

**AMENDMENT NO. 1**

**to the**

**INTERCONNECTION AGREEMENT**

**between**

**VERIZON NEW ENGLAND INC., d/b/a VERIZON MASSACHUSETTS,  
f/k/a NEW ENGLAND TELEPHONE AND TELEGRAPH COMPANY,  
d/b/a BELL ATLANTIC – MASSACHUSETTS**

**and**

**NEUTRAL TANDEM-MASSACHUSETTS, LLC**

This Amendment No. 1 (the "Amendment") is made by and between Verizon New England Inc., d/b/a Verizon Massachusetts, f/k/a New England Telephone and Telegraph Company, d/b/a Bell Atlantic - Massachusetts ("Verizon"), a New York corporation with offices at 185 Franklin Street, Boston, Massachusetts 02110, and Neutral Tandem-Massachusetts, LLC, a Limited Liability Company with offices at 1 S. Wacker Suite 200, Chicago, IL 60606 ("Neutral Tandem"), and, except as otherwise expressly provided herein, shall be deemed effective on July 14, 2005 (the "Amendment Effective Date"). Verizon and Neutral Tandem are hereinafter referred to collectively as the "Parties" and individually as a "Party". This Amendment covers services in Verizon's service territory in the Commonwealth of Massachusetts (the "Commonwealth").

**WITNESSETH:**

**WHEREAS**, pursuant to an adoption letter dated April 20, 2004 (the "Adoption Letter"), Neutral Tandem adopted in the Commonwealth of Massachusetts, the interconnection agreement between AT&T Communications of New England Inc. and Verizon (such Adoption Letter and underlying adopted interconnection agreement referred to herein collectively as the "Agreement"); and

**WHEREAS**, the Federal Communications Commission (the "FCC") released an order on August 21, 2003 in CC Docket Nos. 01-338, 96-98, and 98-147 (the "Triennial Review Order" or "TRO"), which became effective as of October 2, 2003; and

**WHEREAS**, on March 2, 2004, the U.S. Court of Appeals for the District of Columbia Circuit (the "D.C. Circuit") issued a decision affirming in part and vacating in part the TRO (the "D.C. Circuit Decision"), which became effective as of June 15, 2004; and

**WHEREAS**, on August 20, 2004, the FCC released an Order in WC Docket No. 04-313 and CC Docket No. 01-338 (the "Interim Rules Order"), which became effective as of September 13, 2004; and

**WHEREAS**, on February 4, 2005, the FCC released an Order on Remand in WC Docket No. 04-313 and CC Docket No. 01-338 (the "TRRO") setting forth additional rules, which became effective March 11, 2005; and

**WHEREAS**, on July 14, 2005, the Massachusetts Department of Telecommunications and Energy (the "Department"), issued an arbitration order in Docket No. D.T.E. 04-33 (the "July 14, 2005 Arbitration Order") requiring certain interconnection agreements to be amended in accordance with rulings set forth therein; and

**WHEREAS**, on December 16, 2005, the Department issued a Reconsideration Order in Docket No. D.T.E. 04-33 which granted in part and denied in part motions for reconsideration of the July 14, 2005 Arbitration Order (the December 16, 2005 Reconsideration Order and the July 14, 2005 Arbitration Order, as affirmed and modified by the December 16, 2005 Reconsideration Order, may hereinafter be referred to as the "2005 Arbitration Orders"); and

**WHEREAS**, on May 5, 2006, the Department issued an Order on Compliance in Docket No. D.T.E. 04-33-B (the "Order on Compliance") in which the Department resolved certain disputes regarding the terms to be included in a conforming interconnection agreement amendment (the 2005 Arbitration Orders, as modified and affirmed by the Order on Compliance, may hereinafter be referred to as the "Arbitration Orders"); and

**WHEREAS**, in light of the foregoing developments, the Parties, pursuant to Sections 252(a) and (b) of the Communications Act of 1934, as amended, (the "Act"), wish to amend the Agreement in order to comply with the applicable rulings set forth in the Arbitration Orders and to give contractual effect to the provisions set forth herein;

**NOW, THEREFORE**, in consideration of the promises and mutual agreements set forth herein, the Parties agree to amend the Agreement as follows:

1. Amendment to Agreement. The Agreement is amended to include the following provisions and the Pricing Attachment to the TRO Amendment (including Exhibit A) attached hereto, which shall apply to and be a part of the Agreement notwithstanding any other provision of the Agreement or a Verizon tariff.
2. General Conditions.
  - 2.1 Except as permitted by the Amended Agreement, Verizon shall not impose limitations, restrictions, or requirements on requests for, or the use of, unbundled network elements for the service Neutral Tandem seeks to offer.
  - 2.2 Restrictions on Neutral Tandem's Use of UNEs. Neutral Tandem may not access an unbundled Network Element ("UNE") for the exclusive provision of Mobile Wireless Services or Interexchange Services.
  - 2.3 Discontinued Facilities. Notwithstanding any other provision of the Agreement, but subject to and without limiting Section 4.4, below, this Amendment, or any Verizon tariff (subject to any tariff provisions expressly incorporated by reference into the Agreement), but subject to the transition requirements associated with the TRRO, as set forth in Sections 3.4, 3.5, and 3.7 below, Verizon may, effective as of July 14, 2005 and without further notice to Neutral Tandem, cease offering or providing access on an unbundled basis at rates prescribed under Section 251 of the Act to any facility that is a Discontinued Facility, whether as a stand-alone UNE, as part of a Combination, or otherwise.
  - 2.4 Limitation With Respect to Replacement Arrangements. Certain provisions of this Amendment refer to Verizon's provision of a facility, service, or arrangement to replace Discontinued Facilities. Any reference in this Amendment to Verizon's provision of a facility, service, or arrangement that Verizon is not required to provide under 47 U.S.C. § 251 and 47 C.F.R. Part 51 is solely for the convenience of the Parties and shall not be construed as an agreement by the Parties that the rates, terms or conditions upon which Verizon shall provide such facilities, services, or arrangements are subject to the requirements of 47 U.S.C. § 252.
  - 2.5 Pre-Existing Discontinuance Rights.

- 2.5.1 Verizon's rights as to discontinuance of Discontinued Facilities pursuant to this Amendment are in addition to, and not in limitation of, any rights Verizon may have under the Agreement as to discontinuance of Discontinued Facilities, and nothing contained herein shall be construed to prohibit, limit, or delay Verizon's exercise of any pre-existing right it may have under the Agreement to cease providing a Discontinued Facility; provided, however, that in implementing any future discontinuance that Verizon has not already implemented and that is not addressed by this Amendment, Verizon shall comply with any ruling set forth in the Arbitration Orders regarding whether the terms of the Agreement require Verizon to negotiate an amendment in order to discontinue a UNE.
- 2.5.2 Without limiting Section 2.5.1 above, this Amendment itself is not intended to implement future changes in law regarding unbundling obligations (whether new affirmative unbundling obligations or cessation of existing unbundling obligations); provided, however, that, for the avoidance of any doubt, this Section 2.5.2 shall not be construed to limit Verizon's rights with respect to: (a) discontinuance of UNEs at wire centers (or on routes) that in the future become non-impaired based on the FCC's criteria referenced in Sections 3.4 and 3.5 below, (b) discontinuance of any loops or transport that in the future exceed the caps set forth in Sections 3.4 and 3.5 below, (c) Verizon's rejection of a Neutral Tandem order for a TRRO Certification Element without first seeking dispute resolution, under Section 3.6.2.4 below, in any case where a Neutral Tandem order conflicts with a future non-impaired Wire Center designation that the Department or the FCC orders or affirmatively approves, or that is otherwise confirmed through dispute resolution, (d) repricing or disconnection of Discontinued Facilities at the end of the TRRO transition periods as provided for in Section 3.9 below, (e) discontinuance of High Capacity EELs that are determined in the future to be non-compliant under Section 3.11.2.2 or 3.11.2.6 below, (f) future implementation of any rates or charges pursuant to the terms set forth in the Pricing Attachment to this Amendment.

### 3. Verizon's Provision of Certain Network Elements and Related Services.

#### 3.1 FTTH and FTTC Loops

- 3.1.1 New Builds. Notwithstanding any other provision of the Amended Agreement, but subject to and without limiting Section 4.4, below, Verizon is not required to provide nondiscriminatory access to a FTTH or FTTC Loop on an unbundled basis when Verizon has deployed such a loop to the customer premises of an end user that has not been served by any loop facility or when Verizon has deployed such a loop parallel to, or in replacement of, an existing FTTH or FTTC Loop.
- 3.1.2 Overbuilds. Notwithstanding any other provision of the Amended Agreement (but subject to and without limiting Section 2 above and Section 4.4 below), Verizon is not required to provide nondiscriminatory access to an FTTH Loop or an FTTC Loop on an unbundled basis when Verizon has deployed such a loop parallel to, or in replacement of, an existing copper loop facility, except that (a) Verizon must maintain the existing copper loop connected to the particular customer premises after deploying the FTTH or FTTC Loop and provide nondiscriminatory access to that copper loop on an unbundled basis unless Verizon retires the copper loop pursuant to paragraph 47 C.F.R. § 51.319(a)(3)(iv); (b) If Verizon maintains the existing copper loops pursuant to 47 C.F.R. § 51.319(a)(3)(iii)(A), it need not incur any expenses to ensure that the existing copper loop remains capable of transmitting signals prior to receiving a request for access pursuant to that paragraph, in which case

Verizon shall restore the copper loop to serviceable condition upon request; and (c) If Verizon retires the copper loop pursuant to 47 C.F.R. § 51.319(a)(3)(iv), it shall provide nondiscriminatory access to a 64 kilobits per second TDM transmission path (or an equivalent transmission path using other technologies) capable of voice grade service over the FTTH or FTTC Loop (a "Voice Grade Transmission Path") on an unbundled basis. The rates for a Voice Grade Transmission Path under (c) above shall be the same rates applicable under the Amended Agreement to a DS0 loop to the same customer premises were such a loop available, unless and until such time as different rates for a Voice Grade Transmission Path are established pursuant to the terms set forth in the Pricing Attachment to this Amendment, in which case such different rates shall apply.

3.1.2.1 In retiring a copper Loop or subloop, Verizon shall comply with any effective and lawful requirements that apply to that copper loop or subloop under 47 C.F.R. § 51.319(a)(3)(iv); provided, however, that any such requirements shall not apply to retirement of copper feeder subloop.

## 3.2 Hybrid Loops.

3.2.1 Packet Switched Features, Functions, and Capabilities. Notwithstanding any other provision of the Amended Agreement, but subject to and without limiting Section 4.4, below, Verizon is not required to provide unbundled access to the packet switched features, functions and capabilities of its Hybrid Loops. Packet switching capability is the routing or forwarding of packets, frames, cells, or other data units based on address or other routing information contained in the packets, frames, cells or other data units, and the functions that are performed by the digital subscriber line access multiplexers, including but not limited to the ability to terminate an end-user customer's copper loop (which includes both a low-band voice channel and a high-band data channel, or solely a data channel); the ability to forward the voice channels, if present, to a circuit switch or multiple circuit switches; the ability to extract data units from the data channels on the loops; and the ability to combine data units from multiple loops onto one or more trunks connecting to a packet switch or packet switches. In accordance with the Arbitration Orders and the FCC's rules, Verizon shall not be required to build any time division multiplexing (TDM) capability into new packet-based networks or into existing packet-based networks that do not already have TDM capability.

