 63, Tab 522, at 17-22 (Phase 4-G Order); VZ-MA Application, Appdx. H, Vol. 69, Tab 593 (Phase 4-I Order).

method of estimating power costs was sound, because it properly accounted for the incremental energy costs associated with providing power to the CLECs' equipment.[120] Accordingly, we find Rhythms' claim is inadequate to support a finding of non-compliance with checklist item 1.

[120] VZ-MA Application, Appdx. H, Vol. 63, Tab 522, at 20 (Phase 4-G Order).

Turning to Rhythms' first issue, a review of the documentation provided by Rhythms indicates a much more complicated sequence of events than suggested by Rhythms. There was not a single isolated problem which VZ-MA was unable to repair, but a series of problems that apparently began two months earlier. Moreover, the situation involved a misunderstanding of VZ-MA's trouble reporting and escalation procedures by Rhythms' staff, and uncertainty on the part of both VZ-MA and Rhythms regarding how to address the service problem. We are not discounting the unfortunate effect this incident had on customers. Nevertheless, by a joint letter dated September 1, 2000, Rhythms and Verizon have taken affirmative steps to ensure that similar problems do not occur, such as revising VZ–MA's policies to allow a CLEC to dispatch a vendor, manufacturer, certified agent or technical support engineer to provide direction to VZ-MA's technicians.[121] Accordingly, the Department finds that the record before us establishes that VZ-MA has met its collocation obligations under checklist item 1.

B. Checklist Item 2 – Unbundled Network Elements

1. Operations Support Systems

a. Background

[121] VZ–MA Application, Appdx. B, Vol. 47, Tab 554 (VZ–MA/Rhythms Letter to D.T.E. re. Compliance with 8/17/00 Order).

In determining whether a BOC has satisfied the requirements of checklist item 2, the FCC has stated that it will examine whether the BOC provides competitors with nondiscriminatory access to its OSS.[122] The FCC states that the nondiscriminatory standard for OSS functions requires the BOC "to offer requesting carriers access that is equivalent in terms of quality, accuracy, and timeliness" to any functions that the BOC provides to itself or its affiliates.[123] For OSS functions that have no retail analogue, the BOC must provide access "sufficient to allow an efficient competitor a meaningful opportunity to compete."[124]

The FCC has stated that it will follow a two-step approach to its review of whether a BOC has met the OSS requirements of checklist item 2. Under the first step, the FCC states the BOC "must demonstrate that it has developed sufficient electronic . . . and manual interfaces to allow competing carriers equivalent access to all of the necessary OSS functions."[125] As part of

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122 Bell Atlantic New York Order at ¶ 84.

123 Id. at ¶ 85.

124 Id. at ¶ 86.

125 Id. at ¶ 88.

this requirement, the BOC must "provide competing carriers with the specifications necessary for carriers to design or modify their systems in a manner that will enable them to communicate with the BOC's systems and any relevant interfaces."[126] Under the second step, the FCC has stated that it will "examine performance measurements and other evidence of commercial readiness to ascertain whether the BOC's OSS is handling current demand and will be able to handle reasonably foreseeable demand volumes."[127]

Review of a BOC's compliance with the OSS requirements of checklist item 2 is divided into six domains representing the various OSS functions that a competitor must have access to in order to serve the needs of its customers. The six OSS domains are Change Management and Technical Assistance, Pre-Ordering, Ordering, Provisioning, Maintenance and Repair, and Billing. The BOC must satisfy its requirement of providing nondiscriminatory access to the functions in each of these domains in order to show that it is providing access to its OSS in a manner that is just and reasonable.

b. Overview of OSS

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126 Id.

127 Id. at ¶ 89.

VZ-MA provides CLECs operating in Massachusetts with an extensive array of OSS to obtain information from VZ-MA's databases, place orders for end customer services, report and repair service troubles, and obtain the necessary information to bill their end customers for services provided. VZ-MA also provides CLECs with the necessary documentation, specifications, and training to allow CLECs to build interfaces capable of interrelating with VZ-MA's OSS network and to allow the CLECs' representatives to interact with VZ-MA's systems and databases to serve their end customers. While VZ-MA has developed separate interfaces for CLECs to access VZ-MA's back-end OSS systems and databases, CLEC representatives obtain customer and service information from the same back-end systems and databases that are utilized by VZ-MA's retail representatives.[128] Further, VZ-MA notes that, in most cases, the interfaces and systems available in Massachusetts are the same as those that Verizon makes available to CLECs operating in New York, though in many cases there are separate physical components in place to serve each jurisdiction.[129]

VZ-MA's OSS offerings are divided into six primary domains: Change Management and Technical Assistance; Pre-Ordering; Ordering; Provisioning; Maintenance and Repair; and Billing. Within each of these individual domains, VZ-MA has defined obligations that it must meet in order to satisfy the overall checklist requirement that it provides nondiscriminatory access to its OSS. VZ-MA's OSS offerings in each of these individual domains is discussed in detail below.

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128 VZ-MA Application, Appdx. A, Vol. 1, Tab 2, ¶ 18 (McLean/Wierzbicki Decl.).

129 Id. at ¶ 8.

Further, to show that its OSS are available to CLECs on a nondiscriminatory basis, VZ-MA has subjected its OSS offerings to a comprehensive evaluation by an independent third-party, KPMG, acting under the direction and supervision of the Department.

c. Independent Third-Party Testing

In August 1999, the Department contracted with KPMG to conduct an evaluation of VZ-MA's OSS. The purpose of KPMG's evaluation was to determine whether VZ-MA makes available all of the systems, information, and personnel necessary to enable a CLEC to establish an account relationship with VZ-MA, perform its daily operations at a level consistent with that of VZ-MA's retail operations, and maintain its ongoing relationship. KPMG's evaluation was designed to address VZ-MA's OSS-related offerings in each of the domains specified by the FCC as being essential to a BOC's showing that it provides competitors with nondiscriminatory access to its OSS functions.

In designing its test, KPMG organized its evaluation into five distinct testing domains. Because of the interrelation between three OSS functions, KPMG reviewed VZ-MA's Pre-Ordering, Ordering, and Provisioning systems and processes in a combined domain. KPMG examined the systems, interfaces and processes VZ-MA has in place to enable CLECs to discover, report, and resolve service troubles in the Maintenance and Repair domain. In the Billing domain, KPMG reviewed VZ-MA's systems, processes, and procedures for providing CLECs with the usage and billing records that CLECs need in order to accurately bill their end customers. KPMG also evaluated VZ-MA's performance in the Relationship Management and Infrastructure domain,

which examined VZ-MA's Change Management processes, Technical Assistance offerings, and account relationship practices. Finally, KPMG conducted a detailed review of VZ-MA's data collection and reporting processes in its Performance Metrics Review domain.

KPMG conducted its review of VZ-MA's OSS through two primary methods. First, KPMG evaluated the "policies, guidelines, training, documentation and work center activities associated with the CLEC/ILEC relationship management process."[130] Under this method, KPMG examined whether VZ-MA had in place the necessary systems and processes to meet the needs of the CLECs using VZ-MA's wholesale services. The second method KPMG used to evaluate VZ-MA's OSS was through KPMG's assumption of the role of a CLEC operating in Massachusetts. KPMG built a test bed of accounts and used VZ-MA's OSS systems and personnel in the same manner as a traditional CLEC.[131] Through this transaction-based testing, KPMG was able to evaluate the types of experiences that CLECs have in their relations with VZ-MA.

Overall, KPMG evaluated VZ-MA's wholesale OSS capabilities against 804 individual test points within the five domains. Throughout the testing process, KPMG issued Observation and Exception Reports detailing specific issues with VZ-MA's OSS that required correction.

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130 VZ-MA Application, Appdx. I, Vol. 1, Tab 1, at 6 (KPMG Final Report Version 1.4).

131 KPMG's transaction-based testing was actually much broader in scope than the interaction that any single CLEC would likely experience with VZ-MA's systems. KPMG, acting as a CLEC, evaluated each of the available service delivery methods (resale, UNE-Platform, and UNE-Loops) and submitted transactions over each of VZ-MA's available interfaces, except the Common Object Request Broker Architecture ("CORBA") pre-order interface.

Observations and Exceptions were discussed in conference calls, and, when the specific issue required, KPMG performed retests to ensure that VZ-MA's stated changes had been effectively implemented. In its final report, released September 7, 2000, KPMG reported that VZ-MA had satisfied 800 of the defined test points. The Department has taken responsibility to ensure that VZ-MA implements the necessary changes to resolve the problems related to KPMG's four unsatisfactory results.[132]

d. Change Management and Technical Assistance

i. Change Management

(A) Standard of Review

[132] See discussion of KPMG's "Not Satisfied" findings at Section V.B.1.e.iv., and Section V.B.1.g.iv., below.

A key component of the BOC's demonstration that it provides nondiscriminatory access to its OSS functions is the BOC's showing that it has an adequate Change Management process in place and has adhered to that process over time. In determining whether a BOC has met the Change Management requirements of this checklist item, the FCC has employed a five-point review of the BOC's Change Management process. First, the BOC must make available in a readily accessible and organized fashion any information relating to the Change Management process. The FCC has generally applied this standard as requiring the "memorialization of the Change Management process in a basic document."[133] Second, the BOC must show that competing carriers have had substantial input in the design and operation of the Change Management process. Next, the Change Management process must include a procedure for the "timely resolution of change management disputes."[134] Fourth, the BOC must provide for a stable testing environment that mirrors the production environment. This testing environment must allow competitors to certify their OSS are capable of interacting with the OSS of the BOC, and must also allow competitors to test new software releases before they are implemented in the production environment. Finally, the FCC notes it will examine "the efficacy of the documentation the BOC makes available for the purpose of building an electronic gateway."[135] Overarching each of these five points is the general requirement that the BOC must show that it

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133 Bell Atlantic New York Order at ¶ 111.

134 SBC Texas Order at ¶ 108.

135 Id.

has adhered to its Change Management process over time. In approving the Change Management processes of VZ-NY and Southwest Bell Texas ("SWBT"), the FCC noted that while these five factors are indicative of what is necessary for a BOC to show that its Change Management process meets the requirements of nondiscrimination, the FCC does not rule out the possibility that other Change Management plans may meet its requirements as well.[136]

(B) VZ-MA's Offering

VZ-MA follows the same Change Management process in Massachusetts that is in place in New York, and VZ-MA states that the majority of system changes implemented in Massachusetts are implemented at the same time in New York as well.[137] VZ-MA notes that its Change Management process is outlined in a single document and is designed to "accommodate changes requested by CLECs, changes requested by [VZ-MA], emergency changes and changes required

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136 Bell Atlantic New York Order at ¶ 111; SBC Texas Order at ¶ 109 and n.282.

137 VZ-MA Application, Appdx. B, Vol. 32b, Tab 423, ¶ 153 (VZ-MA May OSS Aff.).

by standards bodies or regulatory authorities."[138]

138 Id.

VZ-MA follows its defined Change Management process for all CLEC-affecting software releases.[139] There are currently more than 500 individual CLEC users participating in the Change Management process who receive change notices and updates from VZ-MA.[140] Under the defined process, VZ-MA releases its draft business rules and technical specifications to CLECs 73 days before implementation of the changes. CLECs then have time to file comments with VZ-MA on the draft business rules and specifications, and VZ-MA is required under the Change

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139 VZ-MA does not use its Change Management process to notify CLECs of infrastructure changes that have no effect on the CLEC's interaction with VZ-MA's OSS systems. For example, VZ-MA was not required under the Change Management process to notify CLECs of the changes and upgrades that were made in May and June 2000 to its web-based Graphical User Interface ("GUI") to address outages and slow-downs in performance. Once VZ-MA implemented these infrastructure changes and monitored their performance, the company notified CLECs of the changes that were made and the results of these upgrades. See VZ-MA Application, Appdx. B, Vol. 46, Tab 538, 4764-65 (Transcript of Technical Session 8/22/00); see also Section V.B.1.e.ii, below, for discussion of VZ-MA's GUI availability problems and upgrades.

140 VZ-MA Application, Appdx. B, Vol. 32b, Tab 423, ¶ 155 (VZ-MA May OSS Aff.).

Management process to publish final business rules and specifications 45 days prior to implementation of the changes.[141] VZ-MA notes that in the case of changes to industry standards, VZ-MA works in unison with the CLECs to develop a customized schedule for the release of draft specifications and business rules, CLEC comments, and the publication of final documentation.[142]

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141 Id.

142 Id. at ¶ 156.

VZ-MA notes that CLECs have extensive opportunities to provide input during the Change Management process. First, VZ-MA's Change Management process was developed through a collaborative effort with CLECs.[143] Further, CLECs have the opportunity through the defined Change Management process to submit formal comments on VZ-MA's planned software releases. More significantly, CLECs play a vital role in the scheduling of systems changes. VZ-MA states that it utilizes a process to prioritize and schedule planned systems changes that involves the input of both VZ-MA and the CLECs. VZ-MA explains that all VZ-MA-initiated and CLEC-initiated changes are assigned priorities based on agreed-upon criteria through a joint process with the CLECs. The changes are then ranked and scheduled according to their assigned priorities.[144] VZ-MA notes that this joint prioritization process was used in the Autumn of 1999 to address changes to be implemented in VZ-MA's LSOG-4 software release. VZ-MA states that the result of that process placed the region-wide uniformity of LSOG-4 business rules as the highest priority, and, as a result, VZ-MA implemented 17 changes in its March 1, 2000 LSOG-4

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143 Id. at ¶ 153.

144 Id. at ¶ 161.

release and 22 changes in its June 2000 release that were designed to bring Verizon's business rules into uniformity across the region.[145]

[145] Id.

The Department has adopted the same performance standards used in New York to measure VZ-MA's ability to follow the Change Management process. VZ-MA measures the timeliness of its notification and documentation releases, the timeliness of unscheduled interface outage notices, the accuracy of new software releases, and the timeliness of new software corrections.[146] For each of these Change Management performance metrics, VZ-MA must meet a C2C standard of 95 percent on-time performance, with an additional requirement that no notification or documentation releases may be delayed longer than eight days.[147]

For the period of April through July 2000, VZ-MA's performance with regard to the timely release of documentation and notification met or exceeded C2C standards on all but two occasions. VZ-MA missed its performance standard for on-time Emergency Maintenance notifications in both April and June. However, VZ-MA's 80 percent on-time performance in April represents only one missed notice out of five opportunities, and the 93 percent performance in June represents only one late notice in 15 opportunities. In aggregate over the four-month

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146 VZ-MA Application, Appdx. B, Vol. 32a, Tab 423, ¶ 28 (VZ-MA May Measurements Aff.).

147 Id. at ¶¶ 32, 34.

period, VZ-MA sent emergency maintenance notices late in only these two instances out of a total of 45 emergency maintenance notices sent. With respect to interface outage notifications, VZ-MA met its requirement to provide notice to CLECs within twenty minutes of any outage in April, May, and June (there were no unscheduled interface outages in July). VZ-MA has not yet begun reporting its software corrections timeliness metrics, and began reporting its software accuracy metric in July 2000, but had no software releases subject to the metric performance during that month.

At times it is necessary for VZ-MA to implement systems changes that can not be put through the extended documentation review cycle. To meet these needs, VZ-MA uses Type I bulletins (formerly referred to as FLASH announcements) to notify CLECs of changes that need to be made on an expedited basis. VZ-MA states that it uses Type I bulletins to notify CLECs of changes that are implemented to correct software defects or documentation errors that prevent one or more CLECs from submitting certain types of orders.[148] VZ-MA explains that while these Type I notices may not always address issues that cause a "risk of system outage or of 'putting a CLEC out of business,'" they still must be implemented quickly in order to enable CLECs that are developing interfaces or submitting orders to avoid potential errors based on software or documentation problems.[149] VZ-MA notes further that it began a process to revise its emergency notification procedures in May 1999, and in February 2000, after numerous meetings and reviews

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148 VZ-MA Application, Appdx. B, Vol. 32b, Tab 423, ¶ 168 (VZ-MA May OSS Aff.).

149 Id.

of the process with CLECs, VZ-MA published its final emergency notification guidelines.[150] Finally, VZ-MA states that before any Type I bulletin is sent to the CLEC community, it is reviewed by VZ-MA's technical experts and Change Management personnel for accuracy, completeness, and clarity. Following the release of Type I notices, VZ-MA states that it holds industry conference calls to ensure that all affected parties understand the information in the bulletin.[151]

VZ-MA states that it follows the same Change Management dispute resolution process in Massachusetts that is used in New York. VZ-MA explains that any CLEC may escalate disputes related to the Change Management process first to the Change Management Director and, if necessary, to the Verizon Vice President. VZ-MA's dispute resolution process also provides either party with the opportunity to bring disputes to the Department if resolution is not possible between the parties on their own.[152] VZ-MA notes that the Change Management dispute resolution process was used by CLECs to request that VZ-MA keep the web-based Phase II GUI

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150 Id. at ¶¶ 165-166.

151 VZ-MA Application, Appdx. B, Vol. 34b, Tab 443 (VZ–MA's Response to DTE-WorldCom-4-13).

152 VZ-MA Application, Appdx. B, Vol. 32b, Tab 423, ¶ 163 (VZ-MA May OSS Aff.).

available until all problems with the Phase III GUI had been addressed and resolved. VZ-MA states that the retirement of the Phase II GUI was deferred three times through the escalation process.[153]

153 Id.

Once VZ-MA has presented the final business rules and technical specifications to the CLECs, it begins the process of internally testing the software release and implementing changes prior to releasing the software into the CLEC Test Environment ("CTE").[154] VZ-MA explains that its internal quality assurance ("QA") testing involves a number of separate tests that are conducted to ensure the quality and stability of VZ-MA's software releases.[155] For example, VZ-MA notes that the LSOG-4 software release went through three levels of internal testing before it was released into the CTE. First, VZ-MA states that the software developer performed unit and string testing on the software modules to ensure that they operated as designed. Next, VZ-MA performed "Near Neighbor" testing to determine whether there were any problems with the interactions between separate software modules within each application and between applications. Finally, VZ-MA performs QA or Integration Testing, which involves building and executing

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154 Id. at ¶ 157.

155 VZ-MA Application, Appdx. B, Vol. 34b, Tab 443 (VZ–MA's Response to DTE-WorldCom-4-2(b)).

various progression and regression test cases based on the final documentation and verifying the results of each test case.[156]

156 Id.

Once the internal QA testing is complete, VZ-MA releases the software changes into the CTE for CLEC new release testing four weeks prior to implementation of the software release into the production environment. The CTE allows CLECs to test the interaction between their own interfaces and the new VZ-MA software. VZ-MA states that the CTE is a mirror of the production environment so that CLECs can expect that the results from transactions in the CTE will be identical to the results for the same transaction in production.[157] VZ-MA also notes that for each software release it develops a formal set of test transactions, known as the Quality Baseline Validation Test Deck ("Test Deck"), which CLECs can use to simulate the common types of pre-order and order transactions that a CLEC would expect to use in its daily business operations. The Test Deck is also used by VZ-MA in the production environment at the end of the testing period to show that the CTE and production environments will provide the same transaction results.[158]

Apart from using the Test Deck, CLECs are able to develop and use their own testing scenarios in the CTE if they want to test transaction types more specific to their own business needs. VZ-MA notes that throughout the CLEC new release testing period, CLECs have access

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157 VZ-MA Application, Appdx. B, Vol. 32b, Tab 423, ¶ 172 (VZ-MA May OSS Aff.).

158 Id.

to dedicated testing coordinators to address any problems that arise in the CTE.[159] The CLEC testing procedures also include procedures for CLECs to report any problems to VZ-MA that need to be fixed for retesting.[160]

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159 Id. at ¶ 173.

160 Id. at ¶ 172.

VZ-MA has used its Change Management process for extensive software releases. Notably, in February 2000, VZ-MA released the LSOG-4 software in addition to implementing the changes that were agreed upon during the Autumn 1999 uniform business rules collaborative process. VZ-MA states that the February 2000 release was the largest wholesale services release in Verizon's history.[161] VZ-MA explains that, because of the size of this release, and because the February release was the first to utilize the CTE outside of New York, the release did not go as well as VZ-MA had planned. VZ-MA states that the release included over 400 Test Deck scenarios in the CTE, and the volume of the Test Deck made it difficult for VZ-MA to validate all of the scenarios within the specified test period. VZ-MA states, however, that all of the problems with the February release have been resolved, and that the resolution of these problems with the February release will prevent the same problems from arising again in future releases.[162]

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161 Id.

162 VZ-MA Application, Appdx. B, Vol. 32b, Tab 423, ¶ 172 (VZ-MA May OSS Aff.).

VZ-MA also meets its obligations to provide CLECs with the documentation necessary for developing their own application-to-application interfaces. VZ-MA provides CLECs with both pre-order and order business rules and Electronic Data Interchange ("EDI") interface specifications based on industry standards. In response to earlier CLEC complaints that VZ-MA frequently changes its documentation, VZ-MA notes that it must make changes to its business rules and technical specifications in order to keep its systems current with industry standards and CLEC needs. VZ-MA explains that it abides by the rules of the established Change Management process when it notifies CLECs of all documentation changes. VZ-MA distributes documentation change notifications to all CLECs electronically and holds monthly Change Management meetings with the CLECs to keep them informed of system changes.[163]

In addition to providing business rules and technical specifications, VZ-MA has also developed the Integrated Documentation Application ("IDA") for CLECs. IDA is a document created by VZ-MA that combines the LSOG Industry Guidelines with the VZ-MA-specific Business Rules.[164] IDA is also capable of automatically generating change logs so that CLECs can more easily track VZ-MA system changes over time. Finally, VZ-MA notes that IDA produces a document that shows the technical specifications and associated business rules in a

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[163] Id. at ¶ 182.

side-by-side format. VZ-MA states that this document, which it notes is the first of its kind in the industry, enables CLECs to associate the two separate sets of documents with each other much more easily.[165]

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164 Id. at ¶ 186.

165 Id.

With final respect to this checklist item area, VZ-MA has implemented versioning of its application-to-application interface software.[166] The FCC has previously noted that "versioning is one of the most effective means of ensuring that system changes and enhancements do not adversely affect a carrier's ability to access the BOC's OSS."[167] VZ-MA makes available to CLECs both the current and most recent prior versions of its interface software. LSOG-4, implemented on March 1, 2000, is the current VZ-MA interface software for both EDI pre-order and order. Additionally, CLECs may continue to use the prior versions of VZ-MA's interfaces, LSOG-3 for pre-ordering and LSOG-2 for ordering.[168] VZ-MA confirms that LSOG-2/3 will

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166 In the Bell Atlantic New York Order, the FCC noted with approval VZ-NY's process of maintaining "a pre-existing version [of interface software] after issuing a major new release rather than switching directly from one version to the next." Bell Atlantic New York Order at ¶ 110. Referring to this practice as "versioning," in its approval of the SWBT 271 application, the FCC noted that "versioning is integral to a section 271 applicant's demonstration that the change management plan it has in place affords competing carriers a meaningful opportunity to compete." SBC Texas Order at ¶ 115.

167 SBC Texas Order at ¶ 115.

168 VZ-MA Application, Appdx. B, Vol. 32b, Tab 423, ¶ 158 (VZ-MA May OSS Aff.).

remain available to CLECs in addition to LSOG-4 until the release of the LSOG-5 industry standard software, which currently has no scheduled release date.[169]

(C) Competitors' Positions and VZ-MA's Response

[169] VZ-MA Application, Appdx. B, Vol. 34a, Tab 443 (VZ–MA's Response to DTE-5-51).

AT&T disputes VZ-MA's assertions that it follows the established Change Management process. First, AT&T contends that VZ-MA consistently makes CLEC-sponsored changes a low priority and often drops such changes from scheduled releases without providing any explanation.[170] AT&T cites the delayed implementation of fielded completion notices and electronic jeopardy notices as examples of VZ-MA's unwillingness to implement CLEC-sponsored changes. AT&T argues that CLECs have pushed Verizon to implement fielded completion notices throughout the region since 1998, but that Verizon only implemented this change in its June 2000 release, despite being ordered by the NYPSC to implement fielded completion notices by April 2000.[171] AT&T further contends that it first proposed the implementation of electronic jeopardy notices in January 1999, but that VZ-MA still has not

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170 VZ-MA Application, Appdx. B, Vol. 38, Tab 460, at 26 (AT&T July Supplemental Comments).

171 Id.; see also VZ-MA Application, Appdx. B, Vol. 44, Tab 506 (AT&T's Response to

implemented this function and will not until the October 2000 release.[172]

DTE-ATT-1-9).

[172] VZ-MA Application, Appdx. B, Vol. 44, Tab 506 (AT&T's Response to DTE-ATT-1-9).

VZ-MA notes in response to AT&T's complaints that the prioritization of all changes is a joint effort. VZ-MA states that it schedules CLEC- and VZ-MA-sponsored changes based on the priorities assigned during the monthly Change Management meetings.[173] VZ-MA notes, for example, that in the Fall of 1999, CLECs placed uniform business rules throughout the region as the highest priority in the Change Management process, and, as a result, VZ-MA implemented numerous changes toward that goal in the February and June 2000 releases.[174] With regard to the specific changes cited by AT&T, VZ-MA notes that implementation of fielded completions were scheduled for a December 1999 release, but was delayed due to CLEC concerns over potential Y2K problems.[175] VZ-MA implemented fielded completions in the June 2000 release.[176] VZ-MA

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173 VZ-MA Application, Appdx. B, Vol. 42, Tab 494, ¶ 105 (VZ-MA August Supplemental OSS Aff.).

174 Id.

175 During Department technical sessions, AT&T witness Carmody testified that VZ–MA's

notes also that it scheduled the implementation of electronic jeopardy notifications for two phases, in August and October 2000, but that the August Phase I implementation was delayed at the request of WorldCom because WorldCom was not ready to accommodate the change. VZ-MA states that AT&T agreed to this deferral.[177]

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offer to implement fielded completions in December 1999 was "a show of providing a date, when in fact they knew it was not actually going to happen." See VZ-MA Application, Appdx. B, Vol. 46, Tab 538, at 4834 (Transcript of Technical Session Held 8/22/00). Carmody further testified that VZ–MA failed to implement this change by a NYPSC-imposed deadline of April 2000. See id. at 4835.

176 VZ-MA Application, Appdx. B, Vol. 42, Tab 494, ¶ 106 (VZ-MA August Supplemental OSS Aff.).

177 Id. at ¶ 107.

AT&T's second complaint regarding VZ-MA's adherence to the Change Management process lies in VZ-MA's alleged inability to follow its notification procedures. AT&T contends that it experienced significant ordering problems when VZ-MA implemented a Business Rules change on June 14, 2000, but did not notify CLECs of the change until June 19.[178] AT&T argues that VZ-MA's change, prohibiting the use of an optional field, caused AT&T's orders to be rejected because AT&T did not know the Business Rules had been changed. AT&T contends that this error caused a backlog of over 8,000 orders while AT&T waited for VZ-MA to remove the change that was implemented. AT&T further states that it assumed approximately $25,000 in additional costs to resolve the order backlog.[179]

VZ-MA acknowledges that the incident described by AT&T did occur, but disagrees as to the details. VZ-MA states that the Business Rule change prohibiting the use of the optional field was part of the company's attempt to make its interfaces uniform across the region. VZ-MA notes that the change was implemented on June 18, 2000, not June 14 as AT&T contends, and that the notice was submitted to CLECs on Monday, June 19, 2000.[180] VZ-MA notes further that it did provide notice to CLECs in early June that this change would be forthcoming, but did not

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178 VZ-MA Application, Appdx. B, Vol. 38, Tab 460, at 25-26 (AT&T July Supplemental Comments).

179 VZ-MA Application, Appdx. B, Vol. 44, Tab 506 (AT&T's Response to DTE-ATT-1-8).

180 VZ-MA Application, Appdx. B, Vol. 42, Tab 494, ¶ 108 (VZ-MA August Supplemental OSS Aff.).

specify a date.[181] VZ-MA also notes that as soon as AT&T notified VZ-MA that the change was causing problems, VZ-MA removed the change from the interface so that AT&T could continue to operate.[182] Finally, VZ-MA states that this issue is an isolated incident and does not represent an inherent inability to follow its Change Management process.

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181 AT&T acknowledged during Department technical sessions that it did receive actual, if informal, notice from Verizon on June 7, 2000 stating that the Business Rule change was going to happen. However, AT&T states that the June 7 notice assured CLECs that a formal change bulletin would be released prior to implementation. See VZ-MA Application, Appdx. B, Vol. 46, Tab 538, at 4835-38 (Transcript of Technical Session Held 8/22/00).

182 VZ-MA Application, Appdx. B, Vol. 42, Tab 494, ¶ 108 (VZ-MA August Supplemental OSS Aff.).

WorldCom contends that Verizon has not abided by its established Change Management procedures with respect to the implementation of the ExpressTrak billing system.[183] WorldCom argues that it has requested from Verizon a conversion timeline detailing how and when Verizon intends to move customers from its current systems to ExpressTrak, but that Verizon has not yet provided such a timeline. WorldCom contends that Verizon has already begun implementing

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183 WorldCom describes ExpressTrak as "a new back-end billing system" that VZ–MA is expected to begin implementing for both retail and wholesale customers. WorldCom states that VZ–MA's implementation of ExpressTrak will replace the current Customer Record Information System ("CRIS") billing system and will provide standardized billing formats and account structures throughout the region. WorldCom contends that though ExpressTrak will benefit CLECs, it will have an impact on various OSS functions, and, therefore, must follow VZ–MA's Change Management process. VZ-MA Application,

ExpressTrak in some states without providing draft specifications, holding meetings with CLECs, or allowing CLECs to comment on Verizon's proposed plans. WorldCom also argues that Verizon has not provided a test period for CLECs to test the ExpressTrak system, nor has Verizon expressed any intentions of providing such a test period.[184]

Appdx. B, Vol. 37, Tab 455, ¶¶ 73-76 (WorldCom Lichtenberg/Sivori Decl.).

[184] Id. at ¶¶ 78-84.

In response to WorldCom's complaints over the release of ExpressTrak, VZ-MA notes that it has begun to roll-out the ExpressTrak system on a limited basis in Maryland, Virginia, West Virginia, and Washington, D.C. VZ-MA states, however, that this roll-out has been on a trial basis and the wholesale customers using ExpressTrak in those jurisdictions have been working individually with Verizon to test the new system. VZ-MA states that it does not intend to implement ExpressTrak in Massachusetts before the end of 2000, so there should be no expectation on the part of CLECs to receive documentation on the new system until the implementation timeline requires distribution of such information.[185] VZ-MA further notes that, unlike interface software, ExpressTrak is a back-end system that does not have the same business rule and specification requirements that are normally applied to interface software releases.[186]

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185 VZ-MA Application, Appdx. B, Vol. 46, Tab 538, at 4765-70 (Transcript of Technical Session Held 8/22/00).

186 Id.

With respect to interface documentation, WorldCom contends that Verizon's failure to provide accurate Business Rules and EDI specifications makes it very difficult for CLECs to develop and revise their own systems to interact with Verizon's OSS.[187] WorldCom argues that during its testing of the June 2000 LSOG-4 release in New York and Pennsylvania,[188] it encountered numerous problems with Verizon's Business Rules and EDI documentation. WorldCom contends that although these problems were found in other jurisdictions, the underlying problems with Verizon's documentation exist in all Verizon jurisdictions.[189] WorldCom argues that these documentation problems force CLECs to expend greater time and effort to develop and revise their EDI interfaces.

VZ-MA responds to WorldCom's complaints by contending that WorldCom's arguments are misleading.[190] VZ-MA notes that of the 132 issues identified by WorldCom as being Order Business Rules-related, 44 were not related to the Business Rules. VZ-MA states that the remaining 88 issues can be broken down into four categories. First, 74 items were questions that

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187 VZ-MA Application, Appdx. B, Vol. 37, Tab 455, ¶ 46 (WorldCom Lichtenberg/Sivori Decl).

188 WorldCom's filed comments and testimony throughout this proceeding have focused primarily on Worldcom's experiences with Verizon in New York and Pennsylvania. While the Department has not excluded WorldCom from basing its arguments on extra-jurisdictional experiences, it must be noted that these experiences are not shown to be applicable to VZ-MA's performance in Massachusetts.

189 VZ-MA Application, Appdx. B, Vol. 41, Tab 488 (WorldCom's Response to DTE-WCOM-2).

190 VZ-MA Application, Appdx. B, Vol. 42, Tab 494, ¶ 114 (VZ-MA August Supplemental

VZ-MA was able to answer and did not require any changes to the Business Rules. Nine of the issues were actually WorldCom requests to include specific variations of existing scenarios in the Business Rules documentation. Three of the items were administrative issues. Finally, there were two issues that represented actual documentation errors that required distribution of an industry change notification to correct the error.[191]

OSS Aff.).

191 Id.

Covad and Rhythms both contend that they have experienced substantial difficulties in establishing their EDI interfaces with VZ-MA. Covad argues that it began developing an EDI interface with VZ-MA in August 1998, but that VZ-MA did not respond to Covad's reported problems until early in 2000. Covad notes that it has implemented EDI interfaces with every major ILEC except Bell South and Verizon, despite focusing most of its resources on its development of EDI with Verizon.[192] Rhythms also states that it experienced numerous delays in implementing its EDI interfaces with VZ-MA and contends that once it established its EDI interface, VZ-MA constantly sent files to Rhythms that belonged to other CLECs.[193] Despite Covad's and Rhythms' arguments, VZ–MA maintains that the record shows that numerous

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192 VZ-MA Application, Appdx. B, Vol. 38, Tab 462, ¶¶ 7-8 (Covad Szafraniec/Katzman Decl.).

193 VZ-MA Application, Appdx. B, Vol. 46, Tab 537, at 4810-11 (Transcript of Technical Session Held 8/22/00).

CLECs and KPMG have developed EDI interfaces with VZ-MA's published documentation.[194] Further, VZ–MA states that neither Covad nor Rhythms has provided any evidence that VZ-MA has actively prevented them from developing and implementing their EDI interfaces.

(D) KPMG Findings

[194] VZ-MA Application, Appdx. B, Vol. 32b, Tab 423, ¶ 188 (VZ-MA May OSS Aff.).

In conducting its review of VZ-MA's Change Management process, KPMG tested for the existence and functionality of the process and examined whether VZ-MA implements its process according to its design.[195] KPMG carried out its review by participating in the Change Management process and simulating the experience of a CLEC operating in Massachusetts. In its Final Report, KPMG states that VZ-MA's Change Management process is adequately defined and set out for CLECs.[196] KPMG notes that VZ-MA has defined processes in place for "escalations, negotiations, collaboratives, intervals for change, industry notification of system issues and updates, distributing documentation, testing, and implementation."[197] KPMG also found VZ-MA's processes for prioritizing CLEC-sponsored and VZ-MA-sponsored changes at the monthly

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195 VZ-MA Application, Appdx. I, Vol. 1, Tab 1, at 495 (KPMG Final Report Version 1.4).

196 Id. at 503.

197 Id.

Change Management meetings to be satisfactory.[198]

198 Id.

With respect to VZ-MA's notification and documentation release time lines, KPMG reports that the established procedures were sufficient to meet CLEC's needs. KPMG also reports that for the period of its review, VZ-MA met its established release intervals for 99 percent of Type 1 changes (emergency maintenance), 100 percent of Type 2 changes (regulatory), 100 percent of Type 3 changes (industry standards), 77 percent of Type 4 changes (VZ-MA-initiated), and 100 percent of Type 5 changes (CLEC-sponsored).[199] With respect to Type 4 changes, KPMG notes that VZ-MA's performance improved greatly from 60 percent prior to the June 2000 software release to 100 percent on-time during the June 2000 release.[200] KPMG notes that it excluded 14 flow-through-related Type 4 changes from its measurement of VZ-MA's interval compliance because, according to the adopted "Principles of Change Management" document, "if the change has benefit and has little material impact on the interface, [VZ-MA] can implement the changes in less than 45 days."[201]

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199 Id. at 505.

200 Id.

201 Id. at 511. KPMG released Observation Report #55 on March 28, 2000, which relates to

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VZ-MA's performance with regard the timeliness of Type 4 changes and VZ-MA's classification of flow-through improvements as non-CLEC affecting. After reviewing the July 6, 2000 document entitled "TIS Change Management Process," KPMG accepted VZ-MA's explanation that flow-through improvements should not be classified as CLEC-affecting changes. Appdx. L (Observation Report #55); Appdx. M (KPMG Observation Status Summary dated August 25, 20000.

KPMG also reviewed VZ-MA's established procedures for assisting CLECs with interface development. This evaluation included a review of VZ-MA's CTE which included KPMG's execution of the VZ-MA Test Decks for the February 2000 and June 2000 releases. KPMG notes that, while it was able to complete CTE testing of the February LSOG-2 Test Deck within one week,[202] the test team experienced quality issues in its execution of VZ-MA's February release LSOG-4 Test Deck.[203] KPMG states, however, that VZ-MA resolved problems uncovered

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202 Although KPMG was able to complete its CTE testing of VZ-MA's February LSOG-2/3 release on schedule, KPMG released Exception Report #7 on February 29, 2000, noting that VZ-MA had made three separate revisions to the standard Test Deck after the start of the new release testing period. KPMG noted that this instability in the CTE could prevent CLECs from adequately testing their interfaces. See VZ-MA Application, Appdx. I, Vol. 2, Tab 2 (Exception Report #7). KPMG retested the LSOG-2/3 Test Deck as part of the June 2000 release. Following this retest, KPMG issued its Disposition Report for Exception #7, where it noted that the stability of the CTE had improved greatly and confirmed that VZ-MA had followed the established new release testing procedures. See VZ-MA Application, Appdx. I, Vol. 2, Tab 2 (Disposition Report for Exception #7).

203 VZ-MA Application, Appdx. I, Vol. 1, Tab 1, at 527 (KPMG Final Report Version 1.4). KPMG issued Exception Report #3 and Exception Report #5 on February 16, 2000, where it stated that it was unable to validate VZ-MA's LSOG-4 Pre-Order and Order Test Decks. In Exception #3, KPMG reported that it experienced various instances of system unavailability in the LSOG-4 test environment during the new release period, making completion of the Test Decks validation difficult. See VZ-MA Application, Appdx. I, Vol. 2, Tab 2 (Exception Report #3). KPMG also noted that problems with the accuracy of the Test Decks indicated that VZ-MA had not performed adequate QA testing of the release. KPMG further stated that the frequent revisions VZ-MA made to correct errors in the Test Decks prevented CLECs from having the opportunity to test the LSOG-4 release in a stable environment. See VZ-MA Application, Appdx. I, Vol. 2, Tab 2 (Exception Report #5). VZ-MA accepted KPMG's assessment and KPMG conducted a retest during the June 2000 LSOG-4 release. VZ-MA also noted that the system unavailability was due to software and hardware failures that caused outages. See VZ-MA Application, Appdx. I, Vol. 2, Tab 2 (VZ-MA Response to Exception #3). KPMG states in its Disposition Reports for Exceptions #3 and #5 that it experienced no further

during the February testing, and KPMG "noted improvements in the quality of the Test Deck results" during June release testing of both LSOG-2 and LSOG-4.[204]

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outages in the LSOG-4 CTE, and that it successfully completed its validation of the pre-order and order Test Decks within the defined new release testing period. KPMG notes that the quality of the June Test Decks indicate that VZ-MA adhered to its established QA procedures. See VZ-MA Application, Appdx. I, Vol. 2, Tab 2 (Disposition Report for Exception #3); see also VZ-MA Application, Appdx. I, Vol. 2, Tab 2 (Disposition Report for Exception #5).

204 VZ-MA Application, Appdx. I, Vol. 1, Tab 1, at 527 (KPMG Final Report Version 1.4).

During its interface development review, KPMG also evaluated VZ–MA's procedures for developing and updating interface specification documents, for providing support to CLECs in their interface development efforts, and for uncovering and resolving problems associated with the interface development process and the CTE. KPMG found that VZ-MA's policies and procedures satisfactorily met each of these requirements.[205] In addition, KPMG evaluated whether VZ-MA provides CLECs with adequate information to establish and maintain their account relationships with VZ-MA. KPMG reports that VZ-MA has adequate procedures, documentation, and support to enable CLECs to establish and maintain wholesale account relationships with VZ-MA.[206]

ii. Technical Assistance and Help Desk Support

(A) Standard of Review

The FCC's emphasis on the existence of adequate technical assistance and help desk support has been noted in numerous § 271 orders. The FCC noted in the Ameritech Michigan Order that a BOC must demonstrate it "is adequately assisting competing carriers to understand

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205 Id. at 528-39.

206 Id. at 547-554.

how to implement and use all of the OSS functions available to them."[207] The FCC has found that a BOC's provision of technical assistance and help desk support is evidence that it provides efficient competitors with a meaningful opportunity to compete.[208]

(B) VZ-MA's Offering

[207] Bell Atlantic New York Order at ¶ 126, citing Ameritech Michigan Order, 12 FCC Rcd at 20616.

[208] Bell Atlantic New York Order at ¶ 126.

In meeting its requirement to assist competing carriers in understanding how to use all of the available OSS functions, VZ-MA provides an extensive set of publications and documentation to CLECs. First, VZ-MA publishes the technical specifications necessary for CLECs to build and connect their OSS interfaces to VZ-MA's systems. These specifications include the Pre-Order and Order EDI Guides and the Pre-Order and Order Documentation and Business Rules.[209] VZ-MA also provides CLECs with extensive CLEC and Reseller Handbooks, on CD-ROM and through VZ-MA's wholesale web site, which inform CLECs on the proper procedures for conducting their daily business with VZ-MA's systems and personnel.[210] VZ-MA notes that it publishes complete editions of the handbooks on an annual basis, but provides CLECs with updates to particular sections of the handbooks throughout the year as policies change to meet VZ-MA and CLEC needs. VZ-MA states that CLECs can maintain up-to-date versions of the CLEC and Reseller Handbooks via the VZ-MA wholesale web site, which provides the capability for CLECs to download updated sections of the publications directly to their CD-ROM

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209 VZ-MA Application, Appdx. B, Vol. 32b, Tab 423, ¶ 179 (VZ-MA May OSS Aff.).

210 Id.

versions.[211] Finally, VZ-MA notes that the Integrated Documentation Application ("IDA") offers CLECs a one-of-a-kind combined document that joins the LSOG industry guidelines and VZ-MA Business Rules into a single document. The IDA also automatically builds change logs to enable CLECs to review the revisions and updates that are made to both pieces of the document.[212]

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211 Id. at ¶ 181.

212 VZ-MA Application, Appdx. B, Vol. 42, Tab 494, ¶¶ 121-122 (VZ-MA August Supplemental OSS Aff.).

VZ-MA also claims it has sufficient personnel to meet the business needs of CLECs operating in Massachusetts. VZ-MA's Telecommunications Industry Services Operations Center ("TIS OC") service representatives assist CLECs in the submission and processing of their order transactions.[213] VZ-MA also has a Wholesale Customer Care Center ("WCCC"), formerly the System Support Help Desk, which was created to provide a single point of contact for CLECs with general service questions. VZ-MA states that the WCCC personnel are trained to deal with a wide range of potential CLEC concerns. However, VZ-MA notes that the WCCC representatives are not expected to answer all questions directly, but instead are trained to know what area of VZ-MA's operations is responsible for responding to each type of issue.[214] VZ-MA explains that in order to track the resolution of CLECs' WCCC calls, WCCC representatives are required to open a trouble ticket for every call they receive, regardless of the issue behind the call.[215] As of August 2000, the WCCC was staffed with 43 full-time representatives to handle CLEC inquiries, up from just six full-time representatives at the beginning of 1999.[216] VZ-MA notes that it continues to monitor the performance of the WCCC in making timely responses to

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213 VZ-MA Application, Appdx. B, Vol. 32b, Tab 423, ¶ 23 (VZ-MA May OSS Aff.).

214 Id. at ¶ 200.

215 Id. at ¶ 201; see also VZ-MA Application, Appdx. B, Vol. 27, Tab 350 (VZ–MA's Response to RR-DTE-120).

216 VZ-MA Application, Appdx. B, Vol. 46, Tab 533, at 4581-82 (Transcript of Technical Session Held 8/21/00).

CLEC inquiries, and that VZ–MA will supplement the WCCC staff as needed.[217]

VZ-MA also assists CLECs in conducting their business through its offerings of detailed training programs and CLEC workshops. VZ-MA states that it has developed extensive training programs for CLECs purchasing UNEs and resale services and holds training sessions at its own offices as well as on-site at CLECs' operations.[218] VZ-MA notes that the training programs have been divided into specific areas of focus so that CLEC representatives can focus their training on the specific issues in which they will be involved. Throughout the region, VZ-MA trained 1,278 CLEC representatives in 1999, and trained an additional 300 in the first quarter of 2000.[219]

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217 Id. at 4588-90.

218 VZ-MA Application, Appdx. B, Vol. 32b, Tab 423, ¶¶ 189-191 (VZ-MA May OSS Aff.).

219 Id. at ¶ 192.

In addition to the training programs, VZ-MA also provides CLECs with numerous workshops that focus on specific areas of CLEC interest. VZ-MA's Change Management organization is responsible for developing the topic areas for these CLEC workshops based on the areas of concern identified through Change Management meetings, help desk inquiries, and informal CLEC contacts. The workshops have focused on such issues as Help Desk processes, CLEC-to-CLEC migrations, and flow-through improvements.[220] VZ-MA notes that it notifies CLECs of these workshops through industry mailings sent to the CLEC contacts in the Change Management process. In addition to the announcement of these workshops, VZ-MA's industry mailings also notify CLECs of information regarding billing issues, the addition of new Universal Service Order Codes ("USOCs"), and other information that does not fall into the standardized Change Management process.[221]

(C) Competitors' Positions and VZ-MA's Response

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220 Id. at ¶¶ 65, 154.

221 VZ-MA Application, Appdx. B, Vol. 46, Tab 533, at 4617 (Transcript of Technical Session Held 8/21/00).

CLEC complaints about VZ-MA's technical assistance center around the performance of the WCCC. First, AT&T contends that the WCCC does not provide timely responses to CLEC inquiries. AT&T also argues that the WCCC is not an efficient means for CLECs to obtain assistance because CLECs do not have access to VZ-MA technical personnel who would be able to resolve CLEC problems more efficiently.[222] WorldCom and Rhythms echo AT&T's complaints, adding that the WCCC personnel are inadequately trained to answer technical questions and often fail to respond to CLEC calls in a timely manner.[223] WorldCom also argues that the WCCC does not perform any root-cause analysis on CLEC-reported problems, and, therefore, there is no assurance that once a problem is fixed it will not occur again in the future.[224] Finally, AT&T notes that the frequent turnover of personnel in the WCCC has made the Help

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222 VZ-MA Application, Appdx. B, Vol. 38, Tab 460, at 27-28 (AT&T July Supplemental Comments).

223 VZ-MA Application, Appdx. B, Vol. 37, Tab 455, ¶¶ 87-90 (WorldCom Lichtenberg/Sivori Decl.); see also VZ-MA Application, Appdx. B, Vol. 38, Tab 462, ¶ 23 (Rhythms July Williams Aff.).

224 VZ-MA Application, Appdx. B, Vol. 37, Tab 455, ¶ 89 (WorldCom Lichtenberg/Sivori

Desk unstable and made it difficult for CLECs to obtain adequate assistance.[225]

Decl.).

225 VZ-MA Application, Appdx. B, Vol. 38, Tab 460, at 28 (AT&T July Supplemental Comments).

VZ-MA explains, in response to the CLEC complaints, that there have been some changes to the Help Desk in the past few months, but states, contrary to CLEC contentions, that these changes have improved VZ-MA's ability to assist CLECs. VZ-MA notes that technical personnel do not speak to CLECs directly on a regular basis because their primary duties are to research and resolve issues that are reported by CLECs or by VZ-MA's retail customers.[226] VZ-MA further states that the WCCC personnel are not trained to be able to answer every CLEC inquiry immediately, but instead are trained to know which area of VZ-MA's operations will be able to respond to a particular CLEC question.[227] With respect to root-cause analysis, VZ-MA explains that it performs root-cause analysis on every CLEC-reported trouble. VZ-MA notes, however, that in cases where a root-cause is not determined at the time the trouble is resolved, VZ-MA will not delay reporting the resolution of the trouble to the CLEC simply because the root-cause analysis is not complete.[228] Finally, VZ-MA responds to AT&T's complaint about the turnover in the WCCC by stating that this occurrence was the result of the WCCC's recent move from Maryland to New Jersey. VZ-MA explains, though, that the turnover experienced was a temporary issue, and that Verizon took a number of steps to ensure that the level of service was not diminished during this period. VZ-MA notes that the WCCC manager and two supervisors

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226 VZ-MA Application, Appdx. B, Vol. 42, Tab 494, ¶ 133 (VZ-MA August Supplemental OSS Aff.).

227 Id. at ¶ 128.

228 Id. at ¶ 129.

were transferred to the New Jersey WCCC when it opened to ensure a continued level of high performance, and that the three new supervisors at the New Jersey WCCC were trained in the Maryland WCCC prior to the move to New Jersey.[229] VZ-MA states that even the temporary problem of high turnover rates did not impact the level of Help Desk service provided to CLECs.

(D) KPMG Findings

As part of its evaluation of VZ-MA's OSS, KPMG assessed whether VZ-MA provides adequate technical assistance to enable CLECs to compete. KPMG reviewed VZ-MA's offerings in this area through evaluations of VZ-MA's systems Help Desk performance and VZ-MA's CLEC Training Programs.

[229] Id. at ¶ 134.

KPMG conducted an extensive review of VZ-MA's System Support Help Desk, now WCCC, through interviews with Help Desk personnel, review of Help Desk process documentation, and observation of Help Desk activities.[230] KPMG reports that it found VZ-MA's Help Desk support to be satisfactory to meet the needs of CLECs operating in Massachusetts. In particular, KPMG notes that VZ-MA's WCCC has adequate procedures defined for the receipt, categorization (severity coding), processing, tracking, and resolution of CLEC calls, and that VZ-MA follows its documented procedures.[231]

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230 VZ-MA Application, Appdx. I, Vol. 1, Tab 1, at 593 (KPMG Final Report Version 1.4).

231 Id. at 600-603.

KPMG also reviewed VZ-MA's WCCC performance with respect to the timely closure of CLEC-reported issues. Because of the wide range of issues that result in a CLEC's opening of a Help Desk trouble ticket, there are no C2C standards for the resolution of Help Desk trouble tickets. During its evaluation, KPMG reviewed 9,969 Help Desk trouble tickets and reports that 56 percent of the tickets were resolved and closed on the same day they were opened, and an additional 15 percent were resolved within one week.[232] KPMG notes that while 29 percent of the reviewed trouble tickets required longer than one week to close, there are a variety of circumstances that can cause trouble tickets to require long resolution periods. For example, some Help Desk tickets require system fixes to be scheduled and implemented in future software releases. Also, KPMG reports that in some instances trouble ticket closure was delayed due to the failure of the CLEC to confirm resolution of the reported trouble and accept closure of the ticket, or the reported trouble was found to be the result of a CLEC-originated problem and was not closed until the CLEC confirmed to VZ-MA that it had resolved its problems.[233]

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232 Id. at 609.

233 Id.

KPMG's evaluation of VZ-MA's CLEC Training programs was designed to "determine the existence and functionality of procedures for developing, publicizing, conducting, managing, and monitoring CLEC training."[234] KPMG conducted its evaluation through reviews of the CLEC training documentation and interviews with the VZ-MA personnel responsible for managing VZ-MA's CLEC Training programs.[235] KPMG reports that VZ-MA has a defined and documented program to provide training to CLEC representatives in a clear and consistent format.[236] KPMG also notes that VZ-MA's training programs are capable of being customized at a CLEC's request to meet that CLEC's particular training needs.[237] VZ-MA's CLEC Training program also has in place a process for accepting input and feedback from CLECs about the quality of the training program and suggestions for improvement.[238]

iii. Conclusions

The Department finds that VZ-MA has satisfied its requirements in the offering of nondiscriminatory access to its OSS functions with respect to Change Management and Technical Assistance. Specifically, based upon the evidence in the record and KPMG's OSS Evaluation findings, the Department finds that VZ-MA provides CLECs with sufficient documentation to

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234 Id. at 615.

235 Id.

236 VZ–MA Application, Appdx. I, Vol. 1, Tab 1, at 619-620 (KPMG Final Report Version 1.4)

237 Id. at 620.

238 Id. at 621.

build and maintain their OSS interfaces. Further, the Department finds that VZ-MA's defined Change Management process is sufficient to meet the needs of CLECs and that CLECs have substantial input in that process. The Department also finds that VZ-MA has adhered to its Change Management process over time, as has been confirmed by KPMG. Finally, VZ-MA has convinced the Department that it provides CLECs with a significant level of technical assistance and help desk support through its training programs, published documentation, and the WCCC.

e. Pre-Ordering

i. Standard of Review

The FCC has stated often that pre-ordering access is a critical component of a carrier's ability to compete with the ILEC.[239] Pre-ordering transactions often represent the end customer's first contact with a competing carrier. Therefore, CLEC access to a BOC's pre-ordering functionality must be on a level that allows the CLEC to provide service to prospective customers in as efficient a manner as the BOC's retail operations. In both its Bell Atlantic New York Order and SBC Texas Order, the FCC established the standard by which a BOC's pre-ordering interfaces would be judged in determining whether the BOC provides nondiscriminatory access to its pre-ordering functionality. The FCC concluded that the BOC must offer CLECs an application-to-application interface that enables carriers to integrate responses from pre-ordering transactions into the BOC's ordering interfaces. Further, the BOC must make available to CLECs the same functionality that is available to the BOC's own retail representatives. Through

[239] Bell Atlantic New York Order at ¶ 129; SBC Texas Order at ¶ 148.

transaction response times and interface availability performance measures, the BOC must be able to show that its pre-ordering OSS are capable of sustaining both current and reasonably foreseeable future demands.[240] Finally, in its SBC Texas Order, the FCC concluded that the BOC must also make available to CLECs "nondiscriminatory access to OSS pre-ordering functions associated with determining whether a loop is capable of supporting xDSL advanced technologies."[241]

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240 Bell Atlantic New York Order at ¶ 128; SBC Texas Order at ¶ 147.

241 SBC Texas Order at ¶ 147 and n.394. The FCC noted in the SBC Texas Order that it did not evaluate SWBT's compliance with the loop qualification obligations under Rule 319 that went into effect in May 2000, but that future § 271 applicants will be expected to show compliance with these obligations.

The FCC has identified seven pre-ordering functions that it considers to be essential in providing competing carriers with nondiscriminatory access and a meaningful opportunity compete. The functions are: (1) retrieval of customer service records, (2) address validation, (3) telephone number selection and reservation, (4) service and feature availability, (5) due date availability, (6) loop qualification information inquiry, and (7) customer directory listing information.[242] The BOC must offer CLECs the ability to perform these functions in substantially the same time and manner as its own retail representatives.

ii. VZ-MA's Offering

[242] Bell Atlantic New York Order at ¶ 132.

VZ-MA has made available three interfaces for CLECs to use in conducting pre-ordering transactions. The web-based GUI is currently used by 79 CLECs in commercial production.[243] VZ-MA also offers two application-to-application interfaces. The EDI interface is currently used by 15 Massachusetts CLECs, and the Common Object Request Broker Architecture ("CORBA") interface is available to all CLECs, but is currently being utilized only by AT&T in commercial production.[244] The pre-ordering OSS back-end systems used by CLECs in Massachusetts are the same as those used in both New York and the remainder of New England. Over the first six months of this year, VZ-MA notes that these systems processed over 2.7 million transactions across the region.[245] VZ-MA also notes that its pre-ordering systems can be integrated to automatically populate Local Service Requests ("LSRs"), and that VZ-MA has assisted CLECs in integration by participating in collaborative sessions, making address components consistent

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243 VZ-MA Application, Appdx. B, Vol. 46, Tab 533, at 4575 (Transcript of Technical Session Held 8/21/00).

244 Id.; see also VZ-MA Application, Appdx. B, Vol. 32b, Tab 423, ¶ 33 (VZ-MA May OSS Aff.).

245 VZ-MA Application, Appdx. B, Vol. 42, Tab 494, ¶ 23 (VZ-MA August Supplemental OSS Aff.).

across the region, and synchronizing the field names for pre-order and order data elements.[246]

[246] VZ-MA Application, Appdx. B, Vol. 32b, Tab 423, ¶ 37 (VZ-MA May OSS Aff.).

VZ-MA provides CLECs with access to all of the same pre-order functions that are available to CLECs in New York. The available pre-order functions include: (1) customer service record ("CSR") retrieval; (2) address validation; (3) telephone number ("TN") selection and reservation; (4) product and service availability; (5) due date availability; (6) loop qualifications for ISDN and xDSL; (7) directory listing information request; (8) installation status inquiry; and (9) service order inquiry.[247] VZ-MA measures and reports response times for each of the available pre-order transactions using a simulated response system known as EnView.[248] The EnView system simulates the various pre-order transactions for both retail and wholesale in six-minute increments, or ten times per hour.[249] VZ-MA measures pre-order transactions against a standard of parity, plus not more than four seconds, which is the same standard used by Verizon in New York, for both the EDI and CORBA interfaces.[250] The lone exception to this standard is VZ-MA's standard for the parsed CSR transaction, which takes the standard CSR response and

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247 VZ-MA Application, Appdx. B, Vol. 1, Tab 2, ¶ 19 (Miller Aff.).

248 VZ-MA Application, Appdx. B, Vol. 32a, Tab 423, ¶ 19 (VZ-MA May Measurements Aff.).

249 Id. at ¶ 25.

250 Id. at ¶ 20.

divides the information into separate fields for population into an LSR, and which has no direct retail equivalent. VZ-MA's parsed CSR transaction is measured against a standard of parity to retail non-parsed CSR, plus not more than ten seconds.

For the months of April through July 2000, VZ-MA met its performance standards for each pre-order transaction over the EDI interface. For the CORBA interface, VZ-MA missed its performance standards on only three occasions – product and service availability in May, and rejected query response for both June and July. No standard has been developed for GUI pre-order response times as GUI pre-order is not a part of the C2C Guidelines. However, VZ-MA provided GUI pre-order response times for August 1999 through March 2000 as part of its May 2000 filing with the Department.[251] Over this eight month period, VZ-MA's GUI response time performance exceeded ten seconds only once. The response time for TN selection in November 1999 was 15.65 seconds versus a retail response time of 1.68 seconds.

VZ-MA's OSS interfaces are scheduled to be available to CLECs on a 24 hour per day basis. The C2C standard for VZ-MA's interface availability is 99.5 percent available during scheduled prime-time hours. VZ-MA defines prime-time hours as being 6:00 am to midnight Monday through Saturday, excluding holidays.[252] VZ-MA notes that if a back-end OSS system is unavailable, then neither CLEC nor VZ-MA representatives will be able to access the information on that system. Therefore, CLECs are adversely affected compared to retail representatives only

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251 See id. at Exh. C.

252 VZ-MA Application, Appdx. B, Vol. 32b, Tab 423, ¶ 43 (VZ-MA May OSS Aff.).

when the front-end OSS interface is unavailable. VZ-MA measures interface availability through a combination of EnView-simulated transactions and CLEC-reported outages. VZ-MA applies a weighting to CLEC-reported outages based on the number of CLECs affected by the unavailability of a particular interface connection method.[253]

VZ-MA measures the availability of each of its three interfaces separately. Between April and July 2000, VZ-MA's EDI interface has consistently been available more than 99 percent of the time during prime-time hours. Only in May 2000 did VZ-MA's EDI interface prime-time availability fall below the C2C standard. However, during that month VZ-MA's EDI interface was still available for 99.06 percent of scheduled prime-time hours. Over the same period, VZ-MA's CORBA interface showed only slightly less performance for prime-time availability. While the CORBA availability measure only surpassed the 99.5 percent C2C standard in July, only once did the CORBA availability fall below 99 percent. In May 2000 CORBA scheduled prime-time availability was measured by VZ-MA to be 98.99 percent.

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253 VZ-MA Application, Appdx. B, Vol. 46, Tab 538, at 4688-89 (Transcript of Technical Session Held 8/22/00).

In its August 2000 Supplemental Filing with the Department, VZ-MA described a series of problems that had caused CLECs to experience delays in accessing the GUI. VZ-MA noted that, on July 25, 2000, a memorandum was sent to CLECs via the Change Management process outlining three system infrastructure problems that VZ-MA had addressed to improve the performance and availability of the GUI.[254] VZ-MA reported in its August Supplemental Checklist Affidavit that CLEC trouble tickets regarding the GUI dropped from a level of 94 per week during the period of May 1 through June 22, prior to VZ-MA's fixes of the system problems, to only 15 trouble tickets during the week of July 14 through July 20. Further, of those 15 trouble tickets opened during the week of July 14, none related to system unavailability.[255]

VZ-MA claims its performance metrics for the GUI availability is consistent with its explanation of the problems experienced with the GUI during May and June. While GUI scheduled prime-time availability for May (99.06 percent) and June (97.45 percent) missed the C2C standard, VZ-MA's GUI availability performance for July was well above the 99.5 percent

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254 See VZ-MA Application, Appdx. B, Vol. 42, Tab 494, ¶¶ 27-28 and Exh. E (VZ-MA August Supplemental OSS Aff.).

255 Id. at ¶ 28.

threshold, as VZ-MA reports 99.93 percent availability for the months of July.

Finally, VZ-MA also provides CLECs with information necessary to determine whether a loop is qualified to provide advanced services, such as xDSL, to an end customer. VZ-MA states that CLECs may obtain loop qualification information through any of three methods. First, CLECs may use VZ-MA's pre-order interface to request loop information from VZ-MA's mechanized loop qualification database. CLECs can also request manual loop qualifications from VZ-MA to obtain information that is not available in the mechanized database. Finally, VZ-MA offers CLECs the opportunity to request an engineering query for specific loops in order to obtain detailed loop make-up information. VZ-MA's loop qualification offerings are discussed in detail under checklist item 4.

iii. Competitors' Positions and VZ-MA's Response

During the Department's § 271 proceedings, various CLECs questioned VZ-MA's ability to provide nondiscriminatory access to its OSS pre-ordering functions. These CLEC questions deal primarily with VZ-MA's alleged inability to provide certain pre-order functionality and with problems surrounding VZ-MA's interface availability.

Covad contends that VZ-MA's pre-order functions are not accessible to CLECs in the same manner in which they are available to VZ-MA's own retail representatives. Covad argues that address validation "is a clumsy and frustrating process because it requires exact duplication of the address as it appears in BA's records."[256] Covad further contends that once it is able to

[256] VZ-MA Application, Appdx. B, Vol. 38, Tab 462, ¶ 28 (Covad Szafraniec/Katzman).

validate a customer's address, it must consult its own records to obtain the serving central office information because VZ-MA's pre-order responses do not include such information.[257] Covad also argues that, unlike CLECs, VZ-MA retail representatives are able to obtain customers' CSR information using only their telephone numbers. Covad contends that this does not represent parity of service.[258]

Decl.).

257 Id. at ¶¶ 29-30.

258 Id. at ¶ 19.

VZ-MA refutes Covad's claims about pre-order functionality and notes that the CLEC Handbook and Pre-Order Business Rules explain in detail how Covad and other CLECs can obtain the information Covad states it must obtain from its own internal records. VZ-MA notes that serving central office information and the switch common language location identification ("CLLI") code are available as part of the response to address validation transactions and that the procedures for obtaining that information are explained in the Pre-Order Business Rules. VZ-MA also points out that the details relating to the proper entry of addresses in the address validation transaction are included in the Pre-Order Business Rules. VZ-MA retail representatives follow the same Business Rules for these pre-order functions as CLECs are required to follow.[259] Finally, VZ-MA responds to Covad's assertions regarding the alleged disparity in access to CSR information by stating that Covad, and all other CLECs, have immediate access to any customer or prospective customer's CSR information through any of the three OSS interfaces available to CLECs.[260]

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[259] VZ-MA Application, Appdx. B, Vol. 42, Tab 494, ¶ 21 (VZ-MA August Supplemental OSS Aff.).

[260] Id. at ¶ 22.

In the area of interface availability, a number of the CLEC's complaints are addressed by the GUI system infrastructure changes implemented by VZ-MA in May and June 2000.[261] However, both AT&T and WorldCom contend that there are still problems with VZ-MA's interface availability, and both CLECs argue that VZ-MA's reported performance is inaccurate. AT&T contends that the CORBA interface is frequently unavailable, and that AT&T consistently experiences time-outs while performing pre-order functions. AT&T states that VZ-MA has not provided any root-cause analysis of the problems with the CORBA interface, and that VZ-MA's method for resolving many of these errors is to re-boot its servers to resume service. AT&T provided to the Department a listing of pre-order interface errors it has experienced since November 1999, including 63 performance problems experienced since April 1, 2000.[262] Of the problems experienced since April 1, AT&T highlights a three-day outage from April 17 to 19 that AT&T contends casts doubt on VZ-MA's reported interface availability for April 2000.[263]

WorldCom contends that Verizon's GUI performance has been consistently flawed, even after the system fixes were put in place in May and June. During technical sessions, WorldCom witnesses noted that WorldCom had experienced GUI outages on June 29 and 30, and July 1, 8,

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261 See VZ-MA Application, Appdx. B, Vol. 46, Tab 538, at 4800 (Transcript of Technical Session Held 8/22/00).

262 See VZ-MA Application, Appdx. B, Vol. 44, Tab 506 (AT&T's Response to DTE-ATT-1-5).

263 Id.; see also VZ-MA Application, Appdx. B, Vol. 46, Tab 538, at 4822-23 (Transcript of Technical Session Held 8/22/00).

15, 20, 21, 22, and 23. WorldCom noted that it opened trouble tickets with Verizon on July 8, 15, and 20.[264] WorldCom further argues that during times when the GUI has been available, the interface has worked very slowly and has made it difficult for WorldCom to submit transactions via that interface.[265]

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264 VZ-MA Application, Appdx. B, Vol. 46, Tab 538, at 4854-55 (Transcript of Technical Session Held 8/22/00).

265 VZ-MA Application, Appdx. B, Vol. 37, Tab 455, ¶ 100 (WorldCom Lichtenberg/Sivori Decl.).

VZ-MA asserts that AT&T's complaints regarding the availability of the CORBA interface are misleading. During a technical session held on August 22, VZ-MA witness McLean explained that because CORBA is a synchronous interface, a transaction must make a complete cycle from the CLEC to VZ-MA and back to the CLEC in order for the system to record that the interface is properly functioning.[266] McLean explained that when there are problems with the CORBA interface, both VZ-MA and the CLEC must work together to diagnose the source of the problem. McLean noted that AT&T failed to mention that this type of cooperative effort is currently occurring on between VZ-MA and AT&T regarding instances of interface timeouts when AT&T submits an address validation transaction immediately followed by a parsed CSR request.[267]

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266 VZ-MA Application, Appdx. B, Vol. 46, Tab 538, at 4691-92 (Transcript of Technical Session Held 8/22/00).

