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March 15, 2010

**VIA OVERNIGHT MAIL**

Mr. Jeff R. Derouen  
Executive Director  
Public Service Commission of Kentucky  
211 Sower Boulevard  
Frankfort, KY 40601

RECEIVED

MAR 16 2010

PUBLIC SERVICE  
COMMISSION

Re: Interconnection Agreement Between Cincinnati Bell Telephone Company LLC and <sup>Time Warner</sup> ~~tw~~ telecom of Kentucky llc.

Dear Mr. Derouen:

Enclosed for filing please find an original copy of the Interconnection Agreement amendment between Cincinnati Bell Telephone Company LLC and tw telecom of Kentucky llc. Also enclosed is a 3.5 inch disk containing an electronic copy of the Amendment (in Word97 format). Cincinnati Bell Telephone Company LLC and tw telecom of Kentucky llc, request approval of the Amendment pursuant to section 252(e) of the Telecommunications Act of 1996.

If you have any questions concerning this filing, please feel free to contact me at 513-565-3800. Thank you in advance for your assistance with this matter.

Sincerely,

A handwritten signature in cursive script that reads "Gary Peddicord".  
Gary Peddicord  
Director – Carrier Operations

Enclosure

**AMENDMENT NO. 1  
TO THE  
INTERCONNECTION AGREEMENT BETWEEN  
tw telecom of kentucky llc  
and  
CINCINNATI BELL TELEPHONE COMPANY LLC.  
DATED MARCH 12, 2010**

THIS AMENDMENT is made by and between Cincinnati Bell Telephone Company LLC ("CBT") and tw telecom of kentucky llc ("TWTC"), as of the 12 day of MARCH, 2010. CBT and TWTC are collectively referred to as the "Parties".

WHEREAS, the Parties executed an Interconnection Agreement on June 14, 2001, (the "Interconnection Agreement"); and

WHEREAS, the Parties desire to amend the Interconnection Agreement to change the unbundling obligations of CBT as mandated by the FCC's Order on Remand in CC Docket Nos. 01-338 and 04-313, FCC 04-290;

NOW, THEREFORE, for and in consideration of the promises contained herein, the parties to this Amendment, intending to be legally bound, hereby agree to amend the Interconnection Agreement as follows:

1. The following definitions have been added to **ARTICLE I, DEFINITIONS**:

**"Fiber-Based Collocator"** means any carrier, unaffiliated with CBT, that maintains a collocation arrangement in a CBT 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 CBT wire center premises; and (3) is owned by a party other than the CBT or any affiliate of CBT, except as set forth in this paragraph. Dark fiber obtained from CBT on an indefeasible right of use basis shall be treated as non-incumbent LEC 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.

**"Mobile Wireless Service"** means any mobile wireless telecommunications service, including any commercial mobile radio service.

The **"Triennial Review Order"** or **"TRO"** means the Federal Communication Commission's Report and Order and Order on Remand and Further Notice of Proposed Rulemaking in CC Docket Nos. 01-338, 96-98, and 98-147, adopted February 20, 2003, released August 21, 2003 and effective October 2, 2003.

The **"Triennial Review Remand Order"** means the Federal Communication Commission's Order on Remand in CC Docket Nos. 01-338 and 04-313 (released February 4, 2005).

2. **Section 9.1.5** is added, as follows:

9.1.5 CLEC may not access an unbundled network element for the exclusive provision of mobile wireless services or interexchange services.

3. **Section 9.2.4** is deleted and now reads “9.2.4 Reserved for future use.”

4. **Section 30.19**, Notices. The Notice information for the Parties has been revised as follows:

To TWTC:

tw telecom  
Tina Davis  
Sr. Vice President, Deputy General Counsel  
10475 Park Meadows Drive  
Littleton, CO 80124  
Office: 303-566-1279  
Fax: 303-566-1010

with a copy to:

tw telecom  
Pamela Sherwood  
Vice President Regulatory  
4625 West 86<sup>th</sup> Street, Suite 500  
Indianapolis, IN 46268  
Office: 317-713-8977  
Fax: 317-713-8937

To CBT:

Cincinnati Bell Telephone Company LLC  
221 East Fourth Street, 121-850  
Cincinnati, Ohio 45202  
Attn: Vice President & General Manager - Carrier Services  
Fax: (513) 241-8735

with a copy to:

Cincinnati Bell Telephone Company LLC  
221 E. Fourth Street, 103-1290  
Cincinnati, Ohio 45202-2301  
Attn: General Counsel  
Fax: (513) 397-9557

5. **Schedule 9.2.1**, Sections 5.2 and 5.3 are added, as follows:

5.2 Subject to the cap described in paragraph 5.3, below, CBT shall provide TWTC 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. 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.