3.2.2 Broadband Services. Notwithstanding any other provision of the Amended Agreement (but subject to and without limiting Section 2 above and Section 4.4 below), when Neutral Tandem seeks access to a Hybrid Loop for the provision of "broadband services," as such term is defined by the FCC, then in accordance with 47 C.F.R. § 51.319(a) and the Arbitration Orders, Verizon shall provide Neutral Tandem with nondiscriminatory access under the Amended Agreement to the existing time division multiplexing features, functions, and capabilities of that Hybrid Loop, including DS1 or DS3 capacity (where impairment has been found to exist, which, for the avoidance of any doubt, does not include instances in which Verizon is not required to provide a DS1 Loop under Section 3.4.1 below or is not required to provide a DS3 Loop under Section 3.4.2 below) on an unbundled basis to establish a complete transmission path between the Verizon central office serving an end user and the end user's customer premises. This access shall include access to all features, functions, and capabilities of the Hybrid Loop that are not used to transmit packetized information.

- 3.2.3 Narrowband Services. Notwithstanding any other provision of the Amended Agreement (but subject to and without limiting Section 2 above and Section 4.4 below), when Neutral Tandem seeks access to a Hybrid Loop for the provision of “narrowband services,” as such term is defined by the FCC, then in accordance with 47 C.F.R. § 51.319(a) and the Arbitration Orders, Verizon may either: (a) Provide nondiscriminatory access, on an unbundled basis, to an entire Hybrid Loop capable of voice-grade service (*i.e.*, equivalent to DS0 capacity), using time division multiplexing technology; or (b) Provide nondiscriminatory access to a spare home-run copper loop serving that customer on an unbundled basis.
- 3.2.4 IDLC Hybrid Loops. Notwithstanding any other provision of the Amended Agreement (but subject to and without limiting Section 2 above and Section 4.4 below), if Neutral Tandem requests, in order to provide narrowband services, unbundling of a 2 wire or 4 wire Loop currently provisioned via Integrated Digital Loop Carrier (over a Hybrid Loop), Verizon shall, in accordance with 47 C.F.R. § 51.319(a) and the Arbitration Orders, provide Neutral Tandem unbundled access to a Loop capable of voice-grade service to the end user customer served by the Hybrid Loop.
- 3.2.4.1 Verizon will endeavor to provide Neutral Tandem with an existing copper Loop or a Loop served by existing Universal Digital Loop Carrier (“UDLC”). Standard recurring and non-recurring Loop charges will apply.
- 3.2.4.2 If neither a copper Loop nor a Loop served by UDLC is available, then Verizon shall offer to provision a Loop by constructing the necessary copper Loop or UDLC facilities or such other technically feasible option, such as any technically feasible option identified in note 855 of the TRO, that Verizon in its sole discretion may determine to offer. If Verizon, in its sole discretion, offers to provision a Loop by constructing the necessary copper Loop or UDLC facilities, then Verizon shall construct such copper Loop or UDLC facilities upon request of Neutral Tandem. In addition to the rates and charges payable in connection with any unbundled Loop so provisioned by Verizon, Neutral Tandem shall be responsible for the following charges, which shall be determined on a case-by-case basis and shall apply even if such charges are not provided for in the Pricing Attachment to this Amendment, only if Neutral Tandem requests the construction of a copper Loop or UDLC facilities when Verizon has proposed to provide a different less costly method of technically feasible access: (a) an engineering query charge for preparation of a price quote; (b) upon Neutral Tandem’s submission of a firm construction order, an engineering work order nonrecurring charge; and (c) construction charges, as set forth in the price quote. If the order is cancelled by Neutral Tandem after construction work has started, Neutral Tandem shall be responsible for cancellation charges and a pro-rated charge for construction work performed prior to the cancellation.
- 3.2.4.3 Verizon may exclude its performance in connection with providing unbundled Loops pursuant to this Section 3.2.4 from standard provisioning intervals and performance measures and remedies, if any, contained in the Amended Agreement or elsewhere, until such time as a legally effective order of the Department requires new standard provisioning intervals and/or performance measures and remedies for Verizon’s provisioning of unbundled Loops pursuant to this Section 3.2.4, at which time such new intervals, performance measures, and/or

remedies shall apply to the extent and for so long as they remain effective.

### 3.3 Sub-Loop.

3.3.1 Sub-Loop for Access to Multiunit Premises. All provisions in the Agreement governing Neutral Tandem access to Inside Wire, House and Riser or House and Riser Cable are hereby deleted and replaced with this Section 3.3.1, which shall supersede any other provision in the Agreement. Subject to and without limiting Section 2 above, upon request by Neutral Tandem, Verizon shall provide to Neutral Tandem nondiscriminatory unbundled access to the Sub-Loop for Multiunit Premises Access, regardless of the capacity level or type of loop that Neutral Tandem seeks to provision for its customer, in accordance with 47 C.F.R. § 51.319(b) and the Arbitration Orders.

3.3.1.1 Inside Wire Sub-Loop. In accordance with 47 C.F.R. § 51.319(b) and the Arbitration Orders, upon request by Neutral Tandem, Verizon shall provide to Neutral Tandem access to a House and Riser Cable owned or controlled by Verizon pursuant to this Section 3.3.1.1 at the rates and charges provided in the Amended Agreement. Verizon shall not reserve a House and Riser Cable for Neutral Tandem. Neutral Tandem may access a House and Riser Cable only between the MPOE for such cable and the demarcation point at a technically feasible access point. It is not technically feasible to access inside wire sub-loop if a technician must access the facility by removing a splice case to reach the wiring within the cable.

3.3.1.1.1 Neutral Tandem must satisfy the following conditions before ordering access to a House and Riser Cable from Verizon:

3.3.1.1.1.1 Neutral Tandem shall locate its facilities within cross connect distance of the point of interconnection on such cable. Facilities are within cross connect distance of a point of interconnection if they are located in the same room (not including a hallway) or within twelve (12) feet of such point of interconnection.

3.3.1.1.1.2 If suitable space is available, Neutral Tandem shall install its facilities no closer than fourteen (14) inches of the point of interconnection for such cable, unless otherwise agreed by the Parties.

3.3.1.1.1.3 Neutral Tandem's facilities cannot be attached, otherwise affixed or adjacent to Verizon's facilities or equipment, cannot pass through or otherwise penetrate Verizon's facilities or equipment and cannot be installed so that Neutral Tandem's facilities or equipment are located in a space where Verizon plans to locate its facilities or equipment.

3.3.1.1.1.4 Neutral Tandem shall identify its facilities as those of Neutral Tandem by means of

permanently-affixed externally-visible signage or markings.

3.3.1.1.1.5 To provide Neutral Tandem with access to a House and Riser Cable, Verizon shall not be obligated to (a) move any Verizon equipment, (b) secure any right of way for Neutral Tandem, (c) secure space for Neutral Tandem in any building, (d) secure access to any portion of a building for Neutral Tandem or (e) reserve space in any building for Neutral Tandem.

3.3.1.1.1.6 Verizon shall perform cutover of a Customer to Neutral Tandem service by means of a House and Riser Cable subject to a negotiated interval. Verizon shall install a jumper cable to connect the appropriate Verizon House and Riser Cable pair to Neutral Tandem's facilities, and Verizon shall determine how to perform such installation. Neutral Tandem shall coordinate with Verizon to ensure that House and Riser Cable facilities are converted to Neutral Tandem in accordance with Neutral Tandem's order for such services.

3.3.1.1.2 If proper Neutral Tandem facilities are not available at the time of installation, Verizon shall bill Neutral Tandem, and Neutral Tandem shall pay to Verizon, the Not Ready Charge set forth in the Amended Agreement and the Parties shall establish a new cutover date.

3.3.1.1.3 Verizon shall perform all installation work on Verizon equipment in connection with Neutral Tandem's use of Verizon's House and Riser Cable. All Neutral Tandem equipment connected to a House and Riser Cable shall comply with applicable industry standards.

3.3.1.1.4 Verizon shall repair and maintain a House and Riser Cable at the request of Neutral Tandem. Neutral Tandem shall be solely responsible for investigating and determining the source of all troubles and for providing Verizon with appropriate dispatch information based on its test results. Verizon shall repair a trouble only when the cause of the trouble is a Verizon House and Riser Cable. If (a) Neutral Tandem reports to Verizon a Customer trouble, (b) Neutral Tandem requests a dispatch, (c) Verizon dispatches a technician, and (d) such trouble was not caused by a Verizon House and Riser Cable in whole or in part, then Neutral Tandem shall pay Verizon the charge set forth in the Amended Agreement for time associated with said dispatch. In addition, this charge also applies when the Customer contact as designated by Neutral Tandem is not available at the appointed time. If as the result of Neutral Tandem instructions, Verizon is erroneously requested to dispatch to a site on Verizon company premises ("dispatch in"), a charge set forth in the Amended Agreement will be assessed per occurrence to Neutral Tandem by Verizon. If as the result of

Neutral Tandem instructions, Verizon is erroneously requested to dispatch to a site outside of Verizon company premises ("dispatch out"), a charge set forth in the Amended Agreement will be assessed per occurrence to Neutral Tandem by Verizon.

3.3.1.2 Single Point of Interconnection.

3.3.1.2.1 In accordance with 47 C.F.R. § 51.319(b) and the Arbitration Orders, upon request by Neutral Tandem and provided that the conditions set forth in Subsections 3.3.1.2.1.1 and 3.3.1.2.1.2 are satisfied, the Parties shall negotiate in good faith an amendment to the Amended Agreement memorializing the terms, conditions and rates under which Verizon will provide a single point of interconnection at a multiunit premises suitable for use by multiple carriers:

3.3.1.2.1.1 Verizon has distribution facilities to the multiunit premises, and owns, controls, or leases, the House and Riser Cable at the multiunit premises; and

3.3.1.2.1.2 Neutral Tandem states in the above request that it intends to place an order for access, via the newly provided single point of interconnection, to an unbundled Sub-Loop network element that Verizon is required to provide to Neutral Tandem under the Amended Agreement.

3.3.1.2.2 If the Parties are unable to agree on the rates, terms and conditions under which Verizon will provide a SPOI, then either Party may, in accordance with Section 252 of the Act, petition the Department to intercede and promote a resolution. For the avoidance of any doubt, once the Parties have executed an amendment setting forth the rates, terms, and conditions under which Verizon will provide a SPOI, disputes regarding implementation of the rates, terms, and conditions of such Amendment shall be resolved pursuant to the applicable dispute resolution provisions of the Agreement.

3.3.1.2.3 Verizon's obligations with respect to a SPOI under this section 3.3.1.2 are in addition to Verizon's obligations to provide nondiscriminatory access to a subloop for access to multiunit premises wiring, including any inside wire, at any technically feasible point as set forth in this Amendment.