267 Id. at 4693-94.

In response to the contentions of both AT&T and WorldCom, VZ-MA provided a summary of all CLEC-reported pre-order interface troubles from April through July.[268] VZ-MA reports that during this period, CLECs reported 84 distinct troubles (some troubles were repeated in multiple trouble tickets). Of these 84 instances, 52 actually indicated interface outages that would be reflected in VZ-MA's performance measures. Nineteen instances related to the unavailability of specific transactions or back-end OSS systems. VZ-MA notes that these instances were experienced equally by VZ-MA's retail representatives. Of the remaining 13 reported troubles, five were instances of slow response, three were related to CLECs' connectivity problems, three were unrelated to pre-order, and in two cases VZ-MA found no problems during its investigation of the reported trouble.[269] VZ-MA also provides information specifically related to WorldCom's assertion that there have been numerous planned and unplanned interface outages since VZ-MA implemented its GUI infrastructure changes in May and June.[270] VZ-MA reports that none of WorldCom's reported outages were instances of interface unavailability. In every case reported by WorldCom, VZ-MA explains that the outages were related only to specific back-end OSS systems that similarly affected retail and wholesale transactions. Further, only one of WorldCom's reported outages – the July 8 unavailability of

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268 See VZ-MA Application, Appdx. B, Vol. 47, Tab 560 (VZ–MA's Response to RR-DTE-330).

269 Id.

270 See VZ-MA Application, Appdx. B, Vol. 47, Tab 557 (VZ–MA's Response to RR-DTE-341).

address validation, TN reservation, and xDSL loop qualification from 10:00 p.m. to midnight – affected CLECs operating in Massachusetts. Unlike WorldCom's claim, though, VZ-MA notes that this was a planned unavailability and references Change Request (CR) #1547 as evidence that CLECs were notified of this instance in advance of the planned unavailability.[271]

iv. KPMG's Findings

In its evaluation of VZ-MA's OSS, KPMG combined the Pre-Order, Order, and Provisioning areas of VZ-MA's wholesale systems and processes into a single domain. The combination of these three aspects of VZ-MA's wholesale offerings enabled KPMG to conduct its test in a manner that better resembles the experiences an actual CLEC would have competing in the Massachusetts local market. Throughout the Pre-Order, Order, and Provisioning ("POP") domain, KPMG evaluated 204 individual test points. While KPMG's evaluation was integrated in most respects, this aspect of KPMG's test examined the areas of Pre-Order, Order, and Provisioning separately wherever possible. Within the POP domain, KPMG evaluated VZ-MA's pre-order capabilities through the EDI and GUI functional evaluations, the EDI and GUI volume performance evaluations, the VZ-MA documentation review, and the review of VZ-MA's capacity management planning. KPMG also reviewed VZ-MA's pre-order performance metrics reporting processes as part of its Performance Metrics review.

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[271] Id.

KPMG evaluated VZ-MA's pre-order transaction functionality through the submission of test transactions over both the EDI and GUI interfaces. KPMG's EDI and GUI functional evaluations examined the availability of the pre-order interfaces and VZ-MA's capability to provide timely and accurate responses to a variety of pre-order transactions. The functional evaluations also included the submission of pre-order transactions with planned errors to ensure VZ-MA's systems are capable of providing accurate error responses that contain the necessary information for a CLEC representative to correct and resubmit the transaction.[272] While KPMG's functional evaluations focused predominantly on VZ-MA's LSOG-2 interface, KPMG also submitted transactions over the LSOG-4 interface to ensure that the LSOG-4 interface also provides CLECs with sufficient functionality.

In its evaluation of VZ-MA's pre-order functionality, KPMG states that it found VZ-MA's pre–ordering interfaces to be available on a consistent and reliable basis. Through a review of VZ-MA's Change Control notices and its own usage experiences, KPMG reports that VZ-MA's EDI pre-ordering interface was available 100 percent of the scheduled prime-time hours for

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[272] VZ-MA Application, Appdx. I, Vol. 1, Tab 1, at 15, 71 (KPMG Final Report Version 1.4).

the duration of KPMG's testing.[273] KPMG also reports that VZ-MA's GUI was available 99.85 percent of scheduled prime-time hours during KPMG's test period.[274]

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[273] Id. at 47.

[274] Id. at 100.

KPMG reports that, during the conduct of its functional evaluations, VZ-MA's pre-order systems returned responses for 94 percent of KPMG's EDI pre-order transactions.[275] KPMG notes, however, that VZ-MA implemented system improvements to various pre-order systems

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[275] Id. at 48. KPMG characterized the problems it experienced in receiving responses for CSR inquiries and Installation Service Requests (ISRs) over the EDI interface in Exception Report #13. KPMG noted in its Exception that these problems, if not corrected, could impede CLECs' ability to conduct business over the EDI interface. See VZ-MA Application, Appdx. I, Vol. 2, Tab 2 (Exception Report #13). VZ-MA responded to KPMG's Exception by explaining that some of KPMG's CSR errors were the result of KPMG's use of a resale account ID to perform transactions that do not apply to resale services. VZ-MA stated that a database error had caused the remainder of the CSR errors. See VZ-MA Application, Appdx. I, Vol. 2, Tab 2 (VZ-MA Response to Exception #13). VZ-MA fixed the error and KPMG was able to successfully retest its CSR inquiries. See VZ-MA Application, Appdx. I, Vol. 2, Tab 2 (Disposition Report for Exception #13). With respect to the ISR problems noted by KPMG, VZ-MA implemented a system fix to the EDI software on July 28, 2000 and KPMG successfully

during the functional evaluations, and that KPMG received responses on 98 percent of its pre-order transactions.[276] KPMG notes that the average response times for its due date availability, address validation, and parsed and unparsed CSR pre-order transactions met the parity plus four second C2C standard.[277] KPMG reports that the response times for its product service availability transactions did not meet the C2C standard; however, 95 percent of KPMG's product service availability transactions were received within ten seconds.[278]

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retested these inquiries. See id.

[276] VZ-MA Application, Appdx. I, Vol. 1, Tab 1, at 48 (KPMG Final Report Version 1.4).

[277] Id. at 49.

[278] Id.

As to the accuracy of VZ-MA's pre-order responses, KPMG states that the information included on responses were correct for all pre-order transaction types with the exception of one field in the address validation transaction. KPMG explains that "SUIT" (an abbreviation for "suite") or "UNIT" was returned in place of "APT" for 64 percent of the address validation transactions examined.[279] Finally, KPMG reports that its functional evaluation of VZ-MA's LSOG-4 EDI pre-order interface revealed equally strong performance.[280]

With respect to the LSOG-2 GUI, KPMG reports that it received responses on 100 percent of its pre-order transactions.[281] With respect to the accuracy of VZ-MA's GUI pre-order responses, KPMG states that its responses were complete and accurate in most cases, but that it did experience problems with the "INQNUM" field missing from responses.[282] In its LSOG-4

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279 Id. at 57. VZ-MA states that the errors KPMG reported with respect to the return of "SUIT" or "UNIT" designations where "APT" was expected are the result of the manner in which KPMG's test bed of accounts was created. VZ-MA explains that KPMG's test accounts were manually entered into both the address database and the VZ-MA billing systems by two separate groups of VZ-MA employees. VZ-MA states that the two groups entered the addresses with different designations, creating the opportunity for KPMG to receive unexpected address validation responses. VZ-MA notes that this error can not occur in a commercial environment because "address data is updated via a mechanized feed into Livewire and service representatives utilize that information in preparing service orders for new accounts." See VZ-MA Application, Appdx. B, Vol. 47, Tab 560 (VZ–MA's Response to RR-DTE-354).

280 VZ-MA Application, Appdx. I, Vol. 1, Tab 1, at 61-64 (KPMG Final Report Version 1.4).

281 Id. at 101.

282 Id. at 104. "INQNUM" stands for Inquiry Number. This field is used to identify a tracking number, similar to a Purchase Order Number ("PON"), that links the CLEC's

GUI functional evaluation, KPMG reports that VZ-MA provides responses for all of the pre-order transactions. KPMG notes that it experienced the same problems in LSOG-4 with the missing "INQNUM" field, but states that "INQNUM" data was returned in the "PON" field in KPMG's LSOG-4 GUI pre-order responses.[283]

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pre-order inquiry with VZ-MA's pre-order response.

[283] Id. at 107.

KPMG also tested VZ-MA's EDI and GUI pre-order interfaces as part of its Volume Performance Test. KPMG's Volume Performance Test evaluated VZ-MA's ability to handle CLEC transactions at projected daily, peak, and stress volumes for October 2000.[284] KPMG conducted the Volume Performance Test at the same time that it was submitting individual transactions for the functional evaluations of VZ-MA's interfaces. Though the results are reported separately, KPMG examined both the EDI and GUI interfaces simultaneously in its Volume Performance Test.[285]

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284 Id. at 15, 71.

285 In a Letter Order issued May 12, 2000, the Department denied a motion submitted by AT&T to conduct volume testing of VZ-MA's LSOG-4 production environment. The Department stated in the Letter Order that since the LSOG-2/3 production environment continues to be the predominant environment for CLECs submitting commercial transactions in Massachusetts, KPMG's volume testing should be focused on VZ-MA's ability to handle foreseeable volumes in that environment. The Department further noted that it had directed KPMG to conduct functionality testing of VZ-MA's LSOG-4 environment to ensure that CLEC transactions submitted to VZ-MA via LSOG-4 are

capable of being processed correctly by VZ-MA's systems, and, hence, the Department found "a volume test of the LSOG-4 [production environment] release to be unwarranted." See VZ-MA Application, Appdx. B, Vol. 30, Tab 409, at 2 (Letter Order on AT&T's Motion to Adjust the Master Test Plan and to Clarify the Procedural Schedule).

During the Volume Performance Test, KPMG received responses for 99.9 percent of the transactions submitted via the EDI interface and 99.8 percent of transactions submitted over the GUI.[286] KPMG also reports that VZ-MA returned timely pre-order responses for both interfaces under volume conditions. While VZ-MA's transaction responses met C2C standards for only some transactions, KPMG experienced an average response time of greater than ten seconds for only its EDI and GUI mechanized xDSL Loop Qualification ("LXR") transactions.[287]

KPMG's POP Documentation Review evaluated the published documents that VZ-MA makes available to CLECs to assist them in using VZ-MA's pre-order interfaces. KPMG evaluated VZ-MA's documentation on the basis of whether it provides clear, accurate, and complete information to allow a CLEC representative to submit successfully pre-order transactions and to correct errors in pre-order transactions.[288] As part of its review, KPMG conducted interviews with both the VZ-MA staff responsible for developing pre-order documentation and the CLECs that use VZ-MA documentation in performing their pre-order transactions.[289] In its report, KPMG states that it finds VZ-MA's pre-order documentation satisfactory to meet the needs of CLECs conducting business through VZ-MA's pre-ordering

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286 Id. at 48, 101.

287 Id. at 55, 102-103.

288 Id. at 131-133.

289 Id. at 141.

interfaces.[290] KPMG notes that inconsistencies between separate sets of documentation discovered during the course of its test were corrected to achieve consistency between publications.[291]

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290 Id. at 141-150.

291 Id. at 144. KPMG issued Exception Reports #4, #10, and #12 during its evaluation, identifying a number of inconsistencies in VZ-MA's pre-order documentation and areas

where VZ-MA's was not considered to contain sufficient detail to enable CLECs to submit complete and accurate pre-order inquiries. See VZ-MA Application, Appdx. I, Vol. 2, Tab 2 (Exception Report #4); see also VZ-MA Application, Appdx. I, Vol. 2, Tab 2 (Exception Report #10); see also VZ-MA Application, Appdx. I, Vol. 2, Tab 2 (Exception Report #12). In its Disposition Reports for these three Exceptions, KPMG states that, for each identified and confirmed error, VZ-MA implemented the necessary changes to improve the quality and accuracy of its pre-order documentation. See VZ-MA Application, Appdx. I, Vol. 2, Tab 2 (Disposition Report for Exception #4); see also VZ-MA Application, Appdx. I, Vol. 2, Tab 2 (Disposition Report for Exception #10); see also VZ-MA Application, Appdx. I, Vol. 2, Tab 2 (Disposition Report for Exception #12).

KPMG conducted a capacity management review of VZ-MA's pre-ordering systems to assess whether VZ-MA has in place adequate procedures and tools to manage the projected growth in CLEC demand. In conducting this evaluation, KPMG reviewed relevant VZ-MA documentation and conducted interviews with VZ-MA personnel.[292] KPMG concludes in its report that VZ-MA's capacity management process is adequate to meet both current and projected future volumes of CLEC transactions.[293]

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[292] VZ-MA Application, Appdx. I, Vol. 1, Tab 1, at 235 (KPMG Final Report Version 1.4).

[293] Id. at 235-238.

As part of its Performance Metric Review, KPMG evaluated VZ-MA's methods for recording, calculating and reporting its performance metrics related to pre-ordering functions.[294] KPMG examined the EnView system used by VZ-MA to verify interface availability and to simulate retail and wholesale pre-order transaction response times. KPMG reports that it was able to replicate most of VZ-MA's reported pre-ordering response time metrics for December 1999 and January and February 2000, but experienced problems with the replication of interface availability metrics.[295] KPMG attributed these problems to VZ-MA's lack of formal change management procedures for pre-order metrics calculation, and notes that VZ-MA did not track changes to the metrics calculation algorithms in the "Global Change Tracking Register."[296]

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294 KPMG's Performance Metrics Review also included a data integrity investigation and a transaction test report generation component. These components were not performed with respect to pre-ordering metrics because the EnView system data used to calculate pre-ordering metrics are simulated and do not represent real transactions. See VZ-MA Application, Appdx. I, Vol. 1, Tab 1, at 650, 685 (KPMG Final Report Version 1.4).

295 Id. at 660-661.

296 Id. at 664-668. KPMG characterized the problems with VZ-MA's pre-ordering and provisioning metrics change control processes in Exception Report #14. KPMG explained that VZ-MA had changed numerous algorithm scripts between December 1999 and February 2000 without providing any documentation that such changes had been made. KPMG concluded that these undocumented changes hindered KPMG's ability to replicate VZ-MA's reported pre-ordering and provisioning metrics. See VZ-MA Application, Appdx. I, Vol. 2, Tab 2 (Exception Report #14). In response to KPMG's findings, VZ-MA notes that it has recently implemented a metrics change control process. See VZ-MA Application, Appdx. I, Vol. 2, Tab 2 (VZ-MA Response to Exception #14). However, while KPMG stated that VZ-MA's change control process appeared to satisfy all of KPMG's reported problems, VZ-MA's implementation of this process could not be reviewed by KPMG prior to the conclusion of its OSS evaluation. Therefore, on October 8 and 9, 2000, the Department undertook to review and assess VZ-MA's compliance with

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its defined metrics change control process. See VZ-MA Application, Appdx. B, Vol. 46, Tab 545, at 4877-4878 (Transcript of Technical Session Held 8/28/00).

In conducting its review of VZ-MA's metrics change control process, the Department followed the same process used by KPMG in its OSS evaluation. First, the Department compared the reported results of August 2000 performance measures calculated under both the August and July algorithms. The Department then examined any discrepancies between the two sets of results and checked the differences against VZ-MA Change Control Notices. The Department found that in every case, VZ-MA had provided advance notice of metrics calculation changes through a formal Change Control Notice. The Department concludes that VZ-MA's defined metrics change control process sufficiently records changes to the metrics calculation process and allows for effective tracking of such changes.

v. Conclusions

Based upon the evidence in the record, and the independent testing of KPMG, the Department finds that VZ-MA provides competitors with nondiscriminatory access to its pre-ordering OSS functions. Specifically, the Department finds that VZ-MA's EDI and GUI interfaces offer CLECs access to pre-ordering functions in substantially the same time and manner as VZ-MA makes such functions available to its own retail representatives. The Department also finds that VZ-MA has implemented the necessary processes to satisfy the metrics change control issues raised by KPMG in its third-party evaluation. Further, the Department can not accord significant weight to the CLECs' arguments, which are not supported by either KPMG's evaluation or VZ-MA's current performance metrics, to warrant a finding of noncompliance with the pre-ordering aspects of VZ-MA's requirement to provide nondiscriminatory access to its OSS.

f. Ordering

i. Standard of Review

In meeting its obligation to provide nondiscriminatory access to its ordering systems, the FCC has found that a BOC must show that:

> (i) it is able to return timely order confirmation and rejection notices; (ii) its systems flow-through a high percentage of orders without manual handling, at a rate that is comparable overall to the flow-through rate for its retail services; (iii) the mechanized orders that do not flow-through are handled in a reasonably prompt and accurate manner; (iv) the mechanized and manual components of its ordering systems are scalable to accommodate increasing demand; (v) it provides jeopardy notices in a nondiscriminatory manner; and (vi) it provides timely order

confirmation notices.[297]

For those ordering functions that have a retail analogue, the FCC has determined that the BOC must provide service to CLECs in "substantially the same time and manner as it provides to its retail operations," and for those with no retail analogue, the BOC must show that it allows "an efficient competitor a meaningful opportunity to compete."[298]

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297 SBC Texas Order at ¶170.

298 Id.

In its Bell Atlantic New York Order, the FCC explained that flow-through rates are not a definitive indicator of the BOC's ability to provide nondiscriminatory access to its ordering systems, but rather are "a tool used to indicate a wide range of possible deficiencies in a BOC's OSS that may deny an efficient competitor a meaningful opportunity to compete in the local market."[299] In the absence of high flow-through rates, the FCC has noted that it will examine more closely the other factors involved in its review of the BOC's ordering functionality.[300]

ii. VZ-MA's Offering

[299] Bell Atlantic New York Order at ¶ 162.

[300] Id. at ¶ 163.

VZ-MA provides CLECs with the ability to submit LSRs electronically over both the web-based GUI and the EDI application-to-application interface. Currently, 15 Massachusetts CLECs are using the EDI interface to submit commercial transactions in Massachusetts.[301] VZ-MA notes that it processed over 48,000 LSRs in Massachusetts in July 2000, a 92 percent increase over the same period in 1999,[302] and the same systems and work centers that process Massachusetts orders are responsible for processing nearly 500,000 orders per month throughout New England and New York.[303] VZ-MA also notes that it is processing orders for CLECs in each of the delivery methods available. Of the 48,000 LSRs processed in July, VZ-MA states that approximately 25,500 were for UNE loops, 5,000 were for UNE-P combinations, and 17,500 were resale orders.[304] While CLECs are able to use the LSOG-4 industry guidelines for their ordering systems in Massachusetts, most CLECs continue to utilize the LSOG-2 industry guidelines. In July, 99.5 percent of the LSRs submitted over the EDI interface were submitted under the LSOG-2 guidelines.[305]

VZ-MA processes CLEC orders received via the GUI and EDI interfaces and returns

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301 VZ-MA Application, Appdx. B, Vol. 46, Tab 533, at 4575 (Transcript of Technical Session Held 8/21/00).

302 Id.

303 VZ-MA Application, Appdx. B, Vol. 46, Tab 538, at 4864 (Transcript of Technical Session Held 8/22/00).

304 Id. at 4734-35.

305 VZ-MA Application, Appdx. B, Vol. 47, Tab 550 (VZ–MA's Response to RR-DTE-331).

either a confirmation or reject notice over the same interface the CLEC used to submit the order. VZ-MA tracks a number of C2C Guidelines with respect to its obligation to return timely order confirmation and reject notices. For orders that flow-through VZ-MA's ordering systems without manual handling, VZ-MA is obligated to return 95 percent of confirmation and reject notices within two hours of the receipt of the LSR. For orders that require manual processing, VZ-MA follows two standards based upon the number of lines involved on the LSR. VZ-MA must return 95 percent of confirmations and rejects within 24 hours on LSRs with less than 10 lines, and within 72 hours for LSRs with 10 or more lines.[306] As part of its C2C requirements, VZ-MA provides performance measurements for confirmation and reject notice timeliness separately for both resale and UNEs, and within each of those product types VZ-MA distinguishes between

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306 VZ-MA Application, Appdx. B, Vol. 32b, Tab 423, ¶ 68 (VZ-MA May OSS Aff.); see also VZ-MA Application, Appdx. B, Vol. 32a, Tab 423, ¶¶ 35-36 (VZ-MA May Measurements Aff.).

specific types of orders.[307]

[307] VZ-MA Application, Appdx. B, Vol. 32a, Tab 423, ¶¶ 36-37 (VZ-MA May Measurements Aff.).

VZ-MA's performance for confirmation and reject notice timeliness has been generally strong over the period of April through July 2000. Over the four-month period, VZ-MA missed its C2C standard for only four different areas. First, VZ-MA's performance for resale Complex Local Service Request Confirmations ("LSRCs")[308] was 81.81 percent in April and 93.33 percent in May, but exceeded the standards in both June and July. VZ-MA's UNE-Loop reject timeliness for orders with fewer than ten lines was below the C2C standard in April (92.49 percent), May (91.58 percent), and June (91.41 percent), but met the standard for July. Third, in June, VZ-MA fell below the C2C standard in its performance on the return of LSRCs for resale plain-old-telephone service ("POTS") orders with ten or more lines. However, VZ-MA's performance during June for this measure was 93.15 percent, and VZ-MA met the standard of 95 percent in each of the other three months. Finally, VZ-MA missed its C2C standard for only one confirmation or reject notice metric in July, with a UNE-P flow-through reject rate of 94.90 percent.

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308 The term LSRC can be used interchangeably with Firm Order Confirmation ("FOC").

Throughout the Department's proceedings much emphasis has been placed on VZ-MA's flow-through performance for CLEC orders. VZ-MA notes that high levels of order flow-through are desirable for both VZ-MA and the CLECs.[309] However, the rate of order flow-through is also dependent on the efforts of both VZ-MA and the CLECs and on the order types. VZ-MA has worked diligently to improve the areas of order flow-through that it can control directly, and the Company has also worked with the CLECs to enable them to improve the quality of their orders so that more eligible orders do flow-through VZ-MA's systems.

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309 VZ-MA Application, Appdx. B, Vol. 46, Tab 538, at 4863 (Transcript of Technical Session Held 8/22/00).

VZ-MA's ordering OSS systems automatically perform a series of checks and edits on CLEC LSR submissions to determine first whether or not the order is of a type that is designed to flow-through. If the order is flow-through eligible, VZ-MA's systems check the LSR to ensure that all necessary information is present on the LSR and is in the correct format. As of June 17, 2000, VZ-MA's systems were able to flow-through more than seventy different ordering scenarios across the three services of resale, UNE-P, and UNE-Loops.[310] Since November 1999, VZ-MA has implemented 51 system improvements to its flow-through order process.[311] Among the improvements that VZ-MA has made, CLEC orders for UNE-P arrangements with additional lines, Ringmate service, and UNE-Loop migrations with hunting features are now eligible to flow-through VZ-MA's OSS.[312] Additionally, VZ-MA changed the telephone number field requirements for resale orders, causing a drop in order fall-out from 1,214 in December to only 33 in January 2000.[313] Finally, on June 17, 2000, VZ-MA implemented further system enhancements to its order flow-through allowing pre-qualified ADSL orders of less than 10 lines to flow-through its OSS.[314]

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310 See VZ-MA Application, Appdx. B, Vol. 34b, Tab 443 (VZ–MA's Response to DTE-WorldCom-4-12).

311 VZ-MA Application, Appdx. B, Vol. 46, Tab 533, at 4578-79 (Transcript of Technical Session Held 8/21/00).

312 VZ-MA Application, Appdx. B, Vol. 32b, Tab 423, ¶¶ 61-62 (VZ-MA May OSS Aff.).

313 Id. at ¶ 63.

314 VZ-MA Application, Appdx. B, Vol. 34a, Tab 443 (VZ–MA's Response to DTE-5-35).

In addition to making improvements to its own systems to improve flow-through performance, VZ-MA has also assisted CLECs in improving their orders to achieve greater flow-through results. VZ-MA provides flow-through documentation to CLECs over its wholesale web site and through its Change Management process. Further, in November 1999 VZ-MA began holding monthly CLEC flow-through workshops. The purpose of these workshops is to review the problems that CLECs have experienced in attaining high levels of order flow-through and to discuss with the CLECs the methods by which they can improve their flow-through performance. VZ-MA notes that while these flow-through workshops have been built around the flow-through problems experienced in New York, any improvements to order flow-through are experienced equally in Massachusetts. Finally, VZ-MA notes that it has developed a "complete inventory of flow-through errors by individual CLEC and by mode-of-entry" to enable CLECs to eliminate repeat errors of similar types.[315]

[315] VZ-MA Application, Appdx. B, Vol. 32b, Tab 423, ¶¶ 65-67 (VZ-MA May OSS Aff.).

Under the C2C Guidelines, VZ-MA has a performance standard in place to provide an "achieved flow-through" rate of 95 percent. Achieved flow-through is defined in the C2C Guidelines as the percentage of those order types that are designed to flow-through VZ-MA's OSS that actually do flow-through.[316] VZ-MA has not yet begun reporting its measurements for "achieved flow-through," but has reported total flow-through rates, which includes order types that are not designed to flow-through, for Massachusetts. For resale services in Massachusetts during the period of April through July 2000, VZ-MA reports total flow-through rates of 51.19 percent, 44.60 percent, 43.80 percent, and 42.41 percent. Additionally, during technical sessions held by the Department, VZ-MA testified that resale flow-through for the first 18 days of August was 53 percent.[317] Total flow-through rates for UNE services over the same four-month period

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316 See VZ-MA Application, Appdx. B, Vol. 32a, Tab 423, ¶ 46 (VZ-MA May Measurements Aff.).

317 VZ-MA Application, Appdx. B, Vol. 46, Tab 533, at 4578-79 (Transcript of Technical

were 38.41 percent, 30.35 percent, 38.47 percent, and 39.51 percent. During the first 18 days of August, VZ-MA testified that UNE flow-through rates were at 37 percent.[318]

Session Held 8/21/00).

318 Id.

While the overall flow-through rates for CLECs in Massachusetts appear to be low, VZ-MA argues, and the Department agrees, the causes for such performance do not rest exclusively with VZ-MA. After reviewing flow-through performance disaggregated by CLEC, it became apparent that the abilities of individual CLECs to create complete and accurate LSRs has a significant impact on the rate of order flow-through. Among Massachusetts resellers, VZ-MA provided information showing that over the period of January through June 2000 individual resellers attained flow-through rates ranging from less than 5 percent to over 80 percent.[319] For CLECs ordering UNEs in Massachusetts, VZ-MA presented similar information showing that over the period of January through June 2000 individual CLECs achieved flow-through rates ranging from zero to more than 93 percent.[320] These disaggregated figures show that while VZ-MA's overall flow-through performance appears low, VZ-MA's systems are quite capable of allowing CLECs and resellers to attain high levels of order flow-through and of sustaining future commercial volumes. In addition, these figures represent total flow-through, and, as noted above, a number of order types are not currently designed to flow-through and the order types that are

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319 VZ-MA Application, Appdx. B, Vol. 47, Tab 553 (VZ–MA's Response to RR-DTE-342).

320 Id.

designed to flow-through (e.g., UNE-P) represent a smaller percentage of the total orders in Massachusetts than they do in New York.

There are a number of factors that must be taken into account when examining VZ-MA's order flow-through performance. First, the CLEC's ability to provide a complete and accurate LSR, as discussed above, is an essential first step in determining whether or not an order will flow-through VZ-MA's OSS. The mix of orders CLECs submit has an equally large effect on flow-through rates. VZ-MA notes, for example, that order supplements and cancellations do not flow-through the company's OSS ordering systems.[321] VZ-MA explains that these types of transactions are not designed to flow through so that VZ-MA's TIS OC personnel can ensure that the original pending service order is not executed while the supplement or cancellation is being processed by the company's OSS.[322] VZ-MA states that nearly 40 percent of CLEC UNE-Loop orders, 17 percent of UNE-P orders, and 25 percent of resale orders fall into the category of supplements and cancellations.[323] While VZ-MA has begun implementing system enhancement that will allow some of these supplements and cancellations to be processed on a flow-through basis, the volume of CLEC order supplements and cancellations has a significant effect on the

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321 VZ-MA Application, Appdx. B, Vol. 42, Tab 494, ¶ 12 (VZ-MA August Supplemental Measurements Aff.).

322 Id.

323 VZ-MA Application, Appdx. B, Vol. 42, Tab 494, ¶ 38 (VZ-MA August Supplemental OSS Aff.).

overall flow-through rates. For example, VZ-MA notes that if order supplements and cancellations were excluded from the UNE-Loop flow-through calculation, VZ-MA's flow-through performance would increase by 67 percent.[324] During technical sessions held by the Department, VZ-MA testified that if order supplements and cancellations were excluded from the flow-through calculations, VZ-MA's flow-through performance for the first 18 days of August would increase from 53 percent to 69 percent for resale and from 37 percent to 62 percent for UNEs.[325]

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324 VZ-MA Application, Appdx. B, Vol. 42, Tab 494, ¶ 12 (VZ-MA August Supplemental Measurements Aff.).

325 VZ-MA Application, Appdx. B, Vol. 46, Tab 533, at 4578-79 (Transcript of Technical Session Held 8/21/00).

In showing that it is providing nondiscriminatory access to its OSS ordering systems, VZ-MA must show that it is adequately processing not only those orders that flow-through its systems, but also that it has systems and measures in place to process efficiently those orders that do not flow-through. In order to meet these requirements, VZ-MA has four separate TIS OC work centers to perform the manual editing and processing of CLECs' non-flow-through orders, the Boston Resale Center to process resale orders, the Boston Platform Center to handle UNE-P orders, the DSL Center to address CLECs' xDSL and advanced services needs, and the UNE-Loop/Hot-Cut Center, which processes orders for non-complex UNEs.[326] VZ-MA currently has 717 wholesale service representatives staffing the four TIS OC work centers, a 126 percent increase between November 1999 and July 2000.[327] With specific regard to VZ-MA's resources for advanced services order processing, the DSL Center has a staff of 122 representatives specifically trained to handle xDSL and premium loop orders.[328] VZ-MA developed its TIS OC staffing plans on the basis of a model developed by Andersen Consulting. VZ-MA notes that Andersen Consulting's analysis of VZ-MA's work center staffing incorporated a review of both current and projected future manual processing demands.[329] As evidence that its TIS OC staffing

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326 VZ-MA Application, Appdx. B, Vol. 32b, Tab 423, ¶ 69 (VZ-MA May OSS Aff.).

327 VZ-MA Application, Appdx. B, Vol. 42, Tab 494, ¶ 50 (VZ-MA August Supplemental OSS Aff.).

328 Id. at ¶53.

329 VZ-MA Application, Appdx. B, Vol. 34a, Tab 443 (VZ–MA's Response to DTE-ATT-4-13).

levels are adequate to meet its manual order processing requirements, VZ-MA notes that its on-time performance in providing manual confirmation and reject notices exceeded C2C standards in June 2000.[330]

[330] VZ-MA Application, Appdx. B, Vol. 42, Tab 494, ¶ 48 (VZ-MA August Supplemental OSS Aff.).

Apart from measuring the speed at which its TIS OC personnel perform their manual order processing duties, VZ-MA also measures the accuracy of the TIS OC's work through three service order accuracy metrics -- orders, opportunities, and LSRCs.[331] VZ-MA notes that the methods by which these measurements are calculated are flawed in certain respects, but contends that they understate, rather than overstate, the TIS OC's performance in manually processing CLEC orders. For example, the service order accuracy metrics count as errors any difference between the original valid LSR and the service order that is entered into VZ-MA's systems. These differences include not only errors created by TIS OC personnel, but also instances whereby TIS OC personnel corrected errors that the CLEC made on the original LSR.[332] VZ-MA also states that it has uncovered some instances of incorrect practices in the TIS OC that were causing inaccuracies on the service order, but that VZ-MA has corrected the cause for those errors and re-trained its TIS OC personnel under the correct methods and procedures.[333] VZ-MA

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331 See VZ-MA Application, Appdx. B, Vol. 32b, Tab 423, ¶ 88 (VZ-MA May OSS Aff.).

332 Id. at ¶ 89.

333 Id. at ¶¶ 90-94.

further explains that its strong performance in the area of installation quality[334] reflects the company's position that its service order accuracy metrics do not reflect an inability to process manual orders efficiently and accurately.[335]

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334 Installation quality metrics are addressed in detail under VZ-MA's provisioning OSS systems. See Section V.B.1.g.ii., below.

335 VZ-MA Application, Appdx. B, Vol. 42, Tab 494, ¶ 69 (VZ-MA August Supplemental OSS Aff.).

Because order rejection rates are highly dependent upon factors that VZ-MA cannot directly control, there is no C2C performance standard that VZ-MA must meet for order rejections. However, VZ-MA does report its order reject rate based upon a C2C-approved metric definition. VZ-MA states that its reported LSR reject rate is a misrepresentation of its actual performance with respect to CLEC orders. First, VZ-MA notes that while the C2C-approved calculation for its order reject rate includes in the numerator all rejected LSRs, the denominator only includes the number of valid LSRs rather than the total number of LSRs submitted, including rejected LSRs.[336] VZ-MA explains that this calculation method could result in a reported order reject rate of greater than 100 percent. VZ-MA also notes that its calculation of the order reject rate also includes those orders that are manually corrected by the TIS OC rather than returned to the CLEC. These orders are included in the reject rate even though the CLECs never see them as errors. VZ-MA asserts that if these problems were corrected in the calculation, VZ-MA's order reject rates would be significantly lower than currently reported. The resale reject rates for April, May, and June would be, respectively, 33.8 percent (from 44.3 percent), 36.6 percent (from 48.3 percent), and 31.4 percent (from 39.3 percent). Similarly, recalculated UNE reject rates for the same time periods would be 12.5 percent (from 26.9 percent), 18.5 percent (from 29.1 percent),

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336 VZ-MA Application, Appdx. B, Vol. 42, Tab 494, ¶ 13 (VZ-MA August Supplemental Measurements Aff.).

and 17.0 percent (from 20.8 percent).[337]

[337] Id.

Similar to flow-through, the rate of order rejects is significantly impacted by CLECs' abilities to submit complete and accurate orders to VZ-MA's OSS. Disaggregated CLEC and reseller reject rate data shows that while some competitors in Massachusetts have experienced high rates of order rejects, others have had relatively few of their order submissions rejected by VZ-MA's systems. For resellers during the period of January through June 2000, reject rates range from less than 10 percent to well over 100 percent.[338] During the same period, CLECs ordering UNEs have experienced reject rates as low as 13 percent and as high as 53 percent.[339] While VZ-MA is responsible for providing CLECs with the information they need to produce accurate orders, the evidence of these wide ranges of reject rates between individual carriers shows that the efforts put forth by the CLECs in submitting accurate LSRs are very strongly tied to the overall order reject rates reported by VZ-MA.

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338 VZ-MA Application, Appdx. B, Vol. 47, Tab 553 (VZ–MA's Response to RR-DTE-342).

339 Id.

VZ-MA currently does not transmit jeopardy notices to either CLECs or its own retail representatives. VZ-MA explains that it provides CLECs with access to jeopardy information through its Open Query System ("OQS"), which is updated three times daily and retains information for approximately thirty days. The OQS process was developed in collaboration with CLECs through proceedings held in New York. VZ-MA notes that its retail representatives must log directly into either the Service Order Processor ("SOP") or the Work Force Administration ("WFA") system to obtain jeopardy information or order status. CLECs also have the ability, through VZ-MA's pre-ordering interfaces, to check order status directly in either the SOP or the WFA system.[340] Though VZ-MA currently provides CLECs with parity to its retail representatives in terms of the availability of jeopardy information, in response to CLEC requests,[341] VZ-MA has agreed through the Change Management process to implement EDI jeopardy notification in October 2000. In the meantime, VZ-MA has set up an e-mail notification process to transmit jeopardy information to CLECs.[342]

VZ-MA provides two distinct completion notices to CLECs to signify that an order has been provisioned and processed through the company's billing systems. The first notice to be received by the CLEC is the Provisioning Completion Notice ("PCN"), which notifies the CLEC

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340 VZ-MA Application, Appdx. B, Vol. 32b, Tab 423, ¶¶ 95-97 (VZ-MA May OSS Aff.).

341 See, e.g., VZ-MA Application, Appdx. B, Vol. 37, Tab 455, ¶¶ 120-123 (WorldCom Lichtenberg/Sivori Decl.).

342 VZ-MA Application, Appdx. B, Vol. 42, Tab 494, ¶ 71 (VZ-MA August Supplemental OSS Aff.).

that all provisioning work has been finished and that the CLEC can then take responsibility for the provision of the end customer's service. VZ-MA notes that it began providing PCNs to CLECs in August 1999 to assuage concerns that there was a lag between the completion of the physical provisioning of an order and the processing of that order through VZ-MA's billing systems.[343] Under the C2C Guidelines, VZ-MA must provide 95 percent of PCNs before noon on the day following work completion. VZ-MA sends all of its PCNs electronically over the same interface the CLEC used to submit the order.

[343] VZ-MA Application, Appdx. B, Vol. 32b, Tab 423, ¶ 99 (VZ-MA May OSS Aff.).

Upon completion of the processing of an order through VZ-MA's billing systems, VZ-MA electronically submits to the CLEC a Billing Completion Notice ("BCN"), which notifies the CLEC that VZ-MA has made the necessary adjustments to the customer's account so that the CLEC may commence billing of that customer. VZ-MA provides BCNs to CLECs electronically over the same interface the CLEC used to submit the initial order. VZ-MA is required under the C2C Guidelines to provide 95 percent of BCNs to CLECs before noon on the day following the date of billing completion, or the CRIS completion date. VZ-MA notes that it does not actively transmit to its retail representatives any completion notices. If retail representatives need to determine whether or not a particular order has been completed, they must check the SOP for the status of the order. VZ-MA notes that CLECs are also able to perform this type of inquiry if they have reason to require completion information before a PCN or BCN is generated.[344] Finally, VZ-MA notes that it began providing fielded complex completion notices to CLECs as part of its June 2000 LSOG-4 software release.[345]

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344 Id.

345 VZ-MA Application, Appdx. B, Vol. 34b, Tab 443 (VZ–MA's Response to DTE-WorldCom-4-6).

With respect to PCN on-time performance, VZ-MA met its requirement of 95 percent by noon the next business day in every month from April through July 2000 for both resale and UNE offerings. VZ-MA's BCN performance over the same period, however, did not achieve results as successful. With respect to resale services, VZ-MA's BCN on-time performances were 86.83 percent (April), 93.29 percent (May), 92.43 percent (June), and 99.24 percent (July). For UNE offerings, VZ-MA's performance was reported as 99.98 percent (April), 95.21 percent (May), 85.06 percent (June), and 96.85 percent (July). VZ-MA explains that the lower performance in resale and UNE BCN timeliness is the result of a system error that failed to time-stamp the completion notices, and the default value for the field caused some on-time BCNs to be erroneously scored as late. VZ-MA notes that it resolved this error on August 3, 2000.[346]

In response to concerns raised by various CLECs in the early part of this year, VZ-MA has noted on numerous occasions in this proceeding that it has resolved all of the issues surrounding the problems it had with missing notifiers earlier this year.[347] VZ-MA notes that it has made numerous reviews of and enhancements to its OSS systems and has made all of the necessary software revisions to ensure that the missing notifiers problems will not be repeated. Additionally, it should be noted that KPMG's transaction testing of VZ-MA's OSS did not begin

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346 VZ-MA Application, Appdx. B, Vol. 42, Tab 494, ¶ 72 (VZ-MA August Supplemental OSS Aff.).

347 See VZ-MA Application, Appdx. B, Vol. 32b, Tab 423, ¶¶ 77-86 (VZ-MA May OSS Aff.); see also VZ-MA Application, Appdx. B, Vol. 46, Tab 538, at 4722-23, 4825 (Transcript of Technical Session Held 8/22/00).

until May 2000, after VZ-MA confirmed that it had resolved all of the problems associated with the missing notifiers. VZ-MA has confirmed that all of the changes it made in response to those problems, which were most evident in New York, were implemented in Massachusetts to the same extent that they were implemented in New York.[348]

iii. Competitors' Positions and VZ-MA's Response

[348] Id.; see also VZ-MA Application, Appdx. B, Vol. 34b, Tab 443 (VZ–MA's Response to DTE-WorldCom-4-4).

Only one CLEC, AT&T, has raised and supported with documentation any complaints against VZ-MA's ability to meet its obligation to provide confirmation, rejection, and completion notices. In comments filed with the Department, AT&T alleges that during its production testing of VZ-MA's LSOG-4 software release[349], VZ-MA failed to meet its timeliness obligations with respect to all three types of notifiers, and in many cases, according to AT&T, VZ-MA failed to provide notifiers altogether.[350] AT&T notes in its comments that during its production test, VZ-

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349 AT&T conducted its production testing of the LSOG-4 software over an eight-week period from April 30 through June 24, 2000. During the course of the test, AT&T submitted 2,265 test transactions. VZ-MA Application, Appdx. B, Vol. 44, Tab 506 (AT&T's Response to DTE-ATT-1-4). AT&T notes that it did not notify VZ-MA in advance of its testing plans, nor did it adopt a naming convention for its test orders so that they could be distinguished from actual AT&T production orders. AT&T contends that it followed this practice to simulate a true commercial experience. After the completion of its testing AT&T did not address with VZ-MA any of the problems it raised in this proceeding. AT&T states it did not address with VZ-MA the problems it reported to the Department because, according to its testing agreement, "'[e]ither party may provide test data to a government agency, . . . without providing the test data to the other party prior to disclosure to the Regulator,' so long as it simultaneously provides the data to the other party." Appdx. I (AT&T Response to RR-346, citing Att. 1 "Testing Agreement" at ¶ 21). However, while AT&T cites the section of the agreement governing the release of information to third parties, AT&T did not explain its failure to abide by paragraph 7(c) of the testing agreement, which states "[f]or all other problems or failures associated with the Test lines that AT&T has reasonably determined to be attributable to [VZ-MA], AT&T shall open timely and accurate trouble tickets with [VZ-MA]." Id., citing Att. 1 "Testing Agreement" at ¶ 7(c). The agreement further states that "a trouble ticket will not be considered open until AT&T submits complete and accurate PON(s) to [VZ-MA] where PON(s) exist(s) for the trouble ticket(s) being opened," and "AT&T shall cooperate with [VZ-MA] in resolving the problems and/or failures presented in such trouble tickets." Id. at ¶ 7(d).

350 VZ-MA Application, Appdx. B, Vol. 38, Tab 460, at 20 (AT&T July Supplemental Comments).

MA provided timely confirmation and rejection notices only 66 percent of the time during the week in which AT&T submitted its highest volume of test orders, and for 22 percent of the test orders during that week, AT&T contends that no confirmation or rejection was sent by VZ-MA.[351] When asked to support these claims, AT&T provided documentation showing that during the week of June 11 through 17, of 949 test orders submitted by AT&T, 411 test orders received timely LSRCs, 213 received late LSRCs, and 213 did not receive either an LSRC or a reject notice.[352]

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351 Id. at 21. In its response to information request DTE-ATT-1-4(a), AT&T revised its comments to note that it calculated its 66 percent on-time measurement against the total number of confirmations received and not against the total number of test orders eligible to receive a confirmation (which excludes the 112 test orders for which AT&T received reject notices). AT&T contends that if it were to count all test orders eligible to receive a confirmation, it received timely confirmations for only 49 percent of its orders. See VZ-MA Application, Appdx. B, Vol. 44, Tab 506 (AT&T's Response to DTE-ATT-1-4(a)).

352 See VZ-MA Application, Appdx. B, Vol. 44, Tab 506 (AT&T's Response to DTE-ATT-1-4). AT&T notes that the remaining 112 test orders were rejected by VZ-MA, but makes no indication that these rejections were received late. Assuming that the rejects were received on time, AT&T's data for the week of June 11 shows an on-time notice

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receipt of 55.1 percent.

VZ-MA rejects AT&T's claims that it did not send timely confirmation or reject notices to AT&T during AT&T's production test. VZ-MA notes that during the period of AT&T's production test, VZ-MA achieved 98.7 percent on time performance for both confirmation notices and rejections.[353] VZ-MA notes that its calculation of on time performance included both test orders and actual production orders submitted by AT&T over the period of the test, because VZ-MA was unable to determine which AT&T PONs were associated with AT&T's production test.[354] Further, VZ-MA provided evidence to refute AT&T's claim that it did not receive 213 expected LSRCs. VZ-MA provided logs showing that each of the PONs identified by AT&T had been successfully sent to AT&T via File Transfer Protocol (FTP).[355]

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353 VZ-MA Application, Appdx. B, Vol. 42, Tab 494, ¶¶ 77-78 (VZ-MA August Supplemental OSS Aff.).

354 Id. at ¶ 75.

355 Appdx. G (VZ–MA's Response to RR-DTE-334).

With regard to completion notices, AT&T notes in its comments that only 54 percent of the PCNs AT&T received during its production test were received on time according to the C2C standards.[356] Further, AT&T contends that it received PCNs on only 91 percent and BCNs on only 88 percent of the test orders eligible to be completed.[357] In support of these claims, AT&T provided a breakdown of orders submitted during the week of June 11, its highest volume week of testing. AT&T's data show that of 625 orders it states were eligible to be completed, 571 orders received PCNs with 335 PCNs received on time and 236 received late. The 571 PCNs

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356 VZ-MA Application, Appdx. B, Vol. 38, Tab 460, at 22 (AT&T July Supplemental Comments).

357 Id.

received represent 91.4 percent of the orders AT&T states were eligible to be completed.[358] Further, AT&T's data show that only 552 of its test orders received BCNs, accounting for 88.3 percent of the total number of eligible test orders.[359]

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358 VZ-MA Application, Appdx. B, Vol. 44, Tab 506 (AT&T's Response to DTE-ATT-1-4(e)).

359 Id.

VZ-MA responds to AT&T's claims regarding late completion notices by stating that over the period of the test, 100 percent of PCNs were sent to AT&T on time under the C2C standards. VZ-MA questions the methods that AT&T used in calculating its timeliness performance for these notices.[360] VZ-MA further notes that of the 1,397 eligible orders received during the testing period (including both test orders and production orders), 97 percent received PCNs and 95 percent received BCNs.[361] VZ-MA explained during Department technical sessions that the remaining PCNs and BCNs had not yet been generated.[362] VZ-MA further explains that AT&T's calculations regarding missing completion notices were flawed because AT&T included in its calculations 41 LSRs that had been supplemented and were therefore not eligible to be completed.[363] Finally, with respect to all of AT&T's claims regarding missing notices, VZ-MA notes that it has established a formal trouble ticket process for resolving issues with missing notifiers. VZ-MA notes that AT&T did not follow the established procedures with regard to the LSRCs, PCNs, and BCNs it claims were never received from VZ-MA.[364]

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360 VZ-MA Application, Appdx. B, Vol. 42, Tab 494, ¶ 79 (VZ-MA August Supplemental OSS Aff.).

361 Id.

362 VZ-MA Application, Appdx. B, Vol. 46, Tab 533, at 4583-84 (Transcript of Technical Session Held 8/21/00).

363 VZ-MA Application, Appdx. B, Vol. 47, Tab 550 (VZ–MA's Response to RR-DTE-335).

364 VZ-MA Application, Appdx. B, Vol. 46, Tab 533, at 4583-84 (Transcript of Technical Session Held 8/21/00); see also VZ-MA Application, Appdx. B, Vol. 46, Tab 538, at 4714-15 (Transcript of Technical Session Held 8/22/00).

AT&T also raised complaints over VZ-MA's return of completion notices for order cancellations. AT&T contends that instead of receiving an LSRC on its order cancellations, VZ-MA frequently provides completion notices, leaving AT&T to wonder whether the cancellation was made or the original order provisioned.[365] AT&T contends that VZ-MA's failure to follow its own procedures in this area forces AT&T to spend unnecessary time and expense to resolve the confusion over the notices that it receives. In support of these claims, AT&T notes that during its production test it submitted 387 supplements to cancel previous orders. Of these cancellations, AT&T states that 125 were rejected by VZ-MA and 155 received no response from VZ-MA. Of the remaining 107 cancellations, AT&T shows in its supporting documents that all 107 received completion notices rather than LSRCs.[366]

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365 VZ-MA Application, Appdx. B, Vol. 38, Tab 460, at 23-24 (AT&T July Supplemental Comments).

366 VZ-MA Application, Appdx. B, Vol. 44, Tab 506 (AT&T's response to DTE-ATT-1-6).

VZ-MA confirms that it did encounter a problem with completion notices being sent to AT&T on order cancellations. VZ-MA explains that the problem was related to a software error that caused completion notices to be generated in place of confirmations when every order on an LSR was canceled.[367] VZ-MA states, however, that this software error was fixed once the problem was reported, and that in the future CLECs will receive confirmation notices on order cancellations as is stated in the business rules.[368]

Various CLECs have raised concerns over the low levels of order flow-through that VZ-MA has attained. First, AT&T contends that VZ-MA's low flow-through rates inevitably lead to order backlogs and manual processing errors that prevent CLECs from having an efficient opportunity to compete.[369] As evidence of TIS OC's manual processing errors, AT&T alleges

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367 VZ-MA Application, Appdx. B, Vol. 46, Tab 538, at 4799 (Transcript of Technical Session Held 8/22/00).

368 Id.

369 VZ-MA Application, Appdx. B, Vol. 38, Tab 460, at 23 (AT&T July Supplemental Comments).

that during its production testing 247 test orders were erroneously rejected by VZ-MA's TIS OC, representing nearly 52 percent of the total number of rejected orders during the test period and more than 12 percent of the total orders submitted as part of the production test.[370] AT&T later reduced the number of erroneous reject notices in its allegation to 138.[371]

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370 Id.

371 VZ-MA Application, Appdx. B, Vol. 44, Tab 506 (AT&T's Response to DTE-ATT-1-4(f)).

In response to AT&T's claims regarding the TIS OC's erroneous rejection of AT&T's production test orders, VZ-MA testified during technical sessions that of the 138 test orders that AT&T claimed were rejected in error, VZ-MA found only 57 of the orders to have been inaccurately rejected by the TIS OC staff. Of the 57 incorrect rejects, 41 were the result of TIS OC representatives' misunderstandings of VZ-MA's policies regarding order cancellations on the service due date. Another nine erroneous rejects were the result of a representative's confusion between LSOG-2 and LSOG-4 ordering business rules.[372] VZ-MA notes that in each of these instances the TIS OC representatives who made these errors were retrained in the correct procedures for dealing with orders of these types.[373] VZ-MA further explained the reasons that it believes the remaining 81 test orders were correctly rejected. VZ-MA stated that 41 of those orders were for services not available in Massachusetts, 39 orders included a request for expedited service while stating a requested due date longer than the standard interval, and the final order contained an invalid due date request.[374] VZ-MA finally notes with regard to this complaint that the original number of test orders that AT&T claimed were incorrectly rejected by the TIS OC represented only 6.91 percent of all orders submitted by AT&T during the testing period. After removing the 81 orders that VZ-MA has shown to be correctly rejected, the 57

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372 VZ-MA Application, Appdx. B, Vol. 46, Tab 533, at 4584-85 (Transcript of Technical Session Held 8/21/00).

373 Id.

374 VZ-MA Application, Appdx. B, Vol. 46, Tab 538, at 4710-11 (Transcript of Technical Session Held 8/22/00).

erroneous rejects account for only 2.85 percent of the total universe of orders.[375]

WorldCom also contends that VZ-MA's low order flow-through leads to greater instances of manual processing error and is inadequate to support real commercial competition in Massachusetts.[376] WorldCom further contends that Verizon has failed to implement flow-through improvements that the company had promised to provide as part of its Section 271 application in New York in 1999. WorldCom argues that despite its requests filed with the NYPSC, Verizon has refused to reveal the status of these flow-through improvements.[377] VZ-MA notes in response to WorldCom's claims that it has implemented the flow-through improvements referred to by WorldCom, which were aimed toward improving UNE-P flow-through, and the effect has been that VZ-MA's reported flow-through for UNE-P orders was 77 percent in June 2000 and 92

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375 Id.

376 VZ-MA Application, Appdx. B, Vol. 37, Tab 455, ¶¶ 126-127 (WorldCom Lichtenberg/Sivori Decl.).

377 Id. at ¶¶ 127-128.

percent in July 2000 (through July 24).[378]

[378] VZ-MA Application, Appdx. B, Vol. 42, Tab 494, ¶ 40 (VZ-MA August Supplemental OSS Aff.); see also VZ-MA Application, Appdx. B, Vol. 34a, Tab 443 (VZ–MA's Response to DTE-5-33) for chart identifying specific flow-through improvements made by VZ-MA.

AT&T also raises issue with VZ-MA's lack of flow-through for UNE-Loop hot-cuts. AT&T testified during the Department's technical sessions that VZ-MA's "48 hours to get a confirmation" takes a significant amount of time from the established five-day provisioning interval for hot-cuts. AT&T contends that if hot-cut orders were flow-through eligible, then AT&T and other CLECs would be able to use their full provisioning interval to coordinate their portion of the hot-cut.[379] AT&T further argues that when VZ-MA's manual confirmations are returned later than the established time frame, AT&T's ability to prepare for the scheduled hot-cut is hampered even further, which puts the success of the hot-cut into jeopardy.

VZ-MA did not respond to AT&T's technical session comments regarding hot-cut order flow-through. However, it is apparent that AT&T's claims are based on a mistaken belief that AT&T is not allowed to perform preparatory work on a hot-cut until the cut is formally confirmed by VZ-MA. A number of other Massachusetts CLECs perform coordinated hot-cuts with VZ-MA, and only AT&T has brought these complaints to the Department. The process for preparing hot-cuts that is described by AT&T is only one of many approaches a CLEC can take, and therefore an evaluation of VZ-MA's processing of orders should not be based on the potential

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379 VZ-MA Application, Appdx. B, Vol. 46, Tab 538, at 4823-24 (Transcript of Technical Session Held 8/22/00).

for problems that this lone approach presents.

Covad and Rhythms both raise concern over VZ-MA's alleged failure to upgrade its OSS to allow CLECs to submit line sharing orders electronically. The two CLECs argue that the current manual processing of line sharing orders causes undue delays and increases the chances for errors in order processing and provisioning. Covad and Rhythms note that while VZ-MA has indicated that it is planning to have Telcordia upgrade its systems for line sharing, VZ-MA has not provided any CLECs with information regarding the process or timeline of any such upgrade.[380] In response to Covad and Rhythms' claims, VZ-MA notes that the CLECs are correct in stating that line sharing orders do not currently flow-through VZ-MA's OSS. However, VZ-MA states that CLECs can place line sharing orders with VZ-MA over either the GUI or EDI interface. VZ-MA also notes that, despite the fact that the FCC's Line Sharing Order[381] was implemented only

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380 VZ-MA Application, Appdx. B, Vol. 38, Tab 462, at 38 (July Supplemental Joint Comments of Covad and Rhythms).

381 Deployment of Wireline Services Offering Advanced Telecommunications Capability and Implementation of the Local Competition Provisions of the Telecommunications Act of 1996, Third Report and Order in CC Docket No. 98-147 and Fourth Report and Order in CC Docket 96-98, FCC 99-355 (rel. Dec. 9, 1999) ("Line Sharing Order")

recently, VZ-MA is already looking into the potential of making line sharing orders flow-through eligible.[382]

[382] VZ-MA Application, Appdx. B, Vol. 42, Tab 494, ¶ 33 (VZ-MA August Supplemental OSS Aff.).

Covad contends that VZ-MA's processes for providing queries is inefficient to provide CLECs with service at parity to its own retail operations. Covad argues that VZ-MA's reject notices and queries do not provide sufficient information to allow Covad to correct errors in its errors and resubmit its LSRs.[383] Rhythms echoes the complaints of Covad, noting that in many cases it is required to escalate its help desk trouble tickets in order to find out what the errors are in its orders so that it can correct and resubmit the LSRs.[384] VZ-MA notes in response to these arguments that in May 2000 it implemented a standardized query notice system, at CLECs' request, in order to eliminate the potential discrepancies in query information that arise when

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383 VZ-MA Application, Appdx. B, Vol. 38, Tab 462, ¶¶ 46-47 (Covad Szafraniec/Katzman Decl.).

384 VZ-MA Application, Appdx. B, Vol. 46, Tab 538, at 4811-12 (Transcript of Technical Session Held 8/22/00).

different TIS OC representatives process LSRs.[385]

[385] VZ-MA Application, Appdx. B, Vol. 42, Tab 494, ¶ 54 (VZ-MA August Supplemental OSS Aff.).

Covad further argues that VZ-MA's process for returning only one error on each query notice in inefficient and causes delays in the overall process of turning up service to Covad's customers.[386] Covad contends that each query that Covad receives from VZ-MA adds up to a full day to the end-to-end process of establishing a customer's service, and explains that a process by which VZ-MA returns all of an LSR's errors on a single query notice would reduce substantially the interval from the initial customer contact to the completion of provisioning for that customer's service.[387] Covad notes that it has raised this concern with VZ-MA at Change Management meetings, but that it has received very little feedback on the prospects for revising the query process.[388] Covad also contends that in many instances it has received queries from VZ-MA on orders that have already received an LSRC or been completed, and because Covad believes it has no reason to check for queries on confirmed and completed orders it has had customers' orders canceled and has had customers' service terminated when it failed to respond to these queries.[389]

VZ-MA acknowledges that its ordering systems are currently set up to return only one error on each query notice, but notes that there is a request currently pending in the Change Management process that would require VZ-MA to return all errors found on an LSR in a single

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386 VZ-MA Application, Appdx. B, Vol. 38, Tab 462, ¶ 47 (Covad Szafraniec/Katzman Decl.).

387 VZ-MA Application, Appdx. B, Vol. 46, Tab 533, at 4557-58 (Transcript of Technical Session Held 8/21/00).

388 Id. at 4772.

389 Id. at 4558-59.

query notice.[390] VZ-MA further notes that the change request addresses not only the GUI, which is the interface Covad directed its comments toward, but also the EDI interface. VZ-MA states, however, that if CLECs choose to place greater priority in revising the query process for the GUI only, then VZ-MA will focus its efforts on that process.[391]

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390 Id. at 4600.

391 Id.

With regard to Covad's complaints about queries issued after the confirmation or completion of a customer's order, VZ-MA notes that it does not send queries to CLECs on orders that have already been provisioned, and states that Covad has provided no evidence to support such a claim.[392] VZ-MA states further that there are instances where issues such as facilities problems force VZ-MA to send queries to CLECs after an LSRC is sent, but that this process will not cause a customer to lose service he is already receiving. VZ-MA states that in June 2000 it implemented a revised query process whereby VZ-MA places the queried order into a pending status until the CLEC reviews and corrects the error identified in the query notice, rather than canceling a CLEC order if the CLEC does not respond to queries on the order, as VZ-MA had done prior to June 2000.[393] VZ-MA asserts that, despite Covad's claims that it has no reason to expect queries after an order is confirmed, it is the CLEC's responsibility to ensure that it checks for and responds to all queries so that VZ-MA is able to get the necessary information to complete the provisioning of the CLEC's orders. VZ-MA notes that CLECs using the GUI, as Covad does, do not need to check manually for queries on every pending order. Rather, when the

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392 VZ-MA Application, Appdx. B, Vol. 42, Tab 494, ¶ 56 (VZ-MA August Supplemental OSS Aff.).

393 Id. at ¶ 57.

CLEC representative logs into the GUI, he or she will receive a listing of all pending orders for which a notice of any sort has been received. All the CLEC representative is required to do is to open these notices, make any necessary corrections, and return the information to VZ-MA.[394]

[394] VZ-MA Application, Appdx. B, Vol. 46, Tab 538, at 4861 (Transcript of Technical Session Held 8/22/00).

Covad and Rhythms each also raised complaints over VZ-MA's TIS OC hours of operation. During Department technical sessions, Covad testified that the business hours of the four TIS OC work centers were not sufficient to meet the needs of CLECs whose operation centers were located in different areas of the country. Covad asserted that TIS OC staff was available only from 8:00 a.m. to 5:00 p.m., eastern, Monday through Friday, and indicated that Covad would prefer to see the centers open until at least 6:00 or 7:00 p.m. and on Saturdays.[395] Rhythms noted that its service centers, located in Colorado also face similar problems with the limited overlapping hours of the TIS OC centers. Rhythms stated that it expects to see this problem largely eliminated by Verizon's acquisition of NorthPoint, which has a significant West Coast customer base, but argues that CLECs should not be forced to wait for VZ-MA to experience its own benefits before it implements changes to its operations.[396]

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395 VZ-MA Application, Appdx. B, Vol. 46, Tab 533, at 4559-60, 4562 (Transcript of Technical Session Held 8/21/00).

396 VZ-MA Application, Appdx. B, Vol. 46, Tab 538, at 4804-05 (Transcript of Technical Session Held 8/22/00).

VZ-MA responds to the arguments of both Covad and Rhythms by noting first that the TIS OC centers' business hours are 8:00 a.m. to 6:00 p.m., eastern, Monday through Friday.[397] VZ-MA also asserts that while the TIS OC business hours are limited, CLECs may place orders through the VZ-MA ordering interfaces 24 hours per day. VZ-MA points out that this gives CLECs greater opportunity to submit orders over its own retail centers because the retail representatives may only submit orders during their normal operating hours.[398] VZ-MA finally notes with regard to these complaints that VZ-MA's performance with respect to manual order confirmation and reject timeliness metrics shows that the TIS OC hours of operation are not

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397 VZ-MA Application, Appdx. B, Vol. 46, Tab 533, at 4591 (Transcript of Technical Session Held 8/21/00).

398 VZ-MA Application, Appdx. B, Vol. 42, Tab 494, ¶ 52 (VZ-MA August Supplemental OSS Aff.).

limiting CLECs' opportunities to compete.[399]

[399] Id.

Various CLECs have expressed concern over the accuracy of VZ-MA's Line-Loss Reports.[400] Both Z-Tel and AT&T contend that VZ-MA fails to include all of a CLEC's lost customers on its reports, and, as a result the CLEC continues to bill those customers after they have canceled their service. AT&T argues that this type of situation makes it nearly impossible for the CLEC to attempt to regain that customer's business at a future date because the customer is left with a negative impression of the CLEC that is due to VZ-MA's performance.[401] Z-Tel states that inaccuracies in the Line-Loss reports result in the unnecessary use of time and expense by both VZ-MA and the CLECs in the investigation and correction of errors. Z-Tel further notes that the inevitable effect for the end user is overall frustration.[402] AT&T further argues that there have been numerous instances in which VZ-MA has erroneously included on Line-Loss Reports customers that AT&T has not lost.[403]

WorldCom also contends that Verizon has included many WorldCom customers on Line-

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400 VZ-MA's Line-Loss reporting was addressed in comments filed separately by Z-Tel, AT&T, and WorldCom on July 18, 2000. See VZ-MA Application, Appdx. B, Vol. 38, Tab 463, at ¶ 8 (Rubino Decl.); VZ-MA Application, Appdx. B, Vol. 38, Tab 460, at 24 (AT&T July Supplemental Comments); VZ-MA Application, Appdx. B, Vol. 37, Tab 455, ¶¶ 111-119 (WorldCom Lichtenberg/Sivori Decl.). Additionally, AT&T addressed VZ-MA's Line-Loss reporting and KPMG's lack of Line-Loss report testing in its comments on the KPMG Draft Final Report. See VZ-MA Application, Appdx. B, Vol. 42, Tab 489, at 5-6 (AT&T Comments on the Draft of KPMG's OSS Evaluation Report).

401 VZ-MA Application, Appdx. B, Vol. 46, Tab 538, at 4830-31 (Transcript of Technical Session Held 8/22/00).

402 Id. at 4801-02.

403 VZ-MA Application, Appdx. B, Vol. 38, Tab 460, at 24 (AT&T July Supplemental

Loss reports that had not left WorldCom's service. Additionally, WorldCom states that for those customers who did in fact switch carriers, the dates of service termination provided by Verizon have not matched the dates that WorldCom's lost customers actually canceled their services.[404] WorldCom notes, however, that these two problems have largely been resolved by Verizon.[405]

Comments).

404 VZ-MA Application, Appdx. B, Vol. 37, Tab 455, ¶¶ 114-115 (WorldCom Lichtenberg/Sivori Decl.).

405 Id. at ¶ 116.

However, WorldCom contends that further problems with Line-Loss notification still exist. WorldCom states that in March and April 2000, Verizon notified WorldCom of 1,289 lines that were alleged to be WorldCom losses, but that WorldCom had no record of ever having as customers.[406] WorldCom argues that these types of problems require WorldCom and other CLECs to expend time and money to determine the source of the errors. Finally, WorldCom argues that Verizon's process for transmitting Line-Loss reports to CLECs is inadequate. WorldCom contends that Verizon should be required to transmit these reports over the EDI interface so that CLECs will be able to review the reports more easily.[407]

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406 Id.

407 Id. at ¶¶ 112-113.

In response to CLEC complaints about the accuracy and effectiveness of Line-Loss Reports, VZ-MA explains that it has been working constantly with CLECs, both individually and through the Change Management process, to improve the quality of its reporting. VZ-MA notes that since January 2000 it has made a number of system enhancements to increase the accuracy and efficiency of the reports. Included in these enhancements is the addition of a "customer code" on the report to improve identification of reported accounts, correction of a software error that was causing resale gains to be listed as losses, correction of the Local Service Provider indicator to show the company to which the customer has migrated, and the correction of the Service Order Completion date to match the actual date of migration.[408] VZ-MA further notes that, beginning in October 2000, VZ-MA will begin to make Line-Loss Reports available to CLECs via EDI transmission, and VZ-MA plans to eliminate in December 2000 the "change in class of service" transaction from the list of transactions included on the Line-Loss Reports.[409]

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408 VZ-MA Application, Appdx. B, Vol. 42, Tab 494, ¶ 99 (VZ-MA August Supplemental OSS Aff.).

409 VZ-MA Application, Appdx. B, Vol. 46, Tab 538, at 4732 (Transcript of Technical

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Session Held 8/22/00).