5.3 TWTC may obtain a maximum of ten (10) unbundled DS1 loops to any single building in which DS1 loops are available as unbundled loops.

6. **Schedule 9.2.3** has been replaced in its entirety by **Schedule 9.2.3** (revised 02/01/10) attached hereto as Attachment 1.

7. **Schedule 9.2.4** is deleted in its entirety.

8. **Schedule 9.4**, paragraphs 5.0 through 5.3.3 are deleted and are replaced by “5.0 Reserved for future use.”

9. **Schedule 9.8**, Section B, Standard Intervals. Item number 3, “OC-N Interoffice Transmission Facilities” and its “Negotiated” interval are deleted.

10. In the event of a conflict between the terms of this Amendment and the terms of the Interconnection Agreement, the terms of this Amendment shall prevail. All of the other provisions of the Interconnection Agreement shall remain in full force and effect.

11. Either or both of the Parties is authorized to submit this Amendment to the Commission for approval subject to Section 252(e) of the Federal Telecommunications Act of 1996.

IN WITNESS WHEREOF, the Parties hereto have caused this Amendment to be executed by their respective duly authorized representatives on the date indicated below.

tw telecom of kentucky llc

by: tw telecom holdings inc., its sole member

By: Tina Davis

Name: Tina Davis

Title: Sr Vice President and Deputy  
General Counsel

Date: 3-2-10

Cincinnati Bell Telephone Company LLC

By: Susan J. Maggard

Name: Susan J. Maggard

Title: Vice President & General Manager  
Carrier Services

Date: 3/12/2010

**SCHEDULE 9.2.3****INTEROFFICE TRANSMISSION FACILITIES**

Interoffice Transmission Facilities are CBT transmission facilities dedicated to a particular Customer or carrier, or shared by more than one Customer or carrier, that provide Telecommunications Services between Wire Centers/Switching Centers owned by CBT, or between Switches owned by CBT.

For purposes of this **Schedule 9.2.3**, 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.

1.0 CBT provides several varieties of unbundled Interoffice Transmission Facilities:

1.1 **Unbundled dedicated interoffice transport facility (“Dedicated Transport”)** is a dedicated facility connecting two CBT Central Office buildings via CBT transmission equipment. In each Central Office building, TWTC will Cross-Connect this facility to its own transmission equipment (physically or virtually) Collocated in each Wire Center. All applicable digital Cross-Connect, multiplexing, and Collocation space charges apply at an additional cost.

1.2 **“Dedicated entrance facility”** is a dedicated facility connecting CBT's transmission equipment in a CBT Central Office with TWTC's transmission equipment in TWTC's Switching Center for the purposes of providing Telecommunications Services. CBT is not required to unbundle dedicated entrance facilities.

2.0 CBT shall offer Interoffice Transmission Facilities in each of the following ways:

2.1 As a dedicated transmission path (e.g., DS1 and DS3).

3.0 Where Dedicated Transport or Shared Transport is provided, it shall include (as appropriate):

3.1 The transmission path at the requested speed or bit rate.

3.2 The following optional features are available, if requested by TWTC, at additional cost:

3.2.1 Clear Channel Capability per 1.544-Mbps (DS1) bit stream;

3.2.2 CBT-provided Central Office multiplexing.

- (a) DS3 to DS1 multiplexing; and
- (b) DS1 to Voice/Base Rate/128-, 256-, 384-Kpbs Transport; multiplexing

4.0 Technical Requirements. This Section sets forth technical requirements for all Interoffice Transmission Facilities.

4.1 When CBT provides Dedicated Transport as a circuit, the entire designated transmission facility (e.g., DS1 and DS3) shall be dedicated to TWTC-designated traffic.

4.2 CBT shall offer Interoffice Transmission Facilities in DS1 and DS3 transport systems, where available.

4.3 For DS1 facilities, Interoffice Transmission Facilities shall, at a minimum, meet the performance, availability, jitter, and delay requirements specified for Customer Interface to Central Office "CI to CO" connections in the applicable technical references set forth below.