3.3.2 Distribution Sub-Loop Facility. Notwithstanding any other provision of the Amended Agreement (but subject to the conditions set forth in Section 2 above and Section 4.4 below), in accordance with 47 C.F.R. § 51.319(b) and the Arbitration Orders, upon site-specific request, Neutral Tandem may obtain access to the Distribution Sub-Loop Facility at a technically feasible access point located near a Verizon remote terminal equipment enclosure in accordance with 47 C.F.R. § 51.319(b)(1)(i) and the Arbitration Orders at the rates and charges provided for Unbundled Sub-Loop Arrangements (or the Distribution Sub-Loop) in the Amended Agreement. It is not technically feasible to access the sub-loop distribution facility if a technician must access the facility by removing a splice case to reach the wiring within the cable.

3.4 High Capacity Loops.

3.4.1 DS1 Loops. To the extent the Agreement otherwise requires Verizon to provide Neutral Tandem with unbundled access to § 251(c)(3) DS1 Loops (this section not being intended to create any such obligation in the first instance) the following provisions shall apply notwithstanding any such requirement:

3.4.1.1 Effective as of March 11, 2005, and subject to the transition requirements set forth in Sections 3.4.1.2 and 3.6.3 below:

3.4.1.1.1 Verizon shall provide Neutral Tandem with nondiscriminatory access to a DS1 Loop on an unbundled basis to any building not served by a Wire Center with at least 60,000 Business Lines and at least four Fiber-Based Collocators. Once a Wire Center exceeds both of these thresholds, no future DS1 Loop unbundling will be required in that Wire Center.

3.4.1.1.2 Neutral Tandem may obtain a maximum of ten unbundled DS1 Loops to any single building in which DS1 Loops are available as unbundled loops.

3.4.1.2 Transition Period For DS-1 Loops.

3.4.1.2.1 For a 12-month period beginning on March 11, 2005, any DS1 Loop UNEs that Neutral Tandem leased from Verizon as of that date, but which Verizon is not obligated to unbundle pursuant to Section 3.4.1.1 above, shall be available for lease from Verizon at a rate set forth in the Pricing Attachment to this Amendment, which shall be equal to the higher of (a) 115% of the rate Neutral Tandem paid for the loop element on June 15, 2004, or (b) 115% of the rate the Department has established or establishes, if any, between June 16, 2004, and March 11, 2005, for that loop element. Where Verizon is not required to provide unbundled DS1 Loops pursuant to Section 3.4.1.1, Neutral Tandem may not obtain new DS1 Loops as unbundled network elements.

3.4.2 DS3 Loops. To the extent the Agreement otherwise requires Verizon to provide Neutral Tandem with unbundled access to § 251(c)(3) DS3 Loops (this section not being intended to create any such requirement in the first instance) the following provisions shall apply notwithstanding any such requirement:

3.4.2.1 Effective as of March 11, 2005, and subject to the transition requirements set forth in Sections 3.4.2.2 and 3.6.3 below:

3.4.2.1.1 Verizon shall provide Neutral Tandem with nondiscriminatory access to a DS3 Loop on an unbundled basis to any building not served by a Wire Center with at least 38,000 Business Lines and at least four Fiber-Based Collocators. Once a Wire Center exceeds both of these thresholds, no future DS3 Loop unbundling will be required in that Wire Center.

3.4.2.1.2 Neutral Tandem may obtain a maximum of a single unbundled DS3 Loop to any single building in which DS3 Loops are available as unbundled loops.

3.4.2.2 Transition Period For DS-3 Loops. For a 12-month period beginning on March 11, 2005, any DS3 Loop UNEs that Neutral Tandem leased from Verizon as of that date, but which Verizon is not obligated to unbundle pursuant to Section 3.4.2.1 above, shall be available for lease from Verizon at a rate set forth in the Pricing Attachment to this Amendment, which shall be equal to the higher of (a) 115% of the rate Neutral Tandem paid for the loop element on June 15, 2004, or (b) 115% of the rate the Department has established or establishes, if any, between June 16, 2004, and March 11, 2005, for that loop element. Where Verizon is not required to provide unbundled DS3 Loops pursuant to Section 3.4.2.1, Neutral Tandem may not obtain new DS3 Loops as unbundled network elements.

### 3.4.3 Dark Fiber Loops.

3.4.3.1 Effective as of March 11, 2005, and subject to the transition requirements set forth in Section 3.4.3.2 below, Verizon is not required to provide Neutral Tandem with access to a § 251(c)(3) Dark Fiber Loop on an unbundled basis.

3.4.3.2 Transition Period For Dark Fiber Loops. For an 18-month period beginning on March 11, 2005, any Dark Fiber Loop UNEs that Neutral Tandem leased from Verizon as of that date, but which Verizon is not obligated to unbundle pursuant to Section 3.4.3.1 above, shall be available for lease from Verizon at a rate set forth in the Pricing Attachment to this Amendment, which shall be equal to the higher of (a) 115% of the rate Neutral Tandem paid for the loop element on June 15, 2004, or (b) 115% of the rate the Department has established or establishes, if any, between June 16, 2004, and March 11, 2005, for that loop element. Neutral Tandem may not obtain new Dark Fiber Loops as unbundled network elements.

## 3.5 High Capacity Transport.

3.5.1 DS1 Dedicated Transport. To the extent the Agreement otherwise requires Verizon to provide Neutral Tandem with unbundled access to § 251(c)(3) DS1 Dedicated Transport (this section not being intended to create any such requirement in the first instance) the following provisions shall apply notwithstanding any such requirement:

3.5.1.1 Effective as of March 11, 2005, and subject to the transition requirements set forth in Sections 3.5.1.2 and 3.6.3 below:

3.5.1.1.1 Verizon shall unbundle DS1 Dedicated Transport between any pair of Verizon Wire Centers except where, through application of tier classifications described in Section 3.5.5 below, both Wire Centers defining the Route are Tier 1 Wire Centers. As such, Verizon must unbundle DS1 Dedicated Transport if a Wire Center at either end of a requested Route is not a Tier 1 Wire Center, or if neither is a Tier 1 Wire Center.

3.5.1.1.2 Neutral Tandem may obtain a maximum of ten unbundled DS1 Dedicated Transport circuits on each Route where DS1 Dedicated Transport is available on an unbundled basis.

3.5.1.2 Transition Period For DS-1 Dedicated Transport. For a 12-month period beginning on March 11, 2005, any DS1 Dedicated Transport UNE that Neutral Tandem leased from Verizon as of that date, but which Verizon is not obligated to unbundle pursuant to Section 3.5.1.1 above, shall be available for lease from Verizon at a rate set forth in the Pricing Attachment to this Amendment, which shall be equal to the higher of (a) 115% of the rate Neutral Tandem paid for the dedicated transport element on June 15, 2004, or (b) 115% of the rate the Department has established or establishes, if any, between June 16, 2004, and March 11, 2005, for that dedicated transport element. Where Verizon is not required to provide unbundled DS1 Dedicated Transport pursuant to Section 3.5.1.1 above, Neutral Tandem may not obtain new DS1 Dedicated Transport as unbundled network elements.

3.5.2 DS3 Dedicated Transport. To the extent the Agreement otherwise requires Verizon to provide Neutral Tandem with unbundled access to § 251(c)(3) DS3 Dedicated Transport (this section not being intended to create any such requirement in the first instance) the following provisions shall apply notwithstanding any such requirement:

3.5.2.1 Effective as of March 11, 2005, and subject to the transition requirements set forth in Sections 3.5.2.2 and 3.6.3 below:

3.5.2.1.1 Verizon shall unbundle DS3 Dedicated Transport between any pair of Verizon Wire Centers except where, through application of tier classifications described in Section 3.5.5 below, both Wire Centers defining the Route are either Tier 1 or Tier 2 Wire Centers. As such, Verizon must unbundle DS3 Dedicated Transport if a Wire Center on either end of a requested Route is a Tier 3 Wire Center.

3.5.2.1.2 Neutral Tandem may obtain a maximum of twelve unbundled DS3 Dedicated Transport circuits on each Route where DS3 Dedicated Transport is available on an unbundled basis.

3.5.2.2 Transition Period For Dedicated Transport. For a 12-month period beginning on March 11, 2005, any DS3 Dedicated Transport UNE that Neutral Tandem leased from Verizon as of that date, but which Verizon is not obligated to unbundle pursuant to Section 3.5.2.1 above, shall be available for lease from Verizon at a rate set forth in the Pricing Attachment to this Amendment, which shall be equal to the higher of (a) 115% of the rate Neutral Tandem paid for the dedicated transport element on June 15, 2004, or (b) 115% of the rate the Department has established or establishes, if any, between June 16, 2004, and March 11, 2005, for that dedicated transport element. Where Verizon is not required to provide unbundled DS3 Dedicated Transport pursuant to Section 3.5.2.1 above, Neutral Tandem may not obtain new DS3 Dedicated Transport as unbundled network elements.

3.5.3 Dark Fiber Transport. To the extent the Agreement otherwise requires Verizon to provide Neutral Tandem with unbundled access to § 251(c)(3) Dark Fiber Transport (this section not being intended to create any such requirement in the

first instance) the following provisions shall apply notwithstanding any such requirement:

- 3.5.3.1 Effective as of March 11, 2005, and subject to the transition requirements set forth in section 3.5.3.2 below, Verizon shall unbundle Dark Fiber Transport between any pair of Verizon Wire Centers except where, through application of tier classifications described in Section 3.5.5 below, both Wire Centers defining the Route are either Tier 1 or Tier 2 Wire Centers. As such, Verizon must unbundle Dark Fiber Transport if a Wire Center on either end of a requested Route is a Tier 3 Wire Center.
- 3.5.3.2 Transition Period For Dark Fiber Transport. For an 18-month period beginning on March 11, 2005, any Dark Fiber Transport UNE that Neutral Tandem leased from Verizon as of that date, but which Verizon is not obligated to unbundle pursuant to Section 3.5.3.1 above, shall be available for lease from Verizon at a rate set forth in the Pricing Attachment to this Amendment, which shall be equal to the higher of (a) 115% of the rate Neutral Tandem paid for the Dark Fiber Transport element on June 15, 2004, or (b) 115% of the rate the Department has established or establishes, if any, between June 16, 2004, and March 11, 2005, for that Dark Fiber Transport element. Where Verizon is not required to provide unbundled Dark Fiber Transport pursuant to Section 3.5.3.1 above, Neutral Tandem may not obtain new Dark Fiber Transport as unbundled network elements.
- 3.5.4 Notwithstanding any other provision of the Amended Agreement, Verizon is not obligated to provide Neutral Tandem with unbundled access to § 251(c)(3) Entrance Facilities, and such Entrance Facilities are not subject to the transition provisions (including, but not limited to, transition rates) set forth in this Section 3. The discontinuation of such unbundled Entrance Facilities or Dedicated Transport as set forth in this Amendment does not alter any right Neutral Tandem may have under the existing Agreement to obtain any interconnection facilities that Verizon is required to provide pursuant to section 251(c)(2) of the Act; provided, however, that, for the avoidance of any doubt, this sentence by itself shall not be construed to establish any such right of Neutral Tandem.
- 3.5.5 Wire Center Tier Structure. For purposes of this Section 3.5, Verizon's Wire Centers shall be classified into three tiers, defined as follows:
  - 3.5.5.1 Tier 1 Wire centers are those Verizon Wire Centers that contain at least four Fiber-Based Collocators, at least 38,000 Business Lines, or both. Tier 1 Wire Centers also are those Verizon tandem switching locations that have no line-side switching facilities, but nevertheless serve as a point of traffic aggregation accessible by competitive LECs. Once a Wire Center is or has been determined to be a Tier 1 Wire Center, that Wire Center is not subject to later reclassification as a Tier 2 or Tier 3 Wire Center.
  - 3.5.5.2 Tier 2 Wire Centers are those Verizon Wire Centers that are not Tier 1 Wire Centers, but contain at least 3 Fiber-Based Collocators, at least 24,000 Business Lines, or both. Once a Wire Center is or has been determined to be a Tier 2 Wire Center, that Wire Center is not subject to later reclassification as a Tier 3 Wire Center.