Finally, with respect to Line-Loss reporting, VZ-MA argues that the CLEC complaints raised during this proceeding do not reflect the vast improvements that have already been made in VZ-MA's reporting accuracy. VZ-MA notes that its Line-Loss reports are already more advanced than the current Ordering and Billing Forum ("OBF") standards, which require the reporting of only the working telephone number ("WTN") and the date of the migration. In addition to those items, VZ-MA also provides CLECs with the customer-type indicator, the billing telephone number ("BTN"), and the old and new service provider identifications.[410] VZ-MA notes that while it still receives trouble tickets identifying errors in the Line-Loss reports, the number of lines affected by these errors has declined significantly over time. For example, VZ-MA notes that while it received Line-Loss Report trouble tickets involving 5,215 WTNs in April 2000, the number of WTNs involved in Line-Loss troubles in July was only 1,043.[411] VZ-MA also notes that of the 9,925 WTNs claimed to have been either missing or inaccurately reported on Line-Loss Reports for April 1 through August 25, 2000, 45 percent of the lines were found to be accurately reported upon investigation by VZ-MA. Of the remaining 55 percent, VZ-MA notes that the source of error for 41.2 percent of the lines was fixed by a system change

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410 Id. at 4626-27.

411 Appdx. H (VZ–MA's Response to RR-DTE-338). VZ-MA also notes that in April the 5,215 WTNs represented only 1.4 percent of the total number of lines included on Line-Loss reports. The 1,043 July WTNs account for only 0.3 percent of the total number of reported line-losses during that month. Further, through the first 25 days of August, VZ-MA reports that it has received line-loss trouble tickets for only 280 WTNs, or 0.1 percent of the 269,023 lines included on the August Line-Loss reports.

implemented on April 24, 2000 and a system change implemented on October 6, 2000 resolved the source of error for another 10.5 percent of the WTNs identified on trouble tickets as being inaccurately reported.[412]

iv. KPMG Findings

As stated above, KPMG's evaluation of VZ-MA's wholesale performance and capabilities with respect to ordering was part of the combined POP domain. KPMG's EDI and GUI functional evaluation and volume performance tests assessed VZ-MA's pre-order and order interfaces. Additionally, KPMG performed an analysis of VZ-MA's order flow-through capabilities. KPMG also addressed VZ-MA's ordering processes and interfaces as part of its POP documentation review and its capacity management evaluation. Finally, KPMG reviewed VZ-MA's ordering performance metrics reporting as part of its Performance Metrics review.

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412 Id. The system fix implemented on October 6, 2000 had originally been scheduled for implementation on September 29, 2000. The implementation of the fix was delayed by one week, but is currently in place and has resolved the problems noted in VZ-MA's response to RR-DTE-338. See id.

KPMG evaluated VZ-MA's order transaction functionality through the submission of test transactions over both the EDI and GUI interfaces. KPMG's EDI and GUI functional evaluations examined the availability of the order interfaces and VZ-MA's capability to provide timely and accurate responses to a variety of order transactions. The functional evaluations also included the submission of order transactions with planned errors to ensure VZ-MA's systems are capable of providing accurate error responses that contain the necessary information for a CLEC representative to correct and resubmit the transaction.[413] While KPMG's functional evaluations focused predominantly on VZ-MA's LSOG-2 interface, KPMG also submitted transactions over the LSOG-4 interface to ensure that the LSOG-4 interface also provides CLECs with sufficient functionality.

In its evaluation of VZ-MA's order functionality, KPMG states that it found VZ-MA's ordering interfaces to be available on a consistent and reliable basis. Through a review of VZ-MA's Change Control notices and its own usage experiences, KPMG reports that VZ-MA's EDI ordering interface was available 100 percent of the scheduled prime-time hours for the duration of

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413 VZ-MA Application, Appdx. I, Vol. 1, Tab 1, at 15, 71 (KPMG Final Report Version 1.4).

KPMG's testing.[414] KPMG also reports that VZ-MA's GUI was available 99.85 percent of scheduled prime-time hours during KPMG's test period.[415]

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414 Id. at 47.

415 Id. at 100.

KPMG reports that, during the conduct of its functional evaluations, VZ-MA's order systems returned responses for 98 percent of KPMG's EDI order transactions.[416] KPMG states that VZ-MA's performance with respect to the timely return of responses on KPMG's was strong. KPMG reports that it received 98.4 percent of the functional acknowledgments on its LSRs within one minute of submission.[417] KPMG also reports that VZ-MA met its C2C standard with respect to the return of LSRCs and reject notices for both flow-through and non-flow-through orders.[418] Finally, with respect to the timely return of completion notices, KPMG reports that VZ-MA returned 92.9 percent of PCNs by noon on the business day following the PCN's completion date and 74.7 percent of BCNs by noon on the business day following the BCN's completion date. KPMG notes, however, that these measurements are not based on the same data elements used by VZ-MA in the calculation of its completion notice timeliness metrics. VZ-MA uses the SOP completion date for calculation of PCN timeliness metrics and the CRIS

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416 Id. at 48.

417 Id. at 49.

418 VZ–MA Application, Appdx. I, Vol. 1, Tab 1, at 50-53 (KPMG Final Report Version 1.4).

completion date is used in the calculation of BCN timeliness.[419]

[419] Id. at 53-54.

As to the accuracy of VZ-MA's order responses, KPMG states that VZ-MA provided complete and accurate LSRCs and PCNs, but had inconsistencies in its return of reject notices and BCNs.[420] KPMG notes that VZ-MA's reject notices, or System Error Messages ("SEMs"), were missing certain fields that are required under VZ-MA's Business Rules, but notes that the omitted data fields were not essential to the process of correcting errors and resubmitting LSRs.[421] KPMG also states that VZ-MA's systems omitted two required data fields, "DATASIZE" (a field that indicates the size of the file for verification of transmission accuracy) and "SEGNUM" (Service Order Segment Number identification, an identification number used internally by VZ-MA's systems), from the BCNs returned to KPMG. KPMG notes, however, that the absence of these fields did not impede KPMG's ability to perform its billing initiation activities.[422] KPMG also reported during its EDI functional evaluation that it found that VZ-MA's systems and interfaces provided information that could be readily integrated between pre-order and order transactions.[423] Finally, in its review of the functionality of VZ-MA's LSOG-4 EDI interface, KPMG reports that VZ-MA provided complete and accurate order transaction responses with only one exception. KPMG notes that VZ-MA did not return information in two data fields out

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420 Id. at 58-60.

421 Id. at 59.

422 Id. at 60. In response to Exceptions raised by KPMG concerning the absence of these data fields, VZ-MA updated its Business Rules to eliminate the identification of these fields as being required. See, e.g., VZ-MA Application, Appdx. I, Vol. 2, Tab 2 (Exception Report #12).

of 105 on KPMG's UNE-Loop LSRCs. KPMG notes, however, that these two fields, while required by VZ-MA's Business Rules, were not essential to KPMG's ordering activities.[424]

With respect to the LSOG-2 GUI, KPMG reports that it received responses on 99.4 percent of its order transactions.[425] KPMG also notes that VZ-MA returned these responses in a timely manner, meeting the C2C standards for all response types.[426] With respect to the accuracy of VZ-MA's GUI order responses, KPMG states that its responses were complete and accurate in most cases, but that it did experience problems with the "CLECNAME" field being omitted form SEMs.[427] KPMG notes, however that the omission of this field did not affect KPMG's ability to correct errors and resubmit its LSRs. In its LSOG-4 GUI functional evaluation, KPMG reports that VZ-MA showed satisfactory performance in its handling of all order responses. KPMG

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423 VZ–MA Application, Appdx. I, Vol. 1, Tab 1, at 60 (KPMG Final Report Version 1.4).

424 Id. at 61-64.

425 Id. at 101.

426 Id. at 102.

states that it did discover problems with the omission of the Request Type field from UNE-Loop LSRCs and the omission of the "ERR_CODE" field from error messages, but notes that neither field was essential to KPMG's ability to perform its order submission and correction activities.[428]

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427 Id. at 105.

428 VZ–MA Application, Appdx. I, Vol. 1, Tab 1, at 107-108 (KPMG Final Report Version 1.4).

KPMG also tested VZ-MA's EDI and GUI order interfaces as part of its Volume Performance Test. KPMG's Volume Performance Test evaluated VZ-MA's ability to handle CLEC transactions at projected daily, peak, and stress volumes for October 2000.[429] KPMG conducted the Volume Performance Test at the same time that it was submitting individual transactions for the functional evaluations of VZ-MA's interfaces. KPMG submitted only flow-through eligible orders during the Volume Test in order to focus the test on the ability of VZ-MA's automated systems.[430] Though the results are reported separately, KPMG examined both the EDI and GUI interfaces simultaneously in its Volume Performance Test.[431]

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429 Id. at 15, 71.

430 Id.

431 As noted above, KPMG conducted its volume testing via the LSOG-2/3 production environment only. See Section V.B.1.f.iv above.

During the Volume Performance Test, KPMG received responses for 99.7 percent of the transactions submitted via the EDI interface and 100 percent of transactions submitted over the GUI.[432] KPMG also reports that transaction response times were generally strong for both interfaces under volume conditions. For the EDI interface, KPMG states that it received Functional Acknowledgments within one minute for 84.3 percent of its transactions.[433] VZ-MA also returned LSRCs and SEMs during the Volume Test within the defined C2C standards.[434] For the GUI portion of the Volume Test, KPMG reports that it received all order responses within the

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432 VZ-MA Application, Appdx. I, Vol. 1, Tab 1, at 48,101 (KPMG Final Report Version 1.4).

433 Id. at 54.

434 Id. at 56-57.

defined C2C standards[435].

[435] Id. at 103.

KPMG's order flow-through evaluation examined VZ-MA's ability to flow-through order types without any manual processing. KPMG's review consisted of three components. In the first component, the Achieved Flow-Through Test, KPMG submitted test transactions identified by VZ-MA as being flow-through eligible. KPMG identified 46 transaction types from its EDI and GUI functional evaluation test transactions as being flow-through eligible and monitored the flow-through success on all the transactions that fell into this list of transaction types.[436] KPMG initially reported an achieved flow-through rate of 85.3 percent for resale orders, 98.5 percent for UNE-P orders, and 62.1 percent for UNE-Loop orders. However, after investigation, KPMG found that the initial documentation used to determine flow-through eligibility incorrectly identified certain non-flow-through eligible resale and UNE-Loop order types as being flow-through eligible. When the flow-through indicators for these order types were corrected, the achieved flow-through rates were 100 percent for resale and UNE-Loop orders and 98.5 percent for UNE-P orders.[437] KPMG also reports that the flow-through rate for the orders reviewed as part of the EDI and GUI Volume Performance Tests was 100 percent for all three service types. Finally, KPMG also evaluated VZ-MA's performance with respect to the return of timely

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436 Id. at 114-116.

437 VZ–MA Application, Appdx. I, Vol. 1, Tab 1, at 123-124 (KPMG Final Report Version

confirmation notices as part of its flow-through evaluation. KPMG reports that VZ-MA returned 100 percent of expected LSRCs within the C2C standard of two hours.[438]

1.4).

[438] Id. at 125.

The second component of KPMG's flow-through evaluation was a Commercial Flow-Through Test, in which KPMG sampled live CLEC orders to determine VZ-MA's performance in achieving flow-through in a commercial production environment. To conduct this evaluation, KPMG collected all orders from two CLECs over a two-week period from January 28 through February 11, 2000 to provide an initial pool of sample orders.[439] In order to develop a significant sample size, KPMG included orders submitted in both Massachusetts and New York. KPMG then took a random sample of UNE orders from this initial set of orders and determined the flow-through eligibility of each order. KPMG verified the flow-through performance of each of these orders and calculated the actual and achieved flow-through rates. KPMG reports that of the commercial orders sampled, VZ-MA attained an actual flow-through rate of 35 percent and an achieved flow-through rate of 59 percent.[440] It is important to note that KPMG's Commercial Flow-Through examination is not a good representation of VZ-MA's ability to flow-through

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439 Id. at 122.

440 Id. at 126. VZ-MA objected to KPMG's inclusion of New York orders in the commercial flow-through test, and expressed its concerns over the efficacy of this component of KPMG's flow-through evaluation to the Department. With respect to the 43 orders that KPMG identified as flow-through eligible but did not flow-through, VZ-MA notes that all 43 orders were submitted in New York. VZ-MA explains that 12 of the orders were not eligible to flow-through Verizon's systems at the time they were submitted, 23 orders contained invalid account information which required manual review, five orders were rejected due to CLEC errors on the LSRs, and two orders did not flow-through because the back-end systems that were required to perform edits on the orders were out of service when the orders were submitted. VZ-MA states, finally, that one of the 43 orders KPMG identified as not flowing-through did in fact flow-through Verizon's OSS systems. See VZ-MA Application, Appdx. B, Vol. 47, Tab 560 (VZ–MA's Response to RR-DTE-353).

CLEC orders. Notably, the test was not limited to orders placed in Massachusetts, but more importantly was conducted at a time when Verizon was addressing order processing errors that had caused significant problems in New York. KPMG notes that the Achieved Flow-Through Test is more suited to serve as a primary assessment of VZ-MA's ability to flow-through CLEC orders.[441]

[441] VZ-MA Application, Appdx. I, Vol. 1, Tab 1, at 126 (KPMG Final Report Version 1.4).

The final component of KPMG's review of VZ-MA's flow-through capabilities was a review of the parity between wholesale and retail flow-through scenarios. In this test, KPMG submitted to VZ-MA a list of 48 distinct ordering scenarios and asked VZ-MA to provide a description of the retail equivalent to each scenario and to state whether the retail equivalents were flow-through eligible.[442] While there is no direct correlation between retail and wholesale order flow-through, for the purposes of this evaluation KPMG considered orders that VZ-MA retail representatives entered into the Direct Order Entry (DOE) system to be the equivalent of Level 5 wholesale flow-through orders.[443] KPMG reports that 44 of the 48 scenarios submitted, consisting of eleven flow-through and 33 non-flow-through, had matching flow-through eligibility. The remaining four scenarios were identified by VZ-MA as flow-through eligible for retail but not for wholesale orders.[444]

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442 Id. at 127.

443 Id. at 116 n.71.

444 Id. at 127.

KPMG's POP Documentation Review evaluated the published documents that VZ-MA makes available to CLECs to assist them in using VZ-MA's ordering interfaces. KPMG evaluated VZ-MA's documentation on the basis of whether it provides clear, accurate, and complete information to allow a CLEC representative to submit order transactions successfully and to correct errors on orders returned by VZ-MA.[445] As part of its review, KPMG conducted interviews with both the VZ-MA staff responsible for developing order documentation and the CLECs that use VZ-MA documentation in submitting their ordering transactions to VZ-MA.[446] In its report, KPMG states that it finds VZ-MA's ordering documentation satisfactory to meet the needs of CLECs conducting business through VZ-MA's ordering interfaces.[447] KPMG notes that

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445 Id. at 131-133.

446 VZ–MA Application, Appdx. I, Vol. 1, Tab 1, at 141 (KPMG Final Report Version 1.4).

447 Id. at 141-150.

inconsistencies between separate sets of documentation discovered during the course of its test were corrected to achieve consistency between publications.[448]

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[448] Id. at 144. KPMG issued Exception Reports #4 and #12 during its evaluation, identifying a number of inconsistencies in VZ-MA's order documentation and areas where VZ-MA's was not considered sufficiently detailed to enable CLECs to submit complete and accurate order transactions. See VZ-MA Application, Appdx. I, Vol. 2, Tab 2 (Exception Report #4); VZ-MA Application, Appdx. I, Vol. 2, Tab 2 (Exception Report #12). In its Disposition Reports for these Exceptions, KPMG states that, for each identified and confirmed error, VZ-MA implemented the necessary changes to improve the quality and accuracy of its order documentation. See VZ-MA Application, Appdx. I, Vol. 2, Tab 2 (Disposition Report for Exception #4); VZ-MA Application, Appdx. I, Vol. 2, Tab 2 (Disposition Report for Exception #12).

KPMG also conducted a capacity management review of VZ-MA's ordering systems to assess whether VZ-MA has in place adequate procedures and tools to manage the projected growth in CLEC demand. In conducting this evaluation, KPMG reviewed relevant VZ-MA documentation and conducted interviews with VZ-MA personnel.[449] KPMG concludes in its report that VZ-MA's capacity management process is adequate to meet both current and projected future levels of CLEC orders.[450]

KPMG also evaluated VZ-MA's methods for recording, calculating and reporting its performance metrics related to ordering functions as part of its Performance Metrics Review. First, KPMG reviewed VZ-MA's data collection and filtering processes for the generation of metrics reports. KPMG reports that VZ-MA has in place adequate processes to collect, filter, and maintain the integrity of ordering data.[451] KPMG also validated the accuracy of VZ-MA's reported ordering metrics for the period December 1999 through February 2000. KPMG was

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449 VZ-MA Application, Appdx. I, Vol. 1, Tab 1, at 235 (KPMG Final Report Version 1.4).

450 Id. at 235-238.

451 Id. at 650-652.

able to verify VZ-MA's reported results for nearly all ordering metrics.[452] KPMG noted that in some cases its results differed from VZ-MA's reported results by only one or two orders, and states that these differences were not considered to be substantial.[453]

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452 Id. at 668.

453 Id.

Finally, KPMG calculated metrics, based on the C2C Guidelines, for its own ordering transactions submitted during its EDI and GUI functional evaluations and volume tests. In this component of the metrics review, KPMG examined whether VZ-MA's metrics performance with regard to KPMG's test transactions met the C2C standards. VZ-MA's performance was at or above C2C standards for all ordering metrics with the exception of confirmation and reject notice timeliness for UNE-P Plain Old Telephone Service (POTS) orders. KPMG notes, however, that it found this error to be the result of VZ-MA's counting Complex orders within the POTS measurement.[454] KPMG states that it was able to verify that VZ-MA had implemented a temporary fix to resolve this error, and that VZ-MA intends to implement a permanent fix to correct the classification of orders for metrics reporting purposes.[455]

5. Conclusions

[454] VZ–MA Application, Appdx. I, Vol. 1, Tab 1, at 686 (KPMG Final Report Version 1.4).

[455] Id. at 696.

The Department finds that VZ-MA meets its obligation to provide nondiscriminatory access to its OSS ordering systems and functions. VZ-MA has in place sufficient systems and personnel to provide ordering capabilities to CLECs at parity with those of its own retail operations and in a manner that provides CLECs a meaningful opportunity to compete. Specifically, VZ-MA provides CLECs with timely order confirmation and rejection notices and completion notices. VZ-MA also provides CLECs with access to jeopardy information at a level equal to that of its retail representatives, and, beginning in October 2000, VZ-MA will actively transmit jeopardy notices to CLECs via the EDI interface. With respect to VZ-MA's order flow-through, the Department notes that while VZ-MA's reported metrics show that VZ-MA has not attained high levels of CLEC order flow-through, these reported flow-through results are not indicative of an inability on the part of VZ-MA to flow-through CLEC orders, but rather confirm the argument that CLECs are equally responsible for the achievement of high flow-through performance. The results of KPMG's order flow-through evaluation and the disaggregated CLEC flow-through performances bear out this judgment. Further, the Department finds that VZ-MA has taken the necessary steps to ensure that CLEC orders that do not flow-through VZ-MA's systems are received, processed, and completed in a timely and accurate manner.[456] Finally, as is evidenced in KPMG's Volume Performance Test, VZ-MA's ordering OSS are capable of handling both current and reasonably foreseeable future CLEC demands.

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456 The Department notes also that it has ordered VZ-MA to implement OSS upgrades by April 1, 2001 that will, among other things, permit line sharing orders to flow-through VZ-MA's ordering OSS. Appdx. E (Phase III Order, D.T.E. 98-57, at 23-25 (2000)).

The Department notes that the primary focus of its evaluation was VZ-MA's LSOG-2/3 environment, not the LSOG-4 environment. Therefore, while the Department finds the results of AT&T's LSOG-4 production test instructive, the Department does not find these results to be conclusive of any deficiencies in VZ-MA's ordering OSS that would prevent an efficient competitor from having a meaningful opportunity to compete in the marketplace.

g. Provisioning

i. Standard of Review

In provisioning the orders of competing carriers, the FCC has found that the BOC must provide service to CLEC end customers in "substantially the same time and manner as it is provisioning its own retail customers."[457] In determining that a BOC has met this requirement, the FCC has noted that it will place emphasis on whether the BOC's systems are set up to "provide parity of service for provisioning wholesale and retail orders," whether the BOC is provisioning competitors' customers at the same level of quality as it provisions its own retail customers, and whether or not the completion intervals for wholesale and retail provisioning are at equal levels.[458]

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457 Bell Atlantic New York Order at ¶ 193.

458 The FCC notes with relation to the 271 application of Verizon New York that disparities

ii. VZ-MA's Offering

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between retail and wholesale provisioning completion intervals can be the result of inherent flaws in the underlying data. See Bell Atlantic New York Order at ¶¶ 203-210 and n.617.

VZ-MA provides CLECs with parity in due date offerings through the use of standard provisioning intervals and via the SMARTs Clock. VZ-MA notes, however, that while the company offers CLECs parity in due date assignments, there are various factors that cause VZ-MA's performance metrics to give the mere appearance that parity is lacking. First, VZ-MA notes that CLECs do not always select the first available due date that is offered to them. The CLEC may have any number of reasons for choosing a later due date than what is available, but the end result when they so choose is an inaccurate appearance of disparity between the wholesale and retail average interval offered metrics.[459] The second major factor that causes disparity between wholesale and retail provisioning intervals is the mix of orders that CLECs submit. VZ-MA asserts that because many CLECs order a high concentration of products with longer

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459 VZ-MA Application, Appdx. B, Vol. 32a, Tab 423, ¶¶ 58, 66 (VZ-MA May Measurements Aff.). VZ-MA notes that it implemented a system change for the LSOG-4 environment in March 2000 that automatically codes CLEC orders that have due dates later than the first available due date. VZ-MA explains that as more CLECs begin to use LSOG-4, the automatic coding of these orders will enable VZ-MA to report a more accurate comparison of installation intervals between retail and wholesale. However, VZ-MA notes that this fix will not have any effect on the order mix problem. Id. at ¶ 74.

installation intervals, the overall average provisioning interval will be longer than that of VZ-MA's retail operations.[460] For these reasons, VZ-MA notes that the C2C average interval offered and completed metrics are not adequate measures of the Company's ability to offer CLECs parity in installation intervals and due date availability.[461]

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460 Id. at ¶ 65.

461 Id. at ¶¶ 73, 75-76.

VZ-MA notes that, while it attempts to provide parity in its offering of installation intervals and due dates, it has experienced some problems that have affected its ability to maintain its service. However, VZ-MA asserts that whenever such problems arise, the Company makes every effort to rectify these problems with minimal negative impact on CLECs. For example, until May 2000, a TIS OC process error was responsible for some UNE-P orders receiving due dates not in parity with equivalent retail services. VZ-MA explains that when UNE-P orders requiring a dispatch were dropped to the TIS OC for manual processing, the TIS OC representatives were mistakenly assigning the due date available on the SMARTs Clock at the time they processed the order, rather than the due date available at the time the valid LSR was submitted to VZ-MA. VZ-MA asserts that this error has been corrected and that all TIS OC personnel have received sufficient training on the revised methods and procedures for handling this type of orders.[462] VZ-MA finally notes with respect to this issue that less than 10 percent of all UNE-P orders fall into the category of requiring dispatch, and only those that were processed by the TIS OC after the SMARTs Clock due date had changed were affected by this problem.[463] A second example of VZ-MA's efforts to fix problems that arise with its provisioning parity occurred during the February 2000 software release. VZ-MA explains that a defect in the February release caused the SMARTs Clock to return longer than expected due dates to CLECs over both the EDI and GUI interfaces. However, VZ-MA explains that after investigating CLEC trouble tickets surrounding

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462 VZ-MA Application, Appdx. B, Vol. 32b, Tab 423, ¶ 92 (VZ-MA May OSS Aff.).

463 Id. at ¶ 92, n.10.

this issue, VZ-MA implemented a software fix on April 16, which has corrected the SMARTs Clock error.[464]

[464] VZ-MA Application, Appdx. B, Vol. 42, Tab 494, ¶ 19 (VZ-MA August Supplemental OSS Aff.).

VZ-MA states that the most accurate evidence of its ability to provision CLECs' orders at parity with its own retail provisioning is the company's reported metrics for missed appointments. VZ-MA states that while the selected due dates for retail and wholesale orders may occur at different intervals, the missed appointment rate shows how often VZ-MA is able to complete its provisioning work on or before the selected due date.[465] VZ-MA separately reports missed appointments that are due to customer reasons. If a CLEC or its customer, for example, is not ready for VZ-MA to provision services, or if the VZ-MA technician is unable to gain access to the customer's premises, VZ-MA does not count the missed appointment against its own provisioning performance because these situations are beyond VZ-MA's control.[466]

VZ-MA notes that although CNR and No Access situations are beyond VZ-MA's control, the company has made efforts to work with CLECs to reduce the number of missed appointments that occur as a result of these problems. VZ-MA explains that it has asked CLECs to provide toll-free contact numbers for VZ-MA technicians to call when they experience problems with gaining access to a CLEC customer's premises to complete provisioning services.[467] VZ-MA

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465 VZ-MA Application, Appdx. B, Vol. 32a, Tab 423, ¶¶ 75-77 (VZ-MA May Measurements Aff.).

466 Id. at ¶ 80.

467 VZ-MA Application, Appdx. B, Vol. 34a, Tab 443 (VZ–MA's Response to DTE-5-31).

notes that many CLECs have already provided contact numbers to VZ-MA for this purpose, and others are in the process of setting up these contact numbers.

The C2C standard for VZ-MA's missed provisioning appointment metric is parity with its retail performance. Throughout the period of April through July 2000, VZ-MA met this parity standard for resale provisioning with only one exception. In June, VZ-MA's missed appointments for resale 2-wire digital orders that required dispatch were out of parity with VZ-MA's retail equivalent. For UNE provisioning, VZ-MA's missed appointment rates were almost as good. The only UNE service in which VZ-MA's wholesale missed appointment rate was consistently greater than its retail equivalent was VZ-MA's provisioning of 2-wire xDSL loops requiring dispatch. However, the disparities in the missed appointment rates for this product type were minimal in every month. VZ-MA also had isolated instances of disparity in its provisioning performance for UNE-Loops requiring dispatch in April and UNE 2-wire digital loops requiring dispatch in June. Again, however, the disparities in these measures were minor, and each of these product types were provisioned in parity in the other months reviewed.

VZ-MA measures the quality of its wholesale provisioning through the C2C seven and 30-day installation trouble metrics, the same metrics VZ-MA uses to measure its retail provisioning quality.[468] In calculating the installation quality metrics, VZ-MA counts the number of troubles reported on a line within seven and 30 days of the completion of provisioning work on that line

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468 VZ-MA Application, Appdx. B, Vol. 32a, Tab 423, ¶ 85 (VZ-MA May Measurements Aff.).

and reports that number as a percentage of the total number of lines provisioned during the same seven or 30-day period.[469] VZ-MA notes that the installation quality metrics are also a good indicator of VZ-MA's manual order processing capabilities, because if a service order was entered into SOP incorrectly the customer would report a trouble on the line when the service received was not the same as the service that was ordered.[470] Under the C2C Guidelines, VZ-MA reports its installation quality metrics against a standard of parity with its retail performance. VZ-MA has met this standard with each of its offered services with only two exceptions. Throughout the period April through July 2000, VZ-MA has been unable to meet parity on the quality of its wholesale provisioning of UNE 2-wire digital and xDSL services.[471]

iii. Competitors' Positions and VZ-MA's Response

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469 Id. at Exh. A at 52.

470 Id. at ¶ 85.

471 VZ-MA's UNE loop provisioning is discussed in detail within checklist item 4.

WorldCom contends that Verizon's due date offerings do not offer CLECs parity to Verizon's retail customers. In addition to the SMARTs Clock problems that VZ-MA has acknowledged and fixed, WorldCom contends that Verizon's SMARTs Clock identifies all-day appointments as being any time between 8:00 a.m. and 7:00 p.m. instead of 8:00 a.m. to 5:00 p.m. as Verizon's business rules state. WorldCom contends that this discrepancy has the potential of causing CLEC customers to believe the Verizon technician has missed a provisioning appointment when the technician does not arrive by 5:00, when in fact the technician may arrive after 5:00 and mark the appointment as a CNR or No Access situation. WorldCom argues that this problem not only delays the provisioning of CLEC customers' services, but also skews Verizon's reported provisioning metrics.[472]

VZ-MA acknowledges that there was a discrepancy between the stated business rules and the SMARTs Clock assignments as to the definition of an all-day appointment. According to VZ-MA, the business rules state the correct hours for an all-day appointment, and the problem was the result of an EDI coding problem. VZ-MA asserts that the EDI code was corrected on July 14, 2000, and that this situation is no longer a problem for SMARTs Clock due date

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472 VZ-MA Application, Appdx. B, Vol. 37, Tab 455, ¶ 108 (WorldCom Lichtenberg/Sivori Decl.).

assignments.[473]

[473] VZ-MA Application, Appdx. B, Vol. 42, Tab 494, ¶ 20 (VZ-MA August Supplemental OSS Aff.).

Covad contends that VZ-MA's provisioning intervals for Covad's UNE-Loops are extremely long due to VZ-MA's problems with "botching installations, forgetting to do the central office wiring, provisioning loops that don't work, by not acting on facility issues, or by simply not showing up as promised."[474] Covad argues that, because of these issues, between June 1 and August 15, 2000 it took Covad, on average, 35 days to get loops provisioned from VZ-MA.[475] Covad notes that it measures its provisioning intervals from the point of first customer contact to the turning up of service because that is how the interval is seen by Covad's customers.[476]

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474 VZ-MA Application, Appdx. B, Vol. 38, Tab 462, ¶ 60 (Covad Szafraniec/Katzman Decl.).

475 VZ-MA Application, Appdx. B, Vol. 46, Tab 533, at 4564-65 (Transcript of Technical Session Held 8/21/00).

476 Id. at 4572.

VZ-MA states that Covad's claim that it takes 35 days for VZ-MA to provision Covad's loops is simply inaccurate. VZ-MA states that it provisioned over 7,000 xDSL loops for CLECs between March and June 2000 and provisioned those loops by the scheduled due date 96.5 percent of the time.[477] For Covad specifically, over the period of April through June 2000, VZ-MA completed **Begin Proprietary ***************End Proprietary** in an average interval of **Begin Proprietary******************End Proprietary** and had a missed appointment rate of only **Begin Proprietary**************End Proprietary**.[478] Further, VZ-MA notes that the installation quality of the loops provisioned for Covad during this period was also high, with Covad opening trouble tickets on only **Begin Proprietary****************End Proprietary** of the loops within 30 days of the provisioning completion.[479]

iv. KPMG Findings

KPMG's evaluation of VZ-MA's wholesale provisioning processes was part of the combined POP domain. Within the EDI and GUI Functional Evaluations, KPMG assessed VZ-MA's ability to provide CLECs with desired Due Dates. KPMG also performed a review of the parity between VZ-MA's retail and wholesale provisioning processes and performance. Within its

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477 VZ-MA Application, Appdx. B, Vol. 42, Tab 494, ¶ 102 (VZ-MA August Supplemental Checklist Aff.).

478 Id. Under the C2C Guidelines, VZ-MA's provisioning intervals are calculated from the date that VZ-MA receives a complete and accurate LSR from the CLEC, not from the date of the CLEC's initial order submission, as Covad used in its interval calculations.

479 Id.

process parity review, KPMG evaluated VZ-MA's documented provisioning methods and procedures as well as VZ-MA's ability to follow those defined procedures. KPMG further examined VZ-MA's performance with respect to coordinated provisioning processes. Additionally, KPMG addressed VZ-MA's provisioning process within its capacity management evaluation. Finally, KPMG reviewed VZ-MA's provisioning performance reporting as part of its Performance Metrics review.

As part of its functional evaluations of the EDI and GUI interfaces, KPMG tested VZ-MA's ability to return provisioning due dates as requested by CLECs. Over the LSOG-2 EDI interface, KPMG reports that VZ-MA confirmed KPMG's requested due date for 94.6 percent of the orders submitted during the test. KPMG further states that 3.6 percent of the LSRCs received contained due dates later than KPMG's requested due date, and the remaining 1.8 percent of LSRCs were returned with due dates earlier than KPMG's requests.[480] KPMG notes, however, that 87.5 percent of the modified due dates returned by VZ-MA were the result of KPMG's submission of requested due dates that did not comply with VZ-MA's standard provisioning intervals.[481] With respect to the LSOG-2 GUI, KPMG reports that VZ-MA confirmed 99 percent of KPMG's requested due dates.[482] Over both the EDI and GUI LSOG-4 interfaces, KPMG

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480 VZ-MA Application, Appdx. I, Vol. 1, Tab 1, at 58 (KPMG Final Report Version 1.4).

481 Id.

482 Id. at 105.

reports that VZ-MA did not satisfy its requirements with respect to the confirmation of requested due dates. KPMG states that VZ-MA confirmed only 92.8 percent of requested due dates over the LSOG-4 EDI interface and 92.9 percent of requested due dates over the LSOG-4 GUI.[483] Associated with these "not satisfied" findings KPMG reported in Exception Report #16 that VZ-MA was unable to confirm KPMG's due dates for ISDN migrations in the LSOG-4 environment. KPMG attributed these errors to a lack of complete documentation for ISDN migrations in VZ-MA's Interval Guide.[484] VZ-MA responded to KPMG's Exception by stating that the Interval Guide documentation is complete, and that there were two separate problems causing the incorrect due dates for KPMG's ISDN migrations. The first problem involved an internal processing error that caused some orders to be assigned longer-than-standard due dates, and the second problem was related to a TIS OC training issue, in which VZ-MA's TIS OC representatives were assigning a re-configuration interval to KPMG's orders rather than the

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483 Id. at 63, 108.

484 See VZ-MA Application, Appdx. I, Vol. 2, Tab 2 (Exception Report #16).

standard migration interval.[485] VZ-MA states that each of these problems has been resolved and that future ISDN migrations submitted over the LSOG-4 EDI and GUI interfaces will receive the documented standard provisioning intervals.[486]

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485 VZ-MA Application, Appdx. I, Vol. 2, Tab 2 (VZ-MA Response to Exception #16).

486 Because KPMG was unable to submit LSRs to retest ISDN migrations using LSOG-4 over either interface, KPMG left the related test points as "not satisfied" in its Final Report. The Department will continue to monitor VZ-MA's performance in this area in the commercial environment. See VZ-MA Application, Appdx. B, Vol. 46, Tab 545, at 4877-79 (Transcript of Technical Session Held 8/28/00).

KPMG conducted a review of VZ-MA's defined provisioning processes to evaluate whether VZ-MA provides parity in its provisioning of retail and wholesale orders. KPMG conducted interviews with VZ-MA personnel and observed work center processes to determine whether VZ-MA's provisioning processes were "consistent, repeatable, and comparable" between retail and wholesale.[487] KPMG focused its review on an assessment of VZ-MA's level of parity in provisioning systems, methods and procedures documentation, and process execution in the VZ-MA work centers.[488] In its report, KPMG states that in most cases there is no distinction between the systems, methods, or execution of processes between wholesale and retail orders.[489] KPMG notes that there are some instances where parts of the retail and wholesale order provisioning process are handled by different organizations, but states that in these cases, both organizations follow the same processes in handling their duties.[490] KPMG states that in most instances the prioritization and assignment of provisioning activities is based on the due date and complexity of

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487 VZ-MA Application, Appdx. I, Vol. 1, Tab 1, at 193 (KPMG Final Report Version 1.4).

488 Id.

489 Id. at 195-204.

490 See e.g., id. at 196 (POP-6-1-6).

the specific order.[491] Overall, KPMG reports that VZ-MA satisfied each test point with respect to the level of parity in its provisioning processes.

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491 Id. at 196 (POP-6-1-5).

KPMG also conducted a review of VZ-MA's ability to perform coordinated provisioning activities. KPMG examined the "procedures, processes, and operational environment used to support coordinated provisioning with CLECs."[492] As part of this evaluation, KPMG reviewed VZ-MA's ability to provision KPMG's test account transactions in a timely and accurate manner. KPMG also conducted a blind review of CLEC commercial orders to assess VZ-MA's provisioning coordination capabilities.[493] In addition to its examination of VZ-MA's provisioning of orders, KPMG's test team also reviewed the methods and procedures for VZ-MA's provisioning organizations to assess whether the documentation available to VZ-MA technicians is adequate to enable them to perform their duties. KPMG reports that it observed VZ-MA's provisioning of standard hot-cut loop migrations, hot-cut migrations involving Integrated Digital Loop Carrier ("IDLC"), ADSL loops, DS0 loops, and DS1 loops to assess whether VZ-MA's technicians followed the defined process tasks associated with each product. With the exception of the provisioning of DS1 loops, VZ-MA's technicians performed their provisioning tasks in accordance with the defined methods and procedures at a rate of 99 percent or better.[494] VZ-

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492 VZ–MA Application, Appdx. I, Vol. 1, Tab 1, at 205 (KPMG Final Report Version 1.4).

493 Id.

494 Id. at 216-20.

MA's performance with regard to DS1 loops was 93 percent.[495]

[495] Id. at 220.

KPMG also reported on the timeliness of VZ-MA's provisioning for each of the installations it observed. KPMG found that 99 percent of hot-cuts were provisioned within the agree-upon frame due time, 95 percent of the hot-cuts involving IDLC were provisioned on time, and 100 percent of the reviewed DS0 loop installations were completed on time.[496] With respect to the ADSL orders KPMG reviewed, KPMG notes that 9 percent of the orders could not be provisioned due to a lack of suitable facilities. However, of those orders where suitable facilities existed, VZ-MA provisioned 100 percent of the orders on time.[497] Finally, KPMG reports that 100 percent of the DS1 loops it observed were provisioned on time. However, KPMG notes that due to the circumstances of KPMG's orders, two of the DS1 loops were mis-wired. KPMG explains that it requested that VZ-MA terminate the DS1 loop orders to an RJ-48 block rather than to a Smart Jack, which is VZ-MA's standard provisioning policy. This difference prevented the VZ-MA technician from performing a line acceptance test that would have revealed the mis-wiring at the time of installation.[498]

KPMG conducted a capacity management review of VZ-MA's provisioning-related systems to assess whether VZ-MA has in place adequate procedures and tools to manage the projected growth in CLEC demands for provisioning activities. In conducting this evaluation, KPMG reviewed relevant VZ-MA documentation and conducted interviews with VZ-MA

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496 Id. at 220-221.

497 VZ–MA Application, Appdx. I, Vol. 1, Tab 1, at 221 (KPMG Final Report Version 1.4).

498 Id. at 222.

personnel.[499] KPMG concludes in its report that VZ-MA's capacity management process is adequate to meet the current and projected future demands of the wholesale market for provisioning resources.[500]

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499 Id. at 235.

500 Id. at 235-238.

KPMG evaluated VZ-MA's methods for recording, calculating and reporting its provisioning performance metrics as part of its Performance Metrics Review. First, KPMG reviewed VZ-MA's data collection and filtering processes for the generation of metrics reports. KPMG reports that VZ-MA has in place adequate processes to collect, filter, and maintain the integrity of provisioning data.[501] KPMG also validated the accuracy of VZ-MA's reported provisioning metrics for the period December 1999 through February 2000. KPMG reports that it was able to verify VZ-MA's reported results for all provisioning metrics during January and February except for the PR-2-02 metrics for UNE Specials and the PR-6-02 metrics for UNE POTS provisioning.[502] KPMG notes, however, that it was unable to replicate many of the provisioning metrics for December 1999 due to VZ-MA's alteration of measurement algorithms

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501 Id. at 653-654.

502 VZ–MA Application, Appdx. I, Vol. 1, Tab 1, at 671 (KPMG Final Report Version 1.4). As part of its Exception #9, KPMG reported that VZ-MA's calculation of the Installation Quality metrics uses time frames in the numerator and denominator that do not correspond directly with each other. KPMG contended that VZ-MA's calculation of this metric did not correspond with the definition of the metric in the C2C Guidelines. See VZ-MA Application, Appdx. I, Vol. 2, Tab 2 (Exception Report #9). VZ-MA notes that its calculation of the Installation Quality metrics has not changed since the metric was developed, and that VZ-MA's calculation reports installation troubles that occur within the reported month. VZ-MA acknowledged, however, that the definition of the Installation Quality metrics in the C2C Guidelines does not efficiently clarify the actual calculation, and issued a request to the New York Carrier Working Group to initiate a revision to the metric definition. See VZ-MA Application, Appdx. I, Vol. 2, Tab 2 (VZ-MA Response to Exception #9). KPMG found this action to be sufficient to bring the definition and calculation of the Installation Quality metrics into agreement. See VZ-MA Application, Appdx. I, Vol. 2, Tab 2 (Disposition Report for Exception #9).

without a proper a proper change control policy for recording these changes.[503] KPMG notes in its report that the provisioning metrics it was unable to validate represented less than five percent of the total number of reported provisioning metrics.[504] As stated above, the Department has verified that VZ-MA's recently implemented metrics change control process resolves the issues raised on this point by KPMG in its evaluation.[505]

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503 VZ-MA Application, Appdx. I, Vol. 1, Tab 1 at 673 (KPMG Final Report Version 1.4). See also, above, for discussion of KPMG's findings with regard to pre-ordering and provisioning metrics change control processes.

504 VZ-MA Application, Appdx. I, Vol. 1, Tab 1, at 673 (KPMG Final Report Version 1.4).

505 See Section V.B.1.e.iv, above.

Finally, KPMG calculated metrics, based on the C2C Guidelines, for provisioning activities performed on KPMG's test transactions. In this component of the metrics review, KPMG examined whether VZ-MA's metrics performance with regard to KPMG's test transactions met the C2C standards. Since the C2C standard for most provisioning metrics is parity with retail performance, KPMG compared the provisioning performance of its test transactions to VZ-MA's retail provisioning performance over the period in which KPMG submitted test transactions, May 11 through June 25, 2000.[506] While KPMG reports that VZ-MA met the parity standard for only 46 of the 72 applicable metrics, KPMG states that 11 of the disparities involved metrics in which KPMG's data set consisted of less than four samples and ten of the missed metrics were the result of differences in order mix between KPMG's test samples and VZ-MA's retail data.[507] Importantly, VZ-MA met the parity standard for each of the reported missed appointments metrics during KPMG's test.[508]

v. Conclusions

Based upon the evidence of record, including KPMG's evaluation of VZ-MA's provisioning processes and performance, the Department finds that VZ-MA has met the provisioning requirements of its obligation to provide CLECs with nondiscriminatory access to its OSS. While the Department recognizes that VZ-MA has had prior problems in meeting its

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506 VZ-MA Application, Appdx. I, Vol. 1, Tab 1, at 697 (KPMG Final Report Version 1.4).

507 Id. at 705.

508 Id. at 698-704.

provisioning obligations, the Department believes that VZ-MA has taken the necessary steps to resolve these problems and is currently provisioning CLEC orders at a level equal to its retail provisioning in terms of both timeliness and quality. This conclusion is supported by the results of KPMG's independent evaluation of VZ-MA's provisioning processes, which found VZ-MA's provisioning performance to be at or above defined standards in all areas.

h. Maintenance & Repair

i. Standard of Review

In order to comply with the OSS requirements of checklist item 2, a BOC must show that it provides nondiscriminatory access to its maintenance and repair functions. In recent orders, the FCC has interpreted this requirement to mean that the BOC must make available "the necessary interfaces, systems, and personnel to enable requesting carriers to access the same maintenance and repair functions that [it] provides to itself."[509] The FCC has also stated that competing carriers must be able to access those maintenance and repair functions in "substantially the same time and manner" as the BOC's retail operations. Finally, the BOC must restore service to competitors' customers in substantially the same time and manner and at the same level of quality as it does for its own retail customers.[510]

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509 SBC Texas Order at ¶ 201; see also Bell Atlantic New York Order at ¶ 211.

510 SBC Texas Order at ¶ 201.

ii. VZ-MA's Offering

Through its GUI Repair Trouble Administration System ("RETAS") interface, VZ-MA allows CLECs to perform the same maintenance and repair functions that VZ-MA's retail representatives can perform through the retail CaseWorker system. Throughout the Verizon footprint, approximately 250 CLECs are able to use RETAS to: (1) perform mechanized loop testing; (2) create trouble tickets; (3) obtain the status of a trouble ticket; (4) modify an open trouble ticket; (5) cancel a trouble ticket; (6) request a trouble report history; and (7) perform a trouble ticket service recovery.[511] VZ-MA notes that all of the RETAS functions are available to CLECs for all service types except for the mechanized loop test, which cannot be performed on UNE-Loops.[512] Over the first half of 2000, CLECs in Massachusetts have performed an average of 4,300 maintenance and repair transactions per month via the GUI RETAS interface, with a peak of more than 4,900 transactions performed in June 2000.[513]

In May 2000, Verizon added a new manager position to the Regional CLEC Maintenance Center ("RCMC") whose duties are to identify areas in which Verizon can improve RETAS functionality to increase CLEC use of the interface. The RCMC manager is also responsible for developing and conducting RETAS training sessions and for providing follow-up training at the

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511 VZ-MA Application, Appdx. B, Vol. 32b, Tab 423, ¶ 105 (VZ-MA May OSS Aff.).

512 Id. at ¶ 106.

513 VZ-MA Application, Appdx. B, Vol. 42, Tab 494, ¶ 84 (VZ-MA August Supplemental OSS Aff.).

CLEC work site.[514] VZ-MA also notes that it has made electronic bonding available to CLECs for maintenance and repair functions on a limited basis, but explains that there are few industry standards for the use of electronic bonding for the maintenance and repair of competitive local services. VZ-MA also explains that because electronic bonding is a costly process to develop, very few CLECs have shown an interest in employing this maintenance and repair option.[515]

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514 VZ-MA Application, Appdx. B, Vol. 34a, Tab 443 (VZ–MA's Response to DTE-5-23).

515 VZ-MA Application, Appdx. B, Vol. 32b, Tab 423, ¶¶ 121-123 (VZ-MA May OSS Aff.).

To ensure that CLECs have access to the functionality of the GUI RETAS system at a level equal to retail representatives' access to the CaseWorker system, VZ-MA has adopted various C2C metrics to report performance with respect to response times for the RETAS functions. VZ-MA follows the same response time metrics for RETAS functions that it employs for pre-order transaction responses, parity plus not more than four seconds.[516] For the period of April through July 2000, VZ-MA met the C2C standard for each of the Maintenance and Repair functions with the exception of the Trouble Report History function. However, while the Trouble Report History transaction performance was below the standard for April and May, the response times for this metric were within the parity plus four second standard for both June and July.

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516 VZ-MA Application, Appdx. B, Vol. 32a, Tab 423, ¶ 88 (VZ-MA May Measurements Aff.).

VZ-MA explains that until August 1999, the comparison between retail and wholesale response times was out of parity due to a difference in the type of transactions that were included in each set of calculations. VZ-MA states that wholesale "Create Trouble Ticket" transactions included automatic feature fix transactions, which have a longer transaction response time because the transaction tries to fix the trouble at the time the ticket is created.[517] This type of automatic fix was not part of the retail transaction metrics, so VZ-MA began to exclude these transactions from wholesale reporting in August 1999.[518] VZ-MA notes that a similar difference between retail and wholesale metrics reporting was corrected in December 1999. In the December 1999 situation, VZ-MA notes that wholesale response times were including the time used to verify the CLEC's ownership of the line being reported or checked. Since there is no retail analogue to this part of the CLEC's transaction, VZ-MA began excluding these verification times from the metrics in December 1999.[519] Finally, VZ-MA notes that it enhanced the response times for CLEC transactions in February 2000 by implementing systems changes that enhanced software

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517 VZ-MA Application, Appdx. B, Vol. 32b, Tab 423, ¶ 114 (VZ-MA May OSS Aff.).

518 Id.

519 Id. at ¶ 115.

capabilities by moving frequently used data elements to the RETAS core memory.[520]

[520] Id. at ¶ 117.

VZ-MA measures the timeliness of its restoration of CLEC customers' service against a standard of parity with its own retail repair services. VZ-MA uses three performance metrics to show that it is providing parity between retail and wholesale customers – mean time to repair, missed appointments, and duration out-of-service.[521] VZ-MA notes that there are a number of factors that affect the level of parity between wholesale and retail performance on VZ-MA's service restoration timeliness metrics. First, VZ-MA notes that many CLECs do not accept weekend appointments when they are offered because the CLECs' customers are often available only during business hours. VZ-MA explains that in these instances, though VZ-MA is able to offer a short repair interval, the mean time to repair and duration out-of-service metrics only show the extra weekend days as being additional time that a CLEC customer's line is in need of

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521 VZ-MA Application, Appdx. B, Vol. 32a, Tab 423, ¶¶ 92-95 (VZ-MA May Measurements Aff.).

repair.[522] Further, VZ-MA notes that during the months of April through June 2000 VZ-MA's performance metrics reported repair intervals refused by CLECs as being missed appointments.[523]

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522 VZ-MA Application, Appdx. B, Vol. 42, Tab 494, ¶¶ 134-135 (VZ-MA August Supplemental Checklist Aff.).

523 Id. at ¶ 136.

For resale and UNE-P lines, VZ-MA's Loop Maintenance and Operations System ("LMOS") database assigns the next available repair interval automatically. LMOS also handles assignment of repair intervals for retail customers and does not distinguish between retail and wholesale customers in assigning repair appointments.[524] For UNE-Loop troubles, which are handled through WFA, VZ-MA cannot coordinate the repair intervals with those assigned through the LMOS database. However, VZ-MA notes that it has made a number of revisions to its UNE-Loop repair interval offerings. For example, in April 2000 VZ-MA began allowing same-day repair intervals for troubles reported by 10:00 a.m., and replaced the 24-hour rolling repair interval with an interval of either same-day or next-day by 7:00 p.m.[525] VZ-MA's maintenance and repair performance for both resale and UNE-P services over the period of April through July 2000 has been strong, with the missed appointment rate for April UNE-P troubles being the only metric in which VZ-MA's wholesale performance failed to meet parity with the retail rates. However, VZ-MA's maintenance and repair performance for UNE-Loops over the same period is not as strong for a number of reasons. First, as noted above, the mean time to repair intervals and duration out of service metrics do not accurately relate VZ-MA's performance because of the high rate of CLEC customers that reject offered weekend appointments. Further, as described more fully below, the nature of the trouble detection process for UNE-Loops is much more complex than with resale and UNE-P services and is highly

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524 VZ-MA Application, Appdx. B, Vol. 34a, Tab 443 (VZ–MA's Response to DTE-5-22).

525 Id.

dependent on the CLEC's loop testing capabilities. VZ-MA states, therefore, that its maintenance and repair metrics are not indicative of the quality of service it provides to CLECs that purchase UNE loops.

VZ-MA measures the quality of its wholesale maintenance and repair services through its trouble report rate and repeat trouble rate. VZ-MA's trouble report rate is reported separately for retail, resale, UNEs, and interconnection trunks, and wholesale performance is measured against parity with retail performance.[526] The most telling measure of the quality of VZ-MA's restoration of service is the repeat trouble rate. The repeat trouble rate measures the percentage of troubles that are reported within thirty days of the closure of a trouble ticket on the same line.[527] For the period April through July 2000, VZ-MA's reported trouble rates and repeat trouble rates for resale, UNE-Platform, and basic UNE-Loops have been in parity with analogous retail services in every month. The wholesale services that have missed parity over this period are VZ-MA's trouble rate for UNE 2-wire xDSL loops in each month and for UNE 2-wire digital loops in June and July. The differences between these trouble report rates and their retail equivalents, however, are minimal. VZ-MA also missed the parity standard for repeat trouble

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526 VZ-MA Application, Appdx. B, Vol. 32a, Tab 423, ¶ 90 (VZ-MA May Measurements Aff.).

527 Id. at ¶ 91.

reports for UNE 2-wire digital loops in May, June, and July 2000. However, as explained below, due to the nature of UNE-Loop trouble detection and reporting, VZ-MA's performance in fixing loop troubles is heavily dependent on the CLEC's direction as to the source of the reported trouble.

iii. Competitors' Positions and VZ-MA's Response

CLEC complaints over VZ-MA's ability to provide parity in its maintenance and repair function center on the perceived inability of VZ-MA to repair CLEC-reported troubles without the need for subsequent reports. Covad contends that it must often open multiple tickets for each trouble because VZ-MA erroneously closes out trouble tickets with a report of No Trouble Found ("NTF"). Covad argues that this problem causes Covad's customers to endure extended service outages and forces Covad to pay for multiple trouble tickets.[528] Rhythms raised similar complaints with VZ-MA's maintenance and repair capabilities and provided examples of trouble ticket logs that show extended service outages and frequent escalations of trouble tickets.[529]

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528 VZ-MA Application, Appdx. B, Vol. 38, Tab 462, ¶¶ 68-70 (Covad Szafraniec/Katzman Decl.).

529 VZ-MA Application, Appdx. B, Vol. 38, Tab 462, ¶¶ 21-22 and Att. 2 (Williams Decl.).

VZ-MA explains that a significant portion of the problems cited by Covad and Rhythms relate to the nature of the maintenance and repair process for UNE-Loops. Unlike resale and UNE-P configurations, in which the CLECs use VZ-MA's systems to test the loops and locate the source of the trouble, CLECs must perform their own testing of UNE-Loops to determine the source of the trouble and report that trouble to VZ-MA. VZ-MA explains that if a CLEC opens a trouble ticket and identifies the wrong location for the trouble, the VZ-MA technician will likely report an NTF situation to the CLEC. VZ-MA agrees that there are instances in which an initial NTF report is followed by a subsequent trouble ticket, but states that in most cases the NTF is the result of the CLEC's misdirection as to the location of the trouble.[530] VZ-MA states that when it receives a trouble ticket on a UNE-Loop from a CLEC, it assumes that the CLEC has already tested the line to determine the source of the trouble, but that this is not always the case. For example, VZ-MA notes that between April 15 and June 15, 2000, 55.6 percent of Covad's reported troubles resulted in NTF reports. Of those that were reported as NTF, Covad submitted subsequent reports on only 46.2 percent of the loops, and only 16.8 percent of the NTF reports were later found to have actual troubles with the loop.[531] With respect to the specific cases cited by Rhythms, VZ-MA notes that in several instances VZ-MA missed its repair appointment because it was unable to reach Rhythms to schedule a joint testing of the line. VZ-MA states that in the other cases, VZ-MA found no trouble on the portion of the line identified by Rhythms and

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530 VZ-MA Application, Appdx. B, Vol. 34a, Tab 443 (VZ–MA's Response to DTE-5-20).

531 VZ-MA Application, Appdx. B, Vol. 34a, Tab 443 (VZ–MA's Response to DTE-5-11).

closed the trouble ticket according to procedures.[532]

iv. KPMG Findings

[532] VZ-MA Application, Appdx. B, Vol. 42, Tab 494, ¶ 148 (VZ-MA August Supplemental Checklist Aff.). VZ-MA's performance with respect to the maintenance and repair of UNE Loops is discussed in detail under checklist item 4. See Section V.D., below.

KPMG performed a thorough examination of VZ-MA's maintenance and repair systems as part of its OSS evaluation. KPMG reviewed a total of 220 test points in the Maintenance and Repair Domain, and found that VZ-MA satisfied each test point.[533] KPMG's Maintenance and Repair evaluation included examinations of the functional capacity of the RETAS interface, the ability of RETAS to handle projected future volumes, the parity between VZ-MA's retail and wholesale maintenance and repair processes, the adequacy of VZ-MA's published documentation related to the maintenance and repair process, and the adequacy of VZ-MA's procedures to manage projected growth in CLEC usage of the RETAS interface. KPMG also reviewed VZ-MA's maintenance and repair performance metrics reporting as part of its Performance Metrics review.

KPMG's review of the functionality of the GUI RETAS interface consisted of two primary components. First, KPMG examined whether the RETAS interface performed wholesale maintenance and repair functions in the manner in which it was designed. KPMG developed test transactions and submitted them to VZ-MA in the formats proscribed in the RETAS documentation, testing whether the received responses matched KPMG's expected results. KPMG performed test transactions on each of the available RETAS functions and received satisfactory responses for each transaction.[534] Further, KPMG also measured the response times for functional acknowledgments and responses for each of its test transactions. KPMG reports

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533 VZ-MA Application, Appdx. I, Vol. 1, Tab 1, at 12 (KPMG Final Report Version 1.4).

534 Id. at 247-248.

that the RETAS interface provided functional acknowledgments "almost instantaneously" for each transaction type, and that the transaction responses were received within the time frames set out in VZ-MA's RETAS documentation.[535]

[535] Id. at 249-250.

The second component of KPMG's RETAS functionality evaluation was a comparison of the wholesale RETAS functionality to VZ-MA's retail Caseworker system. KPMG examined the level of parity between RETAS and Caseworker for each of the maintenance and repair functions and found that in almost every case the two systems offer parity in functionality. Most of the functionality that KPMG reports as not being identical involves situations in which CLECs have greater functionality than do retail representatives using Caseworker. For example, KPMG notes that while RETAS provide trouble history data for up to three years, Caseworker maintains trouble history data for only 45 days.[536] Also, retail representatives using Caseworker do not have the ability to perform automated tests on special circuits, as RETAS allows, but rather must access the Delphi system directly.[537] The lone exception to the level of parity in functionality reported by KPMG lies in the service recovery function, which enables a customer to establish a temporary means of maintaining service during a reported trouble (i.e., automatic call forwarding or transfer to voice mail services). KPMG reports that while retail representatives are simply trained to avoid submitting service recovery transactions unless a trouble report has a long repair interval, the RETAS interface prevents CLECs from submitting this type of transaction unless a

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536 Id. at 259.

537 Id. at 258.

reported trouble is in a "Pending Dispatch" or "Dispatch Out" status.[538]

[538] VZ–MA Application, Appdx. I, Vol. 1, Tab 1, at 259 (KPMG Final Report Version 1.4).

KPMG also tested the capability of VZ-MA's RETAS interface to handle projected future volumes of maintenance and repair transactions. KPMG conducted its volume performance test in two phases. The first phase tested RETAS' ability to receive and respond to transactions at projected volumes for September 2000. The second phase of the volume test was conducted using projected December 2000 volumes, and was conducted in conjunction with the volume testing performed as part of KPMG's review of VZ-MA's POP systems. KPMG sent transactions for each phase of the volume test at projected normal, peak (150 percent of normal), and stress (240 percent of normal) volumes for the specified time period. KPMG reports that it experienced no significant degradation of RETAS performance during the conduct of these volume tests.[539]

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[539] Id. at 278-80. KPMG notes that while the success rate for the Switched Access Remote Testing System ("SARTS") transaction declined from normal to peak and from peak to stress volumes, the decline was not considered to be statistically significant. Id. at 278. Further, KPMG also notes that the response times for the extended trouble report history transaction increased as the volume test progressed, but explains that these increases are

the result of the growing size of the transaction responses as more troubles were reported against individual accounts. Id. at 280.

In addition to examining the parity VZ-MA offers through its maintenance and repair interfaces, KPMG also evaluated VZ-MA's ability to repair CLEC-reported troubles in a nondiscriminatory manner. KPMG conducted a review of the defined processes for VZ-MA repair technicians to assess whether any differences between wholesale and retail processes exist. KPMG also evaluated VZ-MA's actual performance in performing maintenance and repair work on wholesale accounts to determine whether VZ-MA's technicians follow their proscribed processes and perform their duties on a nondiscriminatory basis.[540] KPMG reports that while wholesale and retail troubles are reported through different interfaces and to different organizations within VZ-MA, VZ-MA's internal organizations utilize the same back-end interfaces to perform their maintenance and repair functions.[541] Additionally, KPMG notes that repair intervals and due dates are assigned to wholesale and retail accounts using the same LMOS or WFA system.[542] KPMG also reports that VZ-MA performed 100 percent of the repair functions examined in the end-to-end evaluation of actual trouble repairs in an accurate and timely manner.[543]

As a separate part of its Maintenance and Repair process parity evaluation, KPMG also examined the processes VZ-MA follows in carrying out its coordinated, or joint, meet activities

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540 Id. at 299.

541 Id. at 309.

542 Id. at 310.

543 VZ–MA Application, Appdx. I, Vol. 1, Tab 1, at 312-313 (KPMG Final Report Version

with CLECs. In determining that VZ-MA has adequate procedures and processes in place for conducting joint meets with CLECs, KPMG reviewed both VZ-MA internal and published documentation defining the process. KPMG determined, based on these reviews, that VZ-MA has sufficient processes in place to conduct joint meet activities. KPMG further reports that while there is no specific training on joint meet procedures for VZ-MA technicians, the joint meet process does not involve any activities that a technician is not trained to perform on an individual basis.[544]

1.4).

544 Id. at 368-372.

KPMG also evaluated the completeness and accuracy of VZ-MA's maintenance and repair-related documentation. KPMG's review applied three general criteria – coverage adequacy, explanatory effectiveness, and usability – to each of VZ-MA's published maintenance and repair documents and VZ-MA's online RETAS help facility.[545] KPMG reports that VZ-MA satisfied the defined test criteria for each of the documentation sources reviewed.[546]

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545 Id. at 315.

546 Id. at 318-336. KPMG's Observation Report #10, issued on January 4, 2000, identified various discrepancies between the RETAS on-line help function and the RETAS Student User Guide. KPMG noted that the on-line help function cited incorrect portions of the Student User Guide for more detailed information regarding certain RETAS functions. Appdx. K (Observation Report #10). VZ-MA corrected the inconsistencies noted by KPMG in the June 2000 release of the RETAS Student User Guide. Appdx. M (KPMG Observation Status Summary dated August 25, 2000).

KPMG also issued Exception Report #2 on February 1, 2000, noting that the then-current October 1999 RETAS Student User Guide did not contain adequate documentation to assist CLECs in the creation of trouble tickets for UNE Loops, IOF circuits, and DS1 loops. See VZ-MA Application, Appdx. I, Vol. 2, Tab 2 (Exception Report #2). In response to this exception, VZ-MA added detailed information and examples in the March 2000 version of the Student User Guide to assist CLECs in the creation of trouble tickets for the identified service types. See VZ-MA Application, Appdx. I, Vol. 2, Tab 2 (VZ-MA Response to Exception #2). KPMG notes in its Disposition Report for Exception #2, released May 9, 2000, that VZ-MA's revisions to the RETAS documentation were found to be sufficient to meet CLECs' needs. See VZ-MA Application, Appdx. I, Vol. 2, Tab 2 (Disposition Report for Exception #2).

KPMG also reviewed VZ-MA's capacity management procedures for the RETAS interface systems as part of its overall examination of VZ-MA's OSS capacity management process. Through interviews with VZ-MA personnel and reviews of available documentation, KPMG evaluated the adequacy of VZ-MA's process for recording and analyzing usage trends and assessed whether VZ-MA used such information effectively in ensuring that its maintenance and repair systems and interfaces would be able to meet growing and changing CLEC needs. KPMG reports that VZ-MA does have the necessary processes and plans in place to meet its capacity management requirements.[547]

[547] VZ-MA Application, Appdx. I, Vol. 1, Tab 1, at 293-298 (KPMG Final Report Version 1.4).

Finally, as part of its Performance Metrics Review, KPMG evaluated VZ-MA's methods for recording, calculating and reporting its maintenance and repair performance metrics. KPMG reviewed VZ-MA's systems and processes used in the collection and filtering of data for metrics generation purposes, and reports that VZ-MA has in place adequate systems and processes to maintain the integrity of raw maintenance and repair data in its metrics reporting.[548] KPMG also validated VZ-MA's reported maintenance and repair metrics for the period from December 1999 through February 2000. KPMG states that its calculations agreed with VZ-MA's reported performance for all metrics with only minor discrepancies in four areas.[549] Two of the metrics KPMG states it was unable to validate, Percent Troubles with NTF results and Percent Missed Appointments due to customer reasons, are measurements that VZ-MA reports for analysis only and do not have defined C2C standards.[550]

v. Conclusions

Based on the reported performance measures and the positive report from KPMG, the Department finds that VZ-MA makes the maintenance and repair functions of its Operation Support Systems available to competitors on a nondiscriminatory basis. While the Department recognizes that VZ-MA's maintenance and repair performance with respect to UNE-Loops has been below the approved standards, the Department agrees with VZ-MA that this performance is

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548 Id. at 654-655.

549 Id. at 676-677.

550 Id.

at least partly the result of the CLEC's ability to direct VZ-MA accurately to the source of reported troubles. VZ-MA's position is confirmed by KPMG's report that VZ-MA successfully responded to 100 percent of KPMG's reported troubles during the end-to-end process evaluation.

i. Billing

i. Standard of Review

The ability of a CLEC to obtain the necessary information to bill its end customers is vital to the success of competition in the local marketplace. The BOC must provide competitors with "complete and accurate reports of the service usage of competing carriers' customers in substantially the same time and manner that [it] provides such information to itself."[551] The FCC has found that performance standards and measurements provide an adequate measure of whether or not a BOC is providing nondiscriminatory access to its billing functions.[552]

ii. VZ-MA's Offering

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551 Bell Atlantic New York Order at ¶ 226; see also SBC Texas Order at ¶ 210.

552 See Bell Atlantic New York Order at ¶ 227; see also SBC Texas Order at ¶ 211.

Throughout New England, Verizon's billing OSS generate over 1,800 CLEC bills and 48 million call usage records per month.[553] VZ-MA records wholesale usage in the same manner that it records usage for its own retail customers. Call usage for both retail and wholesale customers is recorded at the VZ-MA central office switches on the same data recording tape. Once the usage tape is delivered to VZ-MA's data processing center, an Automated Message Accounting ("AMA") system identifies and separates retail usage from the usage of the various CLECs. CLEC usage records are then transmitted to the Carrier Access Billing System ("CABS") for rating and creation of Exchange Message Interface ("EMI") records. The EMI records are then transferred on a daily basis to CLECs that have requested Daily Usage Feed ("DUF") files. VZ-MA also retains the CLEC usage information to develop the CLECs' wholesale bills.[554] As of June 2000, 55 Massachusetts CLECs receive DUF files from VZ-MA. VZ-MA maintains copies of the DUF files for 45 days after transmission to the CLEC, and the actual usage records for both retail and wholesale customers are kept in VZ-MA's systems for 90 days.[555] VZ-MA notes that it does not charge CLECs for the transmission of DUF files, nor does it have any plans to do so in the future.[556]

VZ-MA reports its performance for the timeliness of both DUF files and CLEC wholesale

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553 VZ-MA Application, Appdx. B, Vol. 42, Tab 494, ¶ 88 (VZ-MA August Supplemental OSS Aff.).