3.5.5.3 Tier 3 Wire Centers are those Verizon Wire Centers that do not meet the criteria for Tier 1 or Tier 2 Wire Centers.

3.6 Certification and Dispute Process for High Capacity Loops and Transport

3.6.1 CLEC Certification and Related Provisions.

3.6.1.1 Before requesting unbundled access to a DS1 Loop, a DS3 Loop, DS1 Dedicated Transport, DS3 Dedicated Transport, or Dark Fiber Transport, including, but not limited to, any of the foregoing elements that constitute part of a Combination or that Neutral Tandem seeks to convert from another wholesale service to an unbundled network element (collectively, "TRRO Certification Elements"), Neutral Tandem must undertake a reasonably diligent inquiry and, based on that inquiry, certify that, to the best of its knowledge, Neutral Tandem's request is consistent with the requirements of the TRRO and that Neutral Tandem is entitled to unbundled access to the subject element pursuant to section 251(c)(3) of the Act. Neutral Tandem's reasonably diligent inquiry must include, at a minimum, consideration of any list of non-impaired Wire Centers that Verizon makes or has made available to Neutral Tandem by notice and/or by publication on Verizon's wholesale website and any back-up data that Verizon provides or has provided to Neutral Tandem under a non-disclosure agreement or that Neutral Tandem otherwise possesses.

3.6.1.2 The back-up data that Verizon shall provide to Neutral Tandem under a non-disclosure agreement pursuant to Section 3.6.1.1 above shall include data regarding the number of Business Lines and fiber-based collocators at non-impaired Wire Centers; provided, however, that Verizon may mask the identity of fiber-based collocators in order to prevent disclosure to Neutral Tandem of other carriers' confidential or proprietary network information. Verizon will provide Neutral Tandem with a translation code in order for Neutral Tandem to identify its fiber-based collocation locations. Verizon shall provide the back-up data required by this section no later than ten (10) business days following Neutral Tandem's written request, but only if a non-nondisclosure agreement covering the back-up data is in effect between Verizon and Neutral Tandem at that time. Upon Neutral Tandem's request, Verizon shall update the back-up data to the month in which Neutral Tandem requests the back-up data; provided, however, that Verizon need not provide the back-up data for a particular Wire Center for a date later than the original date on which the data must have been current to establish the level of non-impairment (e.g., Tier 2, etc.) that Verizon asserts as to that Wire Center.

3.6.1.3 Since Verizon has now modified its electronic ordering system to include a method for Neutral Tandem to provide the certification required by this section, Neutral Tandem shall use such method, as updated from time to time, to provide such certification, so long as such method is no more onerous than providing certification by letter.

3.6.2 Provision-then-Dispute Requirements.

3.6.2.1 Upon receiving a request from Neutral Tandem for unbundled access to a TRRO Certification Element and the certification required by Section 3.6.1 above, Verizon shall immediately process the request in

accordance with any applicable standard intervals and, for the avoidance of any doubt, shall not delay processing the request on the grounds that the request is for a TRRO Certification Element. If Verizon wishes to challenge Neutral Tandem's right to obtain unbundled access to the subject element pursuant to 47 U.S.C. § 251(c)(3), Verizon must provision the subject element as a UNE and then seek resolution of the dispute by the Department or the FCC, or through any dispute resolution process set forth in the Agreement that Verizon elects to invoke in the alternative.

3.6.2.2 If Verizon intends to retroactively reprice a facility or service back to the date of provisioning pursuant to section 3.6.2.3 below should Verizon prevail in a dispute, then Verizon, within thirty (30) days of the date on which it receives Neutral Tandem's certification under Section 3.6.1 above, must notify Neutral Tandem that Verizon disputes the subject order.

3.6.2.3 If a dispute pursuant to section 3.6.2.2 above is resolved in Verizon's favor, then Neutral Tandem shall compensate Verizon for the additional charges that would apply if Neutral Tandem had ordered the subject facility or service on a month-to-month term under Verizon's interstate special access tariff (except as provided in section 3.6.2.3.1 below as to dark fiber). The month-to-month rates shall apply until such time as Neutral Tandem: (1) requests disconnection of the subject facility; 2) requests an alternative term that Verizon offers under its interstate special access tariff; (3) requests the application of applicable term or volume discounts; or (4) negotiates a wholesale special access contract with Verizon for the subject facility or service. If Neutral Tandem has an effective wholesale special access contract with Verizon, the applicable rates under that contract would apply.

3.6.2.3.1 In the case of Dark Fiber Transport (there being no analogous service under Verizon's access tariffs), the monthly recurring rate that Verizon may charge, and that Neutral Tandem shall be obliged to pay, for each circuit shall be no greater than the lowest rates Neutral Tandem could have obtained in the first instance (for the facility to be repriced) had Neutral Tandem not ordered such facility as a UNE. Unless otherwise agreed in writing by the Parties, Verizon may disconnect the subject dark fiber facility thirty (30) days after the date on which the dispute is resolved in Verizon's favor. In any case where Neutral Tandem, within thirty (30) days of the date on which the dispute is resolved in Verizon's favor, submits a valid ASR for a "lit" service to replace the subject Dark Fiber Transport facility, Verizon shall continue to provide the Dark Fiber Transport facility at the rates provided for above, but only for the duration of the standard interval for installation of the "lit" service.

3.6.2.4 Notwithstanding any other provision of the Amended Agreement, but subject to and without limiting Section 4.4, below, Verizon may reject a Neutral Tandem order for a TRRO Certification Element without first seeking dispute resolution in any case where Neutral Tandem's order conflicts with a non-impaired Wire Center designation that the Department or the FCC has ordered or affirmatively approved or that has otherwise been confirmed through previous dispute resolution.

- 3.6.2.5 In the event of a situation where the impairment status of a Wire Center or transport Route is in dispute as of the end of a transition period and if Neutral Tandem challenges Verizon's designation that certain loop and transport facilities are Discontinued Facilities, Verizon shall continue to provision the subject elements as UNEs and then seek resolution of the dispute by the Department or the FCC, or through any dispute resolution process set forth in the Agreement that Verizon elects to invoke in the alternative.
- 3.6.2.6 In accordance with the Order on Compliance, in any case where Verizon, pursuant to Section 3.6.2.3, 3.6.2.3.1, or 3.6.2.5 above, is permitted to charge a higher rate upon the dispute being resolved in Verizon's favor, Verizon, upon resolution of the dispute, may not impose "late fees" but may request carrying charges, such as interest, on the difference between the UNE rate and the rate for the non-UNE facility or service.
- 3.6.3 If Verizon revises or has revised its Wire Center list to add any new Wire Centers not listed as of March 11, 2005 or to upgrade ("upgrade" meaning movement to a higher level of non-impairment (e.g., from Tier 2 to Tier 1)) the non-impairment status of any Wire Centers listed as of March 11, 2005, then Verizon, to the extent it has not already done so, shall notify Neutral Tandem in writing of such changes ("Wire Center Update Notice") and the following provisions shall apply:
- 3.6.3.1 Neutral Tandem's embedded base of TRRO Certification Elements that are or become Discontinued Facilities by operation of any such change to the Wire Center List shall be treated as Discontinued Facilities under Section 3.9.2 below effective as of ninety (90) days of the date on which Verizon issues (or issued) the Wire Center Update Notice (the "Wire Center Update Effective Date"). For the avoidance of any doubt, for purposes of applying Section 3.9.2 in the foregoing circumstances, the Wire Center Update Effective Date shall apply in lieu of, but in no event earlier than, the March 11, 2006 and September 11, 2006 dates set forth in Section 3.9.2; provided, however, that if the Wire Center Effective Date is a date earlier than the March 11, 2006 and September 11, 2006 dates set forth in Section 3.9.2, then the applicable TRRO transition rates described in Sections 3.4 and 3.5 above shall apply during the period from the Wire Center Effective Date to March 11, 2006 (or, in the case of Dark Fiber Transport, September 11, 2006).
- 3.6.3.2 For the avoidance of any doubt, the provisions set forth in Sections 3.6.1 and 3.6.2 (including, but not limited to, Neutral Tandem's certification obligation) shall apply, effective as of the Wire Center Update Effective Date, as to any new requests for TRRO Certification Elements affected by the changes to the Wire Center list.
- 3.6.3.3 Nothing contained in this Section 3.6.3 shall in any way limit any right Neutral Tandem may have to challenge Verizon's revision of its Wire Center Lists, including any change in a Wire Center's designation as Tier 1, Tier 2 or Tier 3.

3.7 DS-0 Capacity (i.e., Mass Market) Switching and Related Elements.

- 3.7.1 Effective as of March 11, 2005, and subject to the transition requirements set forth in Section 3.7.3 below, Verizon is not required to provide Neutral Tandem

with access to Mass Market Switching (which, for purposes of this Amendment, means local circuit switching that, if provided to Neutral Tandem, would be used for the purpose of serving end-user customers using DS-0 capacity loops, and does not include Four Line Carve Out Switching) on an unbundled basis.