554 VZ-MA Application, Appdx. B, Vol. 32b, Tab 423, ¶¶ 125-126 (VZ-MA May OSS Aff.).

555 VZ-MA Application, Appdx. B, Vol. 34a, Tab 443 (VZ–MA's Response to DTE-5-47).

bills through C2C standards. For DUF files, VZ-MA abides by a C2C standard of 95 percent of files delivered within four business days, and for wholesale bills, VZ-MA is required to deliver 98 percent of bills within ten business days of the bill date. VZ-MA met each of these standards for each month from April through July 2000.

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556 VZ-MA Application, Appdx. B, Vol. 34a, Tab 443 (VZ–MA's Response to DTE-5-26).

VZ-MA also follows a C2C standard for the accuracy of its wholesale bills. VZ-MA measures bill accuracy as the percentage of "carrier bill charges adjusted due to billing errors."[557] VZ-MA's C2C standard for billing accuracy is parity with retail accuracy. Over the four-month period from April through July 2000, VZ-MA met its parity standard in April and June. However, VZ-MA notes that the disparities found in the May and July measures are not the result of inaccurate billing, but rather reflect billing adjustments that resulted from settlement agreements reached between VZ-MA and various competitors.[558]

iii. Competitors' Positions and VZ-MA's Response

AT&T contends that VZ-MA's process for recording and transmitting call usage records is inadequate to meet CLECs' needs. AT&T asserts that it has received usage data that belongs to other CLECs, and that its own usage data is not always recorded on the DUF files that VZ-MA transmits. As proof of VZ-MA's inability to record and transmit accurate usage records, AT&T provided a listing of 902 test calls made during its Massachusetts production test, of which AT&T

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557 VZ-MA Application, Appdx. B, Vol. 32a, Tab 423, ¶ 114 (VZ-MA May Measurements Aff.).

558 VZ-MA Application, Appdx. A, Vol. 1, Tab 2, ¶ 98 (McLean/Wierzbicki Decl.).

contends only 226 were accurately reported on AT&T's DUF files.[559]

[559] VZ-MA Application, Appdx. B, Vol. 45, Tab 516 (AT&T's Response to DTE-ATT-1-11).

In response to AT&T's claims, VZ-MA acknowledges that a typographical coding error did cause AT&T to receive usage records that should have been sent to another CLEC, but notes that this problem occurred only once and has been corrected.[560] As to AT&T's complaints about missing usage, VZ-MA states that it took a random sample of 100 of the calls that AT&T claimed were missing from the DUF files and notes that it found 99 of those calls on AT&T's DUF files. VZ-MA explains that for the one call VZ-MA could not find on the DUF files, VZ-MA also has no record of the call being made at the switch, which records all call usage data.[561]

WorldCom raised complaints over Verizon's ability both to provide bills in a timely fashion and in a format that CLECs can use. WorldCom contends that Verizon does not have adequate systems in place to ensure the bill transmissions are actually received by CLECs. WorldCom states that this leads Verizon to claim that CLECs are late in paying their bills when the CLEC is unaware that it was supposed to have received a bill.[562] For example, WorldCom contends that it notified Verizon in mid-May that it had not received its May UNE bill for New York, but that Verizon did not provide a replacement bill until June 7, 2000 and then attempted to

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560 VZ-MA Application, Appdx. B, Vol. 42, Tab 494, ¶ 91 (VZ-MA August Supplemental OSS Aff.).

561 VZ-MA Application, Appdx. B, Vol. 47, Tab 553 (VZ–MA's Response to RR-DTE-336); VZ-MA Application, Appdx. B, Vol. 46, Tab 533, at 4586-87 (Transcript of Technical Session Held 8/21/00); VZ-MA Application, Appdx. B, Vol. 46, Tab 538, at 4715-16 (Transcript of Technical Session Held 8/22/00).

562 VZ-MA Application, Appdx. B, Vol. 37, Tab 455, ¶ 135 (WorldCom Lichtenberg/Sivori Decl.).

assess late payment charges.[563] WorldCom contends this problem is exacerbated by the fact that Verizon does not provide wholesale bills in electronic format. WorldCom contends that, due to the length of some wholesale bills, receiving bills in paper format only makes it nearly impossible for WorldCom, or any other CLEC, to validate the accuracy of its bills.[564]

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563 VZ-MA Application, Appdx. B, Vol. 41, Tab 488 (WorldCom's Response to DTE-WCOM-6).

564 VZ-MA Application, Appdx. B, Vol. 41, Tab 488 (WorldCom's Response to DTE-WCOM-5).

In response to WorldCom's claims, VZ-MA notes that WorldCom did not follow the established procedures for notifying Verizon of its missing May bill. VZ-MA states that WorldCom sent an e-mail to the Verizon billing and collections operations center on June 2, 2000 and was instructed to contact the Help Desk as is the normal procedure for billing inquiries. VZ-MA states further that WorldCom did not contact the Help Desk as instructed, but rather called directly to the systems support center on June 5, which would have been the center that researched WorldCom's claim if WorldCom had called the Help Desk. VZ-MA notes that although WorldCom did not follow the established procedures for reporting a missing bill, Verizon researched the complaint, found that there was a Network Data Mover ("NDM") transmission error, and re-sent the May bill within three hours of WorldCom's call to the systems support center.[565] With respect to WorldCom's claim that Verizon does not provide bills in a usable format, VZ-MA notes that all wholesale bills have been available in electronic format since February 2000. VZ-MA states that an industry mailing was sent to all CLECs on January 12, 2000 informing CLECs of this availability and that a second mailing was sent on January 20 notifying CLECs that a workshop would be held on March 22 to provide further information on electronic bill formats. VZ-MA notes that these industry mailings are also available on VZ-MA's wholesale web site and the electronic availability of all wholesale bills is noted in the CLEC

565 VZ-MA Application, Appdx. B, Vol. 46, Tab 533, at 4585-86 (Transcript of Technical Session Held 8/21/00).

Handbook.[566]

WorldCom also raised complaints over Verizon's disconnecting of WorldCom customers in New York because those customers had outstanding balances with Verizon. WorldCom states that it has had over 300 customers disconnected by Verizon since January 2000.[567] WorldCom states that it first raised this issue with Verizon in March 1999, but Verizon did not implement a fix until May 23, 2000. WorldCom further argues that since the temporary manual fix was put in

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566 VZ-MA Application, Appdx. B, Vol. 46, Tab 538, at 4678 (Transcript of Technical Session Held 8/22/00); see also CLEC Handbook, Vol. III, Section 9.3.10.

567 VZ-MA Application, Appdx. B, Vol. 37, Tab 455, ¶¶ 124-125 (WorldCom Lichtenberg/Sivori Decl.).

place on May 23, WorldCom has had another 25 customers disconnected by Verizon for overdue Verizon balances.[568] In support of its claims, WorldCom provided a listing of its customers who were disconnected between January 1 and July 30, 2000.[569]

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568 Id.

569 See VZ-MA Application, Appdx. B, Vol. 41, Tab 488 (WorldCom's Response to DTE-WCOM-4).

VZ-MA acknowledges that WorldCom's claims about customers being disconnected for past due Verizon balances did represent a systemic problem, but asserts that the problem was resolved with a manual fix on May 23, 2000, and a permanent system fix was implemented the weekend of August 19, 2000.[570] VZ-MA notes also that of the 25 customers WorldCom asserts were disconnected after the manual fix was implemented, only two were actually disconnected after the fix date.[571]

AT&T contends that Verizon's billing help desk is unresponsive to inquiries and that billing claims go unanswered by Verizon.[572] In support of its argument, AT&T states that it has been billed for resale customers in New York even though it does not have any resale accounts. AT&T contends that it has asked Verizon to investigate these charges and credit AT&T's

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570 VZ-MA Application, Appdx. B, Vol. 46, Tab 538, at 4698-99 (Transcript of Technical Session Held 8/22/00).

571 VZ-MA Application, Appdx. B, Vol. 42, Tab 494, ¶ 95 (VZ-MA August Supplemental OSS Aff.).

572 VZ-MA Application, Appdx. B, Vol. 38, Tab 460, at 29 (AT&T July Supplemental Comments).

accounts, but that Verizon has not done so in the four months since the complaint was first raised. AT&T argues that this unresponsiveness to billing claims is evidence that Verizon's billing OSS are not provided in a nondiscriminatory manner.[573]

[573] VZ-MA Application, Appdx. B, Vol. 45, Tab 516 (AT&T's Response to DTE-ATT-1-11(b)).

VZ-MA asserts that AT&T's comments regarding the responsiveness of the billing claims process are inaccurate. VZ-MA notes that it acknowledges receipt of all billing claims within 48 hours of receipt and generally resolves all claims within 30 days.[574] With respect to AT&T's specific complaint regarding the disconnection of resale billing account numbers, Verizon notes that this claim has not yet been resolved because AT&T has not yet completed its part of the resolution process. Verizon explains that both parties agreed during a meeting in May 2000 that Verizon would notify AT&T of the information surrounding the resale Billing Account Numbers, including any telephone numbers associated with the accounts and the AT&T PONs that were submitted to establish the accounts. Upon receiving this information from Verizon, AT&T was expected to submit disconnect orders for any telephone numbers associated with the Billing Account Numbers and then provide written notice to Verizon to disconnect the Billing Account Numbers.[575] VZ-MA notes that while the Billing Account Number information was sent to

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574 VZ-MA Application, Appdx. B, Vol. 42, Tab 494, ¶¶ 92-93 (VZ-MA August Supplemental OSS Aff.).

575 VZ-MA Application, Appdx. B, Vol. 46, Tab 533, at 4587 (Transcript of Technical Session Held 8/21/00); VZ-MA Application, Appdx. B, Vol. 46, Tab 538, at 4717-18 (Transcript of Technical Session Held 8/22/00).

AT&T on May 26, AT&T has not submitted disconnect orders for any of the six telephone numbers still associated with the accounts.[576]

iv. KPMG Findings

[576] Id.; see also VZ-MA Application, Appdx. B, Vol. 47, Tab 553 (VZ–MA's Response to RR-DTE-337).

As part of its OSS evaluation, KPMG examined 170 test points related to VZ-MA's billing process and found each to be satisfied.[577] KPMG reviewed the billing documentation that VZ-MA provides to CLECs, examined VZ-MA's usage collection and transmission processes, and evaluated VZ-MA's ability to provide CLECs with timely and accurate wholesale bills. As part of its evaluation, KPMG conducted a CLEC focus group and survey in order to determine the CLECs' primary concerns with VZ-MA's billing practices. Finally, as part of its Performance Metrics review, KPMG also evaluated VZ-MA's reporting of metrics related to the Billing domain.

In its review of VZ-MA's billing documentation, KPMG examined whether the documentation VZ-MA provides in its CLEC and Resale Handbooks gives CLEC representatives the necessary information to understand and use VZ-MA's billing systems. Specifically, KPMG reviewed whether the available documentation covers all relevant topics, provides accurate and complete information, and is organized in a convenient format.[578] KPMG concluded from its review that VZ-MA's billing documentation is adequate to meet CLECs' needs.

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577 VZ-MA Application, Appdx. I, Vol. 1, Tab 1, at 13 (KPMG Final Report Version 1.4).

578 Id. at 408.

KPMG's review of VZ-MA's usage collection and transmission capabilities required KPMG "to act as a CLEC providing telecommunications services to end user customers."[579] First, KPMG reviewed the process defined by VZ-MA for collecting, recording, and transmitting usage records to CLECs. KPMG's billing test team then generated usage on KPMG's test accounts and examined VZ-MA generated usage records for accuracy and completeness.[580] KPMG also analyzed the timeliness of VZ-MA's delivery of DUF files. In its Final Report, KPMG states that it found all aspects of VZ-MA's usage collection process satisfied. KPMG notes that 95.4 percent of the call usage that its test team generated with the expectation of it

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579 Id. at 445.

580 KPMG issued Exception Report #6 on February 22, 2000 stating that it was not receiving originating access usage records. KPMG noted that all of the access usage records it had received contained a terminating access indicator in the "Originating/Terminating ID" field. KPMG explained that this problem could prevent CLECs from accurately charging interexchange carriers for originating and terminating access. See VZ-MA Application, Appdx. I, Vol. 2, Tab 2 (Exception Report #6). In response to this exception, VZ-MA stated that it differentiates between originating and terminating usage records by using separate record types rather than by using the "Originating/Terminating ID" field indicator. VZ-MA notes that the Ordering and Billing Forum ("OBF") rules allow either process. In order to eliminate the chance of misinterpretation, VZ-MA implemented code changes on March 3, 2000, to follow both available OBF processes for distinguishing originating access records from terminating access records. See VZ-MA Application, Appdx. I, Vol. 2, Tab 2 (VZ-MA Response to Exception #6). KPMG verified VZ-MA's changes during a retest conducted from April 4 through 6, 2000, and stated in its Disposition Report for Exception #6 that VZ-MA's code changes resolved the problems cited by KPMG in the Exception Report. See VZ-MA Application, Appdx. I, Vol. 2, Tab 2 (Disposition Report for Exception #6). KPMG also opened several Observations during its evaluation related to the accuracy of its usage records. Each of these Observations was successfully resolved by VZ-MA before the completion of KPMG's testing. Appdx. M (Observation Status Summary dated August 25, 2000).

being reported on the DUF files was found on KPMG's DUF files.[581] Additionally, KPMG's test team made 730 test calls that it did not expect would generate a usage record on the DUF files, and found that VZ-MA's exclusion of those calls was correct in 99 percent of the cases.[582] KPMG further notes that it received 98.96 percent of its DUF records on time under the C2C standards.[583]

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581 VZ-MA Application, Appdx. I, Vol. 1, Tab 1, at 459 (KPMG Final Report Version 1.4).

582 Id. at 460.

583 Id. at 461. KPMG issued Exception Report #1 on January 18, 2000 relating to the timeliness of its DUF files. KPMG stated that 12 DUF files expected to be received in mid-December were delivered by VZ-MA later than KPMG's expected receipt dates. See VZ-MA Application, Appdx. I, Vol. 2, Tab 2 (Exception Report #1). VZ-MA explained that this problem was the result of the time needed to establish an electronic transmission process for KPMG's DUF files. VZ-MA states that KPMG requested electronic

transmission of its DUF files on November 19, 1999, and that the establishment of electronic transmission normally takes up to two months. VZ-MA states that it expedited KPMG's request for the purposes of the test, but that VZ-MA was unable to complete the process before KPMG's original DUF test began on December 14, 1999. VZ-MA notes that it sent KPMG's initial DUF files in cartridge format, and that each of these files was delivered according to the standard time lines. See VZ-MA Application, Appdx. I, Vol. 2, Tab 2 (VZ-MA Response to Exception #1). KPMG retested the timeliness of VZ-MA's DUF delivery in April 2000 and reported in its Disposition Report for Exception #1 that VZ-MA had met its DUF timeliness obligations. See VZ-MA Application, Appdx. I, Vol. 2, Tab 2 (Disposition Report for Exception #1).

As part of its usage process review, KPMG also examined VZ-MA's procedures related to CLECs' return of usage files for correction. In this review, KPMG's test team both reviewed the defined process for returning usage files and conducted a transaction-based test of the process to examine VZ-MA's ability to follow its processes efficiently.[584] KPMG included CLEC feedback collected from the CLEC focus group and surveys in its review. KPMG reports that VZ-MA's procedures for processing CLEC usage returns are well-defined and are carried out as defined.[585] KPMG also reports that VZ-MA adequately responded to KPMG's usage returns and followed its defined procedures in reviewing and correcting KPMG's usage files.[586]

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584 VZ-MA Application, Appdx. I, Vol. 1, Tab 1, at 431 (KPMG Final Report Version 1.4).

585 Id. at 437-443.

586 Id. at 444.

In reviewing VZ-MA's ability to provide complete, accurate, and timely wholesale bills, KPMG conducted both a review of VZ-MA's defined processes and a validation of the bills KPMG received as part of its transaction-based evaluation.[587] As part of its evaluation of VZ-MA's defined processes, KPMG used information gathered from CLECs through the CLEC focus group and surveys.[588] In conducting the bill validation component of its review, KPMG examined a variety of bill types and bill formats to ensure that VZ-MA's billing processes were consistent across all billing areas. KPMG also requested duplicate copies of bills to ensure that information

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587 Id. at 463.

588 Id. at 470.

on the original and duplicate bill matched. KPMG found each test point in its process evaluation satisfied, and though there were initially some problems revealed in KPMG's bill validation examination, KPMG reports that VZ-MA fixed those problems and KPMG's subsequent re-tests were all satisfactorily completed.[589]

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589 Id. at 478-482. During the course of its Bill Validation testing, KPMG issued Exception Report #11. Exception Report #11 stated that KPMG was unable to verify UNE charges on its Y40 bills. KPMG stated that the information reported on its bills could not be validated against DUF call records and established rate information. See VZ-MA Application, Appdx. I, Vol. 2, Tab 2 (Exception Report #11). VZ-MA noted in response to KPMG's Exception that various issues, including late usage reporting or delayed billing due to order activity on an account, can prevent DUF records from matching bills in a single month. VZ-MA explained that the CLEC handbook recommends that CLECs validate bills over a three-month period to eliminate these types of problems. VZ-MA also stated that it agreed with KPMG that the available billing documentation was insufficient in some areas to assist CLECs with bill validation, and VZ-MA stated it would update the necessary documentation to provide more detailed information. See VZ-MA Application,

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Appdx. I, Vol. 2, Tab 2 (VZ-MA Response to Exception #11). KPMG released a Disposition Report for Exception #11 on July 24, 2000 stating that, based on VZ-MA's updated documentation, KPMG was able to verify its UNE bills successfully. KPMG also noted that VZ-MA had satisfactorily updated the information available to CLECs regarding rate elements and Unbundler Scenarios that would enable CLECs to verify more efficiently their UNE bills. See VZ-MA Application, Appdx. I, Vol. 2, Tab 2 (Disposition Report for Exception #11).

As part of its overall examination of VZ-MA's OSS capacity management process, KPMG examined the capacity management safeguards and procedures of VZ-MA's CABS and CRIS billing applications. KPMG evaluated the overall ability of VZ-MA to monitor and forecast expected CLEC volumes and growth with relation to the demands such growth would have on VZ-MA's billing applications. KPMG also examined whether VZ-MA adequately applied its capacity management process to the scaling of the CABS and CRIS billing applications to meet growing CLEC needs. KPMG reports that VZ-MA satisfied each of the defined billing capacity management test points.[590]

KPMG also evaluated VZ-MA's methods for recording, calculating and reporting its billing performance metrics. First, KPMG reviewed VZ-MA's data collection and filtering processes for the generation of billing metrics reports. KPMG reports that VZ-MA has adequate processes to collect, filter,[591] and maintain the integrity of its billing data for use in metrics reporting.[592] Finally, KPMG performed a validation of VZ-MA's reported billing metrics for December 1999 through February 2000, and reports that its calculations matched VZ-MA's

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590 VZ-MA Application, Appdx. I, Vol. 1, Tab 1, at 491-494 (KPMG Final Report Version 1.4).

591 KPMG notes that its filtering process examination did not apply to VZ-MA's data collection process for the calculation of Bill Timeliness metrics because VZ-MA calculates these metrics using data in its rawest form. VZ-MA Application, Appdx. I, Vol. 1, Tab 1, at 656 (KPMG Final Report Version 1.4).

592 Id. at 655-656.

reported performance in all cases.[593] KPMG notes that VZ-MA's calculation for the Billing Accuracy and Bill Timeliness metrics involve manual processes that could lead to human calculation errors, but states that during its metrics review it did not witness any cases of calculation error by VZ-MA's metrics processing personnel.[594]

v. Conclusions

The Department finds that VZ-MA has in place the necessary systems and personnel to provide competitors with nondiscriminatory access to its billing Operation Support Systems. Through its performance with regard to established metrics, and a successful evaluation from the third-party tester, VZ-MA has shown that its billing systems are available in a manner that will allow an efficient competitor a meaningful opportunity to compete.

2. Combinations of UNEs

a. Standard of Review

593 Id. at 680-681.

594 Id. at 681.

In order to meet the requirements of checklist item 2 that it provides "nondiscriminatory access to network elements in accordance with the requirements of section 251(c)(3)," a BOC has an obligation to provide competitors with access to unbundled network elements "in a manner that allows them to combine them to provide a telecommunications service."[595] The FCC has stated previously that access to combinations of UNEs "provides a competitor with the incentive and ability to package and market services in ways that differ from the BOC's existing service offerings in order to compete in the local marketplace."[596] As such, the FCC notes that it will "examine section 271 applications to determine whether competitive carriers are able to combine network elements as required by the Act and the Commission's regulations."[597]

b. UNE-Platform

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595 Bell Atlantic New York Order at ¶229.

596 Id. at ¶ 230.

597 Id.

i. VZ-MA's Offering

VZ-MA provides CLECs with access to combinations of local loop and local switching elements through its UNE-Platform ("UNE-P") offering. In the Phase 4-J Order of the Consolidated Arbitrations, the Department required VZ-MA to make available to CLECs existing UNE-P combinations in their combined form and prohibited VZ-MA from imposing a "glue charge" for maintaining the combination.[598] In a December 1, 1999 proposal, VZ-MA voluntarily committed to provide CLECs with UNE-P combinations where the combination of elements does not already exist in VZ-MA's network, and agreed to provide these new combinations under the same terms and conditions as existing UNE-P combinations. On January 14, 2000 VZ-MA filed the terms, rates, and conditions for its offering of new and existing UNE-P combinations in its interconnection tariff, M.D.T.E. No. 17. On May 4, 2000 the Department approved VZ-MA's UNE-P offerings.[599]

ii. Competitors' Positions

No CLEC has contested VZ-MA's position that it makes available both new and existing UNE-P combinations of local loop and local switching on a nondiscriminatory basis.

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598 VZ-MA Application, Appdx. H, Vol. 70, Tab 612, at 9-10 (Phase 4-J Order).

599 See VZ-MA Application, Appdx. E, Vol. 18, Tab 282 (D.T.E. 98-57 Phase II Order).

c. Enhanced Extended Loop

i. VZ-MA's Offering

On September 7, 2000, as part of the D.T.E. 98-57 Phase I Order, the Department approved VZ-MA's tariff provisions related to the company's provisioning of the loop-transport combination known as the Enhanced Extended Loop ("EEL"). The Department's order required VZ-MA to allow CLECs to provision new EEL arrangements and to convert existing Special Access arrangements to EELs, if the CLEC is able to certify that it meets one of the three local usage definitions approved by the FCC in the June 2, 2000 Supplemental Order Clarification.[600] The Department further required VZ-MA's EEL offering to comply with the FCC's rules relating to commingling of EELs with Special Access arrangements, auditing of EEL arrangements, and collocation requirements on new EEL arrangements.[601]

ii. Competitors' Positions

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600 VZ-MA Application, Appdx. K, Vol. 6, Tab 72, at 37 (D.T.E. 98-57 Phase I Order).

601 Id. at 32-33, 37-39.

In comments filed with the Department on July 18, 2000, WorldCom contended that VZ-MA's EEL offering was discriminatory because it did not comply with the FCC's Supplemental Order Clarification.[602] Specifically, WorldCom argued that VZ-MA's offering did not meet the FCC's requirements with regard to the three local usage definitions.[603] However, as stated above, the Department's September 7, 2000 order in D.T.E. 98-57-Phase I resolves the disputes raised by WorldCom. No other CLEC raised any issues with VZ-MA's EEL offerings.

d. Conclusions

The Department finds that VZ-MA has met its obligation to provide CLECs with access to combinations of unbundled network elements on a nondiscriminatory basis. Specifically, the Department finds that VZ-MA's UNE-P and EEL offerings comply with both Department and FCC standards. Further, VZ-MA offers CLECs the opportunity to purchase both new and existing combinations of UNEs in VZ-MA's network under the same terms and conditions, and without the imposition of glue charges. Finally, as is discussed more fully below, VZ-MA provides combinations of UNEs to CLECs at rates that are just and reasonable.

3. Pricing of Network Elements

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602 VZ-MA Application, Appdx. B, Vol. 37, Tab 455, ¶34 (WorldCom Lichtenberg/Kinard/Drake Decl.).

603 Id.

a. Standard of Review

Checklist item 2 of § 271 states that a BOC must provide "nondiscriminatory access to network elements in accordance with §§ 251(c)(3) and 252(d)(1)" of the Act.[604] Section 251(c)(3) requires ILECs to provide "nondiscriminatory access to network elements on an unbundled basis at any technically feasible point on rates, terms, and conditions that are just, reasonable, and nondiscriminatory."[605] Section 252(d)(1) requires that a state commission's determination of the just and reasonable rates for network elements shall be based on the cost of providing the network elements, shall be nondiscriminatory, and may include a reasonable profit.[606] Pursuant to this statutory mandate, the FCC has determined that prices for UNEs must be based on the total element long run incremental cost ("TELRIC") of providing those elements.[607] The FCC also promulgated Rule 51.315(b), which prohibits ILECs from separating already combined elements before providing them to competing carriers, except on request.[608] In September 1996, the U.S. Court of Appeals for the Eighth Circuit stayed and then vacated the

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604 47 U.S.C. § 271(B)(ii).

605 47 U.S.C. § 251(c)(3).

606 47 U.S.C. § 252(d)(1).

607 Local Competition First Report and Order, 11 FCC Rcd at 15844-46; 47 C.F.R. §§ 51.501. See also, Line Sharing Order at ¶ 135 (the FCC concluded that states should set the prices for line sharing, as a new network element, in the same manner as the state sets prices for other UNEs).

608 See 47 C.F.R. § 51.315(b).

FCC's pricing rules on jurisdictional grounds, and in 1997 it vacated Rule 51.315(b).[609] The Supreme Court restored these rules, however, on January 25, 1999.[610]

On July 18, 2000, the U.S. Court of Appeals for the Eighth Circuit vacated and remanded the FCC's pricing rules on substantive grounds. The Eighth Circuit affirmed the FCC's use of a forward-looking, incremental cost approach, but found that the use of TELRIC "violates the plain meaning of the Act." Specifically, the Court found that TELRIC inappropriately measures "the cost some imaginary carrier would incur by providing the newest, most efficient, and least cost substitute for the actual item or element which will be furnished by the existing ILEC pursuant to

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609 Iowa Utilities Board v. FCC, 96 F. 3d 1116 (8th Cir. 1996) (per curiam) (temporarily staying the Local Competition Order until the filing of the court's order resolving the petitioners' motion for stay); Iowa Utilities Board v. FCC, 109 F.3d 418 (8th Cir. 1996) (dissolving temporary stay and granting petitioners' motion for stay, pending a final decision on the merits of the appeal), motion to vacate stay denied, 117 S. Ct. 429 (1996); Iowa Utilities Board v. FCC, 120 F.3d 753 (8th Cir. 1997) (vacating the FCC's pricing and combinations rules).

610 AT&T Corp. v. Iowa Utils. Bd., 525 U.S. 366 (1999).

Congress's mandate for sharing."[611] The Court found that the Act requires that network element prices be based on "the cost to the ILEC of providing its existing facilities and equipment either through interconnection or by providing the specifically requested existing network elements that the competitor will in fact be obtaining for use."[612]

The Department has determined that, pending a FCC ruling on remand of its pricing rules or a higher court ruling overturning the Eighth Circuit's findings, it will maintain the status quo for UNE prices and the wholesale discount. The status quo in Massachusetts is use of the FCC's TELRIC and avoided cost methods. Therefore, the Department's evaluation of whether VZ-MA is in compliance with the checklist's pricing requirements will be based on the FCC's pricing standards, notwithstanding the vacatur and remand.

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611 Iowa Utilities Board v. FCC, 219 F.3d 744, 750 (8th Cir. 2000).

612 Id. at 751.

The FCC has said that: "In reviewing state pricing decisions in the context of section 271 applications, we will not reject an application because isolated factual findings by a state commission might be different from what we might have found if we were arbitrating the matter under section 252(e)(5). Rather, we will reject the application only if basic TELRIC principles are violated or the state commission makes clear errors in factual findings on matters so substantial that the end result falls outside the range that the reasonable application of TELRIC principles would produce."[613]

b. Discussion

Some CLECs in the Massachusetts proceeding, notably AT&T and WorldCom, contend that the Department incorrectly applied the FCC's TELRIC methodology and, thus, VZ-MA's UNE rates are not based on TELRIC. The CLECs' arguments about the Department's TELRIC method center on two main points: (1) local switching and switch port rates are too high because they do not factor in switch vendor discounts for new switches, among other reasons; and (2) the cost of capital used to derive all UNE prices is too high. The CLECs also cite other inputs to the Department-approved TELRIC model that they contend are inappropriate.

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613 Bell Atlantic New York Order at ¶ 244.

AT&T argues that VZ-MA's switching rates in Massachusetts are too high because the Department permitted VZ-MA "to estimate costs under the assumption that it would pay for its switching investment at the prices that apply when purchasing switching upgrades . . . These prices are substantially higher than the prices [VZ-MA] pays to purchase new switches to serve forecasted demand."[614] AT&T also contends that the installation factor used to derive the rate for local switching is too high. AT&T further contends that switching rates in Massachusetts have other "problems" that are not as egregious as the two noted above.[615] WorldCom makes the same arguments as AT&T with regard to VZ-MA's UNE rates and concludes that "the prices [VZ-MA] currently charges for [UNEs] are not cost-based or 'just and reasonable' under the Telecommunications Act of 1996 . . . and, as a result, create an insurmountable barrier that has

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614 VZ-MA Application, Appdx. B, Vol. 38, Tab 460, at 10 (AT&T July Supplemental Comments).

615 Id. at 11-12.

precluded the onset of real and robust local competition in Massachusetts."[616]

616 VZ-MA Application, Appdx. B, Vol. 37, Tab 455 at 3 (WorldCom Ankum/Huffman Decl.).

In terms of cost of capital, AT&T argues that the Department-approved cost of capital is "excessive, and does not comport with the FCC's TELRIC methodology." AT&T notes that the average cost of capital used in nine other states is 10.31 percent, compared to the Department-approved cost of capital of 12.16 percent.[617] WorldCom echoes AT&T's arguments on cost of capital.[618]

VZ-MA responded to these contentions by pointing out that the Department recently affirmed that VZ-MA's UNE rates are in compliance with the TELRIC methodology and related statutory requirements. Verizon also points to approval of an amendment to the interconnection agreement between VZ-MA and Z-Tel which, among other things, provides for a promotional

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617 VZ-MA Application, Appdx. B, Vol. 38, Tab 460, at 12 (AT&T July Supplemental Comments).

618 VZ-MA Application, Appdx. B, Vol. 37, Tab 455 at 11 (WorldCom Ankum/Huffman Decl.).

discount of between 30 and 50 percent for local switching usage.[619]

c. Relevant Department Precedent

i. Background

[619] VZ-MA Application, Appdx. B, Vol. 494, at ¶¶ 53-55 (VZ-MA August Supplemental Checklist Aff.).

The recurring and non-recurring UNE prices in Massachusetts were established in a series of decisions in Phase 4 of the Department's Consolidated Arbitrations docket, where the Department and its arbitrator were guided by the FCC's own directives on how to calculate TELRIC.[620] Recurring UNE rates are addressed in the following Orders: Phase 4 (December 4, 1996), Phase 4-A (February 5, 1997), Phase 4-B (May 2, 1997), Phase 4-C (June 27, 1997), Phase 4-D (June 27, 1997), D.T.E. 98-15 (Phase II, III) (March 19, 1999) (making UNE rates permanent), D.T.E. 98-57 (Phase II) (May 4, 2000) (establishing UNE-P rates), Phase 4-N (October 13, 1999), Phase 4-R (August 17, 2000) (setting dark fiber rates), and D.T.E. 98-57 (March 24, 2000) (setting EEL rates). Non-recurring UNE rates are addressed in the following Consolidated Arbitrations Orders: Phase 4-L (10/14/99), Phase 4-O (1/10/2000), and Phase 4-S (9/15/2000).

ii. Recurring UNE Rates

[620] Copies of those decisions are appended to VZ-MA's filing at Appendix H.

In its initial Phase 4 Order, dated December 4, 1996, the Department set interim recurring prices for UNEs using the FCC's TELRIC methodology, which at the time was stayed by the Eighth Circuit. After reviewing requests for reconsideration and clarification and compliance filings, the Department approved VZ-MA's interim UNE rates on May 2, 1997.[621] After the U.S. Supreme Court reinstated the FCC's UNE pricing rules, the Department made these interim UNE rates permanent on March 19, 1999.[622] When the Department affirmed VZ-MA's TELRIC prices after the Supreme Court decision, the Department set up a five-year cycle for evaluating UNE rates – because UNE prices were first set in 1996, the next evaluation is scheduled for 2001.[623]

As noted above, the Department set VZ-MA's UNE rates according to the FCC's TELRIC methodology.[624] The Department first reviewed the model submitted by VZ-MA, and the Hatfield model, submitted by AT&T and MCI. The Department assessed whether each model was reviewable, i.e., whether it is possible to find and understand the financial and numerical relationships inherent in the model. The Department also determined whether each model provided a good representation of a reconstructed local network that will employ the most

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621 VZ-MA Application, Appdx. H, Vol. 36, Tab 250 (DTE Phase 2-B and Phase 4-B Order).

622 VZ-MA Application, Appdx. F, Vol. 8, Tab 157 (D.T.E.'s Order Granting VZ-MA's Motion to Adopt Permanent UNE Rates).

623 Id. at 15-16.

624 VZ-MA Application, Appdx. H, Vol. 27, Tab 162 at 5-6 (DTE's Phase 4 Order re. TELRIC).

efficient technology for reasonably foreseeable capacity requirements. After deciding on the appropriate model to use, the Department determined whether the various financial inputs to the model were appropriate.[625]

625 Id. at 8-9.

The Department concluded that both models were reviewable, but that the model submitted by VZ-MA provided a better representation of a reconstructed local network that will employ the most efficient technology for reasonably foreseeable capacity requirements. To model loop plant, VZ-MA took a random sample of existing wire centers based upon their density characterization, and determined the average loop length and loop characteristics to estimate loop costs.[626] For switching equipment, VZ-MA used its existing configuration of digital switches where they exist, and replaced analog switches with digital switches in the model. For transport technology, VZ-MA assumed an all-SONET configuration. For the feeder portion of the loop, VZ-MA assumed 100 percent fiber optic in the feeder. The Department found VZ-MA's technology choices for its model to be appropriately forward-looking.[627]

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[626] Id. at 13-14.

[627] Id. at 14-17.

As a second step, the Department reviewed the inputs to the VZ-MA model. To address the appropriate sizing of the network, the Department considered demand quantities, fill factors, and investment amounts (e.g., equipment costs).[628] The Department accepted VZ-MA's calculations to size its network, based on current demand on each network component and estimates of the amount of material investment needed to serve that demand. VZ-MA used various utilization factors for various types of plant investment, including factors for components of the network that grow incrementally in capacity in response to changes in demand, distribution cable, and fiber feeder.[629] To estimate investment amounts, VZ-MA based local loop costs on its Outside Plant Planner's Costing Tool and an engineering and construction system, and the costs from recent outside plant jobs. Switching investment were determined by an engineering costing model, and other elements were costed using recent discounted vendor prices. The Department required VZ-MA to correct inputs for switch costs to reflect lines currently active in service plus others it demonstrated are appropriate.[630]

In terms of switching investment, WorldCom argued that VZ-MA did not use an appropriate discount off the manufacturer's listed prices for switches and other electronic equipment. WorldCom asserted that, if the network were being purchased in whole today, VZ-MA would obtain a relatively large discount from equipment suppliers. In response to this

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628 Id. at 27.

629 Id. at 29-30.

630 Id. at 36.

contention, the Department found "that it is speculative to assume what the manufacturers' discounts would be if a TELRIC network were being constructed today. Suppliers' discounts are a function of both supply and demand in the marketplace."[631] WorldCom subsequently filed a motion for reconsideration of this finding, and the Department found that "[VZ-MA] used its current vendor discounts in the TELRIC study, and, as described by [VZ-MA] in its reply to [WorldCom's] motion, we found these to be appropriate and supported by the record . . . [WorldCom's] motion is therefore denied."[632]

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631 Id. at 37.

632 VZ-MA Application, Appdx. K, Vol. 13, Tab 16 at 9-10 (DTE's Phase 4-A Order re Motions for Reconsideration, Clarification and Recalculation).

To determine the appropriate cost of capital, the Department followed FCC guidance to produce rates for monopoly elements and services that approximate what the ILEC would be able to charge if there were a competitive market for such offerings.[633] To accomplish that task, the Department assessed the level of risk that VZ-MA would face in its provision of UNEs in a competitive market for such offerings, which in turn was used to determine the appropriate methodology for estimating the cost of capital to be used in the TELRIC studies.[634] The Department concluded that the level of business risk that VZ-MA would face with regard to the provision of UNEs is higher than that which would apply to a monopoly bottleneck facility, a

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633 VZ-MA Application, Appdx. H, Vol. 27, Tab 162 at 39 (DTE's Phase 4 Order re TELRIC).

634 Id.

facility that, by definition, is not subject to bypass.[635] The Department viewed UNEs as a hybrid set of assets, having some of the characteristics of monopoly bottleneck facilities while also displaying some characteristics of speculative, unsecured investments.[636]

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635 Id. at 44.

636 Id. at 46.

To determine the cost of equity, the Department adopted VZ-MA's discounted cash flow model which draws upon a group of industrial companies (the Standard & Poor 400), as a reasonable surrogate for comparing the likely risk of building and leasing UNEs. The Department determined that a 13.5 percent return on equity was appropriate based on the record of the proceeding.[637] The cost of debt was determined by averaging the costs of debt presented by AT&T and VZ-MA, and was set at 7.8 percent.[638] The Department accepted VZ-MA's proposed capital structure based on market-based percentages of debt and equity in the capital structures of the Standard & Poor ("S&P") 400, which is 23.51 percent debt and 76.49 percent equity. The Department used the FCC projection lives in the FCC's last represcription of VZ-MA's

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637 VZ-MA Application, Appdx. K, Vol. 13, Tab 16 at 6 (DTE's Phase 4-A Order re. Motions for Reconsideration, Clarification and Recalculation).

638 VZ-MA Application, Appdx. H, Vol. 27, Tab 162 at 52 (DTE's Phase 4 Order re TELRIC).

depreciation rates.[639] The weighted average cost of capital that results from these findings is 12.16 percent.

[639] Id. at 56.

To calculate forward-looking joint and common costs, the Department excluded retail related expenses from the TELRIC study.[640] Joint and common expense factors were presented as a ratio of expenses to investments. The Department adopted VZ-MA's calculation, which used current expenses allocated equally across investment accounts. To determine the appropriate level of expenses, the Department required VZ-MA to reduce its current expenses to account for likely efficiency improvements in the face of improved technology utilization and competitive forces. The Department used the operating expenses per line in service for ten BOC local exchange carriers as a surrogate for the level of expenses at or near the average of its competitors.[641] Regarding geographic deaveraging of costs, the Department directed VZ-MA to create four density zones, (metro, urban, suburban, and rural) in recognition that the cost of UNEs are properly characterized by reference to the density, in loops per square mile, of the VZ-MA wire centers.[642]

iii. Non-recurring Charges

In several Phase 4 Orders, the Department also addressed the non-recurring charges

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640 Id. at 57.

641 Id. at 60.

642 Id. at 63-64.

("NRCs") that would apply to the ordering and provisioning of UNEs. The Department reviewed TELRIC NRC models submitted by VZ-MA, and by AT&T and WorldCom. The Department ultimately adopted VZ-MA's NRC model, with certain modifications, as the appropriate model for NRCs in Massachusetts.[643]

643 Phase 4-L Order at 31.

VZ-MA's NRC model relies on three general sets of inputs: (1) a description of the tasks and people that are involved in relevant ordering and provisioning functions; (2) the identification of labor rates of those members of the VZ-MA work force involved in these tasks, which consisted of directly assigned labor rates for each job function code; and (3) an assessment of the time required to carry out the various tasks.[644] To determine the time necessary to carry out the tasks, VZ-MA carried out a work flow analysis to establish the functions to complete each process; it then conducted interviews and panel discussions with subject matter experts to develop work time estimates including a minimum, maximum, and most likely time to complete each task, which were weighted and averaged. VZ-MA next validated the estimates by conducting a review process performed by a panel of subject matter experts and comparing actual work times with estimates.[645]

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644 Id. at 6.

645 Id. at 6-7.

The Department made the following adjustments to VZ-MA's model. First, the Department required VZ-MA to reduce its fallout rate (the rate at which orders fallout of the electronic systems and must be handled manually) from 15 percent to two percent as an appropriate reflection of forward-looking technology that will be in place to process service orders.[646] Also, in order to make the network assumptions in the recurring costs TELRIC and NRC TELRIC studies consistent, the Department required VZ-MA to assume 100 percent fiber in the feeder for its NRCs.[647] The Department required VZ-MA to assume IDLC central office technology, which eliminates the need for manual cross connections on the main distribution frame, in its NRC study, to be consistent with its recurring cost study.[648] In order to compensate for possible bias inherent in the system used by VZ-MA to develop its work time estimates, the Department required VZ-MA to use its subject matter experts' minimum time estimates for each task.[649] VZ-MA submitted a new NRC cost study on February 9, 2000 in compliance with the Phase 4-L Order. This new cost study was approved by the Department with minor modification on September 15, 2000.

iv. Conclusions

The Department confirms that VZ-MA is in compliance with the terms of checklist item 2

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646 Id. at 16.

647 Id. at 19.

648 VZ-MA Application, Appdx. H, Vol. 73, Tab 680 at 12 (DTE's Order re. WorldCom's Motion for Reconsideration and VZ-MA's Motion for Reconsideration and Clarification).

in terms of pricing for network elements. VZ-MA's network element prices in Massachusetts unquestionably are based on the TELRIC of providing those elements. VZ-MA is charging the recurring and non-recurring rates that were approved by the Department pursuant to the TELRIC methodology. The Department has established UNE prices in Massachusetts consistent with basic TELRIC principles. One cannot read the various Department TELRIC Orders and reasonably conclude otherwise. In addition, on October 13, 2000, VZ-MA filed and the Department approved a tariff with lower rates for local switching, transport, and ports.

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649 Appdx. D at 25 (Phase 4-L Order).

Some CLECs argue, however, that the Department committed errors in fact findings on matters so substantial that the end result falls outside the range that the reasonable application of TELRIC principles would produce. In particular, some CLECs contend that the local switching rates in Massachusetts are too high and that the cost of capital — an input to all UNE prices — is too high. The Department submits that these contentions are incorrect for the following reasons.[650]

First of all, arguments that point to differences between VZ-MA's actual or historic costs and the costs used in the TELRIC analysis are misplaced. In a TELRIC environment, it is irrelevant whether the company's actual incremental costs are different from the costs assumed for a future network. For example, arguments that VZ-MA's actual cost of capital is lower than the costs assumed by the Department in calculating TELRIC[651] miss a central point of a TELRIC

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650 A more thorough and detailed discussion of the Department's findings and rationale related to TELRIC inputs can be found in the following Orders: Phase 4 and Phase 4-L. VZ-MA Application, Appdx. H, Vol. 27, Tab 162 (DTE's Phase 4 Order re. TELRIC); Appdx. D (Phase 4-L Order).

651 See, e.g., VZ-MA Application, Appdx. B, Vol 38, Tab 460 at 12-14 (AT&T July

analysis. TELRIC is not designed to match historic or actual costs of the ILEC. Therefore, the fact that a TELRIC-derived cost is greater or less than the company's actual costs is not relevant to a determination of whether a state commission has reasonably applied TELRIC principles. The Department has addressed this point in various TELRIC Orders:

Supplemental Comments) ("[VZ-MA's] risk levels have not risen, and its debt-to-equity ratio has not decreased . . . In the real world, the cost of equity capital has fallen substantially since 1996. Today, the cost of equity capital for [VZ-MA] is closer to 9.0 percent . . .Based on current data, the forward-looking weighted average cost of capital for [VZ-MA] is approximately 8.59 percent.")

The pricing of UNEs, per the TELRIC method, is not an exercise in cost recovery. Its purpose, as stated by the FCC, is to provide an estimate of forward-looking costs of a hypothetical telecommunications network using efficient technology to serve current and reasonably expected levels of demand and customers, assuming the same geographic distribution of central offices as are currently in place. Local Competition Order at ¶ 685; Phase 4 Order at 14-15. . . . A TELRIC proceeding is not the place to enable or ensure that an incumbent local exchange carrier recovers its historic costs.[652]

652 Appdx. D at 46 (Phase 4-L Order).

Related to this point is the contention that "new" information and the fact that VZ-MA has proposed lower rates in another jurisdiction in an ongoing proceeding are evidence that a previously-decided TELRIC analysis is not consistent with TELRIC principles.[653] This argument leads to a slippery-slope. If new information in an industry with ever-changing technology and market conditions, such as telecommunications, makes a TELRIC analysis obsolete or incorrect, then a regulatory agency would be in a constant cycle of doing and re-doing a TELRIC analysis — much like the Navy starting to repaint at the bow of a ship as soon as it finishes painting the stern. The forward-looking nature of TELRIC should make it less susceptible to short-term cost anomalies, but because of the very nature of an industry with rapid changes in technological and market conditions, TELRIC rates proposed or decided in the year 2000 will differ from those proposed or decided in 1999, 1998, 1997, etc. That fact alone does not invalidate the results of an earlier analysis that must necessarily take place at a point in time, and that is why the FCC is correct to focus its evaluation of state pricing decisions on the methodology used and not on the subjective judgments about appropriate inputs.[654] The Department addressed this argument about

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653 See, e.g., arguments by WorldCom about "new" information related to manufacturers' discounts for switching investment: "Based on newly presented evidence, the NYPSC has concluded that the substantial discounts were not uniquely associated with the analog-to-digital switch replacements, but are also available for all new switch purchases. Bell Atlantic has not disputed the accuracy of this new evidence in the New York proceeding and, in fact, has admitted that it 'mis-spoke' when it previously stated that the higher discount level was limited to analog-to-digital replacements." VZ-MA Application, Appdx. B, Vol. 37, Tab 455 at 7 (WorldCom Ankum/Huffman Decl.).

654 See also, AT&T Corp. v. FCC, 220 F.3d 607, 617 (D.C. Cir. 2000): "If new information automatically required rejection of section 271 applications, we cannot imagine how such

new information in its decision affirming TELRIC rates as permanent rates and setting a five-year review cycle for TELRIC:

> The CLECs argue that because certain information contained in [VZ-MA's] 1996 cost study on UNE rates may not be the most recent information available to [VZ-MA] in March, 1999, the rates in that 1996 cost study are necessarily suspect. The claim that more current data exist today is likely always to be true for any telecommunications cost study performed several years ago.[655]

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applications could ever be approved in this context of rapid regulatory and technological change."

655 VZ-MA Application, Appdx. F, Vol 8, Tab 157, at 14 (DTE's Order Granting VZ-MA's Motion to Adopt Permanent UNE Rates).

The envisioned five-year review will occur in 2001, in any event. A five-year time period for a review of TELRIC and resale rates is appropriate for several reasons: (1) it roughly matches the time period used by the Department for review of VZ-MA's retail price cap plan, which is six years; (2) it is generally comparable to the historic time period between rate cases for many utilities; (3) VZ-MA notes that the five-year period is coterminous with the terms of many of its existing contracts with CLECs;[656] (4) AT&T's own witness in an earlier proceeding supported a five-year review;[657] and (5) it is a good balance between the need to update findings and the administrative burden of reviewing cost studies for both the regulators and the participants.

656 Id.

657 Id.

Second, some of the criticisms of our TELRIC judgments are made on the basis that other state commissions came to different conclusions on similar issues.[658] This criticism is unfounded. As the FCC recognized, while TELRIC consists of "methodological principles" for setting prices, states retain flexibility to consider "local technological, environmental, regulatory, and economic conditions."[659] That recognition is consonant with the Act and with the principles of federalism that imbue the Act. And it was affirmed by the D.C. Circuit Court of Appeals in upholding the FCC's Bell Atlantic New York Order: "In other words, while state commissions use TELRIC to establish rates, application of TELRIC principles may result in different rates in different states."[660] In addition, the determination about whether a state has reasonably applied TELRIC principles or whether the results are within a range that reasonable application of TELRIC principles would produce should be based on an assessment of the totality of UNE rate decisions,

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658 See, e.g., VZ-MA Application, Appdx. B, Vol. 38, Tab 460 at 12 (AT&T July Supplemental Comments); VZ-MA Application, Appdx. B, Vol. 37, Tab 455 at 3-4 (WorldCom Ankum/Huffman Decl.). "Nine other states in the [VZ-MA] territory have adopted costs of capital for use in setting UNE rates in accordance with TELRIC, and all have settled on rates that are substantially lower than the one selected in Massachusetts."

659 Local Competition First Report and Order, 11 FCC Rcd at 15812.

660 AT&T Corp. v. FCC, 220 F.3d 607, 615 (D.C. Cir. 2000).

and should not be based on a network-by-element analysis. The Department has established recurring and non-recurring TELRIC-based rates for a wide range of network elements, including, most recently, line sharing. Some CLECs criticize the Department-approved rates for particular network elements – a small subset of the total – but the FCC's evaluation of checklist compliance must be broader and should take into account all of the Department's UNE rate decisions.

Third, some criticisms of the Department's judgments are also based on purported differences between the conclusions reached by the Department and the conclusions underpinning the FCC's findings related to calculating universal service support.[661] Using the FCC's findings in that case as evidence of problems in setting UNE prices is exactly what the FCC twice cautioned parties not to do.[662] Also, the FCC has said explicitly that in its evaluation of state pricing

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[661] See VZ-MA Application, Appdx. B, Vol. 37, Tab 455 at 8 (WorldCom Ankum/Huffman Decl); see also VZ-MA Application, Appdx. B, Vol. 38, Tab 460 at 10 (AT&T July Supplemental Comments). WorldCom also pointed out in a recent ex parte filing to the FCC that the Department-approved cost of capital of 12.6 percent is greater than the FCC's proxy cost of capital of 11.25 percent. However, CLECs have elsewhere commented that the average cost of capital in a subset of other states is 10.31 percent as support for their contention that the Massachusetts figure is wrong. Surely if a cost of capital that is 94 basis points lower than the FCC's proxy is reasonable, then a cost of capital that is 91 basis points higher than the FCC's proxy must also be reasonable.

[662] "For universal service purposes, we find that using nationwide averages is appropriate. The [FCC] has not considered what type of input values, company-specific or nationwide, nor what specific input values, would be appropriate for any other purposes. The federal cost model was developed for the purpose of determining federal universal service support, and it may not be appropriate to use nationwide values for other purposes, such as determining prices for unbundled network elements. We caution parties from making any claims in other proceedings based upon the input values we adopt in this Order." FCC 99-304, CC Docket Nos. 96-45, 97-160, Tenth Report and Order at ¶ 32 (rel. November 2, 1999) (emphasis added). "We are not persuaded by AT&T's assertion that in our

decisions in the context of § 271 applications, it will not reject an application because isolated factual findings by a commission might be different from what it might have found if it were arbitrating the matter under § 252(e)(5).[663]

Fourth, we note that some arguments about whether Massachusetts UNE rates are in compliance with the Act's requirements are blatantly results-oriented. For example, WorldCom explicitly concedes that it chooses to contest a state's pricing determination in a

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Universal Service proceeding, we disallowed the cost recovery of 'augmented switches,' and that Bell Atlantic's recovery includes such cost recovery, which violates our rules. . .We specifically cautioned parties from making any claims in any other proceedings based on the inputs adopted in the Universal Service Tenth Report and Order." Bell Atlantic New York Order at ¶ 245.

663 Id. at ¶244.

§ 271 proceeding not on the basis of whether the rates are TELRIC-based, which is the checklist requirement, but whether the rates produce a margin between costs and revenues sufficient for WorldCom to enter.[664] The Department does not conclude one way or another whether these allegations are correct for the simple reason that such an analysis is not relevant to determining compliance with the checklist.[665] In addition to being irrelevant, such a results-oriented analysis has no place in administrative law, where evidence, precedent, and legal requirements determine whether an administrative finding is reasonable. The argument is a red herring and should be

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664 "When Verizon applied for long-distance authority in New York, the New York commission's rates might not have been perfect, they might not have been exactly at the level that a perfect TELRIC methodology would dictate, but they allowed entry. Those rates in New York did not constitute a barrier to entry, like the rates in Massachusetts currently do. And as a result, WorldCom did not object to Verizon's application for 271 authority in New York. We would have agreed, and did agree, with the parties that the rates in place were not what we believed to be TELRIC rates, but they allowed entry, and the New York commission agreed that, yes, it was necessary for them to revisit their UNE rates." VZ-MA Application, Appdx. B, Vol 49, Tab 565 at 5599 (Transcript of Oral Argument Held 09/08/00).

665 While we voice no opinion on the assertion that there is an insufficient margin between expected retail revenues and costs for the UNE-P in Massachusetts, we make the following observations on this point: (1) each party that presented a margin analysis to us, including VZ-MA, AT&T, WorldCom, and Z-Tel, ended up with different numbers on both the revenue side and cost side of the equation, which suggests that the results of a margin analysis are dependent on assumptions about a number of factors, including local usage, toll revenue, vertical service revenue, access revenue, and customer mix across geographic zones; (2) there is UNE-P competition in Massachusetts; and (3) we strongly urge the FCC to very carefully consider the ramifications of requiring a specified margin between UNE-P rates (which are cost-based) and expected retail revenues (which are usually derived from rates that are not cost-based). Such a requirement likely would preclude § 271 approval in high-cost, rural states and probably many other states as well. It is a line of argument fraught with risk to orderly implementation of the Act.

recognized and rejected as such. We are required to judge whether UNE rates are based on TELRIC — not how those TELRIC rates compare to retail rates. As we stated in our initial TELRIC order, such a comparison is only relevant to calculating the wholesale discount for resale purposes.

> The standard for pricing individual network elements and interconnection is different from the standard we employed in Phase 2 to calculate the resold services (e.g., residential local exchange service). There we determined the appropriate discount from retail prices that should be used to calculate the wholesale price for resold services by environment. Thus, the retail price was the starting point of the analysis. Here, the retail price evaluating which of the ILEC's expenses would be avoided in a wholesale environment is not relevant. Instead, we are constructing a "bottoms-up" analysis of costs.[666]

As noted above, the Department anticipates that most of the criticism of VZ-MA's UNE rates will focus on switching rates. In terms of those rates, three other points merit comment. First, the FCC already has been asked to reject a § 271 application on the basis that the state commission improperly used the switch augmentation discount rather than the new switch discount.[667] In that case, the FCC specifically rejected that request: "We reject AT&T's allegation that Bell Atlantic's switching prices violate TELRIC principles because they fail to account for any cost savings from the steep switch discounts that an efficient carrier operating in

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666 VZ-MA Appdx. H, Vol. 27, Tab 162 at 7-8 (DTE's Phase 4 Order re TELRIC).

667 See Bell Atlantic New York Order at ¶¶ 242-245.

the long run would unquestionably receive."[668] Second, on July 24, 2000, the Department approved an amendment to the interconnection agreement between VZ-MA and

668 Id. at ¶ 242.

Z-Tel which, among other things, provides for a promotional discount of between 30 and 50 percent for local switching usage. The amendment specifically provides that the same promotional discounts shall be made available to other carriers operating in Massachusetts. VZ-MA discusses this amendment in its filing.[669] VZ-MA notes that no other carrier has opted in to the provisions of the amendment as of September 20, 2000.[670]

The negotiations between VZ-MA and Z-Tel, that led to the amendment were undertaken by both Z-Tel and VZ-MA at the request of the Department, in order to facilitate Z-Tel's market entry. It may be suggested that the Department requested that these negotiations take place based on a conclusion that VZ-MA's current switching rates are not TELRIC-compliant. This is not true. The FCC should view the promotional discounts in the VZ-MA/Z-Tel agreement as being in the same vein as the carrier-to-carrier promotions in the recent Bell Atlantic/GTE license transfer approved by the FCC — as a stimulant for competition, and not as an admission that undiscounted rates are not in compliance with applicable requirements. In approving the license transfers between Bell Atlantic and GTE, the FCC stated, "[W]e anticipate that the carrier-to-

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669 See VZ-MA Application, Appdx. A, Tab 7 at ¶¶ 32-34 (Mudge Decl.).

670 Id. at ¶ 34.

carrier promotions for residential service will spur other entities to enter these markets and establish a presence in residential markets that can be sustained after expiration of the promotional discounts."[671]

Third, as noted earlier, on October 13, 2000, VZ-MA filed and the Department approved a tariff with lower rates for switching, transport, and ports. The rates in this tariff are not identical to the switching, transport and port costs currently in effect for VZ-NY, due to differences in rate structure, but the resulting switching, transport, and port costs for CLECs are virtually identical to those same costs for New York, which the FCC already found to be reasonable and in compliance with TELRIC in the Bell Atlantic New York Order. The filing and approval of this tariff should put to rest any arguments that UNE rates in Massachusetts are not TELRIC-compliant.

For all of the reasons discussed above, the FCC should conclude that VZ-MA's rates for

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671 Application of GTE Corporation and Bell Atlantic Corporation For Consent to Transfer Control of Domestic and International Sections 214 and 310 Authorizations and Application to Transfer Control of a Submarine Cable Landing License, FCC 00-221, CC Docket No. 98-184, Memorandum Opinion and Order, at ¶ 352 (rel. June 16, 2000).

UNEs are in compliance with the requirements of the Act. The Department has long recognized that prices based on incremental cost are most consistent with a market environment (see earlier discussion of D.P.U. 1731), and the Department was an early proponent of using forward-looking cost methods for calculating UNE prices (see Massachusetts comments in FCC Docket No. 96-98, filed in May, 1996). The Department has consistently and faithfully applied the FCC's TELRIC methodology since its inception, and the FCC should affirm that UNE rates in Massachusetts are consistent with its TELRIC methodology.

C. Checklist Item 3 - Poles, Ducts, Conduits, and Rights-of-Way

1. Standard of Review

Under § 271(c)(2)(B)(iii), BOCs are required to provide "[n]ondiscriminatory access to the poles, ducts, conduits, and rights-of-way owned or controlled by the [BOC] at just and reasonable rates in accordance with the requirements of section 224."[672] Section 224 permits a utility to deny access to its poles, etc., on a nondiscriminatory basis, "where there is insufficient capacity and for the reasons of safety, reliability and generally applicable engineering purposes." Section 224 further addresses the maximum rates a utility may charge for pole attachments.[673]

a. Background of Relevant Department Precedent

In 1984, the Department adopted regulations pursuant to Massachusetts G.L. c. 166, § 25A, giving the Department the authority to regulate the rates, terms, and conditions of utility

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672 47 U.S.C. § 271(c)(2)(B)(iii).

673 47 U.S.C. § 224.

(including telephone companies) pole attachments and conduits, and to address complaints by licensees.[674] Since 1984, the Department has addressed only one complaint concerning VZ-MA pursuant to those regulations. In 1992, the Department resolved a complaint over conduit license fees by adopting a new methodology by which VZ-MA was required to calculate annually conduit license fees.[675]

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674 Appdx. B (CATV Rulemaking Order, D.P.U. 930 (1984)); 220 C.M.R. §§ 45.00 et seq.

675 Appdx. C (Complaint of Greater Media, Inc., D.P.U. 91-218 (1992)).

On July 24, 2000, the Department adopted regulations governing access to pole attachments, ducts, conduits, and rights-of-way pursuant to G.L. c. 166, § 25A, and 220 C.M.R. §§ 45.00 et seq.[676] These revised regulations include procedures designed to ensure that access to poles, ducts, conduits and rights-of-way is provided on a nondiscriminatory basis. Before the completion of this rulemaking, Massachusetts had not yet taken the requisite steps to exercise full jurisdiction over discriminatory access claims, although the Department has for some time regulated rates, terms and conditions for pole attachments, ducts, conduits and rights-of-way. Accordingly, the Department opened the rulemaking to benefit competition by requiring entities subject to G.L. c. 166 § 25A to provide nondiscriminatory access to any pole, duct, conduit, or right-of-way under their ownership or control, and by establishing regulations for discriminatory access complaints.

2. Discussion

a. Background

676 See VZ-MA Application, Appdx. C, Vol. 1, Tab 32 (D.T.E. Final Order Promulgating Final Regulations) (July 24, 2000).

VZ-MA uses standard pole attachment and conduit license agreements to provide access to its poles, ducts, conduits, and rights-of-way.[677] The same standard license agreements are used by VZ-MA for all of its New England states and VZ-MA also employs a centralized License Agreement Group ("LAG") to handle requests for access to its poles, ducts, conduits, and rights-of-way.[678] VZ-MA states that it has amended its standard license agreements to conform with the Act and has not enforced terms and conditions contained in its existing license agreements that may conflict with the Act.[679]

As of the second quarter of 2000, VZ-MA had 362 pole attachment agreements and 86

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677 VZ-MA Application, Appdx. B, Vol. 32a-b, Tab 423 at 37 (VZ-MA May Supplemental Comments).

678 Id. at 38.

679 Id. at 39.

conduit occupancy agreements in place.[680] To date, VZ-MA has not received any requests for access to private rights-of-way.[681] During the second quarter of 2000, VZ-MA licensed over 5,000 pole attachments, which is 60 percent more poles than it licensed during the second quarter of 1999.[682] Additionally, during the first half of 2000, VZ-MA licensed over 170,000 feet of conduit, which is nearly three times as many feet of conduit as it licensed during the first half of 1999.[683]

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680 VZ-MA Application, Appdx. B, Vol. 42, Tab 494 ¶ 63 (VZ-MA August Supplemental Checklist Aff.).

681 Id.

682 VZ-MA Application, Appdx. A, Tab 1 ¶ 198 (Lacouture/Ruesterholz Decl.).

683 Id. at ¶ 199.

According to VZ-MA, once an application for a pole attachment, or access to ducts or conduits is received, VZ-MA assigns a License Administration Coordinator ("LAC") who is responsible for coordinating all aspects of the application process including providing access to maps, records, and other information; assigning available space; and coordinating any necessary field surveys.[684] VZ-MA states that applications are processed on a first come, first-served basis.[685] VZ-MA states that it evaluates requests for access based on widely-accepted standards

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684 Id. at ¶ 190.

685 VZ-MA Application, Appdx. B, Vol. 12, Tab 160 at 45 (Transcript of Technical Session Held 11/1/99).

regarding capacity, safety, reliability, and general engineering.[686] VZ-MA states that its procedures require completion of make-ready work and issuance of licenses for pole attachments within 180 days and conduit occupancy within 90 days after receiving authorization from the licensee.[687]

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686 VZ-MA Application, Appdx. B, Vol. 12, Tab 161 at 239-240 (Transcript of Technical Session Held 11/2/99).

687 VZ-MA Application, Appdx. B, Vol. 42, Tab 494 ¶ 64 (VZ-MA August Supplemental Checklist Aff.).

VZ-MA states that it completed the make-ready work for pole attachment requests in the first quarter of 1999 in an average of 132 days for licensees, compared with an average of 171 days for similar work for itself.[688] During the same period, VZ-MA states it completed the make-ready work for conduit occupancy requests on average within 94 days of receipt of payment from the licensee of the make-ready estimate, compared with 216 days for itself.[689] In May through July 2000, VZ -MA completed the make-ready operations for pole attachments within 80 days for CLECs and Cable Antenna Television ("CATV") companies, compared with 151 days for make-ready work for itself.[690] Moreover, in May through July 2000, VZ-MA completed the make-

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688 VZ-MA Application, Appdx. B, Vol. 12, Tab 160 at 150 (Transcript of Technical Session Held 11/1/99).

689 Id. at 129.

690 VZ-MA Application, Appdx. A, Tab 1 ¶ 201 (Lacouture/Ruesterholz Decl.).

ready work for conduit occupancy within 35 days for CLEC and CATV companies, compared with 75 days for make-ready work for itself.[691]

691 Id.

During the first quarter of 2000, VZ-MA competed make-ready work and issued licenses for pole attachments in an average of 130 days (166 days for CLECs and other common carriers ("OCCs")), 144 days for cable companies, and 38 days for OCCs.[692] The average number of days for make-ready work for conduit occupancy for the first quarter of 2000 was 90 days.[693] During the second quarter of 2000, VZ-MA received 30 requests for access to records and was able to provide the information requested for more than 80 percent of those requests within five business days after receipt of the request.[694] According to VZ-MA, it responded to these requests "on an average of approximately four business days."[695] VZ-MA states that it has added additional personnel to its LAG and has made managerial changes in its LAG staff to respond to requests by

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692 VZ-MA Application, Appdx. B, Vol. 42, Tab 494 ¶ 64 (VZ-MA Supplemental Affidavits).

693 Id.

694 Id. at ¶ 65.

695 Id.

licensees more effectively and efficiently.[696] Additionally, at least 90 percent of the time during the second quarter of 2000, VZ-MA states that it was able to satisfy CLEC requests for access to poles without make-ready work.[697] According to VZ-MA, in those instances, CLECs gained access to a pole, conduit and duct immediately upon the issuance of a license.[698]

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696 VZ-MA Application, Appdx. B, Vol. 32a-b, Tab 423 at 38 (VZ-MA May Supplemental Comments).

697 VZ-MA Application, Appdx. A, Tab 1 ¶ 194 (Lacouture/Ruesterholz Decl.).

698 Id.

Beginning in April 1999, VZ-MA conducted a series of licensee workshops with approximately 20 licensees participating, including CLECs from throughout New England.[699] The purpose of these workshops was to improve communications between VZ-MA and CLECs, to provide training and information on VZ-MA's licensing procedures, and to obtain licensee input for updates to the terms and conditions of the licensing agreements.[700] As a result of the workshops, VZ-MA made several important modifications to its licensing procedures. For example, under VZ-MA's revised conduit occupancy procedures, licensees now have three project management options for conduit access: (1) if a licensee has identified a conduit route, and no conduit and manhole breakout is available, then VZ-MA will not explore alternatives; (2) a licensee may request that VZ-MA assist in its exploration of conduit route alternatives if the CLEC's chosen route is not available; and (3) a licensee may ask for VZ-MA's assistance in developing available routes of access.[701] VZ-MA contends that all of its standardized license procedures are designed to ensure that competitors seeking access are treated consistently and in an equitable manner.

In summary, VZ-MA argues that it provides nondiscriminatory access to its poles, ducts, conduits, and rights-of-way at just and reasonable rates in accordance with the requirements of §

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699 Id. at ¶ 191.

700 Id.

701 Id.

224.[702] VZ-MA maintains that it treats all licensees in a similar manner because it uses standard license agreements for several New England states and because it maintains a centralized LAG that ensures consistent and efficient service to all licensees.[703] VZ-MA contends that none of the issues raised by the CLECs rises to the level of § 271 non-compliance.

b. Access to Poles

[702] VZ-MA Application, Appdx. B, Vol. 32a-b, Tab 423 at 38 (VZ-MA May Supplemental Comments).

[703] Id.

CLECs challenge a number of VZ-MA's policies concerning make-ready work for pole attachments.[704] NECTA argues that VZ-MA should complete make-ready work within 60 days as opposed to the present 180-day interval.[705] In addition, RCN and NECTA contend that licensees should be allowed to use their own workforce for make-ready work and that VZ-MA's prohibition against CLECs using their own workers violates FCC guidelines.[706] RCN contends that VZ-MA unreasonably prevents CLECs from mitigating excessive and unnecessary make-ready work by not allowing CLECs to "box" poles,[707] use extension brackets, or make temporary attachments to poles.[708] RCN alleges that these methods of aerial construction have wide-spread use by cable companies and CLECs as well as VZ-MA.[709] For example, RCN states that it applied for 137 pole attachments on Hancock Street in Quincy, Massachusetts in 1999, and a survey revealed "a heavily

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704 VZ-MA Application, Appdx. B, Vol. 38, Tab 461 at 8 (NECTA Initial Comments); VZ-MA Application, Appdx. B, Vol. 38, Tab 460 at 54 (AT&T July Supplemental Comments); VZ-MA Application, Appdx. B, Vol. 38, Tab 459 at 8 (RCN July Supplemental Comments).

705 VZ-MA Application, Appdx. B, Vol. 49, Tab 565 at 5535 (Transcript of Oral Argument Held 9/8/00).

706 Id. at 5539, 5567.

707 "Box" or "boxing" refers to the practice of arranging wires on opposite sides of a pole. If boxing were acceptable, it would avoid, in many cases, the need to devise vertical space between wires and, therefore, eliminate portions of make-ready work. VZ-MA Application, Appdx. B, Vol. 42, Tab 494 ¶ 70 (VZ-MA August Supplemental Checklist Affidavit).

708 VZ-MA Application, Appdx. B, Vol. 49, Tab 565 at 5564 (Transcript of Oral Argument Held 9/8/00).

709 Id.

loaded pole line with electric, fire alarm, CATV and several CLEC fiber optic attachments, in addition to telephone attachments in certain sections."[710] The survey also revealed that almost all the poles were "boxed" by another CLEC. RCN states that it asked VZ-MA to allow it to box the poles but was denied. RCN contends that VZ-MA has allowed "boxing" of 20 percent of VZ-MA's poles in Quincy but that it will not allow RCN to box any poles.[711]

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710 Id.

711 Id.

In response to criticisms of its make-ready work policies, VZ-MA states that it must comply with its collective-bargaining agreements, which permit only VZ-MA employees to perform work on its own facilities.[712] According to VZ-MA, it may only use outside contractors for this type of work if: (1) emergency conditions exist; (2) VZ-MA does not own the equipment necessary to do the work; or (3) during limited periods of unusual load conditions, VZ-MA's ability to meet its service commitments is in jeopardy, and the existing workforce cannot meet these needs even after the use of overtime and available temporary transfers.[713] In addition, VZ-

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712 VZ-MA Application, Appdx. B, Vol. 42, Tab 494 ¶ 67 (VZ-MA August Supplemental Checklist Aff.).

713 VZ-MA Application, Appdx. B, Vol. 32a-b, Tab 423 at 45 (VZ-MA May Supplemental Comments).

MA states that there are no restrictions in its union contract that prevent CLEC employees from working on CLEC-owned or controlled facilities.[714] VZ-MA also states that its estimates for make-ready work are sufficiently detailed for AT&T to evaluate their accuracy.[715]

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714 Id.

715 Id.

RCN also raises the issue of VZ-MA's policy of limiting pole applications to 2,000 poles in any one area, or district, as an unnecessary restriction on RCN's ability to expand its network in Quincy.[716] According to RCN, this policy effectively limits RCN to 6,000 poles at a time in Quincy, where there are three districts. RCN states that it needs to attach to approximately 9,500 poles in Quincy to fulfill its franchise obligations and that, so far, it has only been granted access to about one-third of that number.[717] RCN contends that it will need to attach to 60,000 VZ-MA poles this year, and that because of VZ-MA's limit on the number of poles that can be ordered at one time, RCN will have no chance to complete its business plans pursuant to its franchise obligations with the City of Quincy.[718]

With respect to VZ-MA's policy limiting the number of poles that can be ordered at one time, VZ-MA contends that the limitation is reasonable because the policy is intended to prevent a single CLEC from using most or all of VZ-MA's carrying plant to the detriment of other CLECs.[719] Moreover, VZ-MA states that its revised pole attachment agreement no longer contains an absolute prohibition on ordering more than 2,000 poles but rather "provides additional flexibility for VZ-MA to work together with a particular CLEC to reach an acceptable

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716 VZ-MA Application, Appdx. B, Vol. 38, Tab 459 at 1 (RCN July Supplemental Comments).

717 VZ-MA Application, Appdx. B, Vol. 49, Tab 565 at 5564 (Transcript of Oral Argument Held 9/8/00).

718 Id. at 5567.

719 VZ-MA Application, Appdx. B, Vol. 32a-b, Tab 423 at 47 (VZ-MA May Supplemental

accommodation based on the unique facts and circumstances, and in consideration of VZ-MA's other requirements for itself and other licensees."[720]

Comments).

720 Id.

VZ-MA responds to RCN's issue involving Quincy, by stating that VZ-MA's policy is not discriminatory because it is a standardized policy that applies to all CLECs, and because VZ-MA has not enforced the 2,000-pole restriction with respect to RCN.[721] VZ-MA explains that between June 14, 1999 and October 1, 1999, RCN submitted a total of 80 applications and that 44 have been licensed, nine are awaiting a check for make-ready work from RCN, and that the remaining two are "in progress."[722] Since the start of RCN's build-out in Quincy, VZ-MA states that it has licensed more than one-third of the poles in Quincy and continues to process RCN's requests for pole attachments in the city of Quincy.[723]

VZ-MA defends its policy against "boxing" of poles, stating that while "some instances of boxing of poles occurred in Quincy, those instances were not in conformance with VZ-MA's

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721 VZ-MA Application, Appdx. B, Vol. 42, Tab 494 ¶ 68 (VZ-MA August Supplemental Checklist Aff.).

722 Id. at ¶ 69.

723 Id.

practices, and we are not 'boxing' poles at new locations for VZ-MA's facilities."[724] In addition, VZ-MA states that the Mayor of Quincy directed that no further boxing of poles be allowed.[725]

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724 Id. at ¶ 70.

725 VZ-MA Application, Appdx. B, Vol. 45, Tab 513 at 4145 (Transcript of Technical Session Held 08/14/99).

Finally, NECTA alleges that VZ-MA imposes unnecessary overlashing restrictions.[726] According to NECTA, overlashing "only became controversial when [VZ-MA] became concerned that the fiber optic cables that cable operators were overlashing could be used for services that [VZ-MA] was providing, or might want to provide in the future."[727] Regarding VZ-MA's overlashing policy, VZ-MA states that it allows overlashing as long as it is performed in accordance with accepted engineering and safety standards and in a manner that does not adversely affect existing attachers' facilities, including VZ-MA's.[728] In response to CLEC concerns, in August, 2000, VZ-MA changed its post-construction inspection policy so that VZ-MA may now

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726 VZ-MA Application, Appdx. B, Vol. 49, Tab 565 at 5537 (Transcript of Oral Argument Held 09/08/00).

727 VZ-MA Application, Appdx. B, Vol. 38, Tab 461 at 14 (NECTA July Supplemental Comments).

728 VZ-MA Application, Appdx. B, Vol. 42, Tab 494 at ¶ 72 (VZ-MA August Supplemental Checklist Aff.).

inspect overlash projects when deemed appropriate and will not charge the licensee for the cost of inspecting poles when they are found to be in compliance.[729]

c. Access to Conduits

CLECs contend that VZ-MA fails to provide nondiscriminatory access to conduits.[730] AT&T and Conversent object to VZ-MA's policy of reserving space in its conduits for VZ-MA's future needs, which, the CLECs argue, prevents the CLECs from meeting their current needs.[731]

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729 VZ-MA Application, Appdx. B, Vol. 46, Tab 544 (VZ-MA's Response to DTE Record Request 318).

730 VZ-MA Application, Appdx. B, Vol. 49, Tab 565 at 5533 (Transcript of Oral Argument Held 09/08/00).

731 Id.

AT&T also contends that VZ-MA takes too long to process conduit applications. AT&T asserts that VZ-MA fails to meet the 45-day period for processing applications. Specifically, AT&T claims that VZ-MA's so-called "Procedure 9" violates FCC rules because it allows VZ-MA seven days from receipt of an application to send the applicant a written statement for the estimated costs to perform the "Conduit Record Search and Manhole Survey."[732] This, according to AT&T, lengthens VZ-MA's processing interval from the stated 45-day interval to 52 days.[733] Even given the lengthened interval, AT&T asserts that VZ-MA frequently misses the 52-day period.[734]

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732 VZ-MA Application, Appdx. B, Vol. 20, Tab 227 at 2528 (Transcript of Technical Session Held 12/02/99).

733 Id.

734 Id.

AT&T also contends that VZ-MA's conduit policy is discriminatory. According to AT&T, VZ-MA will not lease a full duct to CLECs if it believes that the CLEC will not need all of the duct at that time, but requires the CLEC to pay the cost of full duct.[735]

[735] Id. at 2529-2530.

In addition, AT&T and Conversent contend that VZ-MA unnecessarily inflates the cost of make-ready work for CLECs by preventing CLECs from using their own workforce or vendors.[736] Conversent also complains about the lack of intervals for the processing and provisioning of make-ready work by VZ-MA, leading to considerable delays in obtaining access to conduits.[737] AT&T also contends that VZ-MA does not adequately itemize or explain make-ready work estimates.[738] Finally, AT&T and Conversent contend that VZ-MA does not allow them reasonable access to review plats because VZ-MA claims they are proprietary.[739]

Concerning its conduit access policies, VZ-MA states that AT&T's interpretation of the 45-day requirement is unreasonable. According to VZ-MA, "it is appropriate that all application-related intervals, including this one, be measured from the date all necessary paperwork and

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736 Id. at 2530, 2538.

737 Id. at 2538.

738 Id. at 2655-2658

739 Id. at 2560-2561, 2730-2737.

applicable fees are received to the date all work is complete."[740] VZ-MA also contends that its performance measurements indicate that it does comply with the stated intervals for conduit application processing.[741]

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740 VZ-MA Application, Appdx. B, Vol. 32a-b, Tab 423 at 42, n.23 (VZ-MA May Supplemental Comments).

741 Id.

VZ-MA states that it provides CLECs with conduit plats, subject to redaction of proprietary and competitively sensitive information and execution of a non-disclosure agreement.[742] VZ-MA also states that this practice is the same as the one followed by VZ-NY.[743] In addition, VZ-MA argues that its policy with regard to duct size is reasonable. VZ-MA explains that the policy is designed to make sure that a CLEC obtains only as much space in a conduit as is needed.[744] In addition, VZ-MA disagrees with the CLECs' claim that it charges CLECs for a full conduit even though a CLEC is permitted to use only part of it. VZ-MA states that it applies make-ready work charges only once and space charges are set proportionately.[745]

3. Conclusions

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742 Id. at 48.

743 Id.

744 Id. at 45.

745 Id. at 46.

In response to certain licensees' concerns and suggestions about the terms and conditions of VZ-MA's pole attachment and conduit license agreements, VZ-MA conducted several workshops with licensees to obtain CLEC's comments in order to revise these agreements.[746] VZ-MA has since updated its pole attachment and conduit license agreements, incorporating many of the changes suggested by licensees.[747] For example, VZ-MA has included in its revised pole attachment and conduit licensing agreements such changes as: (1) including a 45-day requirement to complete field surveys; (2) including a commitment that VZ-MA will strive to complete make-ready work within 90 days for conduit access and 180 days for pole attachments; (3) modifying the language concerning the limit on the number of pole applications to preserve VZ-MA's right to limit, if necessary, (rather than strictly prohibit) the filing for pole attachments to no more than 2,000 poles on all pending applications by each CLEC; (4) providing CLECs with the ability to access VZ-MA's pole and conduit records; and (5) eliminating provisions that obligated a CLEC to bear the costs for make-ready work done for VZ-MA's own requirements.[748]

The Department has reviewed VZ-MA's revised license agreements and finds that the terms and conditions contained in both agreements are reasonable, nondiscriminatory and comply with the requirements set forth in the Act. In addition to the respective license agreements, the Department notes that VZ-MA administers access requests through a LAC who is responsible for

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[746] Id. at 39.

[747] Id.

[748] Id. at 40.

coordinating all aspects of the application from providing access to maps, records, and other information, assigning available space, and coordinating any necessary field surveys. The record indicates that license applications are processed on a first come, first served basis.[749] In light of the revised pole attachment and conduit occupancy agreements and the clear procedures that VZ-MA has in place (and for the reasons discussed below concerning specific CLEC criticisms), the Department is satisfied that VZ-MA provides nondiscriminatory access to poles, ducts, conduits, and rights-of-way at just and reasonable rates.

[749] VZ-MA Application, Appdx. A, Tab 1 ¶ 200 (Lacouture/Ruesterholz Decl.).

As noted above, during the technical sessions of this proceeding, AT&T, Conversent, NECTA, and RCN raised concerns in the following areas, which, they argue, demonstrate VZ-MA's non-compliance with its requirements under the Act: (1) VZ-MA's make-ready procedures; (2) VZ-MA's conduit access procedures; (3) VZ-MA's "boxing" procedures; and (4) VZ-MA's "overlashing" procedures. Specifically, NECTA requests that the Department adopt a make-ready provision whereby make-ready work must be completed within a 60-day period (as opposed to 180 days). Several CLECs argue that licensees should be able to use their choice of workforce to complete make-ready work.[750] Additionally, NECTA[751] and RCN[752] allege that VZ-MA's

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750 VZ-MA Application, Appdx. B, Vol. 45, Tab 565 at 5539 (Transcript of Oral Argument Held 09/08/00).

751 Id. at 5535, 5567.

requirement for CLECs to use VZ-MA's workforce on VZ-MA's facilities violates previous FCC rulings, including Cavalier Telephone, LLC v. Virginia Electric and Power Company.[753]

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752 Id. at 5567.

753 Cavalier Telephone, LLC v. Virginia Electric and Power Company, 15 FCC Rcd 40 (2000).

In this recently decided case, Virginia Electric Power Company prohibited the complainant (Cavalier Telephone) from using its own workforce on Virginia Electric Power Company's facilities.[754] Virginia Electric Power Company argued that, while the FCC requires it to allow non-employees near its electric lines, the FCC does not require a utility to allow its own facilities to be worked on by non-employees or contractors.[755] Cavalier Telephone argued that such a prohibition violated the FCC's guidelines, which state that utilities should allow non-employees the ability to work on its facilities.[756] After considering both positions, the FCC decided:

> We have stated that a "utility may require that individuals who will work attaching or making ready attachments of telecommunications or cable system facilities to utility poles, in the proximity of electric lines, have the same qualifications, in terms of training, as the utility's own workers, but the party seeking access will be able to use any individual workers who meet these criteria" [citations omitted]. While we agree that the use of multi-party contractors is an efficient means to accomplish make-ready work, and we encourage Respondent (Virginia Electric Power Company) to consider that alternative, we are not ready to order Respondent to proceed with that method. However, Respondent must make the effort to coordinate all make-ready work and specifically to perform any necessary work on its own facilities in a timely and cooperative manner. Respondent cannot use its own facilities to impede Complainant's deployment of telecommunications

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754 Id.

755 Id. at 9.

756 Id.

facilities.[757]

[757] Id. at 9-10.

In considering the Cavalier Telephone decision in light of VZ-MA's make-ready procedures, the Department finds that VZ-MA's procedures for the completion of make-ready work and issuance of pole attachment and conduit licenses agreements do not violate the FCC's guidelines because VZ-MA's make-ready policy does not impede, in any way, a CLECs' ability to access poles and conduits. In fact, VZ-MA's procedures call for the completion of make-ready work and issuance of licenses for pole attachments within 180 days and for conduit occupancy within 90 days after receiving authorization from the licensee.[758] During the first quarter of 2000, VZ-MA was able to complete make-ready work and issue licenses for pole attachments in an average of 130 days; consisting of 166 days for CLECS, 144 days for CATV, and 38 days for "other."[759] The average number of days for make-ready work for conduit occupancy for the first quarter of 2000 was 90 days.[760]

Under VZ-MA's collective-bargaining agreement, VZ-MA must comply with certain personnel requirements for the performance of make-ready work. VZ-MA furnished copies of its labor contract to interested parties. CLECs have been able to use their workforce in performing work on CLEC-owned facilities.[761] The Department finds that VZ-MA's make-ready provision is reasonable because VZ-MA has an existing legal obligation under its labor agreement to utilize

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758 VZ-MA Application, Appdx. B, Vol. 42, Tab 494 at ¶ 64 (VZ-MA May Checklist Aff.).

759 Id.

760 Id.

761 VZ-MA Application, Appdx. B, Vol. 32a-b, Tab 423 at 45 (VZ-MA May Supplemental

VZ-MA personnel, with some exceptions mentioned above, for the performance of duties on VZ-MA's plant and facilities. VZ-MA's obligations under its labor agreements also do not impede CLECs from utilizing their choice of workforce when performing work on CLEC-owned or controlled facilities.

Comments).

AT&T alleged certain alleged systemic problems with respect to VZ-MA's procedures for CLEC access to underground conduits arguing that, under VZ-MA's procedures, conduit access becomes unnecessarily difficult and expensive.[762] In examining AT&T's concerns, the Department finds that VZ-MA's conduit policy regarding both duct size and make-ready costs is reasonable because it provides a neutral policy for all CLECs, while not allowing any CLEC to secure more space than it requires. Moreover, we disagree with AT&T's claims of inflated charges, finding instead that VZ-MA collects charges for make-ready work only once and charges rent based on the amount of conduit space occupied by a CLEC.

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[762] VZ-MA Application, Appdx. B, Vol. 38, Tab 460 at 54 (AT&T July Supplemental Comments).

Although AT&T comments that VZ-MA does not respond to a CLEC application within the requisite 45 days, the Department finds that VZ-MA's application process is appropriate. It is reasonable for the 45-day interval to begin after VZ-MA has had the opportunity to notify a CLEC about the process and associated costs.[763] Moreover, the Department observes that VZ-MA has met the 45-day requirement approximately 95 percent of the time for 1999.[764] During the first six months of 2000, VZ-MA met the 45-day requirement for 90 percent of the route-specific, pole attachment requests, and conduit and duct access not requiring project management. Additionally, in at least 90 percent of the cases in the second quarter 2000, VZ-MA satisfied CLEC requests for access to poles without the need for make ready work. In addition, VZ-MA has incorporated the 45 day requirement to complete field surveys and provide a response to CLECs' applications into its revised aerial and conduit licensing agreements.[765] All of these actions lead to the conclusion

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763 This 45-day period does not include an initial seven-day period from receipt of an application to send the applicant a written statement for the estimated costs to perform the record search and survey to determine conduit availability. VZ-MA Application, Appdx. B, Vol. 32a-b, Tab 423 at 42 (VZ-MA May Supplemental Comments.).

764 Id.

765 VZ-MA Application, Appdx. B, Vol. 46, Tab 546 (VZ-MA's Response to DTE Record Requests 318 and 319).

that VZ-MA fulfills its obligation to respond in a timely manner to CLECs' applications for pole, conduit and duct access.

Addressing AT&T's concern that VZ-MA reserves conduit space for itself,[766] the Department is satisfied that VZ-MA's policy of reserving space (i.e., VZ-MA will only set-aside space for up to one year if documented by a fully engineered plan)[767] is not discriminatory. Nothing precludes a CLEC from beginning pre-construction work in advance of receiving its occupancy license from VZ-MA.[768] Should pre-construction work for a CLEC take nine months to complete, the CLEC has the same time period to reserve space as VZ-MA. Therefore, because VZ-MA's conduit space procedure protects VZ-MA and CLECs from being unable to use available structures for long periods of time and because VZ-MA and CLECs are treated in the same manner, the Department finds that VZ-MA's reservation of conduit space is neither unreasonable nor discriminatory. Accordingly, the Department finds that VZ-MA's amended procedures for access to conduit contained in its new master underground licensing agreements are consistent with the Act, do not pose an unnecessary restriction on licensees, and are designed to ensure continued access (by both VZ-MA and CLECs) to existing conduit facilities.

With respect to RCN's position that VZ-MA engages in the practice of boxing poles in

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766 VZ-MA Application, Appdx. B, Vol. 38, Tab 460 at 21 (AT&T July Supplemental Comments).

767 VZ-MA Application, Appdx. B, Vol. 32a-b, Tab 423 at 43 (VZ-MA May Supplemental Comments).

768 Id. at 44.

Quincy but prevented RCN from doing the same,[769] we note that VZ-MA has admitted that VZ-MA-owned poles were previously boxed in Quincy, this is no longer the practice.[770] VZ-MA also states that boxing of VZ-MA's poles does not occur at new facilities because of VZ-MA's concern for its own facilities and the facilities of other attachers on the pole.[771] Therefore, the Department finds that VZ-MA's prohibition on boxing is not an unnecessary restriction on licensees because the policy is designed to protect existing facilities on poles and because VZ-MA's policy does not unduly affect any particular licensee or unfairly advantage VZ-MA. In addition, we find that VZ-MA's boxing policy is nondiscriminatory because VZ-MA no longer boxes for itself.

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769 VZ-MA Application, Appdx. B, Vol. 42, Tab 494 at ¶ 70 (VZ-MA August Supplemental Checklist Aff.).

770 Id.

771 Id.

With respect to RCN's comments that VZ-MA only allows 2,000 poles at a time in any one district, RCN admits that VZ-MA has modified this policy so that the 2,000 limit is not absolute.[772] VZ-MA's pole attachment agreement limiting the application to no more than 2,000 poles in any one application, prevents a single CLEC from using all of VZ-MA's resources for one request, thereby crowding out other requesters.[773] We find that VZ-MA's application policy serves a useful purpose for CLECs. Specifically, by segmenting a large application for access to poles, CLECs are able to install cable before VZ-MA has completed all the necessary make-ready work that may be required on an extremely large application. CLECs, therefore, are able to access poles in an expedited manner. Accordingly, we find no discriminatory result in VZ-MA's policy on the number of poles accessed at any one time.

In addressing the reasonableness of VZ-MA's make-ready work estimates, we note that VZ-MA's make-ready costs are accurately broken down into specific categories and thus the make-ready costs are sufficiently explained to the licensee. Moreover, the Department notes that

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772 VZ-MA Application, Appdx. B, Vol. 49, Tab 565 at 5568 (Transcript of Oral Argument Held on 09/08/00).

773 VZ-MA Application, Appdx. B, Vol. 32a-b, Tab 423 at 47 (VZ-MA May Supplemental Comments).

VZ-MA has charged the same pole attachment rates for over 20 years.[774] Moreover, if a licensee believes that a pole attachment rate is unreasonable, the Department has complaint procedures wherein a licensee may file an action alleging unreasonable pole attachment rates.[775]

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774 Id. at 51.

775 See 220 C.M.R. §§ 45.00 et seq.

VZ-MA has modified its overlash procedures to ensure that costs for post-construction inspections are the responsibility of licensees only when an inspection finds the pole attachments to be in non-compliance. VZ-MA's overlash procedures have eliminated the sampling provisions for post-construction inspection.[776] While VZ-MA has the right to inspect overlash projects, the licensee is not required to pay for the inspection of poles found in compliance. Therefore, the Department finds VZ-MA's revised overlash procedures to be reasonable.

In response to NECTA's allegation that VZ-MA overlashes to its own facilities without providing notice and complying with the overlash procedures,[777] the Department notes that VZ-MA does not license itself and, therefore, the licensing procedures logically would not apply to VZ-MA. Insisting that they be so applied would be an idle and formalistic exercise and nothing more. Further, the Act's parity requirement does not demand that VZ-MA establish the same

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776 VZ-MA Application, Appdx. B, Vol. 46, Tab 544 (Verizon-MA's Response to DTE Record Requests 318 and 319).

777 VZ-MA Application, Vol. 49, Tab 565 at 5539 (Transcript of Oral Argument Held 09/08/00).

overlashing process for itself that it does for other licensees. The Department is satisfied that VZ-MA has designed sufficient safeguard procedures in order for licensees, including CLECs, to access poles, ducts, conduits and rights-of-ways in a fair manner.

Based on the evidence in the record, the Department finds that VZ-MA has conclusively demonstrated that it is providing nondiscriminatory access to its poles, ducts, conduits, and rights-of-way at just and reasonable rates, terms, and conditions in accordance with the requirements of § 224, and has satisfied the requirements of checklist item 3. While some commenters raise allegations challenging VZ-MA's compliance with this checklist item, the record is not sufficient to support any contention that VZ-MA denied access to any pole, duct, conduit, or right-of-way in a discriminatory manner or imposed a rate, term or condition that was unreasonable. However, we note that our rules permit any party to raise claims of discriminatory treatment. The Department's finding with respect to checklist item 3 shall in no way be considered precedential in any proceeding under these rules. The Department's conclusion here is in the context of checklist compliance only.

D. Checklist Item 4 - Unbundled Local Loops

1. Standard of Review

Section 271(c)(2)(B)(iv) requires a BOC to provide "[l]ocal loop transmission from the central office to the customer's premises, unbundled from local switching or other services." In various orders, the FCC has defined the loop as a transmission facility between a distribution frame, or its equivalent, in an ILEC central office, and the demarcation point at the customer's

premises.[778] Moreover, this definition includes two-wire and four-wire analog voice-grade loops, and two-wire and four-wire loops that are conditioned to transmit the digital signals needed to provide services such as ISDN, ADSL, HDSL, and DS1-level signals.[779]

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778 SBC Texas Order at ¶ 246 (citations omitted).

779 Id.; see also Bell Atlantic New York Order at ¶ 268.

To meet the standard set forth in this checklist item, VZ-MA must demonstrate that it has a concrete and specific legal obligation to furnish loops and that it is currently doing so in the quantities that CLECs demand and at an acceptable level of quality.[780] In addition, access to the loop must be nondiscriminatory, and, since the ordering and provisioning of network elements has no retail analogue, the FCC will look at whether the BOC's performance offers an efficient CLEC a meaningful opportunity to compete.[781]

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780 SBC Texas Order at ¶ 247.

781 Bell Atlantic New York Order at ¶ 269.

To determine whether VZ-MA meets the requirements of this checklist item, the Department reviewed VZ-MA's performance data, specifically: the time interval for providing unbundled loops; whether due dates are met; whether CLECs are informed of the status of their order; and how responsive VZ-MA is in providing access to necessary support functions (e.g., maintenance and repair).[782] VZ-MA also must provide access to any functionality of the loop requested by a CLEC unless it is not technically feasible to condition the loop facility to support that requested functionality.[783] To provide such access to loop functionality, VZ-MA may be required to condition existing loop facilities so that a CLEC may provide services not currently provided by VZ-MA. Also, the FCC has held that a BOC must provide access to unbundled loops regardless of whether the BOC uses IDLC technology or similar remote concentration devices for the particular loop sought by the CLEC.[784]

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782 See Bell Atlantic New York Order at ¶ 270.

783 SBC Texas Order at ¶ 248, citing Bell Atlantic New York Order at ¶ 271.

784 Id.

2. Overview of VZ-MA's Compliance

a. VZ-MA's Loop Offering

Through both its state-approved tariff (M.D.T.E. No. 17) and interconnection agreements, VZ-MA provisions a full range of loops (including analog and digital 2-wire and 4-wire loops) that CLECs can use to offer service such as POTS, ISDN, ADSL, HDSL, DS1, and DS3 transmission. Through July 2000, VZ-MA had provisioned over 44,000 stand-alone UNE loops, an increase from 22,500 loops at the end of February 2000.[785] At the end of February 2000, VZ-MA had provisioned 1,400 loops provided as part of UNE-P.[786] By August, the UNE-P number had increased to almost 12,000 loops.[787] Similarly, the volume of xDSL loops VZ-MA has provisioned has increased from 5,500 by March 2000 to over 13,000 by August 2000.[788] In addition, VZ-MA offers access to unbundled subloops and line sharing pursuant to interconnection agreements.[789]

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785 See VZ–MA Application, Appdx. A, Tab 1, ¶ 66 (Lacouture/Ruesterholz Decl.); see also VZ-MA Application, Appdx. B, Vol. 32a-b, Tab 423, at ¶¶ 161-163 (VZ–MA May Checklist Aff.).

786 VZ-MA Application, Appdx. B, Vol. 32a-b, Tab 423, at ¶ 163 (VZ–MA May Checklist Aff.).

787 VZ–MA Application, Appdx. A, Tab 1, at ¶ 66 (Lacouture/Ruesterholz Decl.).

788 See VZ-MA Application, Appdx. B, Vol. 32a-b, Tab 423, at ¶ 163 (VZ–MA May Checklist Aff.); see also VZ–MA Application, Appdx. A, Tab 1, at ¶ 95 (Lacouture/Ruesterholz Decl.).

789 D.T.E. 98-57-Phase III (September 29, 2000) ("Phase III Order"); VZ–MA Application, Appdx. A, Tab 1, at ¶¶ 113, 137 (Lacouture/Ruesterholz Decl.). Line sharing is currently available through interconnection agreements. On September 29, 2000, the Department issued its Order on VZ-MA's proposed line sharing and xDSL tariff, approving in part and denying in part, the proposed tariff. Phase III Order at 130. Once VZ-MA's compliance

Just as in New York, Massachusetts CLECs may obtain stand-alone voice grade loops from VZ-MA in three forms: (1) new loops; (2) stand-alone loops to CLECs through coordinated conversions (hot cuts); and (3) UNE-P (in which the CLEC receives the local loop, shared transport, and switching capability from the BOC, see the Department's discussion of UNE-P above in Section V.B.2.b).[790]

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tariff is approved, VZ-MA will "true-up" the rates it has been charging pursuant to its interconnection agreements with the rates in the approved tariff. VZ–MA Application, Appdx. A, Tab 1, at ¶ 113 (Lacouture/Ruesterholz Decl.). Subloop unbundling is available pursuant to interconnection agreements and tariffs. On September 14, 2000, the Department allowed VZ-MA's proposed subloop unbundling tariff to go into effect, pending further investigation and subject to true-up. Id. at ¶ 137.

[790] VZ–MA Application, Appdx. B, Vol. 16, Tab 194, at 1556-1558 (Transcript of Technical Session Held 11/18/99). See Bell Atlantic New York Order at ¶ 276.

In a recently-issued Department Order, the Department directed VZ-MA to make available loops that are compatible with any xDSL service presumed acceptable pursuant to 47 C.F.R. § 51.230(a) for a CLEC's provision of advanced services.[791] Through VZ-MA's tariff, a CLEC may obtain a conditioned loop (i.e., a loop on which VZ-MA has removed load coils or bridged tap) so that the CLEC may offer xDSL services over a loop that otherwise would not support this technology. VZ-MA also offers unbundled line sharing to CLECs, whereby a CLEC may provide data service over the same loop that VZ-MA provides voice service to the same end-user.[792] Upon a CLEC's request, through a line and station transfer, VZ-MA will transfer its voice customer's loop to another loop that will support a CLEC's xDSL offering over the shared loop.[793] Finally, CLECs may order ISDN BRI loops and ADSL loops to provide IDSL and SDSL respectively.[794]

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791 Phase III Order at 13; VZ-MA Application, Appdx. B, Vol. 42, Tab 494, at ¶ 93 (VZ–MA August Checklist Aff.).

792 Phase III Order; VZ-MA Application, Appdx. B, Vol. 42, Tab 494, at ¶ 94 (VZ-MA August Checklist Aff.).

793 Phase III Order at 89-90.

794 VZ–MA Application, Appdx. B, Vol. 16, Tab 194, at 1556-1558 (Transcript of Technical Session Held 11/18/99).

b. VZ-MA'S Ability to Meet CLEC Commercial Demand

VZ-MA has demonstrated its ability to handle significant increases in unbundled loop volumes to meet CLEC commercial demand for UNE loops. For example, the February 2000 stand-alone loop volumes in Massachusetts represented an increase of more than 100 percent from the September 1999 volumes. These volumes have increased an additional 80 percent by August. In January and February 2000, VZ-MA provided over 500 UNE-P loops, an increase of more than 50 percent from its September 1999 volumes. By August, VZ-MA had provisioned approximately 12,000 UNE-P loops.[795] In addition, from March through June 2000, VZ-MA completed over 7,000 orders for unbundled xDSL loops.[796] By August, VZ-MA had provisioned over 13,000 xDSL loops.[797]

VZ-MA has demonstrated that its service centers are prepared to handle large volumes of orders. As mentioned above, VZ-MA has increased by 126 percent the number of personnel in its TIS OC centers to 717 (as of July 2000). The TIS OC center handles both New England and New York orders. The Regional CLEC Coordination Center ("RCCC"), which is the loop-coordination and loop-qualification center, has increased from 22 craft personnel in July 1999 to 67 as of March 2000, an increase of over 200 percent. VZ-MA indicates that the RCCC may grow to more than

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795 VZ–MA Application, Appdx. A, Tab 1, at ¶ 67 (Lacouture/Ruesterholz Decl.).

796 VZ–MA Application, Appdx. B, Vol. 42, Tab 494, at ¶ 96 (VZ-MA August Checklist Aff.).

797 VZ–MA Application, Appdx. A, Tab 1, at ¶ 95 (Lacouture/Ruesterholz Decl.).

240 employees by the end of 2000 just to handle New England orders, the majority of which are for Massachusetts customers.[798] To ensure that staffing levels are sufficient to meet incoming volumes, VZ-MA inputs the actual and forecasted volumes into a staffing model developed by Andersen Consulting.[799]

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798 VZ-MA Application, Appdx. B, Vol. 32a-b, Tab 423, at ¶¶ 163-164 (VZ-MA May Checklist Aff.); VZ-MA Application, Appdx. B, Vol. 42, Tab 494, at ¶ 50 (VZ-MA August Supplemental OSS Aff.).

799 See VZ–MA Application, Appdx. B, Vol. 34a-b, Tab 443 (VZ-MA's response to DTE-ATT-4-13).

In addition, VZ-MA established a dedicated field force of approximately 230 specially-trained technicians who deal only with CLEC-specific, UNE-loop products and installations. Moreover, should conditions warrant, VZ-MA states it can draw quickly from its retail force of over 1,500 technicians to meet spikes in installation demand.[800] According to VZ-MA, the dedicated field forces start each day with a force-to-load level equal to or better than the force-to-load level utilized by VZ-MA's own retail special-services field force. The size of this force is monitored on a daily, weekly, and monthly basis. Each evening, the workload for the next day is calculated, assignments are given out, and where there is a shortage of technicians, technicians who have been trained to address CLEC needs are borrowed from other organizations so that the force-to-load ratio is always maintained at or better than parity.[801]

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800 VZ-MA Application, Appdx. B, Vol. 32a-b, Tab 423, at ¶ 164 (VZ–MA May Checklist Aff.).

801 See VZ–MA Application, Appdx. B, Vol. 16, Tab 194, at 1559-1661 (Transcript of Technical Session Held 11/18/99).

Finally, Verizon's TIS OC has established a DSL Center in Boston to process all New England and New York xDSL and line sharing orders. The Boston center has increased the number of service representatives from 50 in March 2000, to over 120 as of September, 2000.[802] Moreover, VZ-MA has trained an additional 15 people from an outsourcing company to process just line sharing requests. According to VZ-MA, in August 2000, its Boston xDSL/Line Sharing center processed over 50,000 xDSL and line sharing LSRs for New England and New York.[803]

3. Voice-Grade Stand-Alone Loops

a. New Stand-Alone Loop Provisioning

The Department finds that VZ-MA provisions loops in quantities reasonably demanded by competitors, at an acceptable level of quality, and within a reasonable period of time. In addition, we find that VZ-MA provides new loops in substantially the same time and manner as it provides new loops to its retail customers.[804]

The provisioning measurements for which VZ-MA has provided data include: (1) intervals in which VZ-MA provides service; (2) percentage of missed installation appointments; and (3) installation quality. The "average offered interval" is the number of business days between the date a valid order is received and the committed due date. The "average completed interval" is the number of business days between the date a valid order is received and the actual work completion

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802 VZ–MA Application, Appdx. A, Tab 1, at ¶¶ 131-132 (Lacouture/Ruesterholz Decl.).

803 Id.

804 See Bell Atlantic New York Order at ¶ 280.

date. Finally, the "percent completed within interval" is the percentage of POTS orders for one to five lines completed within a specified number of days.[805] Definitions for other provisioning metrics will be provided below.

i. Equivalent Access to Due Dates

[805] VZ–MA Application, Appdx. A, Tab 3, at ¶¶ 59, 61-62 (Guerard/Canny Decl.).

Using VZ-MA's SMARTS Clock, CLECs have equivalent access to appointment dates as VZ-MA's representatives serving retail customers. This is the same system used by VZ-NY which the FCC found provided equivalent access to CLECs in New York.[806] WorldCom argues that it receives longer installation intervals than VZ-MA's retail customers receive.[807] VZ-MA responds that discrepancies in appointment intervals did occur after a February 2000 software release but contends that Verizon made the appropriate software corrections in April.[808] Moreover, KPMG tested and confirmed the accuracy of the due date availability responses provided by the SMARTS

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806 See Bell Atlantic New York Order at ¶ 282.

807 VZ–MA Application, Appdx. B, Vol. 37, Tab 455, at ¶ 107 (WorldCom Lichtenberg/Sivori Decl.).

808 VZ-MA Application, Appdx. B, Vol. 42, Tab 494, at ¶ 19 (VZ–MA August OSS Aff.).

Clock.[809]

[809] Id., citing KPMG Draft Final Report at § III, POP 1-6-1. See Section V.B., above, for a detailed discussion of KPMG's SMARTS Clock test.

WorldCom also states that the operation of the SMARTS Clock is inconsistent with the business rules because the system considers an all-day appointment to mean anytime between 8:00 a.m. and 7:00 p.m. and not 8:00 a.m. to 5:00 p.m., pursuant to the business rules.[810] Verizon indicates an EDI coding problem caused this result, which was corrected in July, 2000.[811] WorldCom has not contested VZ-MA's assertion that it implemented corrections addressing WorldCom's concerns. The Department finds that VZ-MA promptly addressed these concerns and, more importantly, KPMG has verified that the SMARTS Clock provides nondiscriminatory access to appointment dates.[812]

ii. Provisioning Intervals

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810 VZ–MA Application, Appdx. B, Vol. 37, Tab 455, at ¶ 108 (WorldCom Lichtenberg/Sivolri Decl.)

811 VZ-MA Application, Appdx. B, Vol. 42, Tab 494, at ¶ 20 (VZ–MA August OSS Aff.).

812 See Section V.B.1.g.iv, above, for a discussion of KPMG's provisioning findings.

According to VZ-MA, a number of factors outside of its control affect the interval metrics (i.e., average offered interval, average completed interval, and percent completed within interval).[813] VZ-MA argues that these same factors were present in New York when it made its § 271 application with the FCC, and continue to be present in Massachusetts. Specifically, VZ-MA argues that it does not control the due date that is requested by the CLECs. While it offers CLECs the same intervals for the same product as it does its own retail customers, VZ-MA contends that its experience demonstrates that CLECs frequently request intervals longer than the standard interval. In recognition of the effect the longer interval can have on VZ-MA's reported average offered and completed interval measurements, it is permitted to exclude from the calculation orders where the due date is longer than the standard interval or the first available SMARTS Clock appointment.[814]

VZ-MA argues that in order for it to properly exclude orders with longer intervals from its measurements, it must rely on CLECs to code their orders accurately with an "X" – meaning the CLEC or its customer requests a due date later than that offered by VZ-MA. This reliance on CLECs to code their orders accurately will become moot once CLECs begin using LSOG-4, which will automatically put the correct code on an order.[815] Moreover, VZ-MA states that it has taken

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813 VZ–MA Application, Appdx. A, Tab 3, at ¶ 66 (Guerard/Canny Decl.).

814 Id. at ¶¶ 66, 69-70.

815 Id. See Section V.B.1.g.ii, above, for a general discussion of the effect of this miscoding.

a number of steps to ensure that orders are coded correctly (e.g., meetings with CLECs).[816] The FCC has expressly recognized this measurement is sensitive to CLEC behavior, and, therefore, it has accorded "little weight to the data evidencing the average intervals in which loop installations are completed."[817]

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816 See VZ–MA Application, Appdx. A, Tab 3, at ¶ 76 (Guerard/Canny Decl.).

817 Bell Atlantic New York Order at ¶ 285.

Another factor affecting these metrics is the "order mix" selected by CLECs. According to VZ-MA, although it is offering CLECs the same interval for the same products it offers its retail customers, a CLEC's average interval may appear different if the CLEC requests a substantially different mix of products than that offered by VZ-MA to its retail customers.[818]

The record demonstrates that VZ-MA provides new loops to CLEC customers in approximately the same amount of time as it provides new loops to its retail customers. The data also show that VZ-MA's performance provisioning new loops to CLECs is improving steadily.[819] The Department finds persuasive VZ-MA's explanation and its data analysis described in both the Guerard and Canny declaration and its May measurements affidavit. As was the case in New York, we agree that factors outside of VZ-MA's control contribute to longer provisioning intervals on average for CLECs than for VZ-MA's retail service. Indeed, although given the opportunity throughout the proceeding, no CLEC disputed VZ-MA's contention (supported by its

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818 VZ–MA Application, Appdx. A, Tab 3, at ¶ 67 (Guerard/Canny Decl.). See Sections V.B.1.g.ii, above, for a discussion of VZ-MA's "order mix" study.

819 For example, from January through July, 2000, the "average completed interval" for new loops of 1-5 lines requiring a dispatch (PR-2-03), for CLECs was: 6.23, 6.33, 6.64, 4.89, 5.60, 4.94, and 5.00. The same intervals for VZ-MA's retail customers over this same period was: 3.85, 3.61, 4.60, 4.77, 4.64, 5.50, and 5.24.

data and documentation) that CLECs request longer intervals and different "order mixes" than those requested by VZ-MA for its own customers.

iii. Missed Installation Appointments

The evidence also shows that VZ-MA misses fewer installation appointments for CLECs than it does for its own retail customers. The missed appointment measurement captures any orders which, because of VZ-MA's fault, were not completed by the due date to which VZ-MA committed.[820] VZ-MA's performance data for 2000 (through July) demonstrate VZ-MA has provided better service to CLECs for every month except April (the difference for which is insignificant).[821] Unlike the interval metrics discussed above, the percent missed installation appointment is unaffected by certain CLEC-controlled factors as the "order mix" and longer

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820 VZ–MA Application, Appdx. A, Tab 3, at ¶ 83 (Guerard/Canny Decl.).

821 From January through July 2000, VZ-MA missed the following percent of installation appointments for new loops requiring a dispatch (PR-4-04) for CLEC customers: 2.08%, 1.61%, 1.45%, 7.69%, 2.78%, 2.13%, and 4.65%. In contrast, over that same period, VZ-MA missed installation appointments for its own retail customers: 7.31%, 7.02%, 6.71%, 7.07%, 6.19%, 7.35%, and 7.74%.

requested provisioning intervals.[822] According to VZ-MA, this metric indicates that CLECs are receiving service when they request it.[823] Therefore, we find that VZ-MA's process for meeting confirmed appointment dates is nondiscriminatory and that VZ-MA is provisioning new loops to CLECs on a timely basis.[824]

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822 VZ–MA Application, Appdx. A, Tab 3, at ¶ 83 (Guerard/Canny Decl.).

823 Id.

824 See Bell Atlantic New York Order at ¶ 283.

VZ-MA's loop provisioning performance is further gauged by the "average delay days" metric. According to VZ-MA, this metric captures the number of business days between the committed due date and the actual work completion date, and measures the length of the delay for missed installation appointments. The data show that for some months it took VZ-MA more time to complete CLEC loop orders after missing the committed installation due date than it did to complete its retail orders.[825] However, these data also indicate that this metric is susceptible to being skewed by the small volumes of CLEC orders. For example, only 33 CLEC orders were measured from January through July, 2000. Because so few CLEC orders were affected by VZ-MA's performance, we find that VZ-MA's performance has not impeded a CLEC's ability to compete in the local service market in Massachusetts.

iv. Installation Quality

[825] From January through July 2000, the "average delay days" (PR-4-02) for CLEC orders was: 8.43, 3.63, 2.00, 20.00, 13.25, 1.00, and 7.25. During the same period, the corresponding measurement for VZ-MA orders was: 2.84, 2.65, 2.74, 2.81, 2.70, 2.91, and 3.09.

As part of its § 271 review, the FCC considers the percentage of trouble reports filed within seven and 30 days of a loop installation to ensure a BOC is providing quality loops to CLECs.[826] Pursuant to the C2C Guidelines, the established standard for this metric is parity.[827] Our review of VZ-MA's performance data indicates that CLEC customers generally have fewer troubles with new loops than VZ-MA's retail customers.[828] During the month of February 2000, the loops VZ-MA provided its retail customers appear to have experienced significantly fewer

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826 See SBC Texas Order at ¶ 280, n.793; see also Bell Atlantic New York Order at ¶ 284.

827 VZ–MA Application, Appdx. A, Tab 3, at ¶ 91 (Guerard/Canny Decl.).

828 From January through July 2000, the percentage of reported installation troubles (PR-6-02) for CLEC loops within seven days of provisioning was: 1.81%, 4.06%, 1.16%, 1.50%, 0.74%, 0.80%, and 1.08%. During that same period, the percentage of reported installation troubles for VZ-MA retail customers was: 2.01%, 1.88%, 1.70%, 1.92%, 2.12%, 2.17%, and 1.97%. In addition, from January through July, 2000, the percentage of reported installation troubles (PR-6-01) for CLEC loops within 30 days of provisioning was: 3.62%, 10.37%, 3.58%, 4.30%, 1.80%, 1.91%, and 1.90%. During that same period, the percentage of reported installation troubles for VZ-MA retail customers was: 3.28%, 3.29%, 2.93%, 3.36%, 3.53%, 3.68%, and 3.45%.

difficulties than the loops it provided to CLEC customers (1.88 percent compared to 4.06 percent within seven days; and 3.29 percent compared to 10.37 percent within 30 days). However, based upon more recent data, it seems VZ-MA's performance for February was an anomaly. For those other months in which VZ-MA's retail customers experienced fewer problems than CLEC customers, we find that the difference is insignificant. Furthermore, as was the situation in New York, our record lacks evidence of conflicting data and CLECs did not raise serious disputes regarding the quality of the new voice-grade loops provisioned by VZ-MA.[829]

[829] See Bell Atlantic New York Order at ¶ 284.

During the Department's investigation, WorldCom argued that VZ-MA's on-time performance for new loops was poor and that its provisioned loops are often defective. According to WorldCom, a majority of these defects were the result of an "open" condition in the central office, meaning that VZ-MA had not wired the loop to the main distribution frame.[830] When asked to provide documentation supporting its claims, WorldCom could not.[831] Moreover, WorldCom did not raise the issue of "open conditions" in the central office at this year's technical sessions. The Department provides little weight to WorldCom's unsubstantiated assertions of poor loop provisioning made last year – an argument WorldCom has not raised in the approximately

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830 VZ–MA Application, Appdx. B, Vol. 37, Tab 455, at ¶ 41 (WorldCom Lichtenberg/Sivori Decl.).

831 Record request 299 asked WorldCom to provide, among other things, the number of orders where defects on loops were found and were the result of open conditions in the central office. WorldCom responded that it does not track these data.

eight months since.[832]

v. IDLC Claims

[832] See Section V.B.1.g.iv, above, for a discussion of KPMG's loop provisioning test results.

AT&T and WorldCom argue that VZ-MA's procedures for provisioning loops served by IDLC are discriminatory and demonstrate that VZ-MA has not met its obligation to open up the local market to competition.[833] AT&T asserts that VZ-MA refuses to provide alternate facilities when it finds that a particular customer is served by IDLC, thus, effectively preventing CLECs from having access to a substantial segment of the market.[834] It also argues that VZ-MA identifies the existence of IDLC too late in the provisioning process resulting in orders that are "held" and which go "past due."[835] WorldCom contends that rather than providing unbundled access to loops served by IDLC technology, VZ-MA reassigns the customer to either copper or universal digital loop carrier ("UDLC"). According to WorldCom, this practice is discriminatory because IDLC loops transmit data faster and experience less interference than either copper or UDLC loops. WorldCom also argues that VZ-MA refuses to make available to CLECs technology (e.g., GR-303) that would enable VZ-MA to unbundle IDLC loops.[836]

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833 VZ–MA Application, Appdx. B, Vol. 38, Tab 460, at 35-36 (AT&T July Supplemental Comments); VZ–MA Application, Appdx. B, Vol. 37, Tab 455, at 11-14 (WorldCom Lichtenberg/Kinard/Drake Decl.).

834 VZ–MA Application, Appdx. B, Vol. 38, Tab 460, at 35-36 (AT&T July Supplemental Comments).

835 VZ–MA Application, Appdx. B, Vol. 46, Tab 533, at 4518 (Transcript of Technical Session Held 8/21/00).

836 VZ–MA Application, Appdx. B, Vol. 37, Tab 455 at 11-13 (WorldCom Lichtenberg/Kinard/Drake Decl.). GR-303 is a next generation DLC technology that allows the unbundling of IDLC loops. Id. at 28-29, citing MCI WorldCom White Paper, Unbundling Digital Loop Carriers (March 1999). The FCC reviewed this "White Paper" and concluded that despite the future potential, the capability provided by this technology

In response to AT&T's claims that IDLC loops hinder a CLEC's ability to serve certain customers, VZ-MA responds that it first looks for alternate facilities (i.e., copper or UDLC loops). If such facilities are unavailable, VZ-MA undertakes special construction, as set forth in its interconnection agreements, to provision such facilities. Moreover, in lieu of special construction, VZ-MA permits CLECs to use VZ-MA's UNE-P offering to provide service to customers served by IDLC loops, to collocate at VZ-MA's remote terminals, or to interconnect at the feeder distribution interface.[837]

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does not now substantially reduce the CLECs' need to pick up IDLC customers' traffic before it is multiplexed. See UNE Remand Order at ¶ 217 n.417.

[837] VZ-MA Application, Appdx. B, Vol. 42, Tab 494, at ¶ 129 (VZ–MA August Checklist Aff.).

According to VZ-MA, contrary to WorldCom's claims about the technical feasibility of unbundling IDLC loops at the DS1 level, VZ-MA responds that, to date, no ILEC performs such unbundling and, in fact, no interface or equipment that currently exists, including GR-303, is capable of performing this function. VZ-MA also argues that WorldCom has failed to respond to technical questions VZ-MA asked it last year on this subject.[838] As for WorldCom's degradation claim, VZ-MA states that the transmission characteristics of loops are variable and transmission performance is affected by several factors (e.g., the number and type of connections from the customer's serving central office switch throughout the rest of the network, the customer's modem equipment, and equipment used by the Internet service provider).[839]

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838 Id. at ¶¶ 120-123.

839 VZ-MA Application, Appdx. B, Vol. 32a-b, Tab 423, at ¶¶ 235-236 (VZ–MA May Checklist Aff.).

The Department asked WorldCom to provide documentation to support its claims of service degradation experienced by WorldCom customers in Massachusetts who had been migrated from IDLC to either copper or UDLC loops.[840] WorldCom responded that it could not. Rather, it argued that "whether or not any existing WorldCom customer has complained to WorldCom about degraded service to date does not in any way negate the fact that migration of a customer from IDLC to copper facilities can result in the customer experiencing noticeable degradation [in service] . . . ."[841] The Department finds persuasive VZ-MA's explanation about factors affecting the transmission speed and quality over loops, and we note that WorldCom has not challenged VZ-MA's response on this point. Hypothetical concerns about transmission speeds and quality are not sufficient for the Department to find that VZ-MA's practice of migrating IDLC-served customers to UDLC or copper is discriminatory or otherwise demonstrates VZ-MA's non-compliance with the requirements of this checklist item.

When asked to provide documentation supporting its statement that WorldCom has been unable to obtain alternate facilities in Massachusetts and has been quoted exorbitant charges to construct new facilities, WorldCom provided a copy of an e-mail exchange between WorldCom and VZ-MA where VZ-MA indicated that it would not charge WorldCom the special construction charges necessary for WorldCom to provide service to a customer in Southboro, Massachusetts --

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840 See VZ–MA Application, Appdx. B, Vol. 41, Tab 488 (WorldCom Response to DTE-WCOM-8).

841 Id. (emphasis added).

a response that in fact undermines WorldCom's claim. Additionally, VZ-MA states that for the other two Massachusetts facilities listed in the e-mail (involving optical remote modules), WorldCom misunderstands VZ-MA's quote.[842] We note that WorldCom has not disagreed with VZ-MA's explanation on this point.

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842 See VZ–MA Application, Appdx. B, Vol. 28, Tab 357, att. 1 (WorldCom's Response to RR-224); see also VZ-MA Application, Appdx. B, Vol. 32a-b, Tab 423, at ¶¶ 233, 240-245 (VZ–MA May Checklist Aff.).

In response to a request to provide information in support of its claims that VZ-MA failed to identify the presence of IDLC in a timely fashion, AT&T directed the Department to a record request response.[843] Moreover, we note that AT&T's claim is similar to that raised by WorldCom last year in this proceeding, in which WorldCom argued that VZ-MA failed to verify the existence of IDLC before sending the LSRC, causing the postponement of the cutover.[844] When asked to provide documentation to support its claim of the alleged late IDLC facilities check by VZ-MA,

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843 See RR-289. **Begin Proprietary *****

***** End Proprietary.**

844 VZ–MA Application, Appdx. B, Vol. 18, Tab 220, at ¶¶ 58, 61 (WorldCom November

WorldCom indicated that it does not track these data.[845]

b. Maintenance and Repair of Voice-Grade Loops

Lichtenberg/Sivori Decl.).

845 VZ–MA Application, Appdx. B, Vol. 28, Tab 357 (WorldCom Response to RR-300).

We find that, for the reasons discussed below, VZ-MA provides maintenance and repair functions for unbundled, voice-grade local loops in substantially the same time and manner as it provides those functions to its retail customers. In its analysis of SWBT's loop maintenance and repair performance, the FCC compared the rates of missed repair appointments ("MRA"), average or mean time to repair ("MTTR"), and repeat trouble reports.[846] The FCC reviewed these metrics for BA-NY's section 271 application as well.[847]

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846 SBC Texas Order at ¶ 281.

847 See Bell Atlantic New York Order at ¶¶ 311-313.

A cursory review of the data would suggest that VZ-MA is providing discriminatory treatment to CLECs; however, a more thorough analysis reveals that the data are negatively affected by CLEC behavior. The data show that VZ-MA missed approximately twice as many repair appointments for CLEC customers as for its retail customers.[848] According to VZ-MA, there are a number of reasons for this disparity -- none of which was refuted by CLECs during technical sessions nor in their written comments. Beginning in April, 2000, VZ-MA offered CLECs Saturday repair appointments, which were already available to VZ-MA's retail customers. If a CLEC declined the Saturday appointment on behalf of its customer, VZ-MA's employees would count this declination as a "miss."[849] For example, in June, CLECs reported 13 percent of UNE POTS troubles on a Friday. VZ-MA offered these CLECs Saturday repair appointments, which the CLECs rejected 55 percent of the time (preferring a Monday repair appointment). VZ-MA erroneously reported the originally offered (and CLEC rejected) Saturday appointments as "misses."[850] Unless manually overwritten to specify the later, requested appointment date, VZ-

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848 From January through July 2000, VZ-MA missed the following percentage of repair appointments for CLEC customers: 21.31%, 28.05%, 19.08%, 19.07%, 22.61%, 23.66%, and 26.94%. During this same period of time, VZ-MA missed the following percentage of repair appointments for its retail customers: 10.17%, 12.00%, 9.97%, 8.91%, 11.27%, 11.41%, and 11.72%.

849 VZ–MA Application, Appdx. A, Tab 1, at ¶¶ 73, 75 (Lacouture/Ruesterholz Decl.); VZ-MA Application, Appdx. B, Vol. 42, Tab 494, at ¶ 136 (VZ–MA August Checklist Aff.).

850 VZ–MA Application, Appdx. A, Tab 1, at ¶ 73 (Lacouture/Ruesterholz Decl.); VZ-MA Application, Appdx. B, Vol. 42, Tab 494, at ¶ 135 (VZ–MA August Checklist Aff.).

MA's performance on Monday was scored as a "missed appointment."[851] In addition, VZ-MA states that its systems are set up to dispatch automatically on the commitment date.[852] Therefore, according to VZ-MA, its technicians would likely encounter a "no access" situation on the Saturday dispatch. VZ-MA states that this erroneous dispatch is not an efficient use of VZ-MA's resources and inflates its "no access" results.[853]

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851 See VZ–MA Application, Appdx. B, Vol. 34a-b, Tab 443 (VZ–MA's Response to DTE-VZ-5-22).

852 VZ–MA Application, Appdx. A, Tab 1, at ¶ 75 (Lacouture/Ruesterholz Decl.)

853 Id.

According to VZ-MA, because the overwhelming majority of its customers accept offered Saturday appointments (more than 90 percent accepted weekend appointment during this same period), VZ-MA explains that this difference is recorded as a "great dissimilarity" in the MTTR and the "out of service more than 24 hours" ("OOS>24") measurements between wholesale and retail customers (see below for a discussion of these two metrics), in addition to adversely affecting the MRA.[854] VZ-MA indicates that this initial false scoring of "Saturday missed" due dates has been corrected since its August 2000 filing.[855]

VZ-MA also argues that the RCMC has been providing CLECs with short repair appointments (e.g., in April 2000, 15 percent of the UNE missed appointments had an "exceptional" mean time to repair of less than four hours). Thus, the troubles are resolved faster, but VZ-MA's field personnel are not provided as much time to "honor the appointment."[856] According to VZ-MA, when the MRA is adjusted to account for the expedited repair requests and the rejected Saturday appointments, discussed above, the MRA for CLECs is superior than for VZ-MA in May, and the differences between retail and wholesale are halved for June and July.[857] VZ-MA also contends that because the number of trouble reports is so small (e.g., 215 reports in

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854 VZ-MA Application, Appdx. B, Vol. 42, Tab 494, at ¶ 135 (VZ-MA August Checklist Aff.).

855 Id. at ¶ 136.

856 VZ–MA Application, Appdx. A, Tab 1, at ¶ 76 (Lacouture/Ruesterholz Decl.); VZ-MA Application, Appdx. B, Vol. 42, Tab 494, at ¶ 137 (VZ-MA August Checklist Aff.).

857 VZ–MA Application, Appdx. A, Tab 1, at ¶ 77(Lacouture/Ruesterholz Decl.), citing Att.

April, 283 reports in May, 317 reports in June, and 245 in July), VZ-MA's performance is subject to wide variations.[858]

H.

858 VZ-MA Application, Appdx. B, Vol 32a-b, Tab 424, at ¶ 249 (VZ–MA May Checklist Aff.).

VZ-MA argues that the most significant factor contributing to the disparity between VZ-MA's maintenance performance for its retail customers and its performance for CLECs is the CLECs' failure to isolate accurately a trouble location prior to submitting a repair request (i.e., the trouble is actually in the CLEC's network or the end-user's equipment, or in a different part of VZ-MA's network).[859] CLECs' failure to do so results in misdirected trouble reports, which causes VZ-MA to dispatch its technicians multiple times. According to VZ-MA, once the actual trouble location is identified and addressed, an "MRA is experienced for the loop."[860] VZ-MA contends that the CLECs' failure to isolate trouble locations also affects VZ-MA's MTTR metric. When VZ-MA controls for misdirected dispatches, it argues its performance is at parity.[861] Specifically, VZ-MA reviewed data from May through July, 2000, and found that almost 60 percent of CLEC repair requests were not correctly isolated. This amounts to over 600 "wasted"

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859 VZ–MA Application, Appdx. A, Tab 1, at ¶ 78 (Lacouture/Ruesterholz Decl.).

860 VZ-MA Application, Appdx. B, Vol. 32a-b, Tab 423, at ¶¶ 251-253 (VZ–MA May Checklist Aff.).

861 VZ–MA Application, Appdx. A, Tab 1, at ¶ 78 (Lacouture/Ruesterholz Decl.).

dispatches, according to VZ-MA.[862] VZ-MA argues that had it been able to avoid just 50 of those dispatches for June and July and, instead, send those technicians to actual troubles, its MRA results for CLECs would have matched the MRA results for VZ-MA.[863]

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862 Id., citing Att. I.

863 Id.

VZ-MA has also provided information about the MTTR metric. This performance measurement, adopted from the C2C Guidelines, captures the time, in hours, from receipt of a trouble report until it is cleared. According to VZ-MA, for POTS services, the duration is measured on a "running clock" basis, which includes weekends and holidays.[864] We find that, based upon VZ-MA's data, its performance with respect to CLEC customers is improving.[865] As was the situation with the MRA metric, discussed above, VZ-MA's ability to provide CLEC customers with the same level of performance as its own retail customers (as reflected in its performance data) is affected by several factors, many of them CLEC-induced, outside of VZ-MA's control. Accordingly, we accord less weight to these measurements than for VZ-MA's other loop performance data.

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[864] VZ–MA Application, Appdx. A, Tab 3, at ¶ 100 (Guerard/Canny Decl.).

[865] VZ-MA's MTTR performance (MR-4-01) for CLEC customers from January through July, 2000, was: 36.12, 41.27, 31.57, 25.32, 23.43, 24.62, and 26.57. The same metric for VZ-MA's retail customers over the same period was: 16.85, 19.52, 17.65, 19.15, 18.23, 20.27, and 20.43.

In particular, VZ-MA argues that the small number of trouble reports can skew VZ-MA's performance with respect to CLEC customers.[866] The MTTR metric is also sensitive to the CLECs' failure to locate troubles accurately.[867] In support of this assertion, VZ-MA notes that from January through March 2000, half of all reported CLEC troubles were closed as NTF.[868] According to VZ-MA, the CLEC is responsible for testing its UNE loops and for providing information from its test results to VZ-MA's RCMC as to the location and type of trouble. As was mentioned earlier, the failure of CLECs to isolate troubles on UNE loops adversely affects VZ-MA's performance. Even when appropriately dispatched by a CLEC, VZ-MA states that its technicians experience greater difficulty in locating, diagnosing, and repairing CLEC-reported troubles because they lack the information that is generally available to them on retail troubles (e.g., tracking and repairing a metallic fault is a different repair procedure than clearing an open

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866 VZ-MA Application, Appdx. B, Vol. 32a-b, Tab 423, at ¶ 249 (VZ–MA May Checklist Aff.).

867 VZ–MA Application, Appdx. A, Tab 1, at ¶ 78 (Lacouture/Ruesterholz Decl.); VZ-MA Application, Appdx. B, Vol. 32a-b, Tab 423, at ¶¶ 251-253 (VZ–MA May Checklist Aff.).

868 VZ-MA Application, Appdx. B, Vol. 32a-b, Tab 423, at ¶ 253 (VZ–MA May Checklist

circuit).[869]

Aff.).

869 VZ-MA Application, Appdx. B, Vol. 32a-b, Tab 423, at ¶¶ 251-252 (VZ–MA May Checklist Aff.).

According to VZ-MA, it resolves or "closes" approximately half of its retail trouble reports with a determination of a problem with customer provided equipment ("CPE") or NTF.[870] VZ-MA says this level of trouble reports closed to CPE or NTF is similar to that experienced by CLECs with substantial volumes. However, unlike CLECs, VZ-MA expects to resolve a substantial number of troubles attributable to a CPE, usually after an MLT test and some interactive testing with the customer. VZ-MA states that many of these troubles are never dispatched but are resolved with the customer over the phone.[871]

VZ-MA asserts that it would have expected similar troubleshooting by CLECs and their customers and that CLECs would have only called VZ-MA with troubles likely to be in the VZ-MA network. However, more than half of all the trouble reports that VZ-MA receives from CLECs are closed as NTF and less than 10 percent of the initial NTF results generate a repeat report that ultimately results in a found trouble in VZ-MA's network.[872] According to VZ-MA, in most cases, once VZ-MA communicates an "NTF" to the CLEC, there is no further VZ-MA trouble report activity on that circuit. In these circumstances, there is no indication what the actual trouble resolution was or why VZ-MA had to be involved. The Department agrees with VZ-MA that these unnecessary dispatches consume VZ-MA's resources better directed elsewhere and

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870 See VZ–MA Application, Appdx. B, Vol. 34a-b, Tab 443 (VZ–MA's Response to DTE-VZ-5-20.).

871 Id.

872 Id.

skew the MTTR metric, causing VZ-MA's performance with respect to repairing its retail customers' loop troubles to appear superior to its performance repairing CLEC customers' loop troubles when in fact it is not superior.[873]

[873] Id.; VZ–MA Application, Appdx. A, Tab 1, at ¶ 78, Att. I (Lacouture/Ruesterholz Decl.).

As was the case with the MRA metric, VZ-MA's incorrect scoring of CLEC-rejected Saturday repair appointments inflated the results of the MTTR metric, beginning in April 2000.[874] According to VZ-MA, this phenomenon is the "remaining obstacle to achieving equivalence between MTTR results for retail and UNE POTS customers . . . ."[875] VZ-MA explains that the difference in MTTR results between retail and UNE POTS loops is now mainly due to the inclusion of up to 48 hours of weekend time for each CLEC customer who requests a Monday

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874 VZ–MA Application, Appdx. A, Tab 1, at ¶ 73 (Lacouture/Ruesterholz Decl.); VZ-MA Application, Appdx. B, Vol. 42, Tab 494, at ¶¶ 134-135 (VZ–MA August Checklist Aff.).

875 See VZ–MA Application, Appdx. B, Vol. 34a-b, Tab 443 (VZ–MA's Response to DTE-VZ-5-22).

appointment.[876] In fact, when VZ-MA adjusted the May through July 2000 results to account for the CLECs' business practice of rejecting weekend appointments, VZ-MA's MTTR performance improves by an average of four hours and the OOS>24 metric (discussed below) for CLECs "falls in line" with those of retail.[877]

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876 Id.