- 3.7.2 Neutral Tandem shall migrate its embedded end user customer base off of the Mass Market Switching element to an alternative arrangement no later than March 10, 2006.
- 3.7.3 Transition Requirements. For a 12-month period beginning on March 11, 2005, Verizon shall provide access to Mass Market Switching on an unbundled basis for Neutral Tandem to serve its embedded end user customer base. The price for Mass Market Switching in combination with unbundled DS0 capacity loops and Shared Transport obtained pursuant to this section shall be priced at the transitional rates provided for in the Pricing Attachment to this Amendment, which shall be the higher of (a) the rate at which Neutral Tandem obtained that combination of network elements on June 15, 2004 plus one dollar, or (b) the rate the Department establishes or has established, if any, between June 16, 2004, and the effective date of the TRRO, for that combination of network elements, plus one dollar. Neutral Tandem may not obtain new Mass Market Switching as an unbundled network element on or after March 11, 2005.
- 3.7.3.1 For purposes of Section 3.7.3 above, serving the Neutral Tandem's embedded end user customer base means serving Neutral Tandem's end user customers using a Mass Market Switching arrangement that was in service for that end user customer as of March 11, 2005, and does not include adding new Mass Market Switching arrangements, adding new lines to existing arrangements, adding or changing features on an existing arrangement, or serving the embedded end user customer at a location different from the location at which that customer was served using the subject Mass Market Switching arrangement as of March 11, 2005 unless such additional lines, feature changes, or moves are provided as resale under section 251(c)(4) of the Act or pursuant to a separate commercial agreement.
- 3.7.4 As set forth in 47 C.F.R. § 51.319(d)(4), Verizon shall provide Neutral Tandem with non-discriminatory access to signaling, call-related databases and shared transport facilities on an unbundled basis in accordance with Section 251(c)(3) and 47 C.F.R Part 51, to the extent that local circuit switching is required to be made available pursuant to this Section 3.7, but only in connection with Verizon's provision of such local circuit switching.
- 3.8 Payment of Transition Charges. To the extent Neutral Tandem, by operation of the existing terms of the Agreement and the TRRO, was not already required to pay the transitional rate increases described in Section 3 of this Amendment, and without limiting any such existing terms, the following provisions shall apply:
- 3.8.1 Prospective Transition Charges. Neutral Tandem shall, in accordance with the billing provisions of the Agreement, pay any transition charges described in section 3 of this Amendment that Verizon bills (or has billed) in invoices dated on or after July 14, 2005. If Neutral Tandem fails to pay such invoices within the period of time required to avoid late payment charges or penalties under the billing provisions of the Agreement, any such late payment charges and penalties shall apply.
- 3.8.2 Retrospective Transition Charges.

3.8.2.1 Previously-Invoiced Charges. Neutral Tandem, within thirty (30) days of July 14, 2005, shall pay any transitional charges described in section 3 of this Amendment that Verizon already billed to Neutral Tandem in invoices dated prior to July 14, 2005 and that Neutral Tandem has not already paid. Verizon may not charge late payment charges or penalties under billing provisions of the Agreement if Neutral Tandem pays (or has paid) by August 13, 2005 any such invoices dated prior to July 14, 2005.

3.8.2.2 Charges Not Previously Invoiced. Without limiting Neutral Tandem's obligation to pay Verizon's invoices described in the foregoing provisions of this section 3.8, Verizon may, but shall not be required to, use a true up to recover from Neutral Tandem any transitional rate increases described in section 3 of this Amendment that Neutral Tandem has incurred but for which Verizon has not already billed to Neutral Tandem. Verizon may not charge late payments or penalties if Neutral Tandem pays Verizon's true up bill within the period of time required to avoid late payments or penalties under the billing provisions of the Agreement.

3.8.3 Any bills issued by Verizon that include either a transition rate charge or a true up charge, shall specifically identify the time period for which such transition rate or true up applies; the applicable transition rate or true up, and details that enable Neutral Tandem to identify the specific facilities to which the transition rate or true up amounts apply.

3.9 Discontinuance of TRRO Embedded Base at the Close of Transition Period.

3.9.1 Neutral Tandem may, at any time during the TRRO transition periods set forth in this Section 3, place orders to convert or migrate to alternative arrangements (e.g., a separate agreement at market-based rates, arrangement under a Verizon access tariff, or resale) Neutral Tandem's embedded base, if any, of Discontinued Facilities that are subject to those transition periods. Upon Neutral Tandem's request, Verizon shall defer the effectiveness of any such orders to a later date, but no later than March 10, 2006 (or, in the case of dark fiber, September 10, 2006). Notwithstanding the foregoing provisions of this section, any such order to convert or migrate to an alternative arrangement must be placed (or have been placed) far enough in advance of March 10, 2006 (or, in the case of dark fiber, September 10, 2006) to account for any standard intervals that apply, and Neutral Tandem must complete any necessary preparatory activities in advance such that the conversion order can be provisioned by March 11, 2006 (or, in the case of dark fiber, September 11, 2006).

3.9.1.1 Repricing Pending Actual Conversion or Migration. The ability of Neutral Tandem (and other CLECs whose interconnection agreements contain similar provisions) to place advance orders under Section 3.9.1 may result in requests for Verizon to process a significant number of conversions and/or migrations within a short time period. Accordingly, if Neutral Tandem places an order to convert or migrate to an alternative service in accordance with the requirements of Section 3.9.1 and Verizon does not complete the conversion or migration requested by Neutral Tandem as of the date requested by Neutral Tandem (such requested date being no later than the date required under Section 3.9.1), then Verizon, in its sole discretion, may reprice the subject Discontinued Facility effective as of that date by application of the

rate(s) that apply to the available replacement service requested by Neutral Tandem until such time as Verizon completes the actual conversion or migration to that available replacement service. Because the repricing described in this Section 3.9.1.1 may inherently involve, on a temporary basis, the application of rates to a facility or service provisioned through a format for which Verizon's systems are not designed to apply such rates, Verizon, in its sole discretion, may effectuate such repricing by application of a surcharge to an existing rate(s) so that the existing rate plus the surcharge are equivalent to the subject replacement service.

3.9.2 Failure of Neutral Tandem to Request Disconnection or Replacement Service by the Required Date. If Neutral Tandem has not requested disconnection of the subject Discontinued Facility and has not submitted an order for a replacement service in accordance with Section 3.9.1 above by the date required in that section, then Verizon may, in its sole discretion, either: (a) disconnect the subject Discontinued Facility on or at any time after March 11, 2006 (or, in the case of dark fiber, on or at any time after September 11, 2006), provided that Verizon has notified Neutral Tandem in writing at least thirty (30) days in advance of the disconnection date, or (b) without further notice to Neutral Tandem, convert or migrate the subject Discontinued Facility to an analogous access (month-to-month term), resale, or commercial arrangement that Verizon shall identify in writing at least 30 days in advance to Neutral Tandem, and the rates, terms, and conditions of such arrangement shall apply and be binding upon Neutral Tandem as of March 11, 2006 (or, in the case of dark fiber, September 11, 2006).

3.9.2.1 Repricing Pending Actual Conversion or Migration. If Verizon is unable to complete the conversion or migration described in Section 3.9.2 by the applicable date set forth therein, then Verizon may, but shall not be required to, reprice the subject Discontinued Facility, effective as of March 11, 2006 (or in the case of dark fiber, September 11, 2006), by application of the rate(s) that apply to the analogous access, resale, or commercial arrangement until such time as Verizon completes the actual conversion or migration described in Section 3.9.2. Because such repricing may inherently involve, on a temporary basis, the application of rates to a facility or service provisioned through a format for which Verizon's systems are not designed to apply such rates, Verizon, in its sole discretion, may effectuate such repricing by application of a surcharge applicable access, resale, or other analogous arrangement that Verizon identifies under section 3.9.2 above.

3.10 Line Sharing. Notwithstanding any other provision of the Amended Agreement (but subject to the conditions set forth in Section 2 above), Verizon shall provide access to Section 251(c)(3) Line Sharing in accordance with 47 C.F.R. § 51.319(a)(1)(i). For the avoidance of any doubt, the FCC's transition rules set forth in 47 C.F.R. § 51.319(a)(1)(i) became effective independently of this Amendment prior to the Amendment Effective Date, and this Section 3.10 is only intended to memorialize such rules for the convenience of the Parties and in compliance with the Arbitration Orders.

3.11 Commingling and Combinations.

3.11.1 Commingling. Notwithstanding any other provision of the Amended Agreement (but subject to and without limiting Section 4.4 below, and the conditions set forth in Section 2 above and in Section 3.11.2 below):

3.11.1.1 Verizon will not prohibit the commingling of an unbundled Network Element or a combination of unbundled Network Elements obtained under the Agreement or Amended Agreement pursuant to 47 U.S.C. § 251(c)(3) and 47 C.F.R. Part 51, or under a Verizon UNE tariff or under other applicable law, with Wholesale Services obtained from Verizon, but only to the extent and so long as commingling and provision of such Network Element (or combination of Network Elements) is required under 47 C.F.R. § 51.318 or other applicable law. As required by the Arbitration Orders, "Wholesale Services" as used herein include, but are not limited to, any facilities or elements that Neutral Tandem is entitled to obtain from Verizon pursuant to Section 271 of the Act or other law, if any, that applies; provided, however, that, for the avoidance of any doubt, nothing in this Amendment shall be deemed to require Verizon to provide a non-Section 251 element or facility at TELRIC rates. Moreover, to the extent and so long as required by 47 C.F.R. § 51.318 or other applicable law (subject to Sections 3.11.1.3 and 3.11.2 below), Verizon shall, upon request of Neutral Tandem, perform the functions necessary to commingle or combine UNEs with Wholesale Services obtained from Verizon. The rates, terms and conditions of the applicable access tariff or separate non-251 agreement will apply to the Wholesale Services, and the rates, terms and conditions of the Amended Agreement or the Verizon UNE tariff, as applicable, will apply to the UNEs.

3.11.1.2 "Ratcheting," as that term is defined by the FCC, shall not be required. UNEs that are commingled with Wholesale Services are not included in the shared use provisions of the applicable tariff. Verizon may exclude its performance in connection with the provisioning of commingled facilities and services from standard provisioning intervals and from performance measures and remedies, if any, contained in the Amended Agreement or elsewhere, until such time as a legally effective order of the Department requires new standard provisioning intervals and/or performance measures and remedies for Verizon's provisioning of commingled facilities, at which time such new intervals, performance measures, and/or remedies shall apply to the extent and for so long as they remain effective.

3.11.1.3 Limitations on Section 3.11.1.

3.11.1.3.1 [Intentionally Left Blank]

3.11.1.3.2 Nothing contained in Section 3.11.1 shall be deemed:  
(a) to establish any obligation of Verizon to provide Neutral Tandem with access to any facility that Verizon is not otherwise required to provide to Neutral Tandem on an unbundled basis under the Amended Agreement, or  
(b) to limit any right of Verizon under the Amended Agreement to cease providing a facility that is or becomes a Discontinued Facility.