877 VZ–MA Application, Appdx. A, Tab 1, at ¶ 74 (Lacouture/Ruesterholz Decl.), citing Att. G.

Further, Verizon's RCMC personnel made the administrative error of using "now time" as the time the actual trouble report was cleared, rather than the time the trouble was cleared, as noted by the technician. VZ-MA argues that this mistake always runs the "risk of adding administrative time to the total trouble duration" but that this administrative error was corrected.[878]

According to VZ-MA, the OOS>24 hours metric is defined as a customer without dial tone for over 24 hours, which begins on initial contact with the customer when it is determined that the circuit is completely out of service. For POTS, this is measured "OOS" for more than 4, 12 and 24 hours, and for unbundled loops, VZ-MA measures OOS for more than 12 and 24 hours.[879]

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878 VZ-MA Application, Appdx. B, Vol. 42, Tab 494, at ¶ 137 (VZ–MA August Checklist Aff.).

879 VZ–MA Application, Appdx. A, Tab 3, at ¶ 102 (Guerard/Canny Decl.).

Based upon a review of VZ-MA's data for this metric, we find VZ-MA's performance is improving,[880] and also agree that factors beyond VZ-MA's control adversely affect this metric, like other maintenance measures mentioned above.

[880] From January through July 2000, the percentage of loops OOS>24 (MR-4-08) for CLECs was: 40.96%, 46.45%, 47.20%, 34.18%, 31.96%, 35.66%, and 31.82%. During that same period, the percentage of OOS >24 for VZ-MA was: 21.13%, 28.70%, 23.18%, 26.95%, 24.17%, 30.45%, and 30.67%.

VZ-MA also records the number of troubles reported that are found in VZ-MA's network per 100 lines in service. For POTS, it further disaggregates this measurement between troubles found in the loop (i.e., drop wire or outside plant) and the central office. These measurements show that CLECs experience on average a similar level of troubles with VZ-MA's network as VZ-MA does.[881] VZ-MA's data also measure the quality of its maintenance and repair by measuring the percent of reported troubles cleared that have another trouble reported within 30 days where the later trouble is found to be in VZ-MA's network.[882] VZ-MA's data for this metric also show parity.[883]

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881 From January through July 2000, the percentage of network trouble report rate for loops for CLECs was: 1.41%, 1.76%, 0.54%, 1.11%, 1.30%, 1.29%, and 0.88%. During the same period, VZ-MA's reported rate for its loops was: 0.89%, 0.99%, 1.11%, 1.13%, 1.25%, 1.39%, and 1.23%.

882 VZ–MA Application, Appdx. A, Tab 3, at ¶ 106 (Guerard/Canny Decl.).

883 From January through July 2000, the percentage of repeat trouble reports within 30 days for CLECs was: 19.62%, 16.61%, 10.93%, 14.17%, 16.45%, 16.53%, and

c. Conclusions

VZ-MA's data demonstrate that VZ-MA is meeting the stringent standards set forth in the C2C Guidelines for UNE loops.[884] Where VZ-MA's data indicate that its performance is not consistent with those Guidelines, VZ-MA has provided explanations to account for its performance -- explanations that have not been contested by CLECs in our proceeding. In particular, we agree with VZ-MA that factors beyond VZ-MA's control adversely affect its performance for several maintenance-related metrics.

14.29%. VZ-MA's retail performance during the same period was: 18.64%, 18.88%, 19.50%, 18.41%, 19.08%, 18.70%, and 19.43%.

884 As mentioned above, KPMG verified VZ-MA's ability to accurately capture and report the C2C Guidelines performance measurements. See Section V.B.1.g.iv, above for a discussion of KPMG's test.

VZ-MA first noted several of these factors (e.g., CLEC failure to isolate accurately the source of a trouble, skewed results because of small number of orders) in its May 2000 filing. In the three and a half months since that filing and VZ-MA's filing with the FCC, no CLEC contested VZ-MA's assertions. In fact, other than the IDLC claims discussed above, no CLEC disputed VZ-MA's loop provisioning and maintenance performance since the 1999 technical sessions. As was mentioned earlier, WorldCom made several unsupported loop claims last year but was unable to provide documentation to substantiate those claims of poor VZ-MA performance and has not pursued the matter this year before the Department. In addition, as we found above, the Department agrees that VZ-MA's interval metrics (e.g., average interval offered, average completed interval) are affected by business decisions made by CLECs and should be provided less weight. We note that this view is consistent with the FCC's Bell Atlantic New York Order.[885]

4. Hot Cuts

[885] See Bell Atlantic New York Order at ¶ 285 (providing "little weight to the data evidencing the average intervals in which loop installations are completed.").

Simply stated, the hot cut process is designed to move an in-service loop from VZ-MA's switch to a CLEC's switch. VZ-MA and CLECs must coordinate a number of steps that result in the customer being without service for no more than five minutes.[886] As mentioned above, for purposes of evaluating VZ-MA's § 271 Compliance Filing, the Department adopted the performance measurements set forth in the C2C Guidelines. Because there is no retail analog to the hot cut process,[887] the C2C Guidelines establish a performance standard or benchmark that serves as an objective for VZ-MA to meet to demonstrate its hot cut processes provide a CLEC with a meaningful opportunity to compete. Specifically, the FCC reviews data indicating whether VZ-MA provisions hot cuts in sufficient quantities, at an acceptable level of quality, and with a minimum amount of service disruption.[888]

In approving VZ-NY's § 271 application, the FCC noted that VZ-NY's hot cut

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886 VZ–MA Application, Appdx. A, Tab 1, at ¶¶ 81-82 (Lacouture/Ruesterholz Decl.).

887 See SBC Texas Order at ¶ 258; see also Bell Atlantic New York Order at ¶ 291 ("[b]ecause there is no retail equivalent to a hot cut, Bell Atlantic must demonstrate that it provides unbundled loops through hot cuts 'in a manner that offers an efficient competitor a meaningful opportunity to compete.'").

888 See Bell Atlantic New York Order at ¶ 291.

performance was a "minimally acceptable showing" and that it would have serious concerns if any one of the three following measurements were to decline: (1) the 90 percent on-time hot cut performance rate; (2) the five percent of hot cuts resulting in service outages rate; and (3) the two percent of hot cut lines reporting installation troubles rate.[889]

a. Hot Cut Provisioning Process

[889] Id. at ¶ 309.

According to VZ-MA, it uses the same methods and procedures in Massachusetts to perform hot cuts that it uses in New York and that the FCC found to be satisfactory in its review of BA-NY's § 271 application.[890] VZ-MA states that KPMG verified that VZ-MA adheres to the hot cut processes.[891] The Department is persuaded by KPMG's findings that VZ-MA follows the hot cut procedures approximately 99 percent of the time.[892] We note that only AT&T contests

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890 VZ–MA Application, Appdx. A, Tab 1, at ¶ 80 (Lacouture/Ruesterholz Decl.).

891 Id., citing VZ–MA Application, Appdx. B, Vol. 48a-b, Tab 563, at 216-217, 220-221 (KPMG Final Report).

892 According to KPMG, it observed 81 hot cuts with VZ-MA technicians performing a total of 793 tasks. KPMG confirms that the VZ-MA technicians executed 785, or 99 percent,

VZ-MA's adherence to these methods and procedures, and that most of these claims were raised last year, responded to by VZ-MA, and not pursued by AT&T this year. When asked to provide documentation to support claims AT&T made last year during our technical sessions that VZ-MA does not follow the hot cut procedures, **Begin Proprietary ********** End Proprietary**[893]

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of the tasks in accordance with VZ-MA's methods and procedures. VZ–MA Application, Appdx. B, Vol. 48a-b, Tab 563, at 216 (KPMG Final Report (POP-7-1-2-A)).

893 See RRs-220, 284, 285, 292, and 296.

This year, AT&T has argued that VZ-MA has not followed its hot cut procedures because it does not confirm the cable facilities assignment ("CFA") information for an impending hot cut on the LSRC but, rather, includes the Access Customer Termination Location ("ACTL").[894] According to AT&T, the ACTL cannot substitute for the CFA because it provides only the address of the collocation cage from which the customer will be served. AT&T argues that since a CLEC will likely have more than one CFA in a collocation arrangement, the CLEC will be unable to confirm that VZ-MA and the CLEC are dealing with the same customer facility.[895] Finally, AT&T contends that VZ-MA's failure to confirm the CFA on the LSRC requires AT&T to perform "work-arounds," which result in an unnecessary expense for AT&T.[896] Apart from asserting unnecessary expense, AT&T failed to quantify it.

VZ-MA responds that AT&T already has the CFA information it is now requesting VZ-MA to confirm.[897] VZ-MA argues that CLECs specifically requested that they have the responsibility for designating the CFA for their orders. According to VZ-MA, the only reason AT&T asked that the CFA be "parroted" back (i.e., reconfirmed) to it is because AT&T wanted to

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894 VZ–MA Application, Appdx. B, Vol. 38, Tab 460, at 34 (AT&T July Supplemental Comments).

895 Id.

896 Id. at 33.

897 VZ-MA Application, Appdx. B, Vol. 42, Tab 494, at ¶ 84 (VZ–MA August Checklist Aff.).

ensure that the VZ-MA frame technician was going to the correct CFA termination.[898] VZ-MA contends that although AT&T claimed the CFA confirmation was necessary to prevent "no dial tone" situations, improper CFAs has never surfaced during discussions between the two carriers as the "driver" of this problem.

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898 Id.

VZ-MA argues that its employees provide the CFA in question to AT&T during the CTR1 call, which occurs the day the RCCC receives AT&T's order.[899] According to VZ-MA, during this call, its coordinator reviews the due date, the CFA information, and any other details AT&T's coordinator wishes. Moreover, VZ-MA states that KPMG substantiated this process in its report.[900] The VZ-MA coordinator will provide its AT&T counterpart a CFA in the event of a "no dial tone" or "wrong dial tone" situation. If AT&T discovers that the VZ-MA technician is at the wrong location, there is "ample time" to correct this mistake and proceed with the hot cut on the

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899 VZ–MA Application, Appdx. B, Vol. 46, Tab 533, at 4411 (Transcript of Technical Session Held 8/21/00).

900 Id., citing KPMG Draft Final Report Version 1.3 at 224 (POP-7-2-5).

original due date and time.[901] Finally, VZ-MA argues that for all practical purposes, the ACTL is synonymous with the CFA, and, since it also provides the CFA to AT&T during the CTR1 call, the ACTL on the LSRC does not pose any problem with respect to hot cuts.[902]

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901 VZ–MA Application, Appdx. B, Vol. 46, Tab 533, at 4412 (Transcript of Technical Session Held 8/21/00).

902 Id. at 4413.

VZ-MA has persuaded the Department that the inclusion of ACTLs on the LSRCs, in lieu of CFAs, is not an impediment to the completion of a hot cut on the due date and at the scheduled time. In essence, AT&T is complaining that VZ-MA is not providing AT&T with information that is within AT&T's possession and that the failure of VZ-MA to confirm information that AT&T already has, somehow causes additional expense to AT&T in the form of a "work-around." In response to a Department information request, AT&T was unable to indicate how frequently it performs these so-called "work-arounds," which appear to consist of either checking a VZ-MA database or calling a VZ-MA employee.[903] AT&T has not made it clear to the Department why AT&T requires this confirmation, an argument not made by any other carrier, and why it simply could not confirm the CFA during the CTR1 call. In any event, we find that VZ-MA's inclusion of the ACTL, and not the CFA, on the LSRC would not deny an efficient competitor (such as AT&T

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903 VZ–MA Application, Appdx. B, Vol.44, Tab 506 (AT&T's response to DTE-ATT 1-13).

may be) a meaningful opportunity to compete in Massachusetts.[904] VZ-MA's hot cut performance with respect to AT&T's orders is excellent. As noted in its filing with the FCC, from May through July 2000, VZ-MA has completed almost 99 percent of AT&T's hot cut orders on time.[905]

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904 SBC Texas Order at ¶ 258; Bell Atlantic New York Order at ¶ 291.

905 VZ–MA Application, Appdx. A, Tab 1, at ¶ 87 (Lacouture/Ruesterholz Decl.).

VZ-MA states that it developed a process to perform multiple hot cuts on a project basis, and has developed a web-based system to track and manage hot cut orders. These developments virtually eliminate the need for multiple phone calls between the carriers' coordinators.[906] The Department is persuaded that VZ-MA's hot cut process works well and that VZ-MA is continually striving to simplify this process for CLECs. As discussed above, even if VZ-MA is not adhering strictly to its hot cut methods and procedures by inserting the ACTL in lieu of parroting back the CFA to AT&T on LSRCs, AT&T has been unable to demonstrate to the Department that this substitution has had anything other than a de minimis effect on AT&T. Finally, we note that KPMG verified that VZ-MA follows its hot cut procedures 99 percent of the time.

b. On-Time Hot Cut Performance

i. Background

The on-time hot cut measurement requires VZ-MA to provision 95 percent of hot cuts within the window applicable to the particular order (e.g., one hour for orders with fewer than ten lines). Unlike VZ-NY's performance immediately prior to filing its § 271 application with the FCC, VZ-MA bettered this benchmark in Massachusetts every month from January through July 2000.[907] Moreover, VZ-MA has maintained this high level of performance as the hot cut volumes

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906 See VZ-MA Application, Appdx. B, Vol. 32a-b, Tab 423, at ¶ 184 (VZ–MA May Checklist Aff.); see also VZ–MA Application, Appdx. B, Vol. 34a-b, Tab 443 (VZ-MA's Responses to DTE-5-4, DTE-5-5 (where VZ-MA indicates that three CLECs are currently using the web-based system on a trial basis)).

907 From January through July, VZ-MA completed hot cuts within the appropriate window (PR-9-01) in the following percentages: 99.14%, 98.67%, 99.34%, 99.56%, 98.45%,

have increased (463 hot cut orders in April to 1351 orders in July). Also, VZ-MA has demonstrated its ability to perform hot cuts involving IDLC. From March through mid-July, VZ-MA completed 284 hot cuts involving IDLC (or 8.2 percent of all hot cuts), achieving an on-time performance of 93 percent.[908]

99.63%, and 99.19%.

908 VZ–MA Application, Appdx. B, Vol. 42, Tab 494, at ¶ 92 n.11 (VZ-MA August Supplemental Checklist Aff.)

Only one carrier, AT&T, disputes VZ-MA's on-time performance. Specifically, AT&T argues that VZ-MA does not accurately record its hot cut performance and frequently asks CLECs to supplement orders when VZ-MA experiences a problem.[909] VZ-MA has testified that it does not ask CLECs to supplement orders. If VZ-MA is unable to meet a due date, it may extend the due date, but once the order is complete, it would score that order as having missed the due date.[910] VZ-MA also argues that KPMG verified VZ-MA's hot cut performance, finding that VZ-MA provisioned 99 percent of the non-IDLC-loop hot cuts KPMG observed at the agreed-upon

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909 VZ–MA Application, Appdx. B, Vol. 38, Tab 460, at 31-32 (AT&T July Supplemental Comments).

910 VZ–MA Application, Appdx. B, Vol. 46, Tab 533, at 4431-4433 (Transcript of Technical Session Held 8/21/00).

time and that VZ-MA provisioned 95 percent of IDLC-hot cuts at the stated time.[911]

[911] VZ–MA Application, Appdx. B, Vol. 42, Tab 494, at ¶ 86 (VZ-MA August Supplemental Checklist Aff.), citing KPMG Draft Final Report Version 1.3 at 220-221 (POP-7-1-3-A, POP-7-1-3-B).

The Department notes that while AT&T argues that VZ-MA's logs fail to indicate those instances in which VZ-MA asked AT&T to supplement its order to account for a VZ-MA error, AT&T has not explained why AT&T's records fail to reflect this VZ-MA request. If the point is important enough to contest, notations in business records, contemporaneous with events and made in the ordinary course of business, might have been corroborative. No such records were adduced, and so we conclude none exist. VZ-MA witness Maguire testified that VZ-MA does not follow this alleged practice and that if VZ-MA is unable to meet a due date, it will, after notification to the CLEC, extend the due date and appropriately score this revised due date as a "miss." The Department cannot rely upon AT&T's unsubstantiated claims of improper VZ-MA scoring. Indeed, the Department finds it telling that AT&T has not provided documentation from this year to support its claim of VZ-MA mis-scoring its hot cut performance. In fact, since May 2000, VZ-MA provides AT&T with weekly hot cut performance reports. According to VZ-MA, AT&T has not challenged even one of the nearly 400 hot cuts made since May, a claim supported by our record, and VZ-MA completes almost 99 percent of AT&T's orders on time.[912]

ii. Hot Cut Data Reconciliation Between VZ-MA and AT&T

[912] VZ–MA Application, Appdx. A, Tab 1, at ¶ 87 (Lacouture/Ruesterholz Decl.).

In its May 2000 filing, VZ-MA provided a "scorecard" of its on-time performance for AT&T hot cuts from July 1999 to February 2000. On August 18, 2000, AT&T provided its own version of the AT&T hot-cut scorecard, which differed from VZ-MA's AT&T scorecard. VZ-MA reported that it received a total of **Begin Proprietary ********** End Proprietary** from AT&T over the period July 1999 through February 2000. Of the **Begin Proprietary ********** End Proprietary** AT&T claimed that VZ-MA mis-scored 36 orders because, on their respective scorecards, AT&T had scored these orders as "misses" and VZ-MA had scored them as "mades." AT&T claims that, relying on its own data, the 36 orders were those that "were absolutely clear and unambiguous," in terms of being mis-scored. AT&T contends that other orders may have been mis-scored, but that it did not include them as mis-scored if AT&T's records "were at all unclear."[913]

Responding to AT&T's request for a data reconciliation, the Department oversaw a such a process between VZ-MA and AT&T. The Department chose to focus first on the 36 orders because, according to AT&T, those were the ones with the most clear evidence of having been mis-scored.

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913 VZ–MA Application, Appdx. B, Vol. 38, Tab 460, at 8 (AT&T July Supplemental Comments).

From our review of the data reconciliation process, it appears that VZ-MA in fact mis-scored six of those 36 orders. There are three additional orders that AT&T and VZ-MA could not reconcile and which they submitted to the Department for review. Neither AT&T nor VZ-MA produced persuasive evidence that these three orders should be scored as "misses" or "mades," and, accordingly, the Department is unable to categorize them. AT&T now contends that because six orders were mis-scored, "it is likely that a full reconciliation would produce additional scoring changes."[914] We disagree. This is the baldest surmise, advanced with neither logical nor evidentiary underpinning of value. If only six orders out of 36 could be demonstrated by AT&T to have been mis-scored where AT&T itself claimed that its own data were "absolutely clear and unambiguous," then it is likely that there would be a much lower percentage, if any, of mis-scored orders where AT&T's records "were at all unclear," in AT&T's words. Therefore, the results of this data reconciliation indicate to us that there is no need for further data reconciliation of the remaining hot cut orders.

c. Quality of Loops Provisioned Through Hot Cuts

Pursuant to the C2C Guidelines, VZ-MA must demonstrate that fewer than two percent of the lines provisioned through hot cuts experience troubles within the first seven days. Again, the Department finds that VZ-MA exceeds the C2C Guidelines standard. From July 1999 through July 2000, VZ-MA reported troubles on fewer than one percent of hot cut lines. This performance

[914] Appdx. J at 7 (AT&T September 28, 2000 Comments).

has remained below one percent even as volumes have increased.[915] Moreover, VZ-MA revised its hot cut procedures in the second quarter of 2000 so that all of VZ-MA's hot cut "outages" are captured within this installation quality measurement. Therefore, according to VZ-MA, its outages are also less than one percent.[916] As the FCC found in its review of BA-NY's § 271 application, we believe these data and the statistics derived from them confute AT&T's claims that VZ-MA's performance results in a level of service disruptions that significantly affect its ability to obtain and retain customers.[917]

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915 VZ-MA's performance from May through July 2000 is: 0.77% (2719 hot cuts); 0.54% (3535 hot cuts); and 0.90% (3013 hot cuts).

916 VZ-MA Application, Appdx. B, Vol. 42, Tab 494, at ¶ 75 (VZ–MA August Checklist Aff.).

917 See Bell Atlantic New York Order at ¶ 301.

In its response to a Department data request, AT&T provided eight PONS to support its argument that AT&T's customers experienced service problems (from August through November 1999).[918] VZ-MA disputes AT&T's characterization of VZ-MA's performance with respect to these eight orders and reaffirms VZ-MA's findings with respect to at least four of the eight orders. Moreover, even assuming all of AT&T's claims for these eight orders were accurate, VZ-MA argues that its hot cut performance would still be excellent. Finally, VZ-MA states that it is notable that AT&T failed entirely to provide comparable claims about VZ-MA's hot cut provisioning since the beginning of this year.[919]

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[918] VZ–MA Application, Appdx. B, Vol. 27, Tab 340 (AT&T's Response to RR-DTE-290); see also VZ–MA Application, Appdx. B, Vol. 38, Tab 460, at 38-39 (AT&T July Supplemental Comments).

[919] VZ-MA Application, Appdx. B, Vol. 32a-b, Tab 423, at ¶ 180 (VZ–MA May Checklist Aff.); VZ-MA Application, Appdx. B, Vol. 42, Tab 494, at ¶¶ 90-92 (VZ–MA August Checklist Aff.).

The Department agrees with VZ-MA that it is telling that AT&T's complaints about the quality of loops provisioned through hot cuts involved eight orders from August and September of 1999. Notwithstanding VZ-MA's arguments to the contrary, if we accept AT&T's data as accurate, eight orders out of a universe of **Begin Proprietary ********** End Proprietary** hot cuts provisioned by VZ-MA from July 1999 through February 2000 does not indicate a pattern of poor performance nor does it lead us to conclude that VZ-MA's actions pose any barrier to a CLEC's ability to compete. Quite the contrary, in fact. While we do not discount the effect the disruptions described by AT&T had on its customers, based upon the record before us, we can only attribute such outages to isolated events. When asked to provide documentation to support its claims of no dial tone as a result of a failed hot cut, AT&T responded **Begin Proprietary *** *** End Proprietary**.[920] And so, we decline to adopt AT&T's request and agree with VZ-MA that the loops it provisions through hot cuts experience few troubles.

5. xDSL-Capable Loops

a. Standard of Review

In its review of BA-NY's § 271 application, the FCC noted that it would find it "most persuasive" if future applicants demonstrate that they are providing nondiscriminatory access to xDSL-capable loops through comprehensive and accurate reports of performance measures.[921] In

920 See RR-292.

921 SBC Texas Order at ¶ 282, citing Bell Atlantic New York Order at ¶¶ 333-335.

its most recent § 271 Order, the FCC considered the following xDSL-related factors: (1) order processing timeliness; (2) installation timeliness (e.g., average installation interval, percentage of missed due dates); (3) loop quality; and (4) maintenance and repair timeliness and quality.[922]

b. Order Processing Timeliness

[922] SBC Texas Order at ¶ 284.

In order to demonstrate that VZ-MA provides an efficient competitor with a meaningful opportunity to compete, VZ-MA must demonstrate that it provides nondiscriminatory access to loop qualification information, and processes LSRCs in a timely manner.[923]

i. Discussion

VZ-MA argues that it is providing CLECs with real-time mechanized access to loop qualification information contained in the same database its retail employees use to qualify an end-user's line for VZ-MA's ADSL service. According to VZ-MA, as of July 2000, this database included 93 percent of VZ-MA's central offices with collocation arrangements in place, and it states that it will make a reasonable effort to adjust its schedule to accommodate a CLEC request to inventory a specific central office not already included in the database before 2001. Moreover, VZ-MA states that it has enhanced the information contained in this database, beyond that needed by its retail employees, to include data on why a loop does not qualify (e.g., load coils, DLC).[924]

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923 Id. at ¶ 286.

924 VZ–MA Application, Appdx. A, Tab 1, at ¶ 108 (Lacouture/Ruesterholz Decl.); see also VZ–MA Application, Appdx. B, Vol. 34a-b, Tab 443 (VZ-MA's Response to DTE-5-14).

Last year, Covad argued that VZ-MA did not provide loop qualification information through its database in a timely manner, a claim it has not pursued this year.[925] Also last year, several CLECs argued that the level of information contained in the database was inadequate. Finally, in a different Department proceeding, D.T.E. 98-57-Phase III, Digital Broadband argued that VZ-MA's loop qualification database is inaccurate, requiring Digital Broadband to submit requests for manual loop qualification. Digital Broadband raised this issue for the very first time in D.T.E. 99-271 during the September 8, 2000, final oral argument. Counsel for VZ-MA responded that Digital Broadband should have made the claim earlier, with supporting documentation.[926]

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925 VZ–MA Application, Appdx. B, Vol. 18, Tab 218, at ¶ 44 (Covad Technical Statement on Collocation, OSS, and Loop Issues).

926 VZ–MA Application, Appdx. B, Vol. 49, Tab 565, at 5517, 5634-5635 (Transcript of Oral Argument Held 9/8/00).

VZ-MA makes available additional information on loops through manual loop qualifications and engineering queries. Both processes involve a review of certain VZ-MA databases, and the latter includes a review of cable plats and outside plant records, and accordingly requires one additional day (72 hours as opposed to the 48 hours required for manual loop qualifications). According to VZ-MA, its on-time performance for manual qualifications in the first quarter of 2000 was 92 percent. Moreover, since January 2000, VZ-MA has performed approximately 11,700 manual loop qualifications. In contrast, it performed a mere 15 engineering queries during that period of time.[927] CLEC complaints made last year about these two means of qualifying loops were directed mainly at the cost VZ-MA charges to perform these functions. In a recent Department Order, we determined that in a forward-looking environment, loop qualification would be unnecessary (because VZ-MA's loops would be fiber-fed); therefore, we disallowed VZ-MA's proposal to assess any fee for these activities.[928]

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927 VZ–MA Application, Appdx. B, Vol. 34a-b, Tab 443 (VZ-MA's response to DTE-WCOM-4-11).

928 Phase III Order at 103-106.

According to VZ-MA, it processes LSRCs in a timely fashion. VZ-MA states that, pursuant to the C2C Guidelines, the LSRC interval begins at the time VZ-MA receives an error-free LSR from a CLEC.[929] Last year, Covad claimed that it received FOCs[930] within the stated 72-hour interval only 30 percent of the time.[931] VZ-MA reviewed Covad orders and responded that Covad incorrectly calculates this measurement from the time it first submits an erroneous order.[932] Covad does not disagree with VZ-MA's explanation of Covad's scoring; however, Covad claims it is justified in measuring the FOC interval from the date it submits an order because VZ-MA's GUI system causes CLECs to make errors (e.g., requiring CLECs to re-type information, returning queries without sufficient information on the CLEC error, requiring CLECs to make repeated calls to VZ-MA's TIS OC for assistance with errors).[933] VZ-MA responds that its business rules provide the requisite amount of detail to enable a CLEC to submit accurate orders over VZ-MA's

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929 VZ-MA Application, Appdx. B, Vol. 32a-b, Tab 423, at ¶ 204 (VZ–MA May Checklist Aff.).

930 According to VZ-MA, it refers to order confirmations for resale and UNE orders as "LSRCs" and for interconnection trunks, firm order confirmations ("FOCs"). Covad refers to its order confirmations as FOCs, hence the term's use in this context. VZ-MA Application, Appdx. A, Tab 3, at ¶ 44 (Guerard/Canny Decl.).

931 VZ–MA Application , Appdx. B, Vol. 18, Tab 218, at ¶ 27 (Covad Technical Statement on Collocation, OSS, and Loop Issues).

932 VZ-MA Application, Appdx. B, Vol. 32a-b, Tab 423, at ¶ 205 (VZ–MA May Checklist Aff.).

933 VZ–MA Application, Appdx. B, Vol. 38, Tab 462, at ¶ 38 (Covad Berard/Clancy/Cutcher Decl.).

GUI system.[934] According to VZ-MA, its retail representatives must abide by the same pre-order business rules.[935] Finally, VZ-MA argues that its data demonstrate it is providing timely order confirmation.[936]

ii. Conclusions

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934 See Section V.B.1.f.ii, iv above, for a discussion of KPMG's test of VZ-MA's interfaces.

935 VZ-MA Application, Appdx. B, Vol. 42, Tab 494, at ¶ 21 (VZ–MA August OSS Aff.).

936 For example, from May through July 2000, VZ-MA returned over 95 percent of its LSRCs for orders of less than ten lines on time (OR-1-04): 95.24%, 97.15%, and 98.67%. For orders equal to or more than ten lines, VZ-MA was similarly able to meet the C2C Guidelines standard during these months: 99.13%, 97.37%, and 99.04%. We note that, at this time, VZ-MA is unable to disaggregate xDSL orders from all loop, pre-qualified complex, and LNP loop orders.

The Department finds that VZ-MA is providing CLECs, through its enhanced loop qualification database, the amount of information most CLECs require to qualify a loop.[937] The Department is concerned about Digital Broadband's claim of database inaccuracies, which, if proven true, could result in undefined provisioning delays.[938] While we note that such inaccuracies, if true, would affect both CLECs and VZ-MA (including its separate data affiliate when it becomes operational in Massachusetts), an inaccurate database could unnecessarily slow deployment of high-speed Internet access to Massachusetts residences and small businesses. We note, however, that Digital Broadband, unaccountably, first raised this issue at the oral argument;

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937 In a recent Department Order, we approved VZ-MA's proposal to make available the following information in its mechanized database: total metallic loop length (including bridged taps, and presence of load coils, DLC, interferors, digital single subscriber carrier) and qualification for ADSL/HDSL per VZ-MA standards. Phase III Order at 94 n.65.

938 As mentioned above, since the Department disallowed VZ-MA-imposed charges for loop qualification in our Phase III Order, the significance of requesting manual loop qualifications and engineering queries is the additional time required by VZ-MA to perform these procedures (as opposed to the instantaneous access a CLEC or VZ-MA would have through the mechanized database).

thus, there was no opportunity for VZ-MA to respond. We expect VZ-MA to investigate Digital Broadband's claims[939] and include a response to Digital Broadband's claims in its reply comments in this proceeding.

939 In its response to information request DTE-DBC-1, made in D.T.E. 98-57-Phase III, Digital Broadband provided documentation in support of its database inaccuracy claim.

Only Covad contests VZ-MA's manual loop qualification performance, arguing that this process takes an inordinate amount of time to obtain information, if it receives the information at all.[940] When asked by the Department to provide documentation that VZ-MA does not respond to Covad's requests for manual loop qualifications and to provide the average response time for obtaining this additional information, Covad could not.[941] Our record does not indicate any CLEC complaints about VZ-MA's engineering query performance, a function which appears to be a rare occurrence in Massachusetts. Covad claimed that VZ-MA does not return FOCs within the stated interval for a significant number of its orders. However, Covad acknowledges that its claim is based upon Covad's own inaccurate calculation of the C2C-approved metric. Although Covad

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940 VZ–MA Application, Appdx. B, Vol. 38, Tab 463, at ¶ 38 (Covad Szafraniec/Katzman Decl.).

941 VZ–MA Application, Appdx. B, Vol. 45, Tab 511 (Covad's Response to Information Request DTE-CVD-4). In this response, Covad states that it uses a third party to request manual loop qualifications, and this third party indicated that it would require a special study to provide the Department-requested information. Absent documentation, the Department cannot rely on Covad's assertions of manual loop qualification delays or non-responsiveness to such requests by VZ-MA. Given the opportunity to do so, Covad fails to substantiate its claim. We, therefore, can give it little weight.

claims this mis-scoring is justified because it must use the error-prone GUI system, we note that the definition for this metric was developed in a collaborative fashion between CLECs and VZ-MA and was approved by the NYPSC.

In addition, in response to CLEC complaints about VZ-MA's practice of returning CLEC orders identifying one error at a time, VZ-MA indicates that there is a request currently pending in the Change Management process that would require VZ-MA to return all errors found on an LSR in a single query notice.[942] Based upon these factors, we cannot agree with Covad, i.e., that we should ignore VZ-MA's correctly scored performance, which was verified by KPMG, in favor of Covad's claims of poor order processing performance based upon admittedly, incorrectly-scored data. Finally, although VZ-MA includes xDSL orders with other loop orders in the denominator of the relevant metric, based upon our review of VZ-MA's performance data, it appears that VZ-MA returns LSRCs within the stated interval almost all of the time.

c. Installation Timeliness

To determine whether a BOC provisions xDSL-capable loops in a timely manner, the FCC indicated that it will consider the average completion interval and the percentage of installation appointments missed because of BOC-caused errors (see Section D.3.a.ii-iii, above, for the definitions of both metrics).

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942 VZ-MA Application, Appdx. B, Vol. 46, Tab 533, at 4600 (Transcript of Technical Session Held 08/21/00).

i. Discussion

VZ-MA's performance data indicate that it generally provisions xDSL loops for CLECs in approximately the same amount of time that it provisions xDSL loops for its own retail service.[943] A review of VZ-MA's data for the average completed interval show that from April through May, VZ-MA required less time to provision xDSL-capable loops for CLECs than it required for its own retail ADSL service. In the two most recent months (June and July), however, VZ-MA has required more time to provision these loops for CLECs. VZ-MA argues that this metric, average completed interval for xDSL-capable loops, is susceptible to several of the same factors that affect VZ-MA's interval performance data for POTS loops (e.g., CLEC miscoding), with the added factor of VZ-MA's inability to control whether a CLEC pre-qualifies a loop before submitting the order.[944]

VZ-MA indicates that in a study it conducted using approximately 3,000 June orders of two-wire digital and two-wire xDSL loops, it determined that almost all of these orders received

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943 From April through July 2000, the average completed interval for CLECs, requiring a dispatch, was: 7.80, 7.49, 7.16, and 7.14. During the same period, the average completed interval for VZ-MA was: 12.14, 8.96, 6.69, and 5.93.

944 VZ–MA Application, Appdx. A, Tab 3, at ¶ 78 (Guerard/Canny Decl.).

the due date that was requested or that is set forth in the C2C Guidelines. Moreover, VZ-MA stated that for a small subset of these orders where it first appeared that VZ-MA was unable to confirm the requested due date, VZ-MA researched the matter further and found that 95 percent of those orders were indeed given the correct interval based upon the fact that manual loop qualification was necessary on those orders.[945]

[945] VZ–MA Application, Appdx. B, Vol. 45, Tab 520, at 4327-4328 (Transcript of Technical Session Held 8/17/00).

According to VZ-MA, the standard interval for a two-wire xDSL loop, for both CLEC and retail orders, is six business days after loop qualification. VZ-MA states that all retail orders are pre-qualified; however, CLECs have the option of qualifying a loop through the mechanized database or requesting a manual loop qualification. VZ-MA argues that if a CLEC pre-qualifies the loop (like VZ-MA), the six-day interval runs from VZ-MA's receipt of a valid LSR. In addition, if a CLEC submits an LSR requesting a manual loop qualification, this six-day interval runs from the return of the confirmation providing the qualification information. However, VZ-MA asserts, the calculation of the average interval measurement begins with the date that the valid LSR is received (i.e., the date the LSR requesting the manual loop qualification is received).[946] VZ-MA argues that the additional 72 hours (48 hours to perform the manual loop qualification and 24 hours to return the LSRC) affect the average interval metrics so that it appears VZ-MA is not provisioning xDSL-capable loops to CLECs in the same amount it provides them for its retail

[946] VZ–MA Application, Appdx. A, Tab 3, at ¶ 78 (Guerard/Canny Decl.).

service.[947] This appears to be the issue VZ-MA's witness referenced during our technical session.[948]

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947 Id. In its Guerard/Canny Declaration, VZ-MA mentions a study it conducted of over 400 randomly selected xDSL loop orders from June through July. Based upon this study, it determined that the average completed interval for pre-qualified CLEC orders (approximately 200 orders) was 6.46 in June and 5.40 in July. In comparison, VZ-MA's average completed interval for its retail ADSL service was 6.69 and 5.93 during the same period. Id. at ¶ 80. The Department will not comment upon the substance of this study and what weight it should be accorded because VZ-MA did not present the results of the study before us during our § 271 proceeding.

948 VZ–MA Application, Appdx. B, Vol. 45, Tab 520, at 4328 (Transcript of Technical Session Held 8/17/00).

VZ-MA also reports the missed installation appointment measurement for two-wire xDSL loops. A review of these data shows that VZ-MA missed more installation appointments for CLECs than for its retail ADSL service.[949] VZ-MA responds that it is meeting the "proposed on-time installation standard" and that its results exceed the standard of acceptable performance set forth in the C2C Guidelines.

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949 From May through July, the percentage of missed installation appointments for CLECs, with a dispatch (PR-4-04) was: 3.28%, 3.55%, and 3.40%. During the same period, VZ-MA missed the following percentage of appointments for its retail service: 1.94%, 2.16%, and 2.04%.

Covad, Vitts, and Rhythms have challenged VZ-MA's provisioning performance in this proceeding, arguing that VZ-MA does not meet confirmed provisioning due dates. Both Covad and Rhythms note that VZ-MA's own July 2000 data show that it fails to provision xDSL loop orders within six days over 50 percent of the time.[950] Last year, Vitts argued that VZ-MA misses due dates because, among other things, VZ-MA fails to perform the necessary cross-wiring in its central offices.[951] VZ-MA reviewed the data Vitts provided in response to a record request and determined that 30 percent of the orders Vitts claimed VZ-MA missed were, in fact, met. In

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950 VZ–MA Application, Appx. B, Vol. 49, Tab 565, at 5502, 5575 (Transcript of Oral Argument Held 9/8/00). We note that VZ-MA began reporting this metric, PR-3-10, in July 2000. While participants had the July C2C Guideline report for the August technical session discussion of xDSL loops, VZ-MA's review of its provisioning of just pre-qualified loops, as opposed to loops qualified through VZ-MA's manual loop qualification procedure, was apparently not complete by this date (August 17, 2000).

951 VZ–MA Application, Appx. B, Vol. 20, Tab 233, at 3184 (Transcript of Technical Session Held 12/7/99); see also VZ–MA Application, Appdx. B, Vol. 23, Tab 256 (Vitts' Response to RR-199).

addition, VZ-MA argued that 86 percent of Vitts' November 1999 orders were completed on time, and during the October 1999 through March 2000 period, VZ-MA missed 5.8 percent of its appointments for Vitts' orders.[952] Vitts has not contested VZ-MA's performance this year. Rhythms made claims similar to Vitts' during last year's technical session, and for which it provided documentation. VZ-MA reviewed Rhythms' claims and noted that its C2C Guidelines data for Rhythms indicate that its percentage of missed appointments dropped from over 21 percent in October, 1999, to 4.73 percent in March, despite a tenfold increase in Rhythms' orders.[953]

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952 VZ-MA Application, Appdx. B, Vol. 32a-b, Tab 423, at ¶ 210 (VZ–MA May Checklist Aff.).

953 Id. at ¶ 211.

Covad is the only carrier that continues to make specific claims about VZ-MA's provisioning performance. First, Covad contends it takes 35 days on average to provide xDSL service because VZ-MA frequently misses its due dates.[954] VZ-MA reviewed the summary Covad provided to support this claim and others, and argued that Covad's numbers do not add up and that Covad must be including orders canceled through no fault of VZ-MA, such as "no facilities available" in the total of VZ-MA-caused canceled orders.[955] Covad acknowledges that it did, indeed, include "no facilities available" in the category of a VZ-MA-caused canceled order, constituting 32.4 percent of the total. Covad also admitted that it erroneously included orders that were canceled because a duplicate order was issued (6.5 percent of the total). Moreover, Covad indicates that eleven percent of the total is attributable to canceled orders due to long loops; eight percent is due to trenching; two percent is due to the presence of digital loop carrier ("DLC"); and one percent of the total orders that were canceled is attributable to electronics on the line.[956]

Second, Covad argues that VZ-MA claims with increasing frequency that no facilities are

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954 VZ–MA Application, Appdx. B, Vol. 38, Tab 462, at ¶ 60 (Covad Szafraniec/Katzman Decl.), corrected at VZ–MA Application, Appdx. B, Vol. 46, Tab 533, at 4556 (Transcript of Technical Session Held 8/21/00).

955 VZ–MA Application, Appdx. B, Vol. 45, Tab 520, at 4325-4326 (Transcript of Technical Session Held 8/17/00), citing VZ–MA Application, Appdx. B, Vol. 45, Tab 511 (Covad's Response to DTE-CVD-8).

956 VZ–MA Application, Appdx. B, Vol. 45, Tab 520, at 4380-4381 (Transcript of Technical Session Held 8/17/00). VZ-MA later indicated that Covad failed to provide VZ-MA with the data underlying the summary contained in its response to information request DTE-CVD-8. Therefore, VZ-MA was unable to address the substance of Covad's claims during the technical session. Id. at 4381-4382.

available running to the prospective Covad customer's premises. According to Covad, VZ-MA offers no relief in this situation, refusing to find or build copper facilities to meet Covad's request. Without copper facilities, Covad argues, it must either cancel a customer's order or ask the customer to accept downgraded service.[957]

[957] VZ–MA Application, Appdx. B, Vol. 38, Tab 462, at ¶¶ 45-46 (Covad Berard/Clancy/Cutcher Decl.).

VZ-MA responds to Covad's "no facilities" claim by noting that it has not installed copper in ten years in its feeder facilities and that finding a good copper pair is not easy. Moreover, VZ-MA explains that when it assigns a facility to a CLEC, that facility may not be a spare copper pair but, rather, may have been created through a line and station transfer (a process whereby VZ-MA will transfer a customer currently served by copper to a DLC-served loop to free up the copper loop for a CLEC that wants to provide xDSL service). VZ-MA states that since these copper loops are from ten to 60 years old, sometimes they do not work. VZ-MA will attempt to "clear" the pair or perform a transfer, but it is not always successful. The assignment of a facility to a CLEC does not mean that this facility will support the CLEC-intended service, according to VZ-MA, and its technicians may not know that until they are out in the field.[958]

Third, related to the "no facilities" argument, Covad contends that its technicians make unnecessary "truck rolls" (i.e., personnel dispatches) because of VZ-MA's poor loop provisioning. VZ-MA reviewed Covad's data and determined that Covad dispatched its technicians 80 percent of the time after VZ-MA informed Covad that the orders had not been completed (primarily because of "no access" or "customer not ready" situations). Thus, VZ-MA argues that the wasteful "truck rolls" are of Covad's own making.[959]

Fourth, according to Covad, VZ-MA overstates its claims of "no access" to CLEC

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958 VZ-MA Application, Appdx. B, Vol. 45, Tab 520, at 4325, 4357-4358 (Transcript of Technical Session Held 8/17/00).

959 VZ-MA Application, Appdx. B, Vol. 32a-b, Tab 423, at ¶ 207 (VZ–MA May Checklist Aff.).

customer premises. Covad argues that a review of its orders shows that less than half of the so-called "no access" orders were in fact a Covad-caused no access situation.[960] VZ-MA responds that Covad's "informal analysis" of its orders concerns VZ-NY orders, and that issues of "no access" to customer premises are significantly different in New York than they are in Massachusetts.[961]

ii. Conclusions

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960 VZ–MA Application, Appdx. B, Vol. 38, Tab 462, at ¶¶ 47-51 (Covad Berard/Clancy/Cutcher Decl.).

961 VZ-MA Application, Appdx. B, Vol. 42, Tab 494, at ¶¶ 114-115 (VZ–MA August Checklist Aff.).

The more experience VZ-MA gains, the better its performance becomes. This is borne out by VZ-MA's performance data. Its provisioning intervals, for both its retail ADSL service and the service it provides to CLECs, are decreasing, as are the percentage of missed installation appointments. However, VZ-MA's data indicate its provisioning performance has not yet reached formal parity. For the following reasons, however, the Department does not find that this apparent lack of parity, as defined in the C2C Guidelines, is sufficient to support a finding of non-compliance with the requirements of checklist item 4. In previous FCC § 271 Orders, the FCC has demonstrated a willingness, if warranted, to consider additional factors, including other performance metrics, when presented with data indicating sub-parity performance for some measurements.[962]

[962] See Bell Atlantic New York Order at ¶ 274.

For the two most recent months reported by VZ-MA, its average completed interval measurements indicate that it takes approximately one day longer to provision an xDSL loop for a CLEC than it requires for its retail ADSL service. The C2C Guidelines standard is parity. VZ-MA has testified before the Department that its retail representatives do not use manual loop qualifications or engineering queries, which will add additional time to the process. If a loop is not pre-qualified through the mechanized database, VZ-MA's employee will simply tell a prospective customer that it is unable to provide ADSL service. VZ-MA has indicated that it performed over 11,000 manual loop qualifications in Massachusetts for CLECs since the beginning of this year. It is only logical that this added step would increase provisioning intervals for CLECs, thus making it appear that VZ-MA's performance for CLECs is out of parity, when in fact it is not out of parity. Last year, Covad stated that it had a study showing that it loses customers if they are required to wait a certain number of days to receive xDSL service. The figure that Covad cited was 30 days.[963] Even if we were not to account for the additional time required to perform manual loop qualifications, the current one-day difference between the amount of time required to provision an xDSL loop for a CLEC and a VZ-MA customer does not lead us to conclude that this disparity

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963 VZ–MA Application, Appdx. B, Vol. 20, Tab 233, 3270 (Transcript of Technical Session Held 12/7/99).

would result in the CLEC losing a potential xDSL customer.

CLECs receive their requested xDSL provisioning interval approximately 99 percent of the time, and some of those requested provisioning intervals are outside of the six-day standard. When VZ-MA obliges a CLEC's request for a provisioning interval of greater than six days, it shows up in the performance measures as violating the standard, but this does not equal discrimination. Rather, VZ-MA is performing as a wholesale provider should. It gives CLEC customers the service they request. There is a stark inconsistency between the CLECs' argument that VZ-MA is unable to provision xDSL loops within six days and VZ-MA's evidence that shows it is providing CLECs with their requested due date. We find it telling that although given the opportunity to question or challenge VZ-MA's witnesses about its analysis of CLEC-requested due dates, no CLEC did.

VZ-MA's data also show that it misses a higher percentage of installation appointments for CLECs than for its retail service. Again, we note that VZ-MA's performance is improving. Last October, VZ-MA missed over eleven percent of CLEC appointments for xDSL loops.[964] This percentage has been steadily decreasing as the volume of CLEC xDSL loop orders increase, and we expect this trend to continue. We conclude that the difference, approximately one and a half percentage points in the most recent months, does not deny an efficient competitor a meaningful opportunity to compete in Massachusetts, as is evidenced by the increasing volumes of orders

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964 See VZ–MA Application, Appdx. B, Vol. 34a-b, Tab 443 (VZ-MA's Response to Information Request DTE-5-13).

submitted by CLECs.[965] Also, VZ-MA has explained persuasively how including loops that are pre-qualified and loops that require manual loop qualification in the measure creates a mis-impression of a lack of parity. While VZ-MA is persuasive, as noted above, we cannot credit its quantification of this issue because it was not presented before us during our § 271 proceeding. We will continue to monitor VZ-MA's provisioning performance closely and will take appropriate steps should the slight disparity in VZ-MA's performance increase.

As mentioned above, only Covad continues to challenge VZ-MA's provisioning performance. Unfortunately, Covad failed to provide VZ-MA the documentation to support Covad's assertion regarding the 35-day service establishment period so that VZ-MA could review and comment upon it, and be questioned on its response during the technical sessions. To be clear, Covad's 35-day to service figure is not to be compared with the six-day provisioning interval (during which VZ-MA is responsible for connecting the network portion of the loop) measured in PR-3-10. According to Covad, from the time a customer requests service to the date that customer has xDSL service, 35 days elapse, on average.[966] Since there is no end-to-end C2C metric, we have no standard against which to compare this figure, assuming it is accurate. Moreover, since this period of time is obviously influenced by actions taken by Covad, independent

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965 For example, Covad has a higher xDSL market share in Massachusetts then VZ-MA does. See VZ–MA Application, Appdx. B, Vol. 49, Tab 565, at 5495 (Transcript of Oral Argument Held 9/8/00).

966 VZ–MA Application, Appdx. B, Vol. 46, Tab 533, at 4572 (Transcript of Technical Session Held 8/21/00).

of VZ-MA, the relevance of such a statistic is unclear to the Department and certainly not established by anything Covad has presented.[967] Therefore, we do not consider Covad's data to demonstrate poor VZ-MA provisioning performance.

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967 In response to RR-326, Covad provided a list of over 1,000 orders from June through August 15, 2000. For each order, this list provides the PON, the date the order was received, the first FOC date, the FOC date, and the date the order was closed. Based upon this information, it is difficult for the Department to determine for which Covad orders VZ-MA's provisioning performance was poor.

Earlier this year, the Department oversaw a data reconciliation between VZ-MA and Covad for 132 of Covad's orders completed between February 7-11, 2000. The carriers agreed that 116 of the orders were completed on time. In addition, through this reconciliation, it was determined that six orders scored as "misses" should have been counted as "met," increasing VZ-MA's on-time performance to 92 percent.[968]

968 VZ-MA Application, Appdx. B, Vol. 32a-b, Tab 423, at ¶ 207 (VZ–MA May Checklist Aff.).

Covad also expressed concerns about missed due dates because of, among other things, the presence of DLC, load coils, and electronics. Given the enhanced capability of VZ-MA's mechanized database, we do not believe that these factors will continue to be a source of provisioning delays. Moreover, we agree with VZ-MA that "no facilities" issues are to be expected when dealing with copper plant that was installed between one and six decades ago. VZ-MA has persuaded the Department that it makes every effort to accommodate a CLEC request for spare loops. VZ-MA is not required by either FCC or Department rules to build copper facilities for CLECs. Moreover, CLECs have other options where spare loops do not exist. The Department approved a tariffed offering for line and station transfers (VZ-MA will perform these transfers at the request of a CLEC).[969] In our Phase III Order, discussed below, the Department also directed VZ-MA to file a proposed tariff offering for transport from the feeder to the central office and to file a proposal that would allow a CLEC to offer xDSL services in a DLC environment. These options are reasonable substitutes in cases where spare copper loops are limited.

Finally, we are satisfied by VZ-MA's responses to Covad's claims of unnecessary truck rolls and inflated "no access" situations. We note that earlier this year, changes to the cooperative testing procedures were instituted to confirm "customer not ready," "no access," and customer cancellation conditions at the time of installation. According to VZ-MA, if its technicians encounter one of these conditions, they will call the CLEC so that the CLEC will have the

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969 Appdx. E at 89-90 (Phase III Order).

opportunity to verify the condition or attempt to get customer access while the VZ-MA technician is on the line. During the call, the CLEC will give the technician a confirmation number, thus ensuring that VZ-MA and the CLEC can agree, if the need to do so arises, on why a job could not be completed, thereby minimizing issues associated with VZ-MA not being able to complete orders for customer reasons.[970]

d. Loop Quality

To review the installation quality of provisioned xDSL loops, the FCC considers the number of trouble reports made by CLECs within 30 days.[971]

i. Discussion

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970 See VZ–MA Application, Appdx. B, Vol. 34a-b, Tab 443 (VZ-MA's Response to Information Request DTE-5-10).

971 SBC Texas Order at ¶ 299.

According to VZ-MA's data, CLECs submit more trouble reports than VZ-MA does for its retail service.[972] VZ-MA argues that through the New York collaborative process, it developed, with CLECs, a process that would enable a CLEC to test cooperatively with VZ-MA a loop to verify continuity and to ensure that the loop meets the CLEC's requirements. If the loop tests appropriately, the CLEC will give VZ-MA a serial number to indicate that it has accepted the loop as working.[973] According to VZ-MA, it appears that some CLECs are accepting loops and shortly thereafter submitting trouble tickets on those loops. VZ-MA offers a few explanations for this "phenomenon": (1) rather than having a provisioning order be denied because of unavailable facilities, a CLEC will "lock in" a loop and then request VZ-MA to fix the loop on a maintenance basis;[974] and (2) some CLECs may not be performing as detailed an acceptance test as they should

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[972] From April through July, CLECs made the following percentage of trouble reports within 30 days of a loop's provisioning (PR-6-01): 6.58%, 7.94%, 6.20%, and 8.46%. During the same period, VZ-MA noted the following percentage of trouble reports for itself: 3.60%, 3.30%, 2.34%, and 2.97%.

[973] VZ–MA Application, Appdx. A, Tab 1, at ¶ 102 (Lacouture/Ruesterholz Decl.).

[974] VZ–MA Application, Appdx. B, Vol. 45, Tab 520, at 4353-4354 (Transcript of Technical

because of training or equipment limitations.[975]

Session Held 8/17/00).

975 VZ–MA Application, Appdx. A, Tab 1, at ¶ 103 (Lacouture/Ruesterholz Decl.); Appdx. F (VZ-MA Response to RR-323).

VZ-MA reviewed xDSL loop troubles reported in the month of July that had recent service order activity (i.e., the loop was provisioned during June or July), which amounted to almost 600 loop troubles. According to VZ-MA, a majority, almost 60 percent, of the troubles were closed to NTF codes. Of the remainder, VZ-MA states that the vast majority (one third of the total troubles reported) were closed to cable conditions despite the fact that over 75 percent of these loops had recent acceptance testing (with the serial numbers provided) by the CLEC. VZ-MA argues its analysis supports its conclusion that CLECs are accepting loops that they should not be accepting.[976]

[976] Appdx. F (VZ-MA Response to RR-323).

It appears from our record that no CLEC is disputing VZ-MA's explanation of the disparity in numbers of trouble tickets issued (i.e., CLECs accept loops and file trouble tickets immediately thereafter). However, Covad does state that when its technicians go out in the field to perform the installation (i.e., during the truck roll), they have experienced the following problems: (1) the loop has not been installed, (2) the loop has not been identified or tagged, (3) VZ-MA has installed a defective loop, (4) the loop was terminated at the wrong place, or (5) the loop has a facility problem.[977] Covad also argues that if it does not accept a loop because of a provisioning problem, the loop falls into a "black hole" between different divisions of VZ-MA.[978] VZ-MA responds that if Covad does not agree that the loop is good during the provisioning cooperative

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977 VZ–MA Application, Appdx. B, Vol. 38, Tab 462, at ¶ 43 (Covad Berard/Clancy/Cutcher Decl.).

978 VZ–MA Application, Appdx. B, Vol. 38, Tab 462, at ¶ 65 (Covad Szafraniec/Katzman Decl.).

test, it should not accept it; should direct the VZ-MA technician to re-test it; and, if dissatisfied with the VZ-MA technician, should escalate the matter to a VZ-MA manager for resolution.[979]

ii. Conclusions

[979] VZ-MA Application, Appdx. B, Vol. 42, Tab 494, at ¶¶ 140-141 (VZ–MA August Supplemental Checklist Aff.).

During a technical session last year, several CLECs acknowledged accepting loops that, absent additional work by VZ-MA, could not support xDSL service (i.e., loops with load coils, excessive bridged tap) and then, immediately thereafter, filing trouble tickets to obtain loop conditioning. According to Covad, VZ-MA has a commitment to clear a trouble ticket within 24 hours and notes that VZ-MA has "for the most part met the fairly short turnaround in terms of resolving those kinds of conditioning issues."[980] Our record supports VZ-MA's contention that CLECs sometimes accept loops they know will not support the service they intend to offer. Because VZ-MA is committed to addressing trouble tickets in a short amount of time, it appears CLECs willingly accept loops that require additional VZ-MA work. VZ-MA's loop acceptance process provides the appropriate mechanism for a CLEC to express its concern about the possible incompatibility of an assigned loop to support xDSL service (i.e., by rejecting the loop). The Department is not persuaded by Covad's "black hole" argument – VZ-MA has created a clear escalation process that Covad may use as often as necessary. For the aforementioned reasons, the Department does not accord a significant amount of weight to this metric. We will not draw negative performance implications on VZ-MA's part derived from the conduct of some CLECs in playing an angle in the system. Accordingly, we find that VZ-MA provides nondiscriminatory access to loop installation for xDSL loops.

e. Maintenance and Repair

980 VZ–MA Application, Appdx. B, Vol. 20, Tab 233, at 3247-3248 (Transcript of Technical Session Held 12/7/99).

To demonstrate that a BOC provides maintenance and repair for CLEC xDSL loops in substantially the same time and manner as it does for its own retail customers, the FCC will review the average time to repair loops and the repeat trouble report rates.[981]

i. Discussion

[981] SBC Texas Order at ¶ 304.

As was the case with VZ-MA's performance for certain maintenance and repair metrics for POTS loops, VZ-MA requires additional time to repair CLEC xDSL loops on average than it does to repair its own retail loops.[982] On the other hand, CLECs experience fewer repeat troubles on xDSL loops than does VZ-MA's retail service.[983] The C2C Guidelines standard for both metrics is parity. VZ-MA argues that many of the same observations of CLEC behaviors affecting VZ-MA's POTS performance (e.g., CLECs' inability to isolate troubles, preference for Monday and not weekend repair appointments) also affect xDSL loops. For example, VZ-MA data from June, 2000, show that almost 70 percent of CLEC trouble tickets made on Friday requested Monday appointments instead of the offered weekend appointment. VZ-MA notes that, in contrast, its

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982 From April through July, the mean time to repair xDSL loops (MR-4-01) for CLECs was: 44.52, 46.63, 44.92, and 45.37. During that same period of time, VZ-MA's performance for its retail service was: 19.15, 20.02, 44.92, and 24.93.

983 From April through July, CLECs made the following percentage of repeat trouble reports within 30 days (MR-5-01): 13.91%, 14.42%, 14.79%, and 15.04%. VZ-MA's retail service made the following percentage of repeat trouble reports during the same period: 18.41%, 26.99%, 28.76%, and 25.00%.

retail xDSL customers declined an offered weekend appointment just 11 percent of the time.[984] VZ-MA states that choosing a Monday appointment when a Saturday appointment is offered adds 36 to 48 hours to the overall MTTR.[985]

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984 VZ-MA Application, Appdx. B, Vol. 42, Tab 494, at ¶ 138 (VZ–MA August Checklist Aff.).

985 Appdx. F (VZ-MA Response RR-323).

A second factor, which has an even greater affect on xDSL loops than other loops, according to VZ-MA, is the CLECs' inability to direct VZ-MA's technicians to the correct location of a trouble. VZ-MA argues that this CLEC deficiency causes, among other things, VZ-MA to perform multiple dispatches. According to VZ-MA, if a CLEC provides incorrect information, VZ-MA's technicians may determine that there is, in fact, no trouble (i.e., "Found OK" or "FOK," and "NTF"). Contrary to CLEC assertions that a "FOK" or "NTF" determination means that the VZ-MA technician is prematurely closing a trouble ticket, VZ-MA argues that this finding demonstrates that the CLEC failed to isolate the actual trouble point. To remedy this problem, VZ-MA notes that it is providing specialized training to all technicians who work on xDSL loops and has implemented a maintenance cooperative testing process, whereby the CLEC has the opportunity to accept or reject the findings of the VZ-MA technician prior to the close of the trouble ticket.[986]

In support of its claim that CLECs are incorrectly locating sources of troubles, VZ-MA reviewed all trouble reports made by Covad between April 15 and June 15, 2000. According to VZ-MA, its analysis shows that more than half of the trouble reports submitted by Covad were closed as "NTF." In addition, Covad did not open a subsequent trouble report for over half of the VZ-MA-closed NTF tickets. VZ-MA notes that on 29 percent of the initial NTF tickets, Covad issued a repeat trouble report which never resulted in a found trouble. Only 16.8 percent of the

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986 VZ-MA Application, Appdx. B, Vol. 32a-b, Tab 423, at ¶ 208 (VZ–MA May Checklist Aff.); VZ-MA Application, Appdx. B, Vol. 42, Tab 494, at ¶ 146 (VZ–MA August Checklist Aff.).

reports closed to NTF, or under ten percent of all of Covad's trouble reports, resulted in a repeat trouble report that was eventually closed after VZ-MA found and fixed the problem.[987] VZ-MA argues that if it prematurely and inappropriately closed trouble tickets without correcting the troubles, as alleged by CLECs, CLECs would have to open another report in order to clear the trouble. According to VZ-MA, the data simply do not support that CLEC argument.[988]

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987 VZ–MA Application, Appdx. B, Vol. 35, Tab 445 (VZ-MA's Response to Information Request DTE-5-11).

988 VZ-MA Application, Appdx. B, Vol. 42, Tab 494, at ¶ 144 (VZ–MA August Checklist Aff.).

Covad argues, on the other hand, that VZ-MA's review of Covad's trouble tickets, described above, demonstrates that approximately 44 percent of Covad's reported troubles did, in fact, have a trouble found. In addition, in response to VZ-MA's claim that 29 percent of Covad's repeat trouble tickets never resulted in a found VZ-MA trouble, Covad contends that this does not mean these tickets have been closed.[989]

Besides the CLECs' rejection of weekend appointments, VZ-MA argues that the average repair time, or MTTR, for xDSL loops is skewed by substantially longer repair times due to facilities issues for a small percentage of xDSL loops. VZ-MA contends that approximately 15 percent of the xDSL trouble tickets take more than 72 hours to clear, which pushes the MTTR and OOS>24 metrics out of parity. According to VZ-MA, the primary source for these longer repair intervals is the need to refer the trouble to VZ-MA's construction or engineering divisions to provide a facility that meets the CLEC's testing requirements. For example, VZ-MA argues that CLECs will request different loops than the ones they were assigned (and which the CLECs accepted during the provisioning cooperative testing process) in order to increase transmission speed, rather than to achieve continuity. VZ-MA doubts whether these loops would have qualified for VZ-MA's retail ADSL service and asserts that such loops must have required "near-Herculean"

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989 VZ–MA Application, Appdx. B, Vol. 45, Tab 520, at 4374 (Transcript of Technical Session Held 8/17/00).

efforts to get them provisioned.[990]

990 Id. at ¶ 139; Appdx. F (VZ-MA Response to RR-323).

Rhythms attached to its July 2000 comments examples of inadequate responses by VZ-MA to Rhythms' maintenance and repair troubles. According to Rhythms, these trouble tickets highlight some of the more egregious problems it has experienced with VZ-MA and demonstrate that VZ-MA closes trouble tickets without resolving the trouble.[991] VZ-MA reviewed six of the nine attached trouble tickets provided by Rhythms, noting that three of the nine were either too old or did not include the necessary amount of information for VZ-MA to investigate. According to VZ-MA, one ticket, opened at 1:00 a.m. on a Saturday morning, involved several central offices and required several technician "call-outs" to have tests performed in all of the central offices. VZ-MA indicates that service was restored for the DS3 at issue approximately twelve hours later. VZ-MA contends that the other five tickets support VZ-MA's statements regarding certain CLEC troubles that because of facilities issues required extended time to repair. VZ-MA states that three of these five troubles required multiple VZ-MA dispatches to provide an acceptable cable pair to Rhythms, and for two of the three, a re-dispatch was necessary because the VZ-MA technician was unable to reach the Rhythms counterpart to perform the cooperative test. Moreover, VZ-MA asserts that for the one ticket involving a vendor meet, three trouble tickets were closed to "NTF" after VZ-MA repaired the original problem on the circuit. According to VZ-MA, all of these tickets show the complexities of the relationships existing between VZ-MA and the CLECs when it comes to clearing xDSL loop trouble reports.[992] We note that Rhythms has not responded to VZ-

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991 VZ–MA Application, Appdx. B, Vol. 38, Tab 462, at ¶22, Att. 2 (Rhythms Williams Aff.).

992 VZ-MA Application, Appdx. B, Vol. 42, Tab 494, at ¶¶ 147-149 (VZ–MA August

MA's findings with respect to these six trouble tickets.

Covad also argues that VZ-MA frequently misses vendor meetings.[993] VZ-MA responds that Covad has provided no details to support this claim and notes that it has a process in place to ensure that such meetings are honored. In addition, VZ-MA mentions that it is working with Covad to develop further cooperative vendor meet processes.[994] Lastly, Covad disagrees with VZ-MA's contention that the disparity between wholesale and retail xDSL maintenance results is due

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Checklist Aff.).

993 VZ–MA Application, Appdx. B, Vol. 38, Tab 462, at ¶ 70 (Covad Szafraniec/Katzman Decl.).

994 VZ-MA Application, Appdx. B, Vol. 42, Tab 494, at ¶ 149 (VZ–MA August Checklist

to the lack of tools. According to Covad, it developed the ability to send tone over its lines and it shares its testing results with VZ-MA.[995]

ii. Conclusions

Aff.).

995 VZ–MA Application, Appdx. B, Vol. 45, Tab 520, at 4386-4387 (Transcript of Technical Session Held 8/17/00).

As with the hot cut process, the repair of xDSL loops requires coordination between VZ-MA and the CLEC. Although Covad indicates it shares results of its testing and has added equipment to assist in identifying troubles, pro-active steps the Department supports, VZ-MA's evidence of having to rely on CLECs to direct VZ-MA technicians to the exact location of the trouble is uncontroverted in our record. VZ-MA's data indicate that its multiple dispatch rate is almost double for CLECs than for VZ-MA's retail service, and its "FOK" and "NTF" rates are significantly higher for CLEC than VZ-MA retail customers.[996] It is only logical that an unnecessary dispatch means that the VZ-MA technician is unable to attend to a bona fide trouble that much sooner. A CLEC's inability to locate the source of a problem not only delays repairs for that CLEC but other CLECs, too.

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[996] VZ–MA Application, Appdx. B, Vol. 45, Tab 520, at 4280, Exh. 11 (Transcript of Technical Session Held 8/17/00); see also Appdx. F (VZ-MA Response to RR-323).

Thus, we find that VZ-MA's maintenance and repair performance is hindered by the CLECs' inability to identify the source of the trouble. We also find that several of VZ-MA's metrics are affected by the propensity of some CLECs to accept loops they concede are unable to support xDSL service, absent additional work by VZ-MA technicians, as well as the preference for Monday and not weekend repair appointments. Because CLECs are accepting loops that do not support xDSL service, VZ-MA's efforts are that much greater than with its retail xDSL service (e.g., involving VZ-MA's construction and engineering crews) and much more time-consuming. This CLEC practice and the resulting VZ-MA work are captured in VZ-MA's MTTR and OOS>24 metrics, which on their face show a lack of parity. Covad argues that VZ-MA's own analysis of Covad's trouble reports shows that almost 45 percent of Covad's loops experienced troubles. The Department does not find this statistic surprising given Covad's admitted practice of accepting loops that it knows will not support xDSL service, absent additional effort by VZ-MA. While we find this CLEC practice troubling, we do not find VZ-MA's response, increased repair time to provide CLECs with xDSL-capable loops, problematic.[997] Covad also argues that simply because VZ-MA has not found a problem from some of Covad's repeat trouble tickets does not

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997 In our Phase III Order, we agreed with several CLECs, including Covad and Rhythms, that argued that they should not be required to opt in to VZ-MA's wideband testing system ("WTS"), which VZ-MA uses to isolate troubles. Rather, we found that CLECs should be permitted to use their own testing equipment to identify the location of troubles. However, in determining that VZ-MA's WTS should be optional, we noted that we would permit VZ-MA to assess a dispatch fee and would allow VZ-MA to separate from the relevant service metrics its performance with respect to CLECs that opt out of VZ-MA's testing system, a finding consistent with one made recently by the NYPSC. Phase III Order at 78-79.

mean trouble does not exist because it is possible that the repeat trouble ticket is still open. We disagree with this argument. It is clear to us that when VZ-MA states that 29 percent of Covad's repeat trouble tickets "never resulted in a found [VZ-MA] trouble," it means VZ-MA has closed almost a third of Covad's repeat trouble tickets as "NTF."[998]

[998] VZ-MA Application, Appdx. B, Vol, 42, Tab 494, at ¶ 144 (VZ–MA August Checklist Aff.) (emphasis in original).

Finally, we note that CLECs submit significantly fewer repeat trouble reports on xDSL loops than does VZ-MA for its retail customers. This metric demonstrates that once CLECs receive loops that are appropriate for xDSL service, they experience fewer problems than VZ-MA. Similarly, the network trouble report rates (for both loop and central office facilities), shows some difference between the CLEC and VZ-MA measurements, but the differences are small.[999] Therefore, we find that VZ-MA provides maintenance and repair for CLEC xDSL loops in substantially the same time and manner as it does for its retail customers.

6. Line Sharing

In its SBC Texas Order, the FCC stated that because SWBT's § 271 application was submitted well before the FCC's line sharing requirements became effective, it would be unfair to require SWBT to demonstrate full compliance with the Line Sharing Order, including showing that it had implemented the loop facility and OSS modifications necessary to accommodate CLEC line sharing requests.[1000]

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999 From April through July, the incidence of actual loop troubles, as captured by the network trouble report rate (MR-2-02) for CLECs was: 1.89%, 2.33%, 3.08%, and 2.77 %. During the same period, the network trouble report rate for VZ-MA's retail service was: 1.13%, 1.25%, 1.39%, and 1.23%.

1000 SBC Texas Order at ¶ 321.

a. Discussion

VZ-MA states that CLECs may order line sharing today through its interconnection agreements. It contends that it has the OSS in place to receive line sharing orders, and that the OSS enhancements that will occur early next year will help VZ-MA's back-end work and will be transparent to the CLECs.[1001] Today, CLECs have a mechanized interface to order line sharing. According to VZ-MA, the fact that manual work is required on the part of VZ-MA to process these orders has not affected its ability to process CLEC line sharing orders.[1002]

VZ-MA also argues that for CLECs choosing the so-called Option A line sharing arrangement, in which the CLEC purchases the splitter and places it in the CLEC's collocation cage, line sharing is available immediately wherever those CLECs have collocation cages. In Massachusetts, CLECs may also use Option C to obtain line sharing, where the CLEC purchases the splitter but transfers ownership to VZ-MA and has the splitter placed in VZ-MA's central office space. VZ-MA contends that in an agreement reached earlier this year with CLECs that selected Option C, like Covad, it would use its best efforts to complete the first 25 applications of each CLEC by June 7, 2000, and would work to complete an additional 25 applications per month,

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1001 VZ–MA Application , Appdx. B, Vol. 45, Tab 520, at 4329 (Transcript of Technical Session Held 8/17/00).

assuming VZ-MA had received the splitters and material three weeks prior to the completion dates. VZ-MA states that in Massachusetts, it did not receive Covad's splitters until July. According to VZ-MA, 60 percent of the central offices in which Covad has requested line sharing are complete as of mid-August.[1003]

[1002] Id. at 4331-4332.

[1003] Id. at 4361-4363.

Covad argues that VZ-MA has failed to meet its line sharing obligations because only 60 percent of Covad's requested central offices are complete as of early September. Moreover, Covad argues that there remain unresolved line sharing issues involving pricing, the provisioning and collocation augmentation intervals, and access to fiber-fed loops.[1004] Similarly, Rhythms argues that the following line sharing-related issues must be resolved before a determination is made that VZ-MA has met its burden of proof with respect to its line sharing obligations: line sharing over fiber, rates, implementation of OSS upgrades, collocation augmentation intervals, and line splitting.[1005] Digital Broadband argues that VZ-MA has denied access to line sharing beyond the deadline established by the FCC and contends that KPMG did not adequately address line sharing.[1006] Finally, AT&T argues that VZ-MA's position on line splitting is inconsistent with VZ-

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1004 Id. at 5506-5507.

1005 Id. at 5578-5579.

1006 VZ–MA Application, Appdx. B, Vol. 46, Tab 565, at 5221 (Transcript of Oral Argument Held 9/08/00). Digital Broadband is correct that KPMG did not test VZ-MA's line sharing offering. When the Department developed and approved the MTP for the OSS test, VZ-MA was not required by the FCC to offer line sharing.

MA's obligations under the FCC's SBC Texas Order.[1007]

b. Conclusions

[1007] Id. at 5461. "Line splitting," as opposed to "line sharing," is the provisioning of both voice and data services over a single loop by a CLEC, through UNE-P. See Phase III Order at 36.

As mentioned earlier, on September 29, 2000, the Department issued its Order approving in part and denying in part VZ-MA's proposed line sharing and xDSL tariff offerings.[1008] Specifically, we found that VZ-MA should reduce its provisioning interval immediately to the lesser of five business days or the shortest average interval VZ-MA has achieved for its own ADSL retail offering as of the effective date of our Order. Upon implementation of the OSS enhancements, we directed VZ-MA to reduce this interval further to four days.[1009] While VZ-MA states that the OSS enhancements would be necessary if the line sharing provisioning period was reduced to a "very short" interval,[1010] we conclude that VZ-MA's witness was referring to Rhythms' proposal of a staggered 3-2-1 interval (whereby the provisioning interval would initially be three days and then drop after a certain amount of time to one day). The Department rejected

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1008 Phase III Order at 130.

1009 Id. at 51-52.

1010 VZ–MA Application, Appdx. B, Vol. 45, Tab 520, at 4334 (Transcript of Technical Session Held 8/17/00).

Rhythms's proposal in favor of a 5-4 provisioning interval.

After finding that the work required to perform the activities necessary to complete a cable augmentation and a splitter installation collocation application is less than the work required to complete a new collocation arrangement, the Department directed VZ-MA to reduce its proposed 76-business day collocation augmentation interval for line sharing applications to 40 business days.[1011] Based upon our review of relevant FCC Orders and rules, we determined that VZ-MA is not required to offer line splitting, nor did we direct VZ-MA to purchase splitters for use by CLECs.[1012]

As mentioned above, the Department declined VZ-MA's request to make mandatory VZ-MA's WTS. Instead, we agreed with CLECs that they may use their own testing system if they so choose.[1013] We also directed VZ-MA to file proposed tariff provisions whereby a CLEC could offer line sharing from the end-users premises to the central office by placing certain equipment in VZ-MA's remote terminals (i.e., through the so-called "plug and play" option). VZ-MA was also directed to file proposed tariff provisions for the transport of a CLEC's traffic from the feeder

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1011 Phase III Order at 69-70.

1012 Id. at 32-35, 39-41.

1013 Id. at 78-80.

distribution interface back to the central office.[1014]

[1014] Id. at 86-89.

In our Order, the Department also set rates. Notably, we rejected VZ-MA's proposal to assess charges for loop qualification and loop conditioning. Based upon Department precedent, we determined that in a TELRIC environment, VZ-MA's loops would be fiber-fed and, thus, would not require either qualification or conditioning to support xDSL service.[1015] VZ-MA was directed to file line sharing-specific cost studies for several charges (e.g., collocation augmentation and engineering implementation charges), and we found that there should be no charge to CLECs for cooperative testing because such testing is mutually beneficial.[1016]

We conclude that our Phase III Order addresses most, if not all, of the line sharing issues raised by CLECs in the § 271 proceeding.[1017] Covad argued that VZ-MA has not met its § 271 obligations because line sharing is not available at all of the central offices requested by Covad.

1015 Id. at 103-106.

1016 Id. at 113, 116.

1017 Our Phase III Order also addressed CLEC concerns about several VZ-MA proposed provisions related to significant degradation and xDSL definitions. In those instances, the Department agreed with the CLECs that these provisions were inconsistent with FCC rules. See Phase III Order at 11-14, 18-20. In accordance with our Order, on October 13, 2000, VZ-MA filed and the Department approved a compliance filing with respect to those issues.

We disagree. Our record supports VZ-MA's contention that Covad failed to ship its splitters in a timely fashion for installation by VZ-MA at certain central offices requested by Covad. We cannot hold VZ-MA responsible for Covad's actions, which resulted in line sharing delays. VZ-MA has persuaded us that it is using its best efforts to complete Covad's Option C installations in all of Covad's requested central offices in a timely manner. Moreover, we find that Option A CLECs may offer line sharing today wherever they have collocation facilities.

We expect several CLECs to address the timing of the implementation of VZ-MA's OSS enhancements in their comments filed with the FCC. In our Phase III Order, we directed VZ-MA to implement these OSS upgrades in Massachusetts by April 1, 2001. That these enhancements are not in place today does not mean VZ-MA has failed to meet its § 271 obligations. Indeed, in our Order, we noted that VZ-MA began discussions with its vendor, Telcordia Technologies, at the beginning of this year and that the issues involved, (e.g., approximately 25 million lines of code), are complex and not amenable to a quick resolution. CLEC collaboration is essential; in fact, CLECs must select the means of access to loop information, one option of which is direct access to VZ-MA's Loop Facility Assignment and Control System.[1018] VZ-MA has testified that CLECs may submit their line sharing orders electronically. That these orders require some manual work on VZ-MA's part does not prevent a finding of nondiscriminatory access. We find that this manual processing will be short-lived and, even absent complete line sharing order flow-through, VZ-MA has demonstrated that it can handle increased volumes of CLEC orders requiring manual

[1018] Id. at 23-25.

processing without delay.[1019]

For the aforementioned findings, we conclude that VZ-MA satisfies its obligations under checklist item 4.

E. Checklist Item 5 - Unbundled Local Transport

1. Standard of Review

[1019] VZ-MA notes that between November 1999 and July 2000, it increased the number of representatives to handle orders that require manual processing by over 126 percent. In addition, VZ-MA notes that in June 2000, it provided 97.85 percent of all manually-processed LSRCs on time for UNEs. VZ-MA Application, Appdx. B, Vol, 42, Tab 494, at ¶ 48 (VZ–MA August Supplemental OSS Aff.).

Section 271(c)(2)(B)(v) requires a BOC to provide "[l]ocal transport from the trunk side of a wireline local exchange carrier switch unbundled from switching or other services."[1020] The FCC has interpreted this provision in previous § 271 Orders as requiring a BOC to provide both dedicated and shared transport to requesting carriers.[1021]

2. Discussion

[1020] 47 U.S.C. § 271(c)(2)(B)(v).

[1021] SBC Texas Order at ¶ 331 nn.920-921

VZ-MA provides unbundled local transport pursuant to both interconnection agreements and a Department-approved tariff.[1022] According to VZ-MA, CLECS may use VZ-MA's dedicated transport network element to carry their customers' traffic between wire centers or switches owned by VZ-MA or CLECs.[1023] By July 2000, VZ-MA had more than 1,200 dedicated local transport facilities in service.[1024] CLECs may use VZ-MA's shared transport network element for carrying their customers' traffic between VZ-MA's end-office switches, between VZ-MA's end-office and tandem switches, and between VZ-MA's tandem switches.[1025] Moreover, CLECs may use shared transport to reach other points within VZ-MA's network (e.g., directory assistance, operator services), and to reach other CLECs' networks that are interconnected to VZ-MA's network.[1026]

VZ-MA also provides shared transport to CLECs in connection with unbundled local switching elements through UNE-P. Unbundled shared transport is not a separately orderable element, but is provisioned in conjunction with the unbundled line port at VZ-MA's end office switch.[1027] Through July 2000, VZ-MA has provisioned nearly 12,000 switching ports to CLECs,

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1022 VZ-MA Application, Appdx. A, Tab 1, ¶ 160 (Lacouture/Ruesterholz Decl.).

1023 Id.

1024 Id. at ¶ 161.

1025 VZ-MA Application, Appdx. B, Vol. 32a-b, Tab 423, ¶ 261 (VZ-MA May Checklist Aff.).

1026 Id.

1027 VZ-MA Application, Appdx. B, Vol. 10, Tab 138 (VZ-MA Response to Information

and is providing shared transport to and from each switching port.[1028] Thus, according to VZ-MA, the interval associated with unbundled shared inter-office facility ("IOF") transport would be the interval for establishing an unbundled line port depending on the specific type of unbundled line port ordered.[1029] VZ-MA reports a 97.3 percent on-time completion rate for CLECs' unbundled local transport orders in May through July 2000.[1030]

Request DTE 2-81).

1028 VZ-MA Application, Appdx. A, Tab 1, ¶ 165 (Lacouture/Ruesterholz Decl.)

1029 VZ-MA Application, Appdx. B, Vol. 11, Tab 143 (VZ-MA Response to Information Request DTE 2-80).

1030 VZ-MA Application, Appdx. A, Tab 1, ¶ 162 (Lacouture/Ruesterholz Decl.).

According to VZ-MA, as of February 2000, it had provisioned 685 IOF arrangements (334 DS-1 level and 351 DS-3 level arrangements) to 15 different CLECs.[1031] Moreover, VZ-MA added 1.1 million DS-0 circuits to the IOF network in Massachusetts, 15 percent of which (175,000 voice-grade circuits) were provided to CLECs as dedicated UNE IOF transport.[1032] VZ-MA also offers OC-3 (optical carrier level 3) and OC-12 (optical carrier level 12) transport.[1033]

In order to meet the increasing demand for IOF, VZ-MA states that it is building additional high capacity, Synchronous Optical Network ("SONET") rings to increase the overall capacity of its IOF network. VZ-MA completed 60 SONET rings in 1999 and 50 more are under construction, all of which use OC-48 fiber optic multiplexers. According to VZ-MA, the completion of these new SONET rings will add capacity equal to approximately four million DS-0

1031 VZ-MA Application, Appdx. B, Vol. 32a-b, Tab 423, ¶ 259 (VZ-MA May Checklist Aff.).

1032 Id.

1033 VZ-MA Application, Appdx. B, Vol. 16, Tab 190, at 1275 (Transcript of Technical Session Held 11/16/99).

circuits.[1034] In order to provision quality IOF transport, VZ-MA states that it conducts the plant test on the complete circuit that was ordered by the CLEC one day before the due date. On the due date, VZ-MA contacts the CLEC so that the CLEC can perform its own test on the circuit, accepting the circuit if everything is fine.[1035]

1034 VZ-MA Application, Appdx. B, Vol. 16, Tab 190, at 1298-1299 (Transcript of Technical Session Held 11/16/99).

1035 Id. at 1364.

The standard interval for IOF is 15 days for one to eight DS-1s or DS-3s, when facilities are available. VZ-MA negotiates the interval with the CLEC for larger quantities of DS-1, DS-3, OCN products, and dark fiber arrangements.[1036] From April through July 2000, VZ-MA's average completion interval for CLEC-ordered DS-1s was 9.75, 9.71, 12.86, and 14.23 days, respectively, whereas VZ-MA's retail DS-1 provisioning intervals over the same four month period were 9.63, 7.55, 11.81, and 19.95 days, respectively. For DS-3 transport orders during the period from April through July 2000, VZ-MA completed CLEC orders in 30.00, 22.50, 26.96, and 29.00 days, respectively. VZ-MA's retail provisioning performance for DS-3s was 14.00 days in May and 12.00 days in July. VZ-MA did not provision any retail DS-3 transport orders in either April or June 2000.[1037]

1036 VZ-MA Application, Appdx. B, Vol. 8a-b, Tab 132 (VZ-MA Response to Information Request DTE-MCIW 2-58).

1037 VZ-MA Application, Appdx. B, Vol. 42, Tab 494, Exh. G1 (VZ-MA August Supplemental Aff.); Appdx. B, Vol. 47, Tab 552 (VZ-MA Performance Reports for July 2000).

According to VZ-MA, the average completion interval for UNE special services (e.g., DS-0, DS-1, and DS-3 for both resale and UNE) can be longer than the standard interval if the order is large, if a longer interval is requested by the CLEC, or if the interval is negotiated. VZ-MA also asserts that "retail special services," against which its performance to CLECs is measured, contain a very different mix of orders which have shorter intervals than "UNE special services."[1038] According to VZ-MA, in those months where VZ-MA's performance for CLECs was not at parity with VZ-MA's retail performance, CLECs were not ready to accept the IOF orders one-and-a-half to more than seven times more often than VZ-MA. Further, VZ-MA's provisioning performance with respect to CLEC DS-1 and DS-3 orders, and retail DS-3 orders, is affected by the low volume of orders to be provisioned, which allows for a substantial skewing of VZ-MA's metrics if even one order is provisioned in a longer interval.[1039]

VZ-MA also indicates that the apparent lack of parity in missed appointments is "simply the result of measuring against a retail standard that is currently not comparable to IOF."[1040] For

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1038 VZ-MA Application, Appdx. B, Vol. 16, Tab 190, at 1270-1271, 1273, 1275 (Transcript of Technical Session Held 11/16/99); Appdx. B, Vol. 32a-b, Tab 423, ¶ 63 (VZ-MA May Checklist Aff.); Appdx. B, Vol. 11, Tab 140 (VZ-MA Response to Information Request DTE 2-46).

1039 During the period of April through July 2000, VZ-MA provisioned 20, 21, 43, and 13 CLEC DS-1 orders, respectively, in comparison to retail volumes of 2677, 3239, 222, and 309, respectively. For DS-3s, VZ-MA provisioned 5, 4, 24, and 2 CLEC orders and 0, 2, 0, and 1 retail orders from April through July, respectively.

1040 VZ-MA Application, Appdx. B, Vol. 32a-b, Tab 423, ¶ 128 (VZ-MA May Checklist Aff.).

example, VZ-MA reviewed the January 2000 retail orders that were used in comparison to the UNE special service orders and found that only 21 percent of these retail orders were comparable to UNE IOF.[1041] According to VZ-MA, a system change to remove these non-comparable services is being implemented through the change control process.[1042]

1041 Id.

1042 VZ-MA Application, Appdx. B, Vol. 42, Tab 494, ¶ 25 (VZ-MA August Supplemental Checklist Aff.).

As of June 2000, VZ-MA was providing approximately 1000 miles of dark fiber to four CLECs. Moreover, VZ-MA completed 171 dark fiber orders as of June 2000, 99 of which were completed between March and June of this year.[1043] According to VZ-MA, approximately 88 percent of the 99 orders were completed on time. VZ-MA's data indicate that its on-time performance is improving. For example, in March, it met its dark fiber due dates 75 percent of the time. In contrast, from April through June, it was able to complete all dark fiber orders on time.[1044]

WorldCom claims that VZ-MA discriminates in the provisioning of UNE DS-3s by not adhering to the same testing and turn-up procedures that it uses when supplying DS-3s under its special access tariff.[1045] However, in its statement at the oral argument, WorldCom did not state

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1043 VZ-MA Application, Appdx. B, Vol. 42, Tab 494, ¶ 62 (VZ-MA August Supplemental Checklist Aff.).

1044 Id.

1045 VZ-MA Application, Appdx. B, Vol. 37, Tab 455, at 38-39 (Worldcom Lichtenberg/Kinard/Drake Decl.).

that VZ-MA is not in compliance with this checklist item.[1046]

[1046] VZ-MA Application, Appdx. B, Vol. 49, Tab 565 at 5596 (Transcript of Oral Argument Held 9/8/00).

VZ-MA responds to WorldCom's arguments by distinguishing a UNE DS-3 IOF from a special access DS-3. According to VZ-MA, the major differences are that: (1) special access DS-3s are terminated at the end-user premise, while a UNE DS-3 is terminated between two VZ-MA central offices; (2) the special access DS-3 requires a truck roll to the customer premise for testing, while the UNE DS-3 does not; and (3) this testing may be done in advance of the due date.[1047] VZ-MA states that it continues to work with WorldCom to determine whether changes need to be made to the testing process for UNE IOF.[1048]

Nextlink contends that "[VZ-MA's] technicians routinely appear at the wrong address or prematurely determine that the customer is not ready for the service delivery date."[1049] In response, VZ-MA states that its records show that none of the orders in Nextlink's response was

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1047 VZ-MA Application, Appdx. B, Vol. 45, Tab 515, at 4233-4235 (Transcript of Technical Session Held 8/15/00).

1048 Id. at 4235-4236.

1049 VZ-MA Application, Appdx. B, Vol. 42, Tab 491 (Nextlink Response to Information Request DTE-Nextlink 1).

for unbundled IOF transport but, rather, all were special access orders.[1050] In addition, VZ-MA states that it determined that four of the six Nextlink orders were CNR, one was a VZ-MA miss for "no facilities available," and one was a case where Nextlink had ordered the wrong type of signaling for the special access circuit.[1051]

1050 Id. at 4231-4232.

1051 Id.

During the investigation last year, Conversent raised concerns about the quality of some of the dark fiber provided by VZ-MA.[1052] According to Conversent, VZ-MA provisioned sub-standard dark fiber on a span between Burlington and Lowell, Massachusetts. Conversent argued that the measured loss on the dark fiber was 53 decibels ("db").[1053] Conversent contended that VZ-MA is obligated under its interconnection agreement to provide Conversent with unbundled dark fiber that conforms to VZ-MA's standard transmission characteristics at the time the fiber is installed. However, according to Conversent, VZ-MA has never provided Conversent with the data to demonstrate that this dark fiber conformed to VZ-MA's standards when it was installed.[1054]

1052 Id. at 3604.

1053 Id. at 3607.

1054 VZ-MA Application, Appdx. B, Vol. 17, Tab 215, at 4; Exh. 1 (Conversent Graham Aff.).

VZ-MA responded to Conversent's arguments by stating that there is no industry standard for acceptable transmission quality for dark fiber and that fiber manufacturers have different transmission quality standards for their cables.[1055] VZ-MA argues further that it is obligated only to provide dark fiber that conforms to the manufacturer's standard transmission characteristics at the time the fiber is installed.[1056] VZ-MA claims that if the db loss reading meets the manufacturer's specifications, the fiber cable is accepted and inventoried.[1057] VZ-MA also claims that it is the CLEC's responsibility to determine that the transmission characteristics of the dark fiber provided by VZ-MA will accommodate the CLEC's own transmission requirements, and the CLEC has the ability to determine this prior to placing an order by ordering a field survey, as set forth in the dark fiber service description.[1058] According to VZ-MA, Conversent opts not to take advantage of this field survey option and, instead, orders and rejects fiber when it does not meet Conversent's desired characteristics.[1059] Conversent acknowledges that VZ-MA offers a field survey, in which VZ-MA tests the fiber to determine db loss, but states that it does not order these

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1055 VZ-MA Application, Appdx. B, Vol. 9. Tab 133 (VZ-MA Response to Information Request DTE-NEVD 1-4).

1056 Id.

1057 Id.

1058 VZ-MA Application, Appdx. B, Vol. 9, Tab 133 (VZ-MA Response to Information Request DTE-NEVD 1-6).

1059 VZ-MA Application, Appdx. B, Vol 32a-b, Tab 423, ¶ 268 (VZ-MA May Checklist Aff.).

surveys because it does not know the fiber routes to survey.[1060] Conversent indicates that cost is not a consideration, and it would be willing to pay to have VZ-MA perform the field survey if it resulted in Conversent getting the fiber it needs.[1061] VZ-MA indicates it is working with Conversent to "develop engineering services to improve the transmission characteristics of specific dark fibers," and that VZ-MA will soon make available to CLECs new, standardized engineering services.[1062]

1060 VZ-MA Application, Appdx. B, Vol. 21, Tab 237, at 3614-3615 (Transcript of Technical Session Held 12/8/99).

1061 Id. at 3623.

1062 Id. at ¶ 269.

In its application, VZ-MA gave further details about these new processes and services. CLECs are now able to send VZ-MA a dark fiber inquiry form via electronic mail, identifying the geographic end points of the dark fiber they wish to lease, and VZ-MA will determine whether any spare fiber exists between those end points.[1063] VZ-MA will also provide CLECs with a fiber layout map, showing the existing dark fiber routes within a central office.[1064] When a dark fiber order is accepted by a CLEC, VZ-MA will, on a time-and-materials basis, retrofit fiber with VZ-MA's currently-approved connectors in order to improve the transmission qualities of the fiber, and will also clean the connectors in order to remove non-embedded contaminants.[1065]

Finally, AT&T Broadband argued that VZ-MA should be required to provide dedicated interoffice transport from a mid-span meet at UNE cost-based rates, and its failure to do so demonstrates noncompliance on this checklist item.[1066] VZ-MA responded that the mid-span meet

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1063 VZ-MA Application, Appdx. A, Tab 1, ¶ 171 (Lacouture/Ruesterholz Decl.)

1064 Id. at ¶ 172.

1065 Id. at ¶ 173.

1066 VZ-MA Application, Appdx. B, Vol. 49, Tab 565, at 5524 (Transcript of Oral Argument

issue raised by AT&T Broadband is already being considered by the Department as part of an ongoing arbitration proceeding, and is not a § 271 compliance issue.[1067]

3. Conclusions

Held 9/8/00).

[1067] VZ-MA Application, Appdx. B, Vol. 49, Tab 565, at 5615 (Transcript of Oral Argument Held 9/8/00).

We find that no CLEC has mounted a credible challenge to VZ-MA's showing that it provides nondiscriminatory access to its unbundled local transport and that, therefore, VZ-MA has satisfied this checklist item.[1068]

VZ-MA's unbundled local transport performance is generally good, as demonstrated by the C2C metrics. The problems noted by the CLECs do not rise to the level of discriminatory treatment. The Department finds that the difference between VZ-MA's ability to meet due dates for CLECs and for itself is not competitively significant, especially when we factor in the volume of orders provisioned, the percentage of missed due dates attributable to CLECs, and the difficulty of making an "apples to apples" comparison between retail special service orders and UNE special service orders.

Regarding Nextlink's concerns, we note that the FCC does not consider the provision of special access services for purposes of determining compliance with this checklist item.[1069] The Department finds that this specific evidence confutes Nextlink's general assertion. Nextlink's

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1068 See VZ-MA Application, Appdx. B, Vol. 32a-b, Tab 423, ¶ 258 (VZ-MA May Checklist Aff.).

1069 SBC Texas Order at ¶ 335.

claim of "routine" failure by VZ-MA is hyperbole.

The Department also finds VZ-MA's explanation fully responsive to WorldCom's complaints. We do not find WorldCom's comparison of testing procedures between unbundled transport and special access DS-3s to be indicative of any discrimination on the part of VZ-MA with respect to this checklist item. The Department finds VZ-MA's willingness to work with WorldCom and, presumably, other CLECs to improve its testings processes further proof of VZ-MA's satisfaction of this checklist requirement.

Concerning Conversent's dark fiber issues, we note that on September 6, 2000, Conversent filed with the Department a letter indicating that it and VZ-MA are cooperating to improve the transmission quality of certain dark fiber spans, an arrangement it expects to reduce to writing via an amendment to its interconnection agreement. VZ-MA has demonstrated its willingness to address Conversent's concerns, which we believe go beyond its statutory, contractual, or § 271 obligations. The Department is confident VZ-MA would be as accommodating to other CLECs should similar dark fiber issues arise. Based on the satisfactory resolution of Conversent's concerns, as well as VZ-MA's continuing discussions about improving the dark fiber ordering and provisioning processes, the Department finds that VZ-MA is provisioning dark fiber in a nondiscriminatory manner.

Finally, concerning AT&T Broadband's mid-span meet issue, we note the issue is squarely before the Department in an ongoing arbitration proceeding, separate and apart from this

docket.[1070] The Department will address AT&T Broadband's concerns in that proceeding. Moreover, we find that AT&T Broadband's issue is not a § 271 compliance issue.

F. Checklist Item 6 - Unbundled Local Switching

1. Standard of Review

[1070] MediaOne Arbitration, D.T.E. 99-42/43.

Section 271(c)(2)(B)(vi) requires a BOC to provide "[l]ocal switching unbundled from transport, local loop transmission, or other services."[1071] As most recently reaffirmed in the SBC Texas Order, the FCC has interpreted this checklist item as requiring BOCs to provide unbundled local switching that includes the line-side and trunk-side facilities, plus the features, functions, and capabilities of the switch.[1072] These features, functions, and capabilities include the basic switching function as well as the same basic capabilities that are available to the BOC. Additionally, the FCC has determined that local switching includes all vertical features that the switch is capable of providing, as well as any technically feasible customized routing functions.[1073]

1071 47 U.S.C. § 271(c)(2)(B)(vi).

1072 SBC Texas Order at ¶ 336.

1073 Id.

In its Second BellSouth Louisiana Order, the FCC further held that BOCs must permit CLECs to purchase unbundled switching in a manner that permits CLECs to offer, and bill for, exchange access and the termination of local traffic. Moreover, the BOC must demonstrate that it offers equivalent access to billing information for this checklist item.[1074] In previous orders, the FCC held that a BOC must make available trunk ports on a shared basis and routing tables resident in the BOC's switch, as necessary to provide access to the shared transport functionality. Lastly, a BOC may not limit a CLEC's ability to use unbundled local switching to provide exchange access by requiring CLECs to purchase a dedicated trunk from an IXC's point of presence to a dedicated trunk port on the local switch.[1075]

2. Discussion

VZ-MA states that it provides nondiscriminatory access to local switching, including features, functions, and capabilities of the switch through both its interconnection agreements and through Tariff No. 17.[1076] Specifically, VZ-MA provides: (1) line-side and trunk-side facilities; (2) basic switching functions; (3) vertical switch features; (4) customized routing; (5) shared trunk ports; (6) unbundled tandem switching; (7) usage information for billing for exchange access; and

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1074 Billing issues are addressed in Section V.B.1.i., above.

1075 See SBC Texas Order at ¶¶ 337-338.

1076 VZ-MA Application, Appdx. B, Vol. 32a-b, Tab 423, ¶ 290 (VZ-MA May Checklist Aff.).

(8) usage information for reciprocal compensation.[1077] VZ-MA provisions CLEC orders using the same facilities, equipment, and personnel as for VZ-MA's retail orders.[1078] Furthermore, VZ-MA makes available all the switching features and functionality it currently uses for its own services.[1079]

1077 VZ-MA Application, Appdx. B, Vol. 1a-aa, Tab 2, ¶ 80 (Stern Aff.).

1078 VZ-MA Application, Appdx. A, Tab 1, ¶ 154 (Lacouture/Ruesterholz Decl.).

1079 VZ-MA Application, Appdx. B, Vol. 16, Tab 190, at 1437 (Transcript of Technical Session Held 11/16/99).

VZ-MA provides local switching in each of its central offices and provides a cross-connect between a line or trunk port and a CLEC's collocation arrangement. Additionally, VZ-MA offers access to tandem switching at each tandem switch and, similarly, provides a cross-connect between a trunk port and a CLEC's collocation arrangement.[1080] Moreover, VZ-MA makes available eight types of line ports; trunk port connections with line treatment; and access to functions and capabilities that are resident in the switch for the port type requested, on a line-by-line basis, which a CLEC can activate at the time of provisioning or anytime thereafter.[1081]

Through the end of February 2000, VZ-MA had provided over 1,400 local switching ports on a line-side basis as part of UNE-P, of which 1,300 were for business service and 100 were for residential customers.[1082] VZ-MA reports a significant increase in the number of switching ports provisioned for CLECs, and says that it has provisioned nearly 12,000 local line-side switching

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1080 VZ-MA Application, Appdx. B, Vol. 1a-aa, Tab 2, ¶ 81 (Stern Aff.).

1081 Id. at ¶ 82.

1082 VZ-MA Application, Appdx. B, Vol. 32a-b, Tab 423, ¶ 290 (VZ-MA May Checklist Aff.).

ports as part of UNE-P as of July 2000, with 1,900 local switching ports provisioned in July 2000 alone.[1083] In May through July 2000, VZ-MA reports an on-time completion rate of greater than 99 percent for switching/UNE-P orders.[1084] VZ-MA further reports that the average provisioning interval for CLEC local switching was 1.15 days, compared with an interval of 1.64 days for VZ-MA retail.[1085]

1083 VZ-MA Application, Appdx. A, Tab 1, ¶ 146 (Lacouture/Ruesterholz Decl.)

1084 Id. at ¶ 147.

1085 Id. at ¶ 148.

VZ-MA also provides tandem switching, consisting of dedicated tandem trunk ports, shared tandem trunk ports, features, and tandem usage and group routings.[1086] According to VZ-MA, local switching may be combined with shared transport, enabling a CLEC to route its traffic over VZ-MA's network in the same way that VZ-MA routes traffic for its own retail customers.[1087] In addition, VZ-MA will also provide local switching, upon request, using customized routing by class-of-call, for example, operator services or directory assistance.[1088]

VZ-MA has developed the network design request ("NDR") process to facilitate the development and implementation of CLEC requests for VZ-MA-provided routing.[1089] The NDR is used to set up the CLEC's network and routing plans within VZ-MA's network.[1090] Through this process, a CLEC can request standardized routing and blocking options and dialing plans,

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1086 VZ-MA Application, Appdx. B, Vol. 1a-aa, Tab 2, ¶ 84 (Stern Aff.).

1087 Id. at ¶ 85.

1088 Id.

1089 Id.

mirroring the VZ-MA routing, blocking, and dialing plans. Alternatively, a CLEC can request its own customized plans.[1091]

1090 Id. at ¶ 86.

1091 VZ-MA Application, Appdx. B, Vol. 16, Tab 190, at 1438 (Transcript of Technical Session Held 11/16/99).

Should a CLEC select VZ-MA's standardized option (the so-called Option B), CLECs may establish a presence in every switch in VZ-MA's territory in approximately six weeks.[1092] According to VZ-MA, it has pre-built the necessary switch translations for Option B into all of its switches, thus affording CLECs a quick way to obtain a ubiquitous switch presence in Massachusetts.[1093] As of February 2000, nine CLECs were using VZ-MA's Option B.[1094] By

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1092 Id. at 1438, 1440.

1093 VZ-MA Application, Appdx. B, Vol. 32a-b, Tab 423, ¶ 276 (VZ-MA May Checklist Aff.).

1094 Id. at ¶ 277.

August 2000, the number of CLECs using VZ-MA's Option B had increased to 17.[1095] Due to such necessary steps as loading operator services and directory assistance ("OS/DA") branding tapes and loading CLEC-specific rates, the NDR completion intervals for Option B varied from 14 to 38 business days.[1096]

1095 VZ-MA Application, Appdx. A, Tab 1, ¶ 151 (Lacouture/Ruesterholz Decl.).

1096 VZ-MA Application, Appdx. B, Vol. 32a-b, Tab 423, ¶ 277 (VZ-MA May Checklist Aff.).

With the non-standardized option (Option A), VZ-MA develops customized office dialing plans and line class codes to meet a CLEC's "unique requirements for routing instructions, default features, and the creation of appropriate billing and usage records."[1097] This option requires VZ-MA to load the customized design into each switch separately as ordered by the CLEC.[1098] The work required for Option A is time-consuming and complex, requiring, on average, 50 business days to complete.[1099] If a CLEC chooses Option A statewide, VZ-MA's technicians are required to write and program code, and build and load those uniquely defined new line class codes into

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1097 Id. at ¶ 272.

1098 Id. at ¶ 273.

1099 VZ-MA Application, Appdx. B, Vol. 16, Tab 193, at 1476-1478 (Transcript of Technical Session Held 11/17/99).

approximately 140 host switches.[1100]

WorldCom argues that VZ-MA's provision of local switching should be tested by KPMG.[1101] WorldCom also stated that it opened a trouble ticket on its first UNE-P order in Massachusetts because it did not receive WorldCom branding for OS/DA.[1102] However, in its statement at the oral argument, WorldCom did not state that VZ-MA is not in compliance with

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1100 Id. at 1476.

1101 VZ-MA's Application, Appdx. B, Vol. 18, Tab 220, at 50 (WorldCom Guariglia/Kinard/Lichtenberg/Ryan Decl.).

1102 VZ-MA Application, Appdx. B, Vol. 21, Tab 238, at 3763-3764 (Transcript of Technical Session Held 12/09/99).

checklist item 6.[1103]

[1103] VZ-MA Application, Appdx. B, Vol. 49, Tab 565 at 5596 (Transcript of Oral Argument Held 09/08/00).

VZ-MA states that its records indicate that WorldCom's complaints about a UNE-P end-user's inability to use Call Return and to receive an WorldCom-branded OS/DA are incorrect. VZ-MA provided the history of this particular WorldCom trouble ticket, which revealed customer complaints concerning an inability to use Call Return in addition to the OS/DA branding problems.[1104] VZ-MA reported that there was no error in the switch translations, and explained that Call Return, which permits a customer to automatically place calls to the party that last called, does not function over certain lines.[1105]

During the technical sessions, Z-Tel alleged that VZ-MA delayed Z-Tel's implementation of Option A because VZ-MA missed a series of meetings. Z-Tel also argued that VZ-MA should provision Option A within a 60-day interval to avoid unwarranted delays to CLEC entry into the local exchange market.[1106] VZ-MA responds that Z-Tel, not VZ-MA, was responsible for delaying a scheduled meeting, because Z-Tel missed an initial meeting and cited an urgent need to focus on

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1104 VZ-MA Application, Appdx. B, Vol. 32a-b, Tab 423, ¶ 285 (VZ-MA May Checklist Aff.).

1105 Id.

1106 VZ-MA Application, Appdx. B, Vol. 18, Tab 219, at 7 (Z-Tel Statement of D. Davis).

New York (resulting in the exclusion of Massachusetts and Pennsylvania) when that meeting was rescheduled.[1107]

3. Conclusions

The Department is persuaded by VZ-MA's review of the WorldCom trouble ticket and its explanation that WorldCom's customer indeed, simply misunderstood the limitations of the Call Return feature. Moreover, WorldCom has not disputed VZ-MA's response to WorldCom's complaint. Finally, even if we accepted as accurate WorldCom's complaint, it was an isolated incident that has not impeded WorldCom's ability to compete in Massachusetts. An anecdote (even were it a valid one) does not constitute a systemic pattern.

[1107] VZ-MA Application, Appdx. B, Vol. 32a-b, Tab 423, ¶ 281 (VZ-MA May Checklist Aff.).

Moreover, during the technical sessions, Z-Tel conceded that no other state has a standard interval for NDRs.[1108] The Department is not persuaded by Z-Tel's claims that VZ-MA's unbundled switching performance is discriminatory. Indeed, in its latest filing, Z-Tel indicates that VZ-MA has worked effectively to implement Z-Tel's standard NDRs, provisioning them in a 30- to 45-day interval.[1109] Lastly, while Z-Tel still believes that a standard interval for custom NDRs would assist carriers in launching service, the lack of a firm 60-day interval has not, in fact, impeded Z-Tel's ability to roll out service in Massachusetts.[1110]

For the aforementioned reasons, the Department finds VZ-MA meets the requirements set forth in checklist item 6.

1108 VZ-MA Application, Appdx. B, Vol. 21, Tab 237, at 3440 (Transcript of Technical Session Held 12/08/99).

1109 VZ-MA Application, Appdx. B, Vol. 38, Tab 463, ¶ 5 (Z-Tel's Comments on VZ-MA's Supplemental Comments).

1110 Id.

G. Checklist Item 7 - E911 Access, Directory Assistance/Operator Services

1. 911 and E911 Access

a. Standard of Review

Section 271(c)(2)(B)(vii)(I) requires a BOC to provide "nondiscriminatory access to . . . 911 and E911 services."[1111] In previous § 271 orders, the FCC has found that a BOC must provide CLECs access to its 911 and enhanced 911 ("E911") services in the same manner that a BOC obtains such access (i.e., at parity). Specifically, the BOC must maintain the 911 database entries for CLECs with the same accuracy and reliability that it maintains this database for its own customers.[1112]

b. Discussion

[1111] 47 U.S.C. § 271(c)(2)(B)(vii)(I).

[1112] Bell Atlantic New York Order at ¶ 349.

VZ-MA offers E911 interconnection to CLECs under existing interconnection agreements and tariffs.[1113] According to VZ-MA, CLECs are permitted to provide their end-users with access to E911 service by: (1) supplying dial tone, if the CLEC is facilities-based; (2) purchasing local switching from VZ-MA; or (3) reselling VZ-MA's retail exchange service.[1114] VZ-MA states that when a CLEC has its own switch providing its own dial-tone, the CLEC must interconnect with the E911 network at the E911 tandem by either providing its own trunks or by leasing them from VZ-MA.[1115] VZ-MA states that the trunks between the E911 tandem and the Public Service Answering Point ("PSAP") are the same trunks used to transport VZ-MA's E911 calls, and that, for a CLEC call, VZ-MA is responsible for the E911 call, all elements of the network, network design, and routing to the PSAP.[1116] As of July 2000, VZ-MA has provided over 509 E911 trunks to 28 CLECs.[1117]

Moreover, VZ–MA indicates that it provides nondiscriminatory access to the E911 database so that information about a CLEC end-user may be entered.[1118] For a CLEC purchasing VZ-MA's local switching or resale, VZ-MA states that the necessary fields are provided to the

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1113 VZ-MA Application, Appdx. A, Tab 1, ¶ 203 (Lacouture/Ruesterholz Decl.).

1114 VZ-MA Application, Appdx. B, Vol. 1a-aa, Tab 2, ¶ 34 (Howard Aff.).

1115 VZ-MA Application, Appdx. A, Tab 1, ¶ 206 (Lacouture/Ruesterholz Decl.).

1116 Id. at ¶ 208.

1117 Id. at ¶ 207.

1118 Id. at ¶ 213.

CLEC's customers in the exact same manner as for VZ-MA's retail customers.[1119] VZ-MA indicates that, as of July 2000, CLECs with their own switches had over 418,000 E911 listings in Massachusetts.[1120]

No CLECs dispute VZ-MA's compliance with this portion of checklist item 7.

c. Conclusions

[1119] Id. at ¶ 212-213.

[1120] Id. at ¶ 209.

In prior § 271 orders, the FCC noted that no commenter disputed the BOC's compliance with this part of checklist item 7, and that the state commission had concluded that the BOC was providing nondiscriminatory access to 911/E911.[1121] We are presented with a similar situation in Massachusetts with regard to VZ-MA's obligation to provide nondiscriminatory access to 911/E911. Based upon the uncontested evidence in the record, we conclude that VZ-MA is providing nondiscriminatory access to 911/E911 and has successfully demonstrated to us its compliance with this portion of checklist item 7.

2. Directory Assistance & Operator Services

a. Standard of Review

Sections 271(c)(2)(B)(vii)(II)-(III) require a BOC to provide nondiscriminatory access to "directory assistance services to allow the other carrier's customers to obtain telephone numbers" and "operator call completion services."[1122] The FCC has concluded that a BOC must be in

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[1121] Bell Atlantic New York Order at ¶ 350; SBC Texas Order at ¶ 344.

[1122] Bell Atlantic New York Order at ¶ 351.

compliance with the rules implementing § 251(b)(3) in order to satisfy the requirements of this part of the checklist item.[1123]

[1123] Id. at ¶ 352, citing Second Bell South Louisiana Order; SBC Texas Order at ¶ 346.

The FCC explains that "operator call completion services" is a subset of or equivalent to "operator services" ("OS") which has been defined as "any automatic or live assistance to a consumer to arrange for billing or completion, or both, of a telephone call," and that this includes "busy line verification, emergency interrupt, and operator-assisted directory assistance."[1124] The FCC also held that "nondiscriminatory access to directory assistance and directory listings" means that "the customers of all telecommunications service providers should be able to access each LEC's [DA] service and obtain a directory listing on a nondiscriminatory basis . . . ."[1125]

Furthermore, the FCC states that competing carriers may provide OS and DA by either reselling the BOC's services or by using their own personnel and facilities to provide these services.[1126] The FCC notes that its rules require BOCs to permit CLECs wishing to resell the BOC's OS/DA to request the BOC to brand their calls, and that competing carriers wishing to

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1124 Bell Atlantic New York Order at ¶ 352 n.1093.

1125 SBC Texas Order at ¶ 346, citing In Re: Implementation of the Local Competition Provisions of the Telecommunications Act of 1996,CC Docket No. 98-68, Second Report and Order and Memorandum Opinion and Order, FCC 96-333 (August 8, 1996) ("Local Competition Second Order and Report") at ¶¶ 130-135.

1126 SBC Texas Order at ¶ 347.

provide OS/DA using their own facilities and personnel must be able to obtain directory listings either by obtaining directory information on a "read only" or "per dip" basis from the BOC's DA database, or by creating database by subscriber listing information in the BOC's database.[1127]

[1127] Id.

Moreover, although the FCC originally concluded that BOCs must provide OS/DA on an unbundled basis pursuant to §§ 251 and 252, the FCC removed OS/DA from the list of required unbundled network elements in the UNE Remand Order.[1128] The FCC notes that checklist item obligations that do not fall within a BOC's obligations to provide UNEs are not subject to the requirements of §§ 251 and 252, including the requirement that rates be based upon forward-looking economic costs.[1129] However, the FCC stated that checklist items that do not fall within a BOC's UNE obligations still must be provided in accordance with §§ 201(b) and 202(a), which require that rates and conditions are just and reasonable, and not unreasonably discriminatory.[1130]

b. Discussion

VZ-MA claims that it provides nondiscriminatory access to its operator call completion services to CLECs pursuant to both interconnection agreements and Tariff No. 17. Specifically, VZ-MA makes OS available to CLECs by the following means: (1) CLECs can purchase OS from

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1128 SBC Texas Order at ¶ 348, citing UNE Remand Order at ¶¶ 441-442.

1129 Id.

1130 Id.

VZ-MA and use VZ-MA's facilities and personnel; or (2) CLECs may establish their own OS centers and resell VZ-MA's OS.[1131] A CLEC electing the latter option must interconnect its center with VZ-MA's OS centers so that both VZ-MA and the CLEC can provide busy line verification and calling line interrupt services.[1132] In addition, CLECs can interconnect with VZ-MA's Line Information Database to verify telephone number and other billing information.[1133]

1131 VZ-MA Application, Appdx. A, Vol. 1, Tab 1, ¶227 (Lacouture/Ruesterholz Decl.).

1132 Id.

1133 Id.

VZ–MA indicates that in December 1999, all CLEC UNE-P, facility-based CLEC, and reseller calls were commingled with VZ-MA's retail traffic, and service was provided to all customers at 2.3 seconds.[1134] During May through July 2000, VZ-MA, on average, answered OS calls from CLECs' customers within 0.9 seconds and calls from VZ-MA retail customers within 2.6 seconds.[1135] As of July 2000, 16 CLECs were purchasing Operator Call Completion services (the dial-zero function) from VZ-MA using 1,300 dedicated transport facilities provided by VZ-MA; another 14 CLECs were purchasing VZ-MA Operator Call Completion services using VZ-MA's shared transport.[1136] Also, 44 resellers were using VZ-MA's Operator Call Completion services.[1137] VZ-MA indicates that its cost studies for OS are currently under review by the Department in the Consolidated Arbitrations, and OS rates based upon that cost study were filed in

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1134 VZ-MA Application, Appdx. B, Vol. 32a-b, Tab 423, ¶ 297 (VZ-MA May Checklist Aff.).

1135 VZ-MA Application, Appdx. A, Tab 1, ¶ 234 (Lacouture/Ruesterholz Decl.).

1136 Id. at ¶ 231.

1137 VZ-MA Application, Appdx. B, Vol. 32a-b, Tab 423, ¶ 296 (VZ-MA May Checklist Aff.).

Tariff No. 17.[1138]

[1138] VZ-MA Application, Appdx. B, Vol. 1a-aa, Tab 2, ¶ 54 (Howard Aff.).

Moreover, VZ-MA reports that it provides OS with three branding options: (1) a CLEC-specific brand; (2) VZ-MA's branding; or (3) unbranded.[1139] As of the end of October 1999, VZ-MA indicates that there were 12 carriers utilizing VZ-MA's OS, of which eight used their own brand, three were unbranded, and one utilized VZ-MA's brand.[1140]

1139 VZ-MA Application, Appdx. A, Tab 1, ¶ 228 (Lacouture/Ruesterholz Decl.).

1140 VZ-MA Application, Appdx. B, Vol. 16, Tab 193, at 1530-31(Transcript of Technical Session Held 11/17/99).

Next, VZ-MA claims it provides nondiscriminatory access to its DA service pursuant to both its interconnection agreements and Tariff No. 17.[1141] CLECs have three options for providing DA: (1) establish their own DA and use VZ-MA's DA database on a read-only basis; (2) purchase VZ-MA's DA and use VZ–MA's facilities, personnel, and database; or (3) resell VZ-MA's DA.[1142] As of July 2000, 18 CLECs were purchasing DA service from VZ-MA using 1,300 dedicated trunk ports and transmission facilities provided by VZ-MA; another 14 CLECs are purchasing VZ-MA's DA service and using VZ-MA's shared transport service; and 44 resellers were reselling VZ-MA's DA.[1143] Moreover, 17 CLECs are using branding other than VZ-MA for DA and 16 CLECs are using branding other than VZ-MA for OS.[1144] In addition, VZ-MA indicates that one carrier has asked that it be provided VZ-MA's DA in two flavors, branded and unbranded.[1145] VZ-MA also indicates that it provides CLECs with DA Call Completion ("DACC").[1146]

According to VZ-MA, during May through July 2000, on average, VZ-MA answered CLECs' customers DA calls routed to the wholesale call center within 2.6 seconds and VZ-MA

1141 VZ-MA Application, Appdx. A, Tab 1, ¶ 216 (Lacouture/Ruesterholz Decl.).

1142 VZ-MA Application, Appdx. B, Vol. 1a-aa, Tab 2, ¶ 56 (Howard Aff.).

1143 VZ-MA Application, Appdx. A, Tab 1, ¶¶ 219, 222 (Lacouture/Ruesterholz Decl.).

1144 VZ-MA Application, Appdx. B, Vol. 32a-b, Tab 423, ¶ 293 (VZ-MA May Checklist Aff.).

1145 VZ-MA Application, Appdx. B, Vol. 16, Tab 193, at 1531(Transcript of Technical Session Held 11/17/99).

1146 VZ-MA Application, Appdx. B, Vol. 1a-aa, Tab 2, ¶ 59 (Howard Aff.); VZ-MA Application, Appdx. A, Tab 1, ¶ 217 (Lacouture/Ruesterholz Decl.).

retail center calls (including resale calls) within 3.0 seconds.[1147] VZ-MA indicates that recurring and non-recurring cost studies for DA that used the FCC's TELRIC methodology are currently under review in the Department's Consolidated Arbitrations and D.T.E. 98-57 proceedings.[1148] Finally, according to VZ-MA, the FCC recently found that DA service is highly competitive and has removed it from the list of UNEs BOCs must make available to requesting CLECs.[1149]

1147 VZ-MA Application, Appdx. A, Tab 1, ¶ 226 (Lacouture/Ruesterholz Decl.).

1148 VZ-MA Application, Appdx. B, Vol. 1a-aa, Tab 2, ¶ 27 (Howard Aff.). We note that these cost studies have since been approved.

1149 VZ-MA Application, Appdx. B, Vol. 16, Tab 193, at 1540 (Transcript of Technical Session Held 11/17/99).

In its initial comments, WorldCom raised concerns regarding its inability to determine whether VZ-MA is indeed providing nondiscriminatory access to 911, OS and DA until a third party examines VZ-MA's implementation of its NDR process.[1150] WorldCom stated that in New York, KPMG found that VZ-NY's NDR processes had no quality controls and, as a result, WorldCom asserts that certain services such as OS and DA were not being provisioned as ordered by CLECs.[1151] Despite these earlier concerns, WorldCom did not dispute VZ-MA's compliance with checklist item 7 in its statement at the September 8, 2000 oral argument.

c. Conclusions

We note that WorldCom provided no evidence regarding any provisioning problems with OS/DA and that WorldCom did not pursue this issue further. Moreover, WorldCom did not contest VZ-MA's compliance with this portion of checklist item 7 beyond its initial comments. Based upon the record, we find that VZ-MA provides nondiscriminatory access to its DA and operator call completion services and thus, we verify compliance with this portion of checklist item 7.

1150 VZ-MA Application, Appdx. B, Vol. 3, Tab 51, at 4 (WorldCom Initial Comments).

1151 Id. at 4-5.

H. Checklist Item 8 - White Pages Directory Listings

1. Standard of Review

Section 271(c)(2)(B)(viii) requires a BOC to provide "[w]hite pages directory listings for customers of the other carrier's telephone exchange service."[1152] According to the FCC's Second Bell South Louisiana Order, the term "white pages" refers to the local alphabetical directory that includes the residential and business listings of the customers of the local exchange provider and that this term includes, at a minimum, the subscriber's name, address, telephone number, or any combination thereof.[1153] In the same Order, the FCC stated that a BOC will satisfy this checklist item if it: (1) provided nondiscriminatory appearance and integration of white page directory listings to CLECs' customers; and (2) provided white page listings for CLECs' customers with the

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[1152] 47 U.S.C. § 271(c)(2)(B)(viii).

[1153] Bell Atlantic New York Order at ¶¶ 357-358, citing Second BellSouth Louisiana Order at 13 FCC Rcd at 20748.

same accuracy and reliability that it provides its own customers.[1154]

2. Discussion

[1154] Id. at ¶ 359, citing Second BellSouth Louisiana Order at 20747-48.

VZ-MA asserts that it provides CLEC customers in Massachusetts with white pages directory listings in a nondiscriminatory fashion.[1155] VZ-MA indicates that, before directory listings are published, CLECs are provided with numerous opportunities to verify the existence and accuracy of the listings for their end users.[1156] VZ-MA notes that CLECs can view listing information on the Customer Service Record ("CSR") and can utilize the DCAS Directory Listing Request ("DLR").[1157] In addition, 90 days prior to the service order close date, CLECs are provided with a Listings Verification Report ("LVR") which contains all listing that are currently included in the inventory to be published in the upcoming directory.[1158] VZ-MA states that the LVR enables CLECs to confirm the accuracy of its customers' entries.[1159]

1155 VZ-MA Application, Appdx. A, Tab 1 ¶¶ 236-238 (Lacouture/Ruesterholz Decl.).

1156 Id. at ¶ 247.

1157 VZ-MA Application, Appdx. B, Vol. 32a-b, Tab 423 ¶ 302 (VZ-MA May Checklist Aff.).

1158 VZ-MA Application, Appdx. A, Tab 1 ¶ 247 (Lacouture/Ruesterholz Decl.).

1159 Id.

VZ-MA indicates that its directory publishing company publishes 56 primary and 14 community white pages directories at different times throughout the year in Massachusetts.[1160] Through July 2000, VZ-MA's directories included approximately 192,000 basic white page directory listings for CLECs, comprising 122,000 residential listings and 70,000 business listings.[1161]

1160 Id. at ¶ 242.

1161 Id. at ¶ 245.

Despite some discussion of VZ-NY's performance with respect to dropped directory listings, VZ-MA states that no person has ever been accidentally left off a white page listing.[1162] VZ-MA also indicates that it has received no complaints from CLECs about their customers being omitted from the white page directories.[1163] VZ-MA states that the problem of missing listings is not a white page issue because such problems occur in the DA database, and that by the time the white page listings are printed such problems have been resolved.[1164] VZ-MA contends that the majority of DA listings are never removed from any of its databases because the majority of the competitive lines in Massachusetts are resale, thus no disconnection is involved.[1165] In a resale arrangement, the CLEC submits an order to change the type of service, but there is no physical disconnection of existing service. Hence, the order is not distributed to systems that would modify

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1162 VZ-MA Application, Appdx. B, Vol. 12, Tab 161 at 413 (Transcript of Technical Session Held 11/02/99).

1163 Id. at 416.

1164 Id. at 412.

1165 Id. at 404.

or delete directory listings.[1166]

[1166] VZ-MA Application, Appdx. A, Tab 1 ¶ 250 (Lacouture/Ruesterholz Decl.).

However, if the CLEC serves the customer with its own switch, the line is typically disconnected because VZ-MA is no longer providing dial tone.[1167] VZ-MA states that it has implemented software modifications to eliminate deletion of CLEC customers' directory listings from the VZ-MA white pages to ensure that listings are not dropped during hot cuts.[1168] VZ-MA acknowledges that at some earlier point there were sequencing and timing problems associated with facilities-based disconnections.[1169] To remedy this problem, VZ-MA established a

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1167 Id. at ¶ 251.

1168 Id.

1169 VZ-MA Application, Appdx. B, Vol. 12, Tab 161 at 405 (Transcript of Technical Session Held 11/02/99).

quality-assurance team, which has ten employees.[1170] After the orders are completed, this quality-assurance team confirms that everything is completed correctly and that the listings are in the database.[1171]

[1170] Id. at 406-407.

[1171] Id. at 407.

VZ-MA reiterates the FCC's conclusion that VZ-NY demonstrated that it provides directory assistance services in accordance with the requirements of checklist item 7.[1172] VZ-MA notes that, in so doing, the FCC specifically rejected AT&T's claim that its asserted proof of "dropped" directory listings must cause VZ-NY to fail this checklist item.[1173] VZ-MA states that these same claims were raised by AT&T during our technical sessions, based on the same information submitted to and rejected by the FCC, and should similarly be rejected here.[1174] Moreover, VZ-MA states that AT&T provided no Massachusetts-specific data to support its claim.[1175] VZ-MA states that similar to New York, VZ-MA satisfies the criteria of the FCC's Bell Atlantic New York Order, and that, with the exception of the claim that the FCC rejected, no CLEC challenges VZ-MA's satisfaction of its responsibilities.[1176]

AT&T is the only CLEC that raised concerns about VZ-MA's performance with respect to white page directory listings. Specifically, AT&T argues that VZ-MA fails to demonstrate that it includes the directory listings of CLEC customers in its database at the same level of accuracy, timeliness, and reliability it provides to its own customers and, therefore, it fails to demonstrate

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1172 VZ-MA Application, Appdx. B, Vol. 32a-b, Tab 423, ¶97 (VZ-MA May Checklist Aff.).

1173 Id.

1174 Id. at ¶98.

1175 VZ-MA Application, Appdx. B, Vol. 32a-b, Tab 423 ¶298 (VZ-MA May Checklist Aff.).

1176 Id.

that it provides nondiscriminatory access to its directory assistance and white page listings.[1177] AT&T states that in the absence of any evidence to the contrary, AT&T's directory listings experience in New York suggests that VZ-MA's directory listings process for Massachusetts may be likewise inadequate.[1178] Accordingly, AT&T requests that the Department require VZ-MA to substantiate its claim that its Massachusetts directory listings process is working in a commercially reasonable manner before § 271 approval.[1179]

3. Conclusions

AT&T provided no Massachusetts-specific evidence that would warrant a finding of noncompliance on this checklist item. Based upon the evidence in the record, we conclude that VZ-MA is providing non-discriminatory access to its directory listings and, thus, meets the

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1177 VZ-MA Application, Appdx. B, Vol. 15, Tab 178, at 3 (AT&T's Prefiled Comments re. Checklist Items for Technical Session).

1178 Id. at 6.

1179 Id. at 10.

requirements of checklist item 8.

I. Checklist Item 9 – Number Administration

1. Standard of Review

Section 271(c)(2)(B)(ix) requires a BOC to provide "nondiscriminatory access to telephone numbers for assignment to the other carrier's telephone exchange service customers," until "the date by which telecommunications numbering administration, guidelines, plan, or rules are established." In addition, the checklist mandates compliance with "such guidelines, plan or rules" after they have been established.[1180] In 1997, the FCC selected Lockheed Martin as the North American Numbering Plan Administrator and transferred administration over area codes and central office codes to Lockheed Martin.[1181] In October 1998, following the transition period, Lockheed Martin assumed responsibility for all new area code planning and all central office code assignments for Massachusetts. The FCC subsequently designated NeuStar, Inc. as the North

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1180 47 U.S.C. § 271(c)(2)(B)(ix).

1181 In the Matters of Administration of the North American Numbering Plan, CC Docket No. 92-237 and Toll Free Service Access Codes, CC Docket No. 95-155, Third Report and Order, FCC 97-372 (rel. October 9, 1997).

American Numbering Plan Administrator.[1182]

2. Discussion

[1182] In the Matter of Request of Lockheed Martin Corporation and Warburg, Pincus & Co. for Review of the Transfer of the Lockheed Martin Communications Industry Services Business, CC Docket No. 92-237, Order, FCC 99-346 (rel. Nov. 17, 1999).

VZ–MA states that, prior to 1998, VZ–MA maintained a neutral central office code administration group that was responsible for processing requests and assigning central office codes in compliance with industry guidelines.[1183] VZ–MA states that during the transition to Lockheed Martin, VZ–MA complied with FCC and industry guidelines.[1184] Since the transfer, VZ–MA states it has no further direct involvement in telephone numbering administration and is required to follow the same industry guidelines and procedures for access to telephone numbers as other carriers.[1185] VZ–MA states that it complies with all directives for code activation in a

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1183 VZ–MA Application, Appdx. B, Vol. 1a-aa, Tab 2, ¶ 70 (Howard Aff.).

1184 Id. at ¶ 73.

1185 Id.

nondiscriminatory manner.[1186] For example, once a telephone number code has been assigned to a carrier, VZ–MA follows the same procedures for newly assigned central office codes whether the code is assigned to VZ–MA or another carrier.[1187]

1186 Id. at ¶ 74.

1187 Id.

Moreover, VZ–MA states that it adheres in a timely and accurate manner to all industry numbering administration and FCC rules, including provisions requiring the accurate reporting of data to NeuStar, Inc.[1188] This includes reporting Central Office Code Utilization Survey forecast data and providing supporting documentation required when requesting exchange codes for growth in accordance with the Industry Numbering Committee ("INC") Central Office Code Assignment Guidelines.[1189] VZ–MA states that it also conducts a monthly comparison between the Local Exchange Routing Guide and the Verizon Code Administration System to ensure consistency and accuracy.[1190] Further, VZ–MA states that it makes available to CLECs, at no charge, a mechanized testing process called the Verification Evaluation and Testing System ("VETS") to ensure accurate and complete programming of NXX codes in its switches in Massachusetts.[1191]

No CLECs specifically complained about numbering administration issues in Massachusetts.[1192] Further, no CLECs have challenged the programming of CLEC NXX codes in

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1188 VZ–MA Application, Appdx. A, Tab 1, ¶ 253 (Lacouture/Ruesterholz Decl.).

1189 VZ–MA Application, Appdx. B, Vol. 32a-b, Tab 423, ¶ 305 (VZ-MA May Checklist Aff.).

1190 VZ–MA Application, Appdx. A, Tab 1, ¶ 254 (Lacouture/Ruesterholz Decl.).

1191 Id. at ¶ 255.

1192 AT&T Broadband asserts that the lack of numbering resources in Massachusetts is a relevant factor which should prevent or delay the Department from granting VZ–MA approval for entry into the interLATA market. VZ-MA Application, Appdx. B, Vol. 37, Tab 451, at 12 (AT&T Broadband July Comments). However, AT&T Broadband does not assert that the lack of numbering resources is related to VZ–MA's failure to meet any

VZ-MA switches in this proceeding.

3. Conclusions

VZ–MA has demonstrated that it complies with the FCC's number assignment rules and INC Central Office Code Assignment Guidelines, and that it reports data to the central office code administrator as required. Further, VZ–MA has demonstrated that when acting as the code administrator, VZ–MA adhered to FCC requirements and industry guidelines. No party has disputed VZ–MA's compliance. Based upon the record, we verify compliance with the requirements of checklist item 9.

J. Checklist Item 10 - Access to Databases and Signaling

1. Standard of Review

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particular checklist item, but rather suggests the Department consider the current lack of numbering resources as part of a separate public interest analysis. Id. at 12 n.13.

Section 271(c)(2)(B)(x) requires a BOC to provide "nondiscriminatory access to databases and associated signaling necessary for call routing and completion." The FCC requires BOCs to demonstrate that they provide nondiscriminatory access to: (1) signaling networks, including signaling links and signaling transfer points ("STPs");[1193] (2) certain call-related databases necessary for call routing and completion, or in the alternative, a means of physical access to the

[1193] An STP is a "signaling point with the function of transferring signaling messages from one signaling link to another . . . ." Newton's Telecom Dictionary at 750.

STP linked to the unbundled database; (3) and Service Management Systems ("SMS").[1194] The FCC also requires that a BOC design, create, test, and deploy Advanced Intelligent Network ("AIN")-based services at the SMS through a "Service Creation Environment" ("SCE").[1195]

1194 SBC Texas Order at ¶ 362, citing Second BellSouth Louisiana Order at ¶ 267. An SMS is a system that provides the ability to create, modify, and update information in the Advanced Intelligent Network databases. VZ-MA Application, Appdx. B, Vol. 1a-aa, Tab, 2, ¶64 (Crawford Aff.).

1195 Id., citing Second BellSouth Louisiana Order at ¶ 272. An SCE is defined as an "AIN-related term that refers to the surroundings, including the organizational structure, computing and communications resources, in which a LEC creates new services." Newton's Telecom Dictionary at 739.

The FCC has defined call-related databases as databases, other than OSS, that are used in signaling networks for billing and collection or the transmission, routing, or other provision of telecommunication services.[1196] In the Local Competition First Report and Order, the FCC required ILECs to provide unbundled access to their call-related databases, including but not limited to: the Line Information Database ("LIDB");[1197] the Toll-Free Calling database;[1198] the Local Number Portability ("LNP") database;[1199] and AIN databases.[1200] In the UNE Remand Order, the FCC clarified that the definition of call-related databases "includes, but is not limited to, the calling name ("CNAM") database, as well as the 911 and E911 databases."[1201]

2. Discussion

VZ-MA contends that the FCC found that VZ-NY had satisfied the requirements of the

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1196 SBC Texas Order at ¶ 363, citing Local Competition First Report and Order at ¶ 484, n.1126; UNE Remand Order at ¶ 403.

1197 The LIDB database contains information used for alternate billing arrangements (e.g., collect, bill-to-third number, and calling card calls) and end-user Calling Name and Address ("CNAM") data. VZ-MA Application, Appdx. B, Vol. 1a-aa, Tab, 2 ¶ 53 (Crawford Aff.).

1198 The Toll-Free database processes queries for toll-free dialed calls (e.g., 800/888/877) to determine carrier selection and other routing instructions. VZ-MA Application, Appdx. B, Vol. 1a-aa, Tab, 2 ¶ 57 (Crawford Aff.).

1199 The LNP database contains identification records on ported numbers and provides call routing instructions for calls to such ported numbers. VZ-MA Application, Appdx. B, Vol. 1a-aa, Tab 2 ¶ 60 (Crawford Aff.).