3.11.2 Service Eligibility Criteria for Certain Combinations and Commingled Facilities and Services. Notwithstanding any other provision of the Agreement, this Amendment (but subject to the conditions set forth in Sections 2 and 3.11.1 above, and Section 4.4, below), or any Verizon tariff or SGAT:

3.11.2.1 Verizon shall not be obligated to provide:

- 3.11.2.1.1 an unbundled DS1 Loop in combination with unbundled DS1 or DS3 Dedicated Transport, or commingled with DS1 or DS3 access services;
- 3.11.2.1.2 an unbundled DS3 Loop in combination with unbundled DS3 Dedicated Transport, or commingled with DS3 access services;
- 3.11.2.1.3 unbundled DS1 Dedicated Transport commingled with DS1 channel termination access service;
- 3.11.2.1.4 unbundled DS3 Dedicated Transport commingled with DS1 channel termination access service; or
- 3.11.2.1.5 unbundled DS3 Dedicated Transport commingled with DS3 channel termination service,

(individually and collectively “High Capacity EELs”) except to the extent Verizon is required by 47 C.F.R. § 51.318 to do so, and not unless and until Neutral Tandem certifies in writing (i.e., ASR or LSR) to Verizon that each combined or commingled DS1 circuit or DS1 equivalent circuit of a High Capacity EEL satisfies each of the service eligibility criteria on a circuit-by-circuit basis as set forth in 47 C.F.R. § 51.318. Neutral Tandem must remain in compliance with said service eligibility criteria for so long as Neutral Tandem continues to receive the aforementioned combined or commingled facilities and/or services from Verizon. The service eligibility criteria shall be applied to each combined or commingled DS1 circuit or DS1 equivalent circuit of a High Capacity EEL. If any combined or commingled DS1 circuit or DS1 equivalent circuit of a High Capacity EEL is, becomes, or is subsequently determined to be, noncompliant, the noncompliant High Capacity EEL circuit will be treated as described in Section 3.11.2.2 below. The foregoing shall apply whether the High Capacity EEL circuits in question are being provisioned to establish a new circuit or to convert an existing wholesale service, or any part thereof, to unbundled network elements. For existing High Capacity EEL circuits, Neutral Tandem must re-certify in writing (i.e., letter or, as applicable, ASR or LSR) for each DS1 circuit or DS1 equivalent on or before January 15, 2006 (subject to Section 3.11.2.5.1.4 if applicable). Any existing High Capacity EEL circuits that Neutral Tandem leased from Verizon as of July 14, 2005 that Neutral Tandem failed to re-certify as required by Paragraph 3.11.2.1 on or before January 15, 2006 (or, if Section 3.11.2.5.1.4 applies, October 13, 2005) shall be treated as a non-compliant circuit as described under Section 3.11.2.2 effective as of February 15, 2006 (or, if Section 3.11.2.5.1.4 applies, August 14, 2005).

- 3.11.2.2 Without limiting any other right Verizon may have to cease providing circuits that are or become Discontinued Facilities, if a High Capacity EEL circuit is or becomes noncompliant as described in this Section 3.11, and Neutral Tandem has not submitted an LSR or ASR, as appropriate,

to Verizon requesting disconnection of the noncompliant facility and has not separately secured from Verizon an alternative arrangement to replace the noncompliant High Capacity EEL circuit, then Verizon, to the extent it has not already done so prior to execution of this Amendment, shall reprice the subject High Capacity EEL circuit (or portion thereof that had been previously billed at UNE rates), effective beginning on the date on which the circuit became non-compliant, by application of a new rate (or, in Verizon's sole discretion, by application of a surcharge to an existing rate) to be equivalent to an analogous access service or other analogous arrangement that Verizon shall identify in a written notice to Neutral Tandem. The new rate shall be no greater than the lowest rate Neutral Tandem could have otherwise obtained for an analogous access service or other analogous arrangement.

- 3.11.2.3 When submitting an ASR for a circuit for which certification under Section 3.11.2 above is required, Neutral Tandem should follow Verizon's ordering guidelines and provide all specified supporting information on the ASR related to the circuit's eligibility, but at a minimum, Neutral Tandem must include the certification in the remarks section of the ASR as follows: "Certification: The circuit(s) requested in this ASR meet the eligibility criteria set forth in 47 C.F.R. § 51.318(b)(2)." The foregoing certification must be contained in the Remarks section of the ASR unless and until such time as provisions are made to populate other fields on the ASR to capture this certification. Verizon may reject any ASR for a circuit for which certification is required under this section if the ASR does not contain the required certification.
- 3.11.2.4 All ASR-driven conversion requests will result in a change in circuit identification (circuit ID) from access to UNE or UNE to access.
- 3.11.2.5 All requests for conversions will be handled in accordance with Verizon's conversion guidelines, and in a manner that is not inconsistent with the Arbitration Orders. Each request will be handled as a project and will be excluded from all ordering and provisioning metrics, until such time as a legally effective order of the Department requires new standard provisioning intervals and/or performance measures and remedies for Verizon's provisioning of conversions, at which time such new intervals, performance measures, and/or remedies shall apply to the extent and for so long as they remain effective. Until such time as the DTE orders or permits a different interval (at which time such different interval shall apply), new rates for converted circuits shall be effective no later than thirty (30) business days after Neutral Tandem submits its order and certification.

3.11.2.5.1 To the extent Neutral Tandem, during the period from July 14, 2005 to October 13, 2005, submitted a written

request (i.e., electronic mail including a spreadsheet identifying the subject circuits by circuit identification number and billing account number) for conversion of an access circuit to a UNE High Capacity EEL that qualifies for conversion under the terms of the Amended Agreement, Verizon, for purposes of billing, will begin to apply the applicable UNE rates under the terms of the Amended Agreement to such qualifying UNE High Capacity EEL (or UNE portion of a commingled High Capacity EEL) effective as of August 25, 2005, provided that the following conditions were also satisfied:

3.11.2.5.1.1 Neutral Tandem, by 4 p.m. on October 13, 2005, requested a project call with Verizon for the above circuits to be held prior to 4 p.m. on October 13, 2005 or as soon as possible thereafter to ensure that Neutral Tandem scheduled the processing of, and could proceed to process, ASRs for the subject conversions no later than November 18, 2005;

3.11.2.5.1.2 Neutral Tandem submitted the foregoing ASRs for the subject conversions no later than November 18, 2005;

3.11.2.5.1.3 each of the foregoing ASRs included the certification required by Section 3.11.2.3 above; and

3.11.2.5.1.4 Neutral Tandem re-certified, by October 13, 2005, any High Capacity EEL circuits that Neutral Tandem leased from Verizon as of July 14, 2005 as required by Section 3.11.2.1 above.

3.11.2.6 Once per calendar year, Verizon may obtain and pay for an independent auditor to audit Neutral Tandem's compliance in all material respects with the service eligibility criteria applicable to High Capacity EELs. Any such audit shall be performed in accordance with the standards established by the American Institute for Certified Public Accountants, and may include, at Verizon's discretion, the examination of a sample selected in accordance with the independent auditor's judgment. Where non-compliance is found, Neutral Tandem must convert all non-compliant circuits to the appropriate service, true up any difference in payments, and make the correct payments on a going-forward basis. To the extent the independent auditor's report concludes that Neutral Tandem failed to comply in all material respects with the service eligibility criteria, then (without limiting Verizon's rights under Section 3.11.2.2 above) Neutral Tandem must reimburse Verizon for the cost of the independent auditor within thirty (30) days after receiving a statement of such costs from Verizon. Should the

independent auditor confirm that Neutral Tandem complied in all material respects with the service eligibility criteria, then Neutral Tandem shall provide to the independent auditor for its verification a statement of Neutral Tandem's reasonable and verifiable costs of complying with any requests of the independent auditor, and Verizon shall, within sixty (60) days of the date on which Neutral Tandem submits such costs to the auditor, reimburse Neutral Tandem for its reasonable and verifiable costs verified by the auditor. Neutral Tandem shall maintain records adequate to support its compliance with the service eligibility criteria for each DS1 or DS1 equivalent circuit for at least eighteen (18) months after the service arrangement in question is terminated.

### 3.12 Routine Network Modifications.

3.12.1 General Conditions. In accordance with 47 C.F.R. §§ 51.319(a)(7) and (e)(4), and subject to the conditions set forth in Section 2 above:

3.12.1.1 Verizon shall make such routine network modifications as are necessary to permit access by Neutral Tandem to the Loop, Dedicated Transport, or Dark Fiber Transport facilities available under the Amended Agreement (including DS1 Loops and DS1 Dedicated Transport, and DS3 Loops and DS3 Dedicated Transport), where the facility has already been constructed. Routine network modifications applicable to Loops or Transport may include, but are not limited to: rearranging or splicing of in-place cable at existing splice points; adding an equipment case; adding a doubler or repeater; installing a repeater shelf; deploying a new multiplexer or reconfiguring an existing multiplexer; accessing manholes; and deploying bucket trucks to reach aerial cable. Routine network modifications applicable to Dark Fiber Transport may include, but are not limited to, splicing of in-place dark fiber at existing splice points; accessing manholes; deploying bucket trucks to reach aerial cable; and routine activities, if any, needed to enable Neutral Tandem to light a Dark Fiber Transport facility that it has obtained from Verizon under the Amended Agreement. Routine network modifications do not include the construction of a new Loop or new Transport facilities, trenching, the pulling of cable, the installation of new aerial, buried, or underground cable for a requesting telecommunications carrier, or the placement of new cable. Verizon shall not be required to perform any routine network modifications to any facility that is or becomes a Discontinued Facility.

3.12.2 Performance Plans. Verizon may exclude its performance in connection with the provisioning of Loops or Transport (including Dark Fiber Transport) for which routine network modifications are performed from standard provisioning intervals and performance measures and remedies, if any, contained in the Amended Agreement or elsewhere; provided, however, that at such time as a legally effective order of the Department requires new standard provisioning intervals and/or performance measures and remedies for Verizon's

provisioning of Loops or Transport (including Dark Fiber Transport) for which routine network modifications are performed, such new intervals, performance measures, and/or remedies shall apply to the extent and for so long as they remain effective.

- 3.12.3 Nothing contained in this Section 3.12 shall be deemed to require Verizon to provide on an unbundled basis any facility that the Amended Agreement does not otherwise require Verizon to provide on an unbundled basis.

4. Miscellaneous Provisions.

- 4.1 Conflict between this Amendment and the Agreement. This Amendment shall be deemed to revise the terms and provisions of the Agreement to the extent necessary to give effect to the terms and provisions of this Amendment. In the event of a conflict between the terms and provisions of this Amendment and the terms and provisions of the Agreement this Amendment shall govern, provided, however, that the fact that a term or provision appears in this Amendment but not in the Agreement, or in the Agreement but not in this Amendment, shall not be interpreted as, or deemed grounds for finding, a conflict for purposes of this Section 4.1.
- 4.2 Counterparts. This Amendment may be executed in one or more counterparts, each of which when so executed and delivered shall be an original and all of which together shall constitute one and the same instrument.
- 4.3 Captions. The Parties acknowledge that the captions in this Amendment have been inserted solely for convenience of reference and in no way define or limit the scope or substance of any term or provision of this Amendment.
- 4.4 Scope of Amendment. This Amendment shall amend, modify and revise the Agreement only to the extent set forth expressly herein. As used herein, the Agreement, as revised and supplemented by this Amendment, shall be referred to as the "Amended Agreement". Nothing in this Amendment shall be deemed to amend or extend the term of the Agreement, or to affect the right of a Party to exercise any right of termination it may have under the Agreement. This Amendment does not alter, modify or revise any rights and obligations under applicable law contained in the Agreement, other than those Section 251 rights and obligations specifically addressed in this Amendment.
- 4.5 Reservation of Rights. Notwithstanding any contrary provision in the Amended Agreement, or any Verizon tariff, nothing contained in the Amended Agreement, or any Verizon tariff shall limit either Party's right to appeal, seek reconsideration of or otherwise seek to have stayed, modified, reversed or invalidated any order, rule, regulation, decision, ordinance or statute issued by the Department, the FCC, any court or any other governmental authority related to, concerning or that may affect either Party's rights or obligations under the Amended Agreement, any Verizon tariff, or applicable law.
- 4.6 Joint Work Product. This Amendment is a joint work product, and any ambiguities in this Amendment shall not be construed by operation of law against either Party.
- 4.7 Definitions. Notwithstanding any other provision in the Agreement or any Verizon tariff, the following terms, as used in the Amended Agreement, shall have the meanings set forth below:
- 4.7.1 Business Line. As set forth in 47 C.F.R. § 51.5, a "Business Line" is a Verizon-owned switched access line used to serve a business customer, whether by

Verizon itself or by a competitive LEC that leases the line from Verizon. The number of business lines in a Wire Center shall equal the sum of all Verizon business switched access lines, plus the sum of all UNE loops connected to that Wire Center, including UNE loops provisioned in combination with other unbundled elements. Among these requirements, business line tallies (1) shall include only those access lines connecting end-user customers with Verizon end-offices for switched services, (2) shall not include non-switched special access lines, (3) shall account for ISDN and other digital access lines by counting each 64 kbps-equivalent as one line. For example, a DS1 line corresponds to 24 64 kbps-equivalents, and therefore to 24 "business lines".

- 4.7.2 Call-Related Databases. Databases, other than operations support systems, that are used in signaling networks for billing and collection, or the transmission, routing, or other provision of a telecommunications service. Call-related databases include, but are not limited to, the calling name database, 911 database, E911 database, line information database, toll free calling database, advanced intelligent network databases, and downstream number portability databases.
- 4.7.3 Commingling. As set forth in 47 C.F.R. § 51.5, Commingling means the connecting, attaching, or otherwise linking of an unbundled network element, or a combination of unbundled network elements, to one or more facilities or services that Neutral Tandem has obtained at wholesale from Verizon, or the combining of an unbundled network element, or combination of unbundled network elements, with one or more such facilities or services. "Commingling" means the act of commingling.
- 4.7.4 [Intentionally Left Blank]
- 4.7.5 Dedicated Transport. Dedicated Transport includes Verizon transmission facilities, within a LATA, between Verizon Wire Centers or switches (including Verizon switches with line-side functionality that terminate loops and are located at Neutral Tandem's premises), or between Verizon Wire Centers or switches and switches owned by requesting telecommunications carriers, including, but not limited to, DS1-, DS3-, and OCn-capacity level services, as well as dark fiber, dedicated to a particular customer or carrier. For the avoidance of any doubt, this Section 4.7.5 is subject to Section 3.5.4 above, and shall not be construed to require Verizon to provide unbundled access to Dedicated Transport that Verizon is not required to provide under Section 3.5.4.
- 4.7.6 Discontinued Facility. Discontinued Facilities as of the Amendment Effective Date are, whether as stand-alone facilities or combined or commingled with other facilities: (a) any Entrance Facility, subject to Section 3.5.4 above; (b) local circuit switching that, if provided to Neutral Tandem would be used for the purpose of serving Neutral Tandem's customers using DS1 or above capacity Loops; (c) Mass Market Switching (subject to the transition provisions set forth herein for Neutral Tandem's embedded end user customer base, if any, as of March 11, 2005); (d) Four-Line Carve Out Switching; (e) OCn Loops and OCn Dedicated Transport; (f) subject to Sections 3.4.1, 3.4.2, and 3.6.2 above, DS1 Loops or DS3 Loops out of any Wire Center that meets the FCC's non-impairment criteria addressed in section 3.4 of this Amendment; (g) Dark Fiber Loops (subject to the transition provisions set forth herein for Neutral Tandem's embedded base of Dark Fiber Loops, if any, as of March 11, 2005); (h) subject to Sections 3.4.1 and 3.4.2 above, any DS1 Loop or DS3 Loop that exceeds the maximum number of such Loops that Verizon is required to provide to Neutral Tandem on an unbundled basis under section 3 of this Amendment (subject to

the transition requirements set forth therein); (i) subject to Sections 3.5.1 and 3.5.2 above, DS1 Dedicated Transport, DS3 Dedicated Transport, or Dark Fiber Transport on any Route that meets the FCC's non-impairment criteria addressed in section 3.5 of this Amendment (subject to the transition requirements set forth therein); (j) subject to Sections 3.5.1 and 3.5.2 above, any DS1 Dedicated Transport circuit or DS3 Dedicated Transport circuit that exceeds the number of such circuits that Verizon is required to provide to Neutral Tandem on an unbundled basis under section 3 of this Amendment; (k) the Feeder portion of a Loop (as a stand-alone element); (l) Line Sharing, subject to the TRO transition period addressed herein; (m) any Call-Related Database, other than the 911 and E911 databases (subject to the transition requirements set forth herein as to any Call-Related Databases used in connection with Mass Market Switching for Neutral Tandem 's embedded end user customer base for such switching, if any, as of March 11, 2005); (n) Signaling (subject to the transition requirements set forth herein as to any Signaling used in connection with Mass Market Switching for Neutral Tandem 's embedded end user customer base for such switching, if any, as of March 11, 2005); (o) Shared Transport (subject to the transition requirements set forth herein as to any Shared Transport used in connection with Mass Market Switching for Neutral Tandem 's embedded end user customer base for such switching, if any, as of March 11, 2005); (p) FTTH Loops (lit or unlit), subject to Section 3.1.2 above; (q) FTTC Loops (lit or unlit), subject to Section 3.1.2 above; (r) Hybrid Loops, subject to Section 3.2 above.

- 4.7.7 DS1 Dedicated Transport. Dedicated Transport having a total digital signal speed of 1.544 Mbps.
- 4.7.8 DS3 Dedicated Transport. Dedicated Transport having a total digital signal speed of 44.736 Mbps.
- 4.7.9 DS1 Loop. As set forth in 47 C.F.R. § 51.319(a), a DS1 Loop is a digital local loop having a total digital signal speed of 1.544 megabytes per second. DS1 loops include, but are not limited to, two-wire and four-wire copper loops capable of providing high-bit rate digital subscriber line services, including T1 services.
- 4.7.10 DS3 Loop. As set forth in 47 C.F.R. § 51.319(a), a DS3 loop is a digital local loop having a total digital signal speed of 44.736 megabytes per second.
- 4.7.11 Entrance Facility. Dedicated Transport (lit or unlit) that does not connect a pair of Verizon Wire Centers.
- 4.7.12 Feeder. The fiber optic cable (lit or unlit) or metallic portion of a Loop between a serving wire center and a remote terminal or feeder/distribution interface.
- 4.7.13 Fiber-Based Collocator. A fiber-based collocator is any carrier, unaffiliated with Verizon, that maintains a collocation arrangement in a Verizon Wire Center, with active electrical power supply, and operates a fiber-optic cable or comparable transmission facility that (1) terminates at a collocation arrangement within the Wire Center; (2) leaves the Verizon Wire Center premises; and (3) is owned by a party other than Verizon or any affiliate of the incumbent LEC, except as set forth in this section. Dark fiber obtained from Verizon on an indefeasible right of use basis shall be treated as non-Verizon fiber-optic cable. Two or more affiliated Fiber-Based Collocators in a single Wire Center shall collectively be counted as a single Fiber-Based Collocator. The term affiliate is defined by 47

U.S.C. § 153(1) and any relevant interpretation in Title 47 of the Code of Federal Regulations.

- 4.7.14 Four-Line Carve Out Switching. Local circuit switching that, if provided to Neutral Tandem, would be used for the purpose of serving a Neutral Tandem end user customer served by four or more DS0 Loops in Density Zone 1 in the top 50 MSAs.
- 4.7.15 FTTH Loop. A fiber-to-the-home loop (or "FTTH Loop") is a local loop consisting entirely of fiber optic cable, whether dark or lit, serving an end user's customer premises or, in the case of predominantly residential multiple dwelling units (MDUs), a fiber optic cable, whether dark or lit, that extends to the multiunit premises' minimum point of entry (MPOE). In accordance with the Arbitration Orders, FTTH Loops are not limited to those loops being used to provide service to residential customers.
- 4.7.16 FTTC Loop. A fiber-to-the-curb loop (or "FTTC Loop") is a local loop consisting of fiber optic cable connecting to copper distribution plant that is not more than 500 feet from the customer's premises or, in the case of predominantly residential MDUs, not more than 500 feet from the MDU's MPOE. The fiber optic cable in a fiber-to-the-curb loop must connect to copper distribution plant at a serving area interface from which every other copper distribution subloop also is not more than 500 feet from the respective customer's premises. In accordance with the Arbitration Orders, FTTC loops are not limited to those loops being used to provide service to residential customers.
- 4.7.17 House and Riser Cable (or Inside Wire Subloop). A distribution facility in Verizon's network between the minimum point of entry ("MPOE") at a multiunit premises where an end user customer is located and the Demarcation Point for such facility, that is owned or controlled by Verizon.
- 4.7.18 Hybrid Loop. A local Loop composed of both fiber optic cable, usually in feeder plant, and copper wire or cable, usually in the distribution plant. FTTH Loops and FTTC Loops are not Hybrid Loops.
- 4.7.19 Interexchange Service. Shall have the meaning as defined by the FCC.
- 4.7.20 Line Sharing. The process by which Neutral Tandem provides xDSL service over the same copper Loop that Verizon uses to provide voice service by utilizing the frequency range on the copper loop above the range that carries analog circuit-switched voice transmissions (the High Frequency Portion of the Loop, or "HFPL"). The HFPL includes the features, functions, and capabilities of the copper Loop that are used to establish a complete transmission path between Verizon's main distribution frame (or its equivalent) in its serving Wire Center and the demarcation point at the end user's customer premises, and includes the high frequency portion of any inside wire (including any House and Riser Cable) owned or controlled by Verizon.
- 4.7.21 Mobile Wireless Service. As set forth in 47 C.F.R. § 51.5, a mobile wireless service is any mobile wireless telecommunications service, including any commercial mobile radio service.
- 4.7.22 Route. As set forth in 47 C.F.R. § 51.319(e), a "Route" is a transmission path between one of Verizon's Wire Centers or switches and another of Verizon's Wire Centers or switches. A route between two points (e.g., Wire Center or

switch "A" and Wire Center or switch "Z") may pass through one or more intermediate Wire Centers or switches (e.g., Wire Center or switch "X"). Transmission paths between identical end points (e.g., Wire Center or switch "A" and Wire Center or switch "Z") are the same "route," irrespective of whether they pass through the same intermediate Wire Centers or switches, if any.

- 4.7.23 Signaling. Signaling includes, but is not limited to, signaling links and signaling transfer points.
- 4.7.24 Sub-Loop for Multiunit Premises Access. Any portion of a Loop that is technically feasible to access at a terminal in Verizon's outside plant at or near a multiunit premises. It is not technically feasible to access a portion of a Loop at a terminal in Verizon's outside plant at or near a multiunit premises if a technician must access the facility by removing a splice case to reach the wiring within the cable.
- 4.7.25 Wire Center. As set forth in 47 C.F.R. § 51.5, a Wire Center is the location of a Verizon local switching facility containing one or more central offices, as defined in the Appendix to Part 36 of Chapter 47 of the Code of Federal Regulations. The Wire Center boundaries define the area in which all customers served by a given Wire Center are located.