1200 SBC Texas Order at ¶ 363, citing Local Competition First Report and Order ¶ 484; see also 47 C.F.R. § 51.319(e).

1201 SBC Texas Order at ¶ 363, citing UNE Remand Order at ¶ 403.

Act for this checklist item and that VZ-MA"likewise satisfies the criteria of the Bell Atlantic New York Order for this checklist item in Massachusetts."[1202] VZ-MA contends that it is providing CLECs with access to its call-related databases and signaling network in the same manner as VZ-NY does in New York.[1203] It also notes that, as with its New York application, no CLEC has challenged VZ-MA's compliance with this checklist item.[1204]

1202 VZ-MA Application, Appdx. B, Vol. 32a-b, Tab. 423, at 107 (VZ-MA May Checklist Aff.), citing Bell Atlantic New York Order at ¶ 366.

1203 VZ–MA Application, Appdx. A, Tab 1, ¶ 257 (Lacouture/Ruesterholz Decl.).

1204 VZ-MA Application, Appdx. B, Vol. 32a-b, Tab 423, at 107 (VZ-MA May Supplemental Comments).

VZ-MA states that it has complied with the requirements of this item by providing nondiscriminatory access to (1) its signaling network, (2) to its call-related databases used in the signaling network, and (3) to the associated SMS for each database.[1205] According to VZ-MA, access to its databases and associated signaling is available pursuant to interconnection agreements and Tariff No. 17 and that in all cases such access is non-discriminatory.[1206] VZ-MA testified that

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1205 VZ-MA Application, Appdx. B, Vol. 1a-aa, Tab 1, ¶ 79 (Crawford Aff.).

1206 VZ-MA Application, Appdx. B, Vol. 32a-b, Tab 423, ¶ 107 (VZ-MA May Checklist Aff.), citing VZ-MA Application, Appdx. B. Vol. 1a-aa, Tab 1 ¶¶ 42-79 (Crawford Aff.); VZ-MA Application, Appdx. B, Vol. 14, Tab 164 at 806-845 (Transcript of Technical Session Held 11/4/99); VZ-MA Application, Appdx. A, Tab 1, ¶¶ 258-260 (Lacouture/Ruesterholz Decl.).

it uses the same facilities, equipment and personnel to provision signaling links for CLECs as it does for itself, and that CLEC signaling traffic is handled by VZ-MA's signaling network in the same manner as VZ-MA's signaling traffic. [1207] In addition, VZ-MA testified that all signaling traffic on VZ-MA's signaling network is queued and routed on a nondiscriminatory basis.[1208]

[1207] VZ–MA Application, Appdx. A, Tab 1, ¶¶ 262-263 (Lacouture/Ruesterholz Decl.).

[1208] Id. at ¶ 263.

VZ-MA states that as of July 2000, 35 CLECs were accessing VZ-MA's signaling network (26 via third-party hub providers and nine with direct interconnection), four CLECs had established access to VZ-MA's Toll-Free database, eight CLECs had made the necessary arrangement for accessing VZ-MA's CNAM in the New England region, and six CLECs had made the necessary arrangement for accessing VZ-MA's LNP Database.[1209] VZ-MA testified that in 1999, it processed more than 6.6 billion Toll-Free Database queries for IXCs, independent telephone companies, third-party hub providers, wireless carriers and CLECs operating in New York and New England, of which 1.6 billion queries were for Massachusetts.[1210] In addition, VZ-MA stated that in 1999, it processed approximately 29 million queries to its CNAM for other telecommunications carriers in New England.[1211]

According to VZ-MA, there is only one CLEC in New England that is directly accessing its LIDB database, although the CLEC stores its LIDB records with a third-party hub provider, not

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1209 Id. at ¶¶ 260, 265, 273, 277.

1210 Id. at ¶ 265.

1211 Id. at ¶ 273.

VZ-MA.[1212] VZ-MA also testified that it is providing access to its LIDB to 40 other telecommunications carriers, including IXCs, independent telephone companies, wireless carriers, and third-party hub providers in New England.[1213] It states that in 1999, it processed more than 77 million LIDB queries in New England.[1214]

1212 Id. at ¶ 268.

1213 Id.

1214 Id.

VZ-MA testified that it also makes nondiscriminatory access available to the SCE for CLECs operating in Massachusetts but that no CLEC is currently using such access to create their own AIN-based telecommunications services.[1215] VZ-MA argues that this was the case in New York, and the FCC found that VZ-NY had "met its burden" nonetheless.[1216] Therefore, VZ-MA claims, the Department should reach the same conclusion.[1217]

3. Conclusions

No CLEC disputes VZ-MA's compliance with this checklist item. VZ-MA's evidence in support of its compliance with checklist item 10 is uncontroverted. Based upon the evidence in the record, we conclude that VZ-MA is providing nondiscriminatory access to databases and associated signaling necessary for call routing and completion, in compliance with the requirements

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1215 Id. at ¶¶279-282.

1216 VZ-MA Application, Appdx. B, Vol. 32a-b, Tab. 423 at 108 (VZ-MA May Checklist Aff.), citing Bell Atlantic New York Order at ¶ 366 (where FCC found that "if no competitor is actually using a checklist item, a BOC must show that it has a concrete and specific legal obligation to furnish the item upon request and be 'presently ready to furnish each item in quantities that competitors may reasonably demand and at an acceptable level of quality.'").

1217 Id.

of the Act.

K. Checklist Item 11 - Number Portability

1. Standard of Review

Section 271(c)(2)(B)(xi) of the Act requires a BOC to comply with the number portability rules adopted by the FCC pursuant to § 251 of the Act.[1218] Section 251(b)(2) requires all LECs to "provide, to the extent technically feasible, number portability in accordance with requirements prescribed by the [FCC]."[1219] Section 251(e)(2) requires that the "cost of establishing. . . number portability shall be borne by all telecommunications carriers on a competitively neutral basis. . .."[1220] Furthermore, BOCs are also required to replace gradually interim number portability with permanent number portability.[1221]

Number portability is defined as "the ability of users of telecommunications services to retain, at the same location, existing telecommunications numbers without impairment of quality, reliability or convenience when switching from one telecommunications carrier to another."[1222] In the Bell Atlantic New York Order, the FCC rejected a CLEC's claims that VZ-NY would not

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1218 47 U.S.C. § 271(c)(2)(B)(xi).

1219 47 U.S.C. § 251(b)(2).

1220 47 U.S.C. § 251(e)(2).

1221 See 47 C.F.R. §§ 52.3(b)-(f); Second BellSouth Louisiana Order, 13 FCC Rcd at 20758, ¶ 275; First Number Portability Order, 11 FCC Rcd at 8355 and 8399-8404, ¶¶ 3, 9; Third Number Portability Order, 13 FCC Rcd at 11708-12, ¶¶ 12-16.

1222 47 U.S.C § 153(30).

provide number portability to customers with telephone numbers issued by that CLEC stating that it did "not find that [the CLEC's] unsupported assertions are indicative of a systematic failure in [VZ-NY's] provision of number portability."[1223] Likewise, in the SBC Texas Order, the FCC rejected commenters' claims of unreliable LNP service since the commenters' "claim[s] appear to be anecdotal and unsupported by any persuasive evidence."[1224]

2. Discussion

[1223] Bell Atlantic New York Order at ¶ 370.

[1224] SBC Texas Order at ¶ 372.

VZ-MA indicates that, through July 2000, VZ-MA has ported approximately 203,000 telephone numbers in Massachusetts through LNP arrangements for 22 CLECs.[1225] This figure is up from 11,700 numbers ported at year-end 1998.[1226] VZ-MA reports an 86 percent growth rate in ported numbers in Massachusetts for the first half of 2000.[1227] Moreover, VZ-MA states that it has also worked with CLECs to transition from interim number portability ("INP") to LNP on a

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1225 VZ–MA Application, Appdx. A, Tab 1, ¶ 284 (Lacouture/Ruesterholz Decl.).

1226 VZ-MA Application, Appdx. B, Vol. 32a-b, Tab 423, ¶ 310 (VZ-MA May Checklist Aff.).

1227 VZ-MA Application, Appdx. B, Vol. 42, Tab 494, ¶ 151 (VZ-MA August Supplemental Checklist Aff.).

mutually-agreed upon schedule and that, as of July 2000, VZ-MA was supporting CLECs with INP on approximately 7,600 numbers.[1228] VZ-MA asserts that it is provisioning LNP in a timely fashion and that during May, June and July 2000 it met its due date commitments on approximately 98 percent of all orders for stand-alone LNP.[1229]

1228 VZ–MA Application, Appdx. A, Tab 1, ¶ 286 (Lacouture/Ruesterholz Decl.).

1229 Id. at ¶ 284.

In its Pre-Technical Session Statement, AT&T argues that VZ-MA had not demonstrated that it was able to port a CLEC customer's telephone number on a commercially reasonable basis, or that such porting was timely and accurate and in accordance with FCC standards.[1230] AT&T stated that despite VZ-MA's representations regarding its purported improvement, AT&T had continued to experience difficulties with LNP, demonstrating VZ-MA's noncompliance with its § 271 obligations.[1231] AT&T described the problems as poor responsiveness of VZ-MA personnel once VZ-MA issues a FOC or LSRC, and the inaccuracy and untimeliness of porting a number.[1232]

1230 VZ-MA Application, Appdx. B, Vol. 15, Tab 178 at 1-2 (AT&T's Prefiled Comments re. Checklist Items for Technical Session).

1231 Id. at 5.

1232 Id.

According to RCN, VZ-MA's current method of processing LNP requests results in late notification of rejected requests.[1233] RCN asserts that this late notification of rejected requests requires RCN to reschedule LNP orders, which in turn disrupts RCN's business and provides bad service to its customers.[1234] In addition, RCN states that problems coordinating the LNP due date sometimes result in their customer losing telephone service.[1235] RCN states that VZ-MA's difficulties in provisioning LNP arise mostly from its failure to give CLECs parity access via a web page interface to VZ-MA's back-office provisioning systems.[1236] However, in its statement at the

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1233 VA-MA Application, Appdx. B, Vol. 15, Tab 183 at 1 (RCN's Statements of P. Musseau and D. Smith)

1234 Id. at 1-2.

1235 Id. at 2.

1236 Id. at 3.

oral argument, RCN indicated that VZ-MA is in compliance with this checklist item.[1237]

AT&T Broadband indicates that VZ-MA's LNP performance has significantly improved, but AT&T Broadband also expressed concern about the potential for increased problems as LNP volumes increase.[1238] AT&T Broadband claims that the overall volumes of porting requests are low and not representative of a truly competitive market and, as competition develops, the

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1237 VZ-MA Application, Appdx. B, Vol. 49, Tab 565, at 5559 (Transcript of Oral Argument Held 9/8/00).

1238 VZ-MA Application, Appdx. B, Vol. 15, Tab 187 at 7-8 (AT&T Broadband Technical Session Statement of D. Kowolenko); VZ-MA Application, Appdx. B, Vol. 37, Tab 451 at 11 (AT&T Broadband July Supplemental Comments).

volumes of ported numbers will increase significantly.[1239]

[1239] VZ-MA Application, Appdx. B, Vol. 15, Tab 187 at 8 (AT&T Broadband Technical Session Statement of D. Kowolenko); see also VZ-MA Application, Appdx. B, Vol. 37, Tab 451 at 10-11 (AT&T Broadband July Supplemental Comments).

In its Pre-Technical Session Statement, AT&T Broadband argued that VZ-MA has failed to confirm canceled or rescheduled orders in a timely fashion; has cut ports despite a confirmed rescheduled or canceled order; and has changed due dates.[1240] More recently, in its response to VZ-MA's May Supplemental Filing, AT&T Broadband reiterates its concern regarding VZ-MA's performance in administering same-day port cancels and reschedules.[1241] AT&T Broadband presents data showing that from March through June 2000, VZ-MA erroneously ported approximately 3.5 percent of ports that VZ-MA had confirmed to AT&T Broadband as canceled

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1240 VZ-MA Application, Appdx. B, Vol. 15, Tab 187 at 7-8 (AT&T Broadband Technical Session Statement of D. Kowolenko)

1241 VZ-MA Application, Appdx. B, Vol. 37, Tab 451 at 9 (AT&T Broadband July Supplemental Comments).

or rescheduled.[1242]

[1242] Id. at 10, Exh. A at ¶ 9; VZ-MA Application, Appdx. B, Vol. 43b, Tab 504 (AT&T Broadband's Responses to Discovery Requests DTE-1 and 2 with Motion for Confidential Treatment).

In response to AT&T's challenge to VZ-MA's provisioning performance, VZ-MA points out that AT&T provided no data to support its claims.[1243] As to RCN's concern regarding the timely provision of FOCs and ordering errors when ordering on the three-day standard interval,[1244] VZ-MA replies that timely provisioning of FOCs was a challenge for its earlier for manually handled orders, but that it has made improvements with substantial TIS OC force additions in 2000.[1245] VZ-MA states that it processes and completes hundreds of LNP orders within the three-day standard interval every month, and that its current performance in providing FOCs within two

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1243 VZ-MA Application, Appdx. B, Vol. 32a-b, Tab 423, ¶ 312 (VZ-MA May Checklist Affidavit).

1244 See VZ-MA Application, Appdx. B, Vol. 15, Tab 183 at 1-3 (RCN's Statements of P. Musseau and D. Smith)

1245 VZ-MA Application, Appdx. B, Vol. 32a-b, Tab 423, ¶ 314 (VZ-MA May Checklist Aff.), citing VZ-MA Application, Appdx. B, Vol. 32a-b, Tab 423, ¶ 70 (May OSS Aff.).

hours on flow-through orders has consistently been nearly 100 percent.[1246] VZ-MA also credits the improved quality of RCN's orders for the improvement in provisioning FOCs within two hours on flow-through orders.[1247] Furthermore, VZ-MA disagrees with RCN's claim that access to VZ-MA's back-end operating systems is necessary to improve order flow through and quality; however, VZ-MA indicates that it has developed its OSS interfaces to simplify the task of preparing quality orders without the need for CLEC representatives to learn and work with the idiosyncracies of numerous BOC legacy systems.[1248]

1246 VZ-MA Application, Appdx. B, Vol. 32a-b, Tab 423, ¶¶ 314-315 (VZ-MA May Checklist Aff.), citing VZ-MA Application, Appdx. B, Vol. 32a-b, Tab 423 at Exh. B1 (VZ-MA May Measurements Aff.).

1247 Id. at ¶ 315.

1248 Id. at ¶ 316.

VZ-MA notes that AT&T Broadband has acknowledged substantial improvement in the LNP process with only a one percent miss rate of due date commitments for LNP orders completed in the period August through December 1999.[1249] VZ-MA notes that AT&T Broadband is the only CLEC of the 22 CLECs served by VZ-MA who continues to comment on VZ-MA's LNP capabilities, but that AT&T Broadband's comments focus on the limited area of same day port cancels and reschedules, where AT&T Broadband claims that VZ-MA's miss rate is four percent.[1250] VZ-MA notes that AT&T Broadband's same day cancellations and rescheduled orders involved more than 65 percent of the orders in the August through October 1999 period,

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1249 VZ-MA Application, Appdx. B, Vol. 32a-b, Tab 423, ¶ 313 (VZ-MA May Checklist Aff.), citing VZ-MA Application, Appdx. B, Vol. 15, Tab 187 at 6-7 (AT&T Broadband Technical Session Statement of D. Kowolenko) and VZ-MA Application, Appdx. B, Vol. 25, Tab 315 (RR-156).

1250 VZ-MA Application, Appdx. B, Vol. 42, Tab 494, ¶ 152 (VZ-MA August Supplemental Checklist Aff.).

and that AT&T Broadband currently supplements 12 percent of its orders.[1251] Thus, VZ-MA indicates that AT&T Broadband's four percent miss rate on same-day reschedules and cancellations translates into less than 0.5 percent of the total orders resulting in service problems.[1252]

1251 VZ-MA Application, Appdx. B, Vol. 32a-b, Tab 423, ¶ 313 (VZ-MA May Checklist Aff.); VZ-MA Application, Appdx. B, Vol. 42, Tab 494, ¶152 (VZ-MA August Supplemental Checklist Aff.).

1252 VZ-MA Application, Appdx. B, Vol. 42, Tab 494, ¶ 152 (VZ-MA August Supplemental Checklist Aff.).

Moreover, VZ-MA indicates that it is exploring a mechanized process for handling all supplemental orders, including same-day cancellation or reschedules of ports.[1253] This mechanized process would allow a supplemental LSR entered by a CLEC into the Request-Manager interface, or DCAS, to flow through automatically to VZ-MA's downstream provisioning systems, making the change on a near-real-time basis without any human intervention.[1254] VZ-MA notes that this

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1253 VZ-MA Application, Appdx. B, Vol. 42, Tab 494, ¶ 154 (VZ-MA August Supplemental Checklist Aff.); VZ-MA Application, Appdx. B, Vol. 45, Tab 520 at 2452-53 (Transcript of Technical Session Held 11/23/99).

1254 VZ-MA Application, Appdx. B, Vol. 42, Tab 494, ¶ 155 (VZ-MA August Supplemental Checklist Aff.); VZ-MA Application, Appdx. B, Vol. 45, Tab 520 at 2453-54 (Transcript of Technical Session Held 11/23/99).

would eliminate the requirement for the CLEC who wants to make a late change in its order to call the RCCC in order to pull the order from the work schedule.[1255]

[1255] VZ-MA Application, Appdx. B, Vol. 42, Tab 494, ¶ 155 (VZ-MA August Supplemental Checklist Aff.).

Lastly, as part of the POP Domain of its OSS Evaluation, KPMG submitted a sample of LNP orders within the EDI and GUI functional evaluations of the LSOG-2 and LSOG-4 environments.[1256] In the functional evaluations, KPMG tested for VZ-MA's ability to accurately process LNP orders and to provide timely and accurate responses. Though KPMG did not report disaggregated results for the LNP orders in its final evaluation, KPMG testified at Department technical sessions that 100 percent of the stand-alone LNP orders that were submitted via both the LSOG-2 and the LSOG-4 environment received timely and accurate responses from VZ-MA.[1257] Further, KPMG stated that it also examined the flow-through success for its LNP order transactions, and found that the LNP orders did flow-through as expected.[1258] Finally, KPMG states that the LNP orders submitted as part of its LSOG-4 functional evaluation were submitted using "resources which were live," provided by AT&T so that KPMG could examine VZ-MA's ability to provision LNP orders.[1259] KPMG states that each of the LNP orders were correctly provisioned on time, and each received a timely PCN and BCN.[1260]

3. Conclusions

1256 VZ-MA Application, Appdx. I, Vol. 1a-b, Tab 1, at 20, 24, 75, 79 (KPMG's OSS Evaluation Final Report, Version 1.4); see also VZ-MA Application, Appdx. B, Vol. 46, Tab 545, at 5017 (Transcript of Technical Session Held 8/28/00).

1257 VZ-MA Application, Appdx. B, Vol. 46, Tab 547, at 5062 (Transcript of Technical Session Held 8/29/00).

1258 Id. at 5070-5071.

1259 Id. at 5062.

1260 Id. at 5062, 5070.

Based upon the record, we conclude that VZ-MA satisfies its obligations to provide number portability in compliance with the Act and FCC rules and, thus, meets the requirements of checklist item 11. VZ-MA provides permanent number portability in accordance with FCC regulations, and is replacing INP with LNP. VZ-MA's percent on-time performance for LNP-only exceeded the 95 percent standard in each month from January through July 2000. Specifically, VZ-MA's success rate for LNP-only for the first seven months of 2000 were 99.03 percent, 99.29 percent, 99.24 percent, 98.94 percent, 99.38 percent, 98.55 percent and 98.28 percent, respectively.

Although AT&T and RCN raised concerns during the 1999 technical sessions, neither provided any persuasive evidence to support a finding of non-compliance on this checklist item. We do not find AT&T and RCN's arguments to have merit, particularly in light of the current data on LNP provisioning which reveal an approximately 99 percent success rate in overall LNP provisioning. Furthermore, neither AT&T nor RCN continued to raise concerns regarding VZ-MA's compliance with this checklist item in their responses to VZ-MA's May 2000 Supplemental Filing.

Likewise, AT&T Broadband's claims regarding VZ-MA's miss rate on same-day cancellations and reschedules, a very small subset of total LNP orders, are inadequate to support a finding of noncompliance. We find that VZ-MA's efforts to mechanize the process for same-day cancellations and reschedules will only improve VZ-MA's already impressive performance.

L. Checklist Item 12 – Local Dialing Parity

1. Standard of Review

Section 271(c)(2)(B)(xii) requires a BOC to provide "[n]ondiscriminatory access to such services or information as are necessary to allow the requesting carrier to implement local dialing parity in accordance with the requirements of section 251(b)(3)."[1261] Section 251(b)(3) imposes upon all ILECs "[t]he duty to provide dialing parity to competing providers of telephone exchange service and telephone toll service with no unreasonable dialing delays."[1262] The FCC has interpreted this language to mean that customers of CLECs must be able to dial the same number of digits the BOC's customers dial to complete a local telephone call.[1263] Also, customers of CLECs must not otherwise suffer inferior quality service compared to the BOC's customers.[1264] In addition, the BOC is required to permit all competitive providers to have nondiscriminatory access to telephone numbers, OS, DA, and directory listings, with no unreasonable dialing delays.[1265]

1261 47 U.S.C. § 271(c)(2)(B)(xii).

1262 47 U.S.C. § 251(b)(3).

1263 47 C.F.R. §§ 51.205, 51.207.

1264 47 C.F.R. § 51.207.

1265 47 U.S.C. § 251(b)(3).

2. Discussion

VZ–MA claims that it provides local dialing parity at no additional charge as an inherent component of its interconnection agreements.[1266] VZ–MA states that it provides local dialing arrangements to CLECs and resellers that permit their customers to make local calls to VZ–MA's customers, to CLEC customers, and to DA or operator call completion services without dialing extra digits or access codes.[1267] VZ–MA maintains that local calls placed over a VZ–MA resold line are dialed by the reseller's customers in the same manner, and are processed and routed in the same manner, as local calls placed over comparable VZ–MA retail lines.[1268] VZ–MA indicates that it does not cause CLECs' local service customers to experience inferior service with respect to post-dialing delays, call completion rates and transmission quality as compared to VZ–MA's customers.[1269] VZ–MA states that once a local call passes from a CLEC's network to VZ–MA's network, it is treated the same as a similarly routed call originating from any other service provider's network, including VZ–MA's network.[1270] VZ–MA states that the only factor affecting the dialing parity of CLEC-placed calls to VZ–MA is whether a CLEC has provisioned sufficient

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1266 VZ–MA Application, Appdx. A, Tab 1, ¶ 288 (Lacouture/Ruesterholz Decl.).

1267 Id. at ¶ 287.

1268 VZ–MA Application, Appdx. B, Vol. 1a-aa, Tab 2, ¶ 91 (Howard Aff.).

1269 VZ–MA Application, Appdx. A, Tab 1, ¶ 289 (Lacouture/Ruesterholz Decl.).

1270 Id.

trunking to transport effectively its end-user calls to VZ–MA's network.[1271] VZ-MA states that it exchanged an average of 1.9 billion minutes of traffic with CLECs over local interconnection trunks during the first seven months of 2000, and all of the calls were completed with local dialing parity.[1272] In addition, in compliance with a Department Order,[1273] VZ–MA notes it has implemented intraLATA presubscription throughout Massachusetts, which offers CLECs dialing parity on intraLATA toll calls.[1274]

1271 VZ–MA Application, Appdx. B, Vol. 14, Tab 164, at 671 (Transcript of Technical Session Held 11/4/99).

1272 VZ–MA Application, Appdx. A, Vol. 1, Tab 1, ¶ 290 (Lacouture/Ruesterholz Decl.).

1273 VZ-MA Application, Appdx. L, Vol. 2, Tab 6 (D.T.E. Order in 98-85: MCI Petition to require Verizon Massachusetts to implement intraLATA presubscription).

1274 VZ–MA Application, Appdx. A, Tab 1, ¶ 291 (Lacouture/Ruesterholz Decl.).

No CLEC has asserted that VZ–MA fails to satisfy this checklist item.[1275]

3. Conclusions

VZ–MA demonstrates that it provides local dialing parity in accordance with the requirements of section 251(b)(3). VZ–MA has shown that customers of competing carriers are able to dial the same number of digits that VZ–MA's customers dial to complete a local telephone call and that these customers do not receive service inferior in quality to that of customers of VZ–MA. Therefore, we verify compliance with checklist item 12. Moreover, we note that no CLEC has challenged VZ–MA's compliance with this checklist item.

M. Checklist Item 13 – Reciprocal Compensation

1. Standard of Review

[1275] While no CLEC has complained about VZ–MA's dialing parity performance, WorldCom stated that KPMG should test VZ-MA's NDR process, which, it argues, is a necessary element to VZ–MA's ability to provide local dialing parity. VZ–MA Application, Appdx. B, Vol. 3, Tab 51, at 48 (WorldCom Initial Comments).

Section 271(c)(2)(B)(xiii)[1276] requires that VZ–MA provide reciprocal compensation in accordance with the requirements of sections 251(b)(5)[1277] and 252(d)(2). Section 252(d)(2)(A) specifies that terms and conditions for reciprocal compensation may be considered just and reasonable only if they "(i) . . . provide for the mutual and reciprocal recovery by each carrier of costs associated with the transport and termination on each carrier's network facilities of calls that originate on the network facilities of the other carrier; and (ii) . . . determine such costs on the basis of a reasonable approximation of the additional costs of terminating such calls."[1278]

1276 47 U.S.C. § 271(c)(2)(B)(xiii).

1277 Section 251(b)(5) states that each LEC has the duty to establish reciprocal compensation arrangements for the transport and termination of telecommunications. 47 U.S.C. § 251(b)(5).

1278 47 U.S.C. § 252(d)(2)(A).

The FCC has determined that reciprocal compensation arrangements apply to local traffic.[1279] In February 1999, the FCC determined that traffic directed to an Internet service provider ("ISP") and bound for the Internet was interstate and, therefore, not subject to its reciprocal compensation rule.[1280] The Department responded to the FCC's Order by reversing a prior Department ruling regarding ISP-bound traffic and held that VZ–MA is not required to pay reciprocal compensation for ISP-bound traffic.[1281] Acknowledging the difficulty in differentiating ISP-bound traffic from local traffic, the Department approved a 2:1 ratio of terminating to originating traffic, any excess of which VZ-MA may consider to be terminating to an ISP and, thus, exclude from reciprocal compensation payments, unless the submitting CLEC provides evidence that its "local" (i.e., non-ISP bound) traffic exceeds the 2:1 ratio.[1282] In the Bell Atlantic New York Order, the FCC concluded that, in light of the FCC's holding in the Internet Traffic Order, inter-carrier compensation for ISP-bound traffic is not governed by section 252(b)(5), and, therefore, is not a checklist item.[1283] In March 2000, the United States Court of Appeals for the D.C. Circuit vacated the FCC's Internet Traffic Order, and remanded the Order back to the FCC

1279 47 C.F.R. § 51.701.

1280 Inter-Carrier Compensation for ISP-Bound Traffic, CC Docket No. 99-68 et al., Declaratory Ruling and Notice of Proposed Rulemaking, FCC 99-38 (rel. Feb. 26, 1999) ("Internet Traffic Order").

1281 VZ–MA Application, Appdx. G, Vol. 5, Tab 108 (MCI WorldCom, D.T.E. 97-116-C (1999)).

1282 Id. at 28 n.31.

1283 Bell Atlantic New York Order at ¶ 377.

for a further explanation of the FCC's analysis.[1284]

2. Discussion

[1284] Bell Atlantic Tel. Cos. v. FCC, 206 F.3d 1 (2000).

VZ–MA states that it complies with the requirements of this checklist item by offering CLECs reciprocal compensation arrangements through its interconnection agreements with carriers.[1285] As of February 2000, VZ–MA is paying reciprocal compensation to 24 CLECs, nine broadband CMRS providers, and seven paging companies.[1286] According to VZ–MA, in 1999, approximately 300 million minutes of use ("MOUs") originated with CLECs and were terminated by VZ–MA; approximately 16 billion MOUs originated with VZ–MA and were delivered to CLECs.[1287] VZ–MA paid approximately $48.9 million to CLECs for VZ–MA traffic delivered to them in 1999.[1288] For the first two months of 2000, VZ–MA paid CLECs approximately $5.2 million for terminating 6.6 billion MOUs.[1289] Reciprocal compensation payments made by VZ–MA are based on the 2:1 ratio established by the Department or under inter-carrier compensation agreements that cover local as well as ISP-bound traffic.[1290]

VZ–MA notes that the FCC confirmed that reciprocal compensation, under § 251 of the Act, is mandated only for the transport and termination of local traffic, and that ISP-bound traffic

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1285 VZ–MA Application, Appdx. A, Tab 1, ¶ 292 (Lacouture/Ruesterholz Decl.).

1286 Id. at ¶ 293.

1287 VZ–MA Application, Appdx. B, Vol. 32a-b, Tab 423, ¶ 323 (VZ-MA May Checklist Aff.).

1288 Id.

1289 Id.

1290 VZ–MA Application, Appdx. A, Tab 1, ¶ 294 (Lacouture/Ruesterholz Decl.).

is non-local interstate traffic.[1291] VZ–MA states that it has made reciprocal compensation payments in excess of the Department ordered 2:1 ratio to one CLEC which produced evidence that its local traffic exceeded the ratio.[1292]

1291 VZ–MA Application, Appdx. B., Vol. 1a-aa, Tab 2, ¶ 100 (Howard Aff.).

1292 VZ–MA Application, Appdx. A, Tab 1, ¶ 294 (Lacouture/Ruesterholz Decl.).

GNAPs claims that VZ–MA has not complied with its § 271 obligations with respect to reciprocal compensation.[1293] GNAPs argues that VZ–MA has not paid it reciprocal compensation according to the Department adopted 2:1 ratio.[1294] In addition, GNAPs indicates that the FCC's Internet Traffic Order does not relieve VZ–MA of its obligation to pay CLECs for terminating non-ISP bound calls.[1295] GNAPs claims that, immediately following the Department's Order in D.T.E. 97-116-C, GNAPs informed VZ–MA that approximately one-third of its traffic is not ISP bound; however, GNAPs received no response from VZ–MA.[1296] GNAPs also states that VZ–MA refuses to negotiate with GNAPs despite the Department's prompting VZ–MA to do so.[1297]

1293 VZ–MA Application, Appdx. B, Vol. 15, Tab 180, at 2 (Global NAPs Pre-Filed Technical Session Statement).

1294 Id.

1295 Id. at 3.

1296 Id.

1297 Id. at 5, citing D.T.E. 97-116-C.

According to GNAPs, before entering into any negotiations regarding reciprocal compensation with GNAPs, VZ–MA insists that the parties first execute a confidentiality agreement.[1298] GNAPs states that to require such an agreement would be unlawful and would prevent the parties from reporting back to the Department as to the status of the negotiations and, therefore, GNAPs has been unwilling to sign such an agreement.[1299]

1298 VZ–MA Application, Appdx. B, Vol. 15, Tab 180, at 5 (Global NAPs Pre-Filed Technical Session Statement).

1299 Id.

AT&T states that the fact that VZ–MA is not bound to pay reciprocal compensation in excess of the Department mandated 2:1 ratio means that VZ–MA cannot satisfy its obligation under § 271.[1300] According to AT&T, the FCC has stated that checklist item 13 is important to ensure that all carriers that originate calls bear the costs of terminating such calls.[1301] AT&T states that the Department found that CLECs incur costs to terminate calls to ISPs originated by VZ–

1300 VZ–MA Application, Appdx. B, Vol. 15, Tab 178, at 2 (AT&T's Prefiled Comments re. Checklist Items for Technical Session).

1301 Id.

MA.[1302] Accordingly, AT&T argues that CLECs are entitled to compensation for these costs by VZ–MA.[1303] However, during the September 8, 2000 panel hearing, AT&T indicated that VZ–MA is in compliance with checklist item 13.[1304]

1302 Id., citing D.T.E. 97-116-C.

1303 Id.

1304 VZ–MA Application, Appdx. B, Vol. 49, Tab 565, at 5436 (Transcript of Oral Argument Session Held 9/8/00).

In response to GNAPs' claim that VZ–MA has not paid any reciprocal compensation to GNAPS, VZ–MA states that it used the 2:1 ratio as the basis for making its payments to GNAPs and the amount of traffic terminated to VZ–MA by GNAPs has been minuscule.[1305] VZ–MA states that it is current on all reciprocal compensation payments to GNAPs.[1306] In response to GNAPs' claim that approximately one-third of its traffic is not ISP-bound and, therefore, eligible for reciprocal compensation payments, VZ–MA states that GNAPs has not provided support for its claim to VZ–MA.[1307] Further, in response to GNAPs' claim that VZ–MA will not negotiate with GNAPs, VZ-MA states that GNAPs' current negotiating position is that VZ–MA must first surrender its claim regarding no reciprocal compensation for past and current ISP-bound traffic

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1305 VZ–MA Application, Appdx. B, Vol. 32a-b, Tab 423, ¶ 327 (VZ-MA May Checklist Aff.).

1306 Id.

1307 Id. at ¶ 328.

before GNAPs will discuss inter-carrier compensation charges for future traffic, and that GNAP's position on this issue is unacceptable to VZ–MA.[1308] VZ-MA's reciprocal compensation rates were established in a Consolidated Arbitrations proceeding and were made permanent, along with other UNE rates, in another Department Order.[1309]

3. Conclusions

1308 Id. at ¶ 329.

1309 See VZ-MA Application, Appdx. H, Vol. 27, Tab 162 (DTE's Phase 4 Order re. TELRIC); VZ-MA Application, Appdx. H, Vol. 36, Tab 250 (D.T.E.'s Phase 4-B Order); VZ-MA Application, Appdx. H, Vol. 42, Tab 293 (D.T.E.'s Order Denying TCG's Motion for Reconsideration); VZ-MA Application Appdx. H, Vol. 42, Tab 294 (D.T.E.'s Order Approving NYNEX's TELRIC Compliance Filing); VZ-MA Application, Appdx. F, Vol. 8, Tab 157 (D.T.E.'s Order Granting BA-MA's Motion to Adopt Permanent UNE Rates).

VZ-MA has demonstrated that it has reciprocal compensation arrangements in accordance with § 252(d)(2) in place, and is making required payments on a timely basis. VZ–MA has shown it is providing reciprocal compensation under the obligations in its Department-approved interconnection agreements and tariffs, as well as relevant Department Orders. Therefore, we verify compliance with the requirements of checklist item 13. AT&T's argument regarding compensation for ISP-bound traffic is one that will be reached in the context of the FCC's action on remand, and is outside of our § 271 proceeding. With regard to GNAPs' arguments, we do not conclude that VZ–MA's actions have violated the § 271 provisions relative to reciprocal compensation. GNAPs has not provided persuasive evidence to conclude that VZ–MA is not complying with the 2:1 payment ratio mandated by one of our Orders.[1310] The Department notes that the concerns of AT&T and GNAPs were raised during the Department's 1999 technical sessions, but that AT&T and GNAPs did not raise the same concerns thereafter or respond to VZ–MA's May 2000 Supplemental Filing regarding reciprocal compensation.

N. Checklist Item 14 - Resale

1. Standard of Review

[1310] See VZ–MA Application, Appdx. G, Vol. 5, Tab 108 (D.T.E. 97-116-C).

Section 271(c)(2)(B)(xiv) requires a BOC to make "telecommunications services . . . available for resale in accordance with the requirements of sections 251(c)(4) and 252(d)(3)."[1311] Under § 251(c)(4)(A), ILECs are required "to offer for resale at wholesale rates any telecommunications service that the carrier provides at retail to subscribers who are not telecommunications carriers."[1312] In addition, § 252(d)(3) requires state commissions to determine wholesale rates based on "retail rates charged to subscribers for the telecommunications service requested, excluding the portion thereof attributable to any marketing, billing, collection, and other costs that will be avoided by the local exchange carrier."[1313]

Moreover, § 251(c)(4)(B) prohibits "unreasonable or discriminatory conditions or limitations" on services resold under § 251(c)(4)(A), with the exception that, if an ILEC makes a service available only to a specific category of retail subscribers, a state commission may prohibit a reseller under § 251(c)(4)(A) from offering the service to a different category of subscribers. Finally, §§ 271(c)(2)(B)(ii) and 271(c)(2)(B)(xiv) require that a BOC demonstrate that it provides

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1311 47 U.S.C. § 271(c)(2)(B)(xiv).

1312 47 U.S.C. § 251(c)(4)(A).

1313 47 U.S.C. § 252(d)(3).

nondiscriminatory access to OSS for resale, and the FCC will presume that any resale restriction is unreasonable unless the BOC proves to the state commission that the restriction is reasonable and non-discriminatory.[1314]

2. Resale non-OSS Issues

a. Discussion

[1314] 47 C.F.R. § 51.613(b); SBC Texas Order at ¶ 387; Bell Atlantic New York Order at ¶ 379.

VZ-MA indicates that its retail telecommunications services are available for resale at wholesale rates pursuant to interconnection agreements and its Department-approved resale tariff (Tariff No. 14).[1315] VZ-MA discounts its retail telecommunications services at the wholesale discount rates established by the Department.[1316] The discount rates are 24.99 percent when a reseller uses VZ-MA's OS and DA, and 29.47 percent without these VZ-MA services.[1317]

The resale discount was established by the Department, pursuant to pricing rules set by the FCC in the Local Competition First Report and Order. The general methodology employed by the Department was to determine the percentage of VZ-MA expenses (as a fraction of revenues) that are avoidable in sales for resale and apply that percentage discount to the retail rate for each

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1315 VZ–MA Application, Appdx. A, Tab 1, ¶ 296 (Lacouture/Ruesterholz Decl.).

1316 VZ–MA Application, Appdx. A, Tab 1, ¶ 295 (Lacouture/Ruesterholz Decl.); VZ–MA Application, Appdx. F, Vol. 8, Tab 157 (DTE's Order Granting VZ-MA's Motion to Adopt Permanent UNE Rates).

1317 VZ–MA Application, Appdx. A, Tab 1, ¶ 295 (Lacouture/Ruesterholz Decl.); VZ–MA Application, Appdx. F, Vol. 8, Tab 157 (DTE's Order Granting VZ-MA's Motion to Adopt Permanent UNE Rates).

service, deriving a wholesale rate that has the effect of excluding costs avoided by VZ-MA.[1318] The Department required two uniform discount rates for business and residential customers, one including OS and DA from VZ-MA (24.99 percent) and the other excluding OS and DA (29.47 percent).[1319]

[1318] Id. at 10.

[1319] VZ-MA Application, Appdx. L, Vol. 1, Tab 1, Section 10.5.1. (D.T.E.'s Tariff No. 14).

VZ-MA claims that it is providing resold services in the commercial volumes demanded by the CLECs. Through July 2000, VZ-MA has provided about 246,000 resold lines to more than 44 resellers, including 32,000 residential lines and 214,000 business lines.[1320] VZ-MA maintains that it makes its retail telecommunications services available for resale without unreasonable or discriminatory conditions or limitations.[1321] VZ-MA asserts that the only restrictions for resale of its retail telecommunications services are those expressly authorized by applicable FCC and Department rules.[1322] VZ-MA further indicates that, pursuant to a Department Order, VZ-MA restricts a reseller from purchasing, at the wholesale discount, Public Access Lines ("PAL") or Public Access Smart-pay Lines ("PASL") services for use by the reseller or its affiliates.[1323]

1320 VZ–MA Application, Appdx. A, Tab 1, ¶ 297 (Lacouture/Ruesterholz Decl.).

1321 VZ–MA Application, Appdx. A, Tab 1, ¶ 296 (Lacouture/Ruesterholz Decl.).

1322 Id.

1323 VZ-MA Application, Appdx. B, Vol. 1a-aa, Tab 1, ¶ 19 (Crawford Aff.).

VZ-MA allows resellers to assume retail contracts (unless prohibited by tariff or contract) under the same terms and conditions as the retail contract, with the applicable wholesale discount.[1324] The customer is subject to termination liabilities to the extent they were part of the original terms of the contract.[1325] This contract termination policy will remain in effect until February 24, 2001, at which time VZ-MA will reevaluate it.[1326] VZ-MA adds that, with the

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1324 VZ–MA Application, Appdx. A, Tab 1, ¶ 299 (Lacouture/Ruesterholz Decl.).

1325 Id. at ¶ 300.

1326 VZ-MA Application, Appdx. B, Vol. 42, Tab 494, ¶ 172 (VZ-MA August Supplemental Checklist Aff.).

exception of the end date, this termination policy is the same as VZ-NY's policy approved by the FCC in the Bell Atlantic New York Order.[1327] Specifically, VZ-MA notes that the FCC found that VZ-NY's termination liabilities did not constitute a restriction on resale under checklist item 14.[1328]

1327 VZ-MA Application, Appdx. B, Vol. 42, Tab 494, ¶ 172 (VZ-MA August Supplemental Checklist Aff.), citing Bell Atlantic New York Order at ¶ 390.

1328 Id.

ASCENT generally claims that VZ-MA engages in "anti-competitive tactics" and cites as an example VZ-MA's refusal to resell voicemail like other ILECs, including BA-NY. ASCENT also contends that VZ-MA will revert to an anti-competitive contract termination charge policy in 2001.[1329] ASCENT notes that in previous § 271 reviews, the FCC has taken the issue of termination liabilities seriously.[1330] ASCENT argues that a concern arises in this case because, unlike New York, Massachusetts has not established guidelines on permissible termination liabilities.[1331] Although the Department ruled that VZ-MA did not have to resell voicemail, ASCENT contends that VZ-MA is not precluded from so doing.[1332]

In response to ASCENT's comment that VZ-MA will revert to an anti-competitive termination policy in 2001, VZ-MA asserts that ASCENT's claim is a speculative assumption of VZ-MA's future conduct and thus, is not a current § 271 issue.[1333] VZ-MA also states that its decision not to make voicemail available for resale or to provide inside wiring service for resellers is in accordance with Department policy.[1334]

1329 VZ-MA Application, Appdx. B, Vol. 38, Tab 456, at 10-11 (ASCENT July Supplemental Comments).

1330 Id. at 9.

1331 Id. at n.9.

1332 VZ-MA Application, Appdx. B, Vol. 38, Tab 456 at 11 (ASCENT July Supplemental Comments), citing DPU/DTE 97-101 (1998).

1333 VZ-MA Application, Appdx. B, Vol. 42, Tab 494, ¶ 172 (VZ-MA August Supplemental Checklist Aff.).

1334 Id. at ¶ 168, citing D.T.E. 97-101; VZ-MA Application, Appdx. L, Vol. 2, Tab 5 (DTE's

b. Conclusions

Based upon the evidence in the record, we determine that VZ-MA meets its obligation to offer for resale at wholesale rates any telecommunications service that VZ-MA provides at retail to subscribers who are not telecommunications carriers. VZ-MA makes its retail telecommunications services available for resale at wholesale rates pursuant to its interconnection agreements and its Department-approved resale tariff. Moreover, no CLEC challenged VZ-MA's compliance with this portion of checklist item 14.

Order in 97-101: RCN Arbitration) (11/09/98); VZ-MA Application, Appdx. H, Vol. H, Tabb 121 (DPU Phase I Order) (11/08/96).

ASCENT's comments regarding VZ-MA's termination liability policy amount to mere speculation regarding VZ-MA's future conduct and do not apply to VZ-MA's current policy, which is the same as VZ-NY's policy approved by the FCC in the Bell Atlantic New York Order. Moreover, no other CLEC or reseller raised complaints about VZ-MA's termination liability policy. According to VZ-MA, the FCC has found that termination liabilities do not on their face cause a carrier to fail checklist item 14.[1335] Accordingly, we conclude that ASCENT's complaint does not prevent a finding of compliance with checklist item 14.

In support of its claim that VZ-MA engages in "anti-competitive tactics," ASCENT states that VZ-MA refuses to resell voicemail, but that VZ-MA could choose to do so. The Department has not ordered VZ-MA to resell voicemail, and the fact that VZ-MA has not voluntarily chosen to resell voicemail does not prevent a finding of compliance.[1336]

1335 SBC Texas Order at ¶ 392.

1336 See VZ-MA Application, Appdx. L, Vol. 2, Tab 5 (D.T.E.'s Order in 97-101: RCN Arbitration) (November 9, 1998) (Department denied RCN's request that Verizon be ordered to make voice messaging services available for resale).

3. Resale OSS Issues

a. Billing

i. Discussion

RNK reports that it resells approximately $200,000 per month of VZ-MA's services.[1337] RNK contends that VZ-MA's bills for resold services are consistently untimely, inaccurate, and overly difficult to interpret, and that these problems prevent RNK from competing with VZ-MA.[1338] RNK raises two concerns with the timeliness of bills. First, RNK states that it has inquired about obtaining Connect:Direct and DUF, but notes that the process to request, install and maintain Connect:Direct is burdensome and potentially costly.[1339] RNK further asserts that "industry sources" report problems with Connect:Direct and DUF, including transmission errors at

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1337 VZ-MA Application, Appdx. B, Vol. 17, Tab 205, at 3 (RNK Pre-Technical Session Statement).

1338 Id. at 3-4.

1339 VZ-MA Application, Appdx. B, Vol. 37, Tab 453, at 2 (RNK July Supplemental Comments).

the software interpretation level.[1340] In addition, RNK questions whether the data provided by Connect:Direct is consistent with the CD-ROM versions of the electronic bills.[1341]

1340 Id.

1341 Id.

Second, RNK notes its dissatisfaction that resale bills are due 30 days after the billing date, rather than 30 days after the posting date.[1342] RNK indicates that it relies on the electronic version of the bill contained on CD-ROMs, which generally arrive a week before the bill due date.[1343] RNK claims, however, that the timing and technical complications of interpreting the CD-ROMs make it difficult for RNK to determine, before the bill is due and with reasonable accuracy, the amounts that RNK owes VZ-MA and the amounts RNK's own customers owe RNK.[1344] RNK recommends that VZ-MA's Tariff No. 14 be amended so that the due date will run from the date the CD-ROM bills are sent to CLECs, thus, ensuring that CLECs have 30 days to pay the bill.[1345]

1342 Id. at 3.

1343 Id. at 3-4.

1344 Id. at 4.

1345 Id. at 9.

VZ-MA responds that it provides CLECs, in a timely manner, with all information they need to bill for resold services, including billing details for calls and service usage that are billed individually.[1346] In response to RNK's dissatisfaction with resale bills being due 30 days after the billing date, VZ-MA explains that resale billing methods and procedures were modeled after its retail summary bill service.[1347] VZ-MA states that it is its normal procedure to send resale and retail paper bills within seven to ten days from the billing period via the U.S. Postal Service.[1348] VZ-MA indicates that, as explained in the Resale Handbook, the electronic version of the bill, available through Connect:Direct, CD-ROM, and cartridge tape, is the official bill.[1349] Moreover, the electronic version is available through Connect:Direct at the same time the paper summary bill is completed, and therefore is available before the paper bill is received.[1350]

Furthermore, VZ-MA indicates that no other reseller has raised the issue of the bill timeliness because the vast majority of these resellers subscribe to DUF, which provides usage on a daily basis.[1351] According to VZ-MA, during May through July 2000, on average, it delivered over

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1346 VZ–MA Application, Appdx. A, Tab 1, ¶ 303 (Lacouture/Ruesterholz Decl.).

1347 VZ–MA Application, Appdx. B, Vol. 32a-b, Tab 423, ¶ 340 (VZ-MA May Checklist Aff.).

1348 Id.

1349 VZ-MA Application, Appdx. B, Vol. 42, Tab 494, ¶¶ 160-161 (VZ-MA August Supplemental Checklist Aff.).

1350 Id. at ¶ 162.

1351 VZ–MA Application, Appdx. B, Vol. 32a-b, Tab 423, ¶ 340 (VZ-MA May Checklist Aff.).

99 percent of DUF billing records within four business days.[1352] Accordingly, VZ-MA maintains that use of Connect:Direct and DUF could eliminate many of RNK's billing issues.[1353] VZ-MA notes that Connect:Direct does require purchase of a software package for approximately $300 and, if accessed via a dial-up arrangement, may involve toll charges, but in most cases VZ-MA provides a local access number which eliminates this concern.[1354] Moreover, VZ-MA states that it does not charge for DUF.[1355]

1352 VZ–MA Application, Appdx. A, Tab 1, ¶ 303 (Lacouture/Ruesterholz Decl.).

1353 VZ-MA Application, Appdx. B, Vol. 42, Tab 494, ¶¶ 161-162 (VZ-MA August Supplemental Checklist Aff.).

1354 Id. at ¶ 158.

1355 Id. at ¶ 166.

Regarding RNK's assertions that industry sources report problems with Connect:Direct and DUF, including errors at the software interpretation level and discrepancies between the CD-ROM and Connect:Direct versions of the bill, VZ-MA states that it is not aware of any complaints from CLECs or resellers, or discrepancies between the CD-ROM and Connect:Direct versions of the bill.[1356] Moreover, VZ-MA notes that in the Massachusetts Draft Final Report, KPMG stated that "100% of DUF records were accurate with regard to format and content."[1357]

[1356] Id. at ¶¶ 159, 160.

[1357] VZ–MA Application, Appdx. A, Tab 1, ¶ 303 (Lacouture/Ruesterholz Decl.).

RNK also raises concerns with VZ-MA's claim adjustments and bill credits processes.[1358] RNK notes that, due to VZ-MA retraining of its billing associates, VZ-MA is providing more timely responses to billing claims, and further indicates that the billing claims report now supplied by VZ-MA has remedied a problem in VZ-MA's billing system involving a type of charge unique to RNK.[1359] However, RNK states that its review of the billing claim responses reveals that the dollar amounts of adjusted claims was in the order of 75 percent in RNK's favor.[1360] In addition, while VZ-MA now supplies the billing claims report to enable RNK to apply credits to the proper customer's account, RNK claims the report is of limited use to it in the actual reconciliation of RNK's accounts because of RNK's difficulties in interpreting the report.[1361]

Lastly, RNK cites billing inaccuracies and errors as a concern. Although RNK acknowledges the resolution of certain RNK-specific billing errors, RNK reports that three additional difficulties in VZ-MA's billing system have arisen wherein RNK must pay VZ-MA for specific calls despite RNK's inability to bill its customer for those calls.[1362] Specifically, RNK indicates that it is unable to bill its customers: (1) for collect calls to its customers; (2) for

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1358 VZ-MA Application, Appdx. B, Vol. 17, Tab 205, at 6-7 (RNK Pre-Technical Session Statement); VZ-MA Application, Appdx. B, Vol. 37, Tab 453, at 4-5 (RNK Supplemental Comments).

1359 VZ-MA Application, Appdx. B, Vol. 37, Tab 453 at 4 (RNK Supplemental Comments).

1360 Id.

1361 Id. at 4-5.

1362 Id. at 5-6.

additional minutes beyond those provided for in its customers' flat rate calling plan; and (3) for calls wrongly designated as being within a customer's calling plan, which RNK states is due to an apparent change in the coding of VZ-MA's billing systems.[1363]

1363 Id.

In response to RNK complaints of a high percentage of inaccurate bills and not receiving timely credits, VZ-MA has retrained billing associates and implemented a monthly audit of all CLECs' and resellers' billing claims that were outstanding for over 30 days.[1364] This process, VZ-MA claims, allows the billing manager to efficiently track all open claims and to identify and escalate issues as appropriate.[1365] By making improvements in reduction of billing errors and timeliness of bill claim resolution, and by producing a billing claims report for reconciliation, VZ-MA states that it has provided RNK with the means and support to work through its billing

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1364 VZ–MA Application, Appdx. B, Vol. 32a-b, Tab 423, ¶ 345 (VZ-MA May Checklist Aff.).

1365 Id.

issues.[1366] VZ-MA explains that the billing claims report and clarifications in the Resale Handbook contain the necessary detail to apply credits properly to customer accounts and, if RNK needs assistance, a VZ-MA billing service representative can provide additional information.[1367]

1366 VZ-MA Application, Appdx. B, Vol. 42, Tab 494, ¶ 166 (VZ-MA August Supplemental Checklist Aff.).

1367 Id. at ¶ 163.

Finally, in response to RNK's claims of difficulties in interpreting VZ-MA's billing and its inability to bill customers for certain calls for which it still must pay VZ-MA, VZ-MA states that it is investigating solutions to these problems.[1368] Nevertheless, VZ-MA states that RNK could have access to information regarding collect and third-party calls and detail associated with additional minutes beyond the "flat rate" calling plans if RNK obtained DUF, which contains a message type indicator that identifies the billing arrangement applicable to the call.[1369] Regarding a change to the billing system coding mentioned by RNK as a billing problem, VZ-MA explains that the coding change was performed to remedy an April 24, 2000, customer complaint that the VZ-MA was not in compliance with current BOS standards.[1370] Because the change was considered a repair, VZ-MA did not communicate the change to the CLEC community; however, VZ-MA concedes that this was a mistake and, as a result of CLEC complaints, the code was reversed.[1371]

ii. Conclusions

RNK is the only carrier to comment on VZ-MA's resale billing services. We note that

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1368 Id. at ¶ 164.

1369 Id.

1370 Id. at ¶ 165.

1371 Id.

RNK acknowledges improvement in timely responses to billing claims, as well as resolution of an RNK-specific billing problem through the billing claims report. We further note that VZ-MA has retrained billing associates and instituted monthly audits to ensure accurate billing, and that RNK could eliminate many of its billing problems by using Connect:Direct and DUF. Moreover, VZ-MA is assisting RNK with resolving RNK's specific billing issues, and we conclude that the present record does not reveal a systemic problem inherent in VZ-MA's billing procedures.

We also conclude that RNK fails to demonstrate that obtaining Connect:Direct or DUF would be too costly or technically infeasible, and it provided no documentation to support its assertion that "industry sources" reported problems with Connect:Direct and DUF. Finally, RNK's concerns with the timeliness of bills appears to be the result of misunderstanding as to which bill is the "official" bill. Based upon the evidence in the record, we determine that RNK's concerns do not prevent a finding of compliance with checklist item 14.

b. Provisioning, Maintenance and Repair

i. Discussion

According to VZ-MA, it is providing resold services at parity with VZ-MA's retail operations.[1372] VZ-MA notes that retail services sold to CLECs are processed, maintained and

[1372] VZ-MA Application, Appdx. B, Vol. 42, Tab 494, ¶ 157 (VZ-MA August Supplemental Checklist Aff.).

repaired in the same manner as its retail services, and that it uses the same resources and personnel to provision, maintain and repair retail and resold services.[1373]

[1373] VZ–MA Application, Appdx. A, Tab 1, ¶ 304 (Lacouture/Ruesterholz Decl.).

VZ-MA states that, in accordance with the C2C Guidelines, it records resale provisioning measurements for POTS, Complex and Special Services.[1374] VZ-MA indicates that its wholesale provisioning and maintenance and repair performance generally exceeds its retail performance, as demonstrated by the following metrics: missed appointments, facilities missed orders, installation quality, trouble report rate, trouble duration intervals and repeat report rate.[1375] These measurements vary monthly, but overall show that, for July 1999 through February 2000, VZ-MA's resale provisioning performance is generally better than, or equivalent to, its retail provisioning performance.[1376] VZ-MA also notes that in its data for May through July 2000, its

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1374 VZ–MA Application, Appdx. B, Vol. 32a-b, Tab 423, ¶ 334 (VZ-MA May Checklist Aff.).

1375 VZ-MA Application, Appdx. B, Vol. 42, Tab 494, ¶ 157 (VZ-MA August Supplemental Checklist Aff.).

1376 VZ–MA Application, Appdx. B, Vol. 32a-b, Tab 423, ¶ 334 (VZ-MA May Checklist Aff.).

maintenance performance results for resale orders, such as the trouble report rate and repeat trouble reports, were comparable to its retail order performance results.[1377] VZ-MA states that an apparent "disparity" in maintenance and repair results, involving missed appointments, is the result of a disparate relative proportion of residential and business customers served by CLECs versus retail operations.[1378] VZ-MA asserts that parity may be shown by separately comparing retail and CLEC business customers and retail and CLEC residence customers.[1379]

1377 VZ–MA Application, Appdx. A, Tab 1, ¶ 305 (Lacouture/Ruesterholz Decl.).

1378 VZ-MA Application, Appdx. B, Vol. 42, Tab 494, ¶ 157 (VZ-MA August Supplemental Checklist Aff.).

1379 Id.

VZ-MA states that it is delivering resale services to CLECs within the intervals they request.[1380] VZ-MA also reports that for May, June and July 2000, it met, on average, 99 percent of CLECs' installation appointments that did not require a technician dispatch and 95 percent of appointments that did require dispatch.[1381] VZ-MA asserts that these figures are higher than its retail performance during the same period.[1382]

VZ-MA states that the only area of VZ-MA's retail performance that appears to be more favorable than VZ-MA's resale performance is installation intervals for resale orders that can be installed without a dispatch of a VZ-MA technician.[1383] However, VZ-MA explains that "no dispatch" orders take longer to provision than retail orders because: (1) VZ-MA provides its

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1380 VZ–MA Application, Appdx. A, Tab 1, ¶ 306 (Lacouture/Ruesterholz Decl.).

1381 Id.

1382 Id.

1383 VZ-MA Application, Appdx. B, Vol. 42, Tab 494, ¶ 157 (VZ-MA August Supplemental Checklist Aff.); VZ–MA Application, Appdx. A, Tab 1, ¶ 307 (Lacouture/Ruesterholz Decl.).

CLEC customers with the service interval the CLECs request for the products they order, and CLECs themselves ask for longer intervals than retail customers; and (2) resellers submit a mix of orders that often have longer standard intervals than VZ-MA's mix of retail orders.[1384] Where CLECs have requested the standard interval for resale services, VZ-MA states that it generally provisions them on time.[1385]

1384 VZ–MA Application, Appdx. A, Tab 1, ¶ 307 (Lacouture/Ruesterholz Decl.).

1385 Id. at ¶ 308.

ASCENT alleges lack of parity in provisioning in three areas**:** initiation of service, weekend installations, and network interface device connections.[1386] RNK alleges that VZ-MA has had problems adhering to deadlines for provisioning or installation, and that RNK subsequently had to extend deadlines.[1387]

VZ-MA responds to ASCENT's claims of a disparity in retail versus resale provisioning by noting that ASCENT produced no evidence of resellers currently experiencing such a disparity.[1388] ASCENT alleges a lack of parity in provisioning intervals for "cut-through" service; however, VZ-MA notes that the same rules for installation of cut-through service are applicable to VZ-

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1386 VZ-MA Application, Appdx. B, Vol. 38, Tab 456 at 11-12 (ASCENT July Supplemental Comments).

1387 VZ-MA Application, Appdx. B, Vol. 2, Tab 46 at 6 (RNK Initial Comments on BA-MA's Section 271 Application).

1388 VZ-MA Application, Appdx. B, Vol. 42, Tab 494, ¶¶ 169-171 (VZ-MA August Supplemental Checklist Aff.).

MA.[1389] Regarding ASCENT's claim that VZ-MA would not perform weekend installations for wholesale requests, VZ-MA indicates that in April 2000, VZ-MA began accepting Saturday due dates for non-dispatchable wholesale orders and for those dispatchable orders where Saturday has been opened as a "green day" in the SMARTS clock.[1390] Prior to April, Saturday due dates were honored on an expedited basis only.[1391]

ii. Conclusions

ASCENT's assertions are based on the unsworn comments of Mr. McKeown, President of ServiSense, at the August 4, 1999, public hearing in Newton. ASCENT did not provide any evidence to substantiate these claims. Moreover, ServiSense itself did not file comments and ASCENT provided no evidence to indicate that ServiSense continues to have the concerns it expressed over a year ago. Likewise, RNK did not further elaborate on alleged problems with

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1389 Id. at ¶ 169.

1390 Id. at ¶ 171.

1391 Id.

installation and provisioning deadlines. On the other hand, the performance measurements support a finding that VZ-MA provides resale services at parity with its retail operations. Thus, the problems alleged by ASCENT and RNK are insufficient to overcome VZ-MA's showing that it is in compliance with the provisioning requirements of this checklist item.

Furthermore, VZ-MA's compliance with nondiscriminatory access to OSS is discussed above among requirements for satisfaction of Checklist item 2.[1392] For the reasons detailed above, we find that VZ-MA demonstrates that it offers nondiscriminatory access to its OSS for the resale of its retail telecommunications services. Furthermore, we conclude that VZ-MA's OSS offerings for resale are the same as its offerings for UNEs. Overall, VZ-MA demonstrates that it makes telecommunications services available for resale in accordance with §§ 251(c)(4) and 252(d)(3) and, consequently, satisfies the requirements of checklist item 14.

VI. PUBLIC INTEREST ANALYSIS

[1392] See Section V.B., above for discussion of access to OSS for resale of retail telecommunications services.

As the FCC has noted, the public interest analysis is an independent element of the statutory § 271 checklist. Accordingly, the FCC must render an independent determination that VZ-MA's entry into the long distance market is in the public's interest to ensure that no circumstances exist that might thwart congressional intent for the marketplace to be open.[1393] In the SBC Texas Order, the FCC stated that:

> Among other things, we may review the local and long distance markets to ensure that there are not unusual circumstances that would make entry contrary to the public interest under the particular circumstances of [the BOC's] application. Another factor that could be relevant to our analysis is whether we have sufficient assurance that markets will remain open after grant of the application. While no one factor is dispositive in this analysis, our overriding goal is to ensure that nothing undermines our conclusion, based on our analysis of checklist compliance, that markets are open to competition.[1394]

1393 Bell Atlantic New York Order at ¶ 422.

1394 SBC Texas Order at ¶ 417.

For the reasons outlined below, we believe that the FCC's approval of VZ-MA's application is in the public interest. The local exchange market in Massachusetts is "irreversibly opened to competition."[1395] More than 100 facilities-based and resale CLECs are registered to operate in the Commonwealth. Each month the Department approves on average five registrations for new CLECs. Facilities-based competition is thriving not just in the urban parts of the state but also in suburban and rural areas. Although competition is greatest among business customers, residential competition is increasingly steadily and should continue to do so as CLECs increase their market penetration. As VZ-MA points out, CLECs maintain approximately 400,000 lines over their own facilities.[1396] This figure is proportionately equal to the number of facilities-based lines that competitors served in New York at the time of VZ-NY's application in New York.[1397] Competitors have 22 voice switches and over 2,000 fiber-route miles in VZ-MA's territory.[1398] Competitors also have established approximately 1,600 collocation arrangements, and have access to over 94 percent of VZ-MA's residential access lines and over 96 percent of VZ-MA's business

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1395 Evaluation of the United States Department of Justice re: Bell Atlantic New York § 271 Filing at 7, CC Docket No. 99-295 (1999).

1396 VZ-MA Application, Appdx. A, Vol. 1, Tab 6, ¶ 25 (Taylor Decl.).

1397 When VZ-NY filed its New York application, competitors maintained 652,000 lines over their own facilities while Verizon served approximately 14.1 million access lines. Bell Atlantic New York Order, CC Docket No. 99-295 at ¶ 14. In Massachusetts, competitive local exchange carriers are serving approximately 400,000 lines over their own facilities while VZ-MA maintains approximately 5.4 million access lines. VZ-MA Application, Appdx. A, Vol. 1, Tab 6, ¶ 25 (Taylor Decl.).

1398 VZ-MA Application, Appdx. A, Vol. 1, Tab 6, ¶ 27 (Taylor Decl.).

lines through collocation arrangements.[1399] Although undoubtedly some competitors will argue that VZ-MA still controls too great a share of the local exchange market, the FCC does not provide a market share test and has not adopted a market share test for BOC entry into long distance.[1400]

1399 VZ-MA Application, Appdx. A, Vol. 1, Tab 1, ¶ 34 (Lacouture/Ruesterholz Decl.).

1400 SBC Texas Order at ¶ 419.

In addition, the Department has taken several steps to ensure that the local market remains open after VZ-MA enters the long distance market. On September 5, 2000, the Department adopted a comprehensive PAP for VZ-MA. The Massachusetts PAP[1401] is modeled after the New York PAP and contains measurements, standards, and reporting requirements from the New York C2C Guidelines. The FCC found that both the New York PAP and the New York C2C Guidelines are comprehensive mechanisms containing key characteristics that will be effective in keeping local markets open to competition.[1402] The Department is also certain that the PAP will provide a reliable process to report VZ-MA's performance, while serving as a dependable safeguard against backsliding. In addition, we have ordered that VZ-MA implement a separate Change Control Assurance Plan so that changes to VZ-MA's OSS software occur without interruption to competitors' operations. The Change Control Assurance Plan provides bill credits

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1401 A summary of the Massachusetts PAP is attached in the appendix to this Report.

1402 Id., at ¶ 433.

in the amount of $5.28 million above and beyond the $142 million bill credits under the PAP.[1403]

[1403] See Appendix A.

Moreover, the Department is finalizing agency regulations in Accelerated Docket Rulemaking, D.T.E. 00-39, which will create an expedited dispute resolution procedure to promptly resolve disputes among telecommunications carriers.[1404] These regulations are modeled in large part after the FCC's Accelerated Docket Procedures.[1405] The Massachusetts "Rocket Docket" procedures will give CLECs the assurance that should VZ-MA act in an anti-competitive manner, CLECs will have a forum in which to gain swift recourse.

Finally, the Department is confident that VZ-MA's entry into the long distance will benefit Massachusetts long-distance consumers by adding a significant competitor to the market. VZ-NY claims that when it entered the long distance market in New York earlier this year, it offered less expensive calling plans than most long distance carriers.[1406] Consequently, many long distance carriers in New York responded and introduced competitive lower priced bundled service offerings.[1407] This challenge -- and response behavior -- is what competition is about. An independent consumer group, the Telecommunications Research & Action Center, has concluded that customers in New York who have switched to VZ-NY for long distance services will save up

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1404 The new section to the agency regulations, 220 C.M.R. §§ 15.00 et seq., sets out an optional accelerated docket procedural schedule to resolve certain inter-carrier disputes within 90 days.

1405 Implementation of the Telecommunications Act of 1996, Amendment of the Rules Governing Procedures to Be Followed When Formal Complaints are Filed Against Common Carriers, Second Report & Order, 13 FCC Rcd 17018 (1998). See 47 C.F.R. § 1.730.

1406 VZ-MA Application, Appdx. A, Vol. 1, Tab 5, ¶¶ 5-21 (Breen Decl.).

to $120 million per year.[1408] We would expect VZ-MA's entry into the Massachusetts long distance market to have the same beneficial effects here.

1407 Id., at ¶¶ 22-27.

1408 VZ-MA Application, Appdx. A, Vol. 1, Tab 5, Att. A (Breen Decl.).