IN WITNESS WHEREOF, the Parties hereto have caused this Amendment to be executed as of the Amendment Effective Date.

**NEUTRAL TANDEM-MASSACHUSETTS, LLC**

**VERIZON NEW ENGLAND INC., d/b/a VERIZON MASSACHUSETTS**

By: \_\_\_\_\_

By: \_\_\_\_\_

Printed: John Barnicle

Printed: Jeffrey A. Masoner

Title: Chief Operating Officer

Title: Vice President Interconnection Services Policy and Planning

## Pricing Attachment to the TRO Amendment

1. General
  - 1.1 As used in this Attachment:
    - 1.1.1 "Services" means and includes any Network Element or other service, facility, equipment or arrangement, provided pursuant to this Amendment; and,
    - 1.1.2 "Charges" means the rates, fees, charges and prices for a Service.
  - 1.2 Charges for Services provided under the Amended Agreement shall be those set forth in Exhibit A of this Pricing Attachment and in the Amended Agreement (including any cross references therein to applicable tariffs). The Charges stated in Exhibit A of this Pricing Attachment shall be automatically superseded by any new Charge(s) when such new Charge(s) are required by any order of the Department or the FCC, approved by the Department or the FCC, or otherwise allowed to go into effect by the Department or the FCC (including, but not limited to, in a tariff that has been filed with the Department or the FCC), provided such new Charge(s) are not subject to a stay issued by any court of competent jurisdiction.
  - 1.3 If Section 1.2 does not provide for a Charge(s) for a Service and the Department or the FCC approves or has approved or otherwise allows or has allowed a Charge(s) to go into effect (including, but not limited to, pursuant to a tariff that has been filed with the Department or the FCC) (an "Established Charge(s)"), then the Established Charge(s) shall be the Charge(s) for Services provided under the Amendment Agreement as if set forth in Exhibit A hereto, provided such Established Charge(s) are not subject to a stay issued by any court of competent jurisdiction. Established Charges shall be effective automatically without further amendment of the Amended Agreement. Established Charges shall not be retroactive absent a Department or FCC decision to the contrary.
  - 1.4 For the avoidance of any doubt, Charges for Services that Verizon is required to provide under this Amendment shall apply as set forth in Sections 1.2 and 1.3 of this Pricing Attachment regardless of whether the text of the Amendment specifically states that a Charge applies for a particular Service.

## EXHIBIT A<sup>1</sup>

MA NETWORK MODIFICATION - RATE ELEMENT	NON-RECURRING CHARGES
ENGINEERING QUERY <sup>2</sup>	\$ 106.49 <sup>♦</sup>
ENGINEERING WORK ORDER <sup>3</sup>	\$ 419.01 <sup>♦</sup>
EXPEDITE ENGINEERING QUERY <sup>2, 4</sup>	\$ 166.97 <sup>♦</sup>
EXPEDITE ENGINEERING WORK ORDER <sup>3, 4</sup>	\$ 674.76 <sup>♦</sup>
REMOVAL OF LOAD COILS (>18K FT)	\$ 632.01 <sup>♦</sup>
REMOVAL OF LOAD COILS (>18K FT) ADDL	\$ 632.01 <sup>♦</sup>
EXPEDITE REMOVAL OF LOAD COILS (>18K FT)	\$ 959.15 <sup>♦</sup>
EXPEDITE REMOVAL OF LOAD COILS (>18K FT) ADDL	\$ 959.15 <sup>♦</sup>
REMOVAL OF SINGLE BRIDGED TAP	142.17 <sup>♦</sup>
REMOVAL OF MULTIPLE BRIDGED TAPS	\$ 343.17 <sup>♦</sup>
EXPEDITE - REMOVAL OF SINGLE BRIDGED TAP	\$ 215.03 <sup>♦</sup>
EXPEDITE - REMOVAL OF MULTIPLE BRIDGED TAPS	\$ 519.80 <sup>♦</sup>

<sup>1</sup> This Exhibit may contain rates and charges for (and/or reference) services, facilities, arrangements and the like that Verizon does not have an obligation to provide under the Amended Agreement. Notwithstanding any such rates and/or charges (and/or references) and, for the avoidance of any doubt, nothing in this Exhibit shall be deemed to require Verizon to provide a service, facility, arrangement or the like that the Amended Agreement does not require Verizon to provide, or to provide a service, facility, arrangement or the like upon rates, terms or conditions other than those that may be required by the Amended Agreement.

<sup>2</sup> Engineering Query Charges apply in addition to charges for actual network modification and Engineering Work Order charges where applicable; provided however, that if Verizon is not permitted under Sections 1.2-1.4 of this Pricing Attachment to charge for a particular routine network modification that Verizon is required to perform under Section 3.12.1 of the Amendment, then Engineering Query Charges shall not apply to that routine network modification until such time as Verizon may be permitted to charge for the subject network modification in accordance with Section 1.3 of this Pricing Attachment.

<sup>3</sup> Engineering Work Order Charges apply in addition to charges for actual network modification and Engineering Query charges where applicable; provided however, that if Verizon is not permitted under Sections 1.2-1.4 of this Pricing Attachment to charge for a particular routine network modification that Verizon is required to perform under Section 3.12.1 of the Amendment, then Engineering Work Order Charges shall not apply to that routine network modification until such time as Verizon may be permitted to charge for the subject network modification in accordance with Section 1.3 of this Pricing Attachment.

<sup>4</sup> Expedite Charges apply in addition to other listed rates.

<sup>♦</sup> Massachusetts rates per Verizon DTE MA No. 17 tariff.

## TRRO TRANSITION RATES<sup>5</sup>

MA MASS MARKET UNE-P - RATE ELEMENT	RATE	TRRO Effective Date	NEW MRC (\$1.00 INCREASE)
Remote Call Forwarding Port	\$1.57	3/11/2005	\$2.57
Unbundled-B-ISDN Port	\$7.46	3/11/2005	\$8.46
P-Phone/Centrex Port Electronic Key Tele Port	\$7.46	3/11/2005	\$8.46
PAL Line Identifier	\$2.22	3/11/2005	\$3.22
COIN Port	\$2.48	3/11/2005	\$3.48
Unbundled Line Port	\$2.22	3/11/2005	\$3.22
MA DARK FIBER LOOP - RATE ELEMENT	RATE	TRRO Effective Date	NEW MRC (15% Increase)
Serving Wire Center Charge	\$10.04	3/11/2005	\$11.55
Loop Fixed Charge	\$5.44	3/11/2005	\$6.26
Loop Mileage Charge per 1/10 mile – METRO	\$5.04	3/11/2005	\$5.80
Loop Mileage Charge per 1/10 mile – URBAN	\$4.82	3/11/2005	\$5.54
Loop Mileage Charge per 1/10 mile – SUBURBAN	\$4.73	3/11/2005	\$5.44
Loop Mileage Charge per 1/10 mile – RURAL	\$4.44	3/11/2005	\$5.11
MA DARK FIBER IOF - RATE ELEMENT	RATE	TRRO Effective Date	NEW MRC (15% Increase)
IOF Channel Term Fixed Charge	\$5.44	3/11/2005	\$6.26
Serving Wire Center Charge	\$10.04	3/11/2005	\$11.55
Mileage per 1/10 Mile	\$4.97	3/11/2005	\$5.72
Per Intermediate Cross-connection & jumper cables	\$18.79	3/11/2005	\$21.61
MA DS1/DS3/DARK FIBER TRANSPORT - RATE ELEMENT	RATE	TRRO Effective Date	NEW MRC (15% Increase)
DS1 Fixed	\$37.12	3/11/2005	\$42.69
DS1 per Mile	\$1.20	3/11/2005	\$1.38
DS3 Fixed	\$356.41	3/11/2005	\$409.87
DS3 per Mile	\$16.42	3/11/2005	\$18.88
DS3/DS1 Mux	\$483.34	3/11/2005	\$555.84

<sup>5</sup> The rates in this section reflect increases authorized by the FCC's Triennial Review Remand Order (TRRO) for Neutral Tandem's embedded base of UNEs that are subject to the TRRO transition provisions described in the attached Amendment. The rate elements set forth in this section are only those for which rate recalculation was required to reflect the TRRO rate increases. Additional rates and charges may apply pursuant to the underlying Agreement (including any tariffs referenced therein). Also, if the Parties enter (or have entered) a separate commercial agreement for UNE replacement services, the rates and charges set forth herein may be superseded by rates and charges set forth in the separate commercial agreement.

<b>DS1 Channel Activation</b>	\$17.26	3/11/2005	\$19.85
<b>DS1/DS0 Mux</b>	\$312.29	3/11/2005	\$359.13
<b>MA DS1/DS3 LOOP - RATE ELEMENT</b>	<b>RATE</b>	<b>TRRO Effective Date</b>	<b>NEW MRC (15% Increase)</b>
<b>DS1 Loop – METRO</b>	\$54.44	3/11/2005	\$62.61
<b>DS1 Loop – URBAN</b>	\$73.61	3/11/2005	\$84.65
<b>DS1 Loop – SUBURBAN</b>	\$83.85	3/11/2005	\$96.43
<b>DS1 Loop – RURAL</b>	\$130.71	3/11/2005	\$150.32
<b>DS3 Loop</b>	\$762.68	3/11/2005	\$877.08
<b>DS3 Loop per 1/4 mile</b>	\$8.29	3/11/2005	\$9.53
<b>MA DS1/DS3 EEL LOOP - RATE ELEMENT</b>	<b>RATE</b>	<b>TRRO Effective Date</b>	<b>NEW MRC (15% Increase)</b>
<b>DS1 Loop – METRO</b>	\$54.44	3/11/2005	\$62.61
<b>DS1 Loop – URBAN</b>	\$73.61	3/11/2005	\$84.65
<b>DS1 Loop – SUBURBAN</b>	\$83.85	3/11/2005	\$96.43
<b>DS1 Loop – RURAL</b>	\$130.71	3/11/2005	\$150.32
<b>DS3 Loop</b>	\$762.68	3/11/2005	\$877.08
<b>DS3 Loop per 1/4 mile</b>	\$8.29	3/11/2005	\$9.53
<b>MA DS1/DS3 EELTRANSPORT – RATE ELEMENT</b>	<b>RATE</b>	<b>TRRO Effective Date</b>	<b>NEW MRC (15% Increase)</b>
<b>DS1 Fixed</b>	\$37.12	3/11/2005	\$42.69
<b>DS1 per Mile</b>	\$1.20	3/11/2005	\$1.38
<b>DS3 Fixed</b>	\$356.41	3/11/2005	\$409.87
<b>DS3 per Mile</b>	\$16.42	3/11/2005	\$18.88
<b>DS3/DS1 Mux</b>	\$483.34	3/11/2005	\$555.84
<b>DS1 Channel Activation</b>	\$17.26	3/11/2005	\$19.85
<b>DS1/DS0 Mux</b>	\$312.29	3/11/2005	\$359.13