4.4 For DS3 facilities, Interoffice Transmission Facilities shall, at a minimum, meet the performance, availability, jitter, and delay requirements specified for Customer Interface to Central Office "CI to CO" connections in the applicable technical references set forth below.

4.5 When requested by TWTC, Interoffice Transmission Facilities shall provide physical diversity. Physical diversity means that two circuits are provisioned in such a way that no single failure of facilities or equipment will cause a failure on both circuits.

4.6 When physical diversity is requested by TWTC, CBT shall provide physical separation between intra-office and inter-office transmission paths (unless otherwise agreed by TWTC).

4.7 Any request by TWTC for diversity shall be subject to additional charges.

4.8 CBT shall offer the following interface transmission rates for Interoffice Transmission Facilities:

4.8.1 DS1 (Extended SuperFrame - ESF and D4);

4.8.2 DS3 (C-bit Parity and M13 shall be provided);

4.9 CBT shall permit (when made available as a service) TWTC to obtain the functionality provided by DCS together with and separate from dedicated transport in the same manner that CBT offers such capabilities to IXC's that purchase transport services. If TWTC requests additional functionality, such request shall be made through the Bona Fide Request process.

#### 5.0 DS1 Requirements

5.1 CBT shall unbundle DS1 transport between any pair of CBT wire centers except where, through application of tier classifications described in Section 8.0 of this Schedule 9.2.3, both wire centers defining the route are Tier 1 wire centers. As such, CBT must unbundle DS1 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.

5.2 TWTC may obtain a maximum of ten (10) unbundled DS1 dedicated transport circuits on each route where DS1 dedicated transport is available on an unbundled basis.

#### 6.0 DS3 Requirements

6.1 CBT shall unbundle DS3 transport between any pair of CBT wire centers except where, through application of tier classifications described in Section 8.0 of this Schedule 9.2.3, both wire centers defining the route are either Tier 1 or Tier 2 wire centers. As such, CBT must unbundle DS3 transport if a wire center on either end of a requested route is a Tier 3 wire center.

6.2 TWTC may obtain a maximum of 12 unbundled DS3 dedicated transport circuits each route where DS3 dedicated transport is available on an unbundled basis.

#### 7.0 Dark Fiber Requirements

7.1 CBT shall unbundle dark fiber transport between any pair of CBT wire centers except where, through application of tier classifications described in Section 8.0 of this Schedule 9.2.3, both wire centers defining the route are either Tier 1 or Tier 2 wire centers. As such, an incumbent LEC must unbundle dark fiber transport if a wire center on either end of a requested route is a Tier 3 wire center.

#### 8.0 **Wire center tier structure.** For purposes of this Schedule 9.2.4, CBT wire centers shall be classified into three tiers, defined as follows:

- 8.1 Tier 1 wire centers are those CBT 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 incumbent LEC 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 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.

- 8.2 Tier 2 wire centers are CBT 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 determined to be a Tier 2 wire center, that wire center is not subject to later reclassification as a Tier 3 wire center.
- 8.3 Tier 3 wire centers are those CBT wire centers that do not meet the criteria for Tier 1 or Tier 2 wire centers.

## 9.0 Technical References:

### Dedicated Transport

ANSI T1.101-1994, American National Standard for Telecommunications

-Synchronization Interface Standard Performance and Availability

ANSI T1.102-1993, American National Standard for Telecommunications -  
Digital Hierarchy - Electrical Interfaces

ANSI T1.105-1995, American National Standard for Telecommunications -  
Synchronous Optical Network (SONET) - Basic Description  
including Multiplex Structure, Rates and Formats

ANSI T1.105.01-1995, American National Standard for Telecommunications  
-Synchronous Optical Network (SONET) - Automatic Protection  
Switching

ANSI T1.105.02-1995, American National Standard for Telecommunications  
-Synchronous Optical Network (SONET) - Payload Mappings

ANSI T1.105.03-1994, American National Standard for Telecommunications  
-Synchronous Optical Network (SONET) - Jitter at Network Interfaces

ANSI T1.105.03a-1995, American National Standard for Telecommunications  
-Synchronous Optical Network (SONET) - Jitter at Network

### Interfaces -DS1 Supplement

ANSI T1.105.04-1995, American National Standard for Telecommunications  
-Synchronous Optical Network (SONET) - Data Communication Channel  
Protocols and Architectures

ANSI T1.105.05-1994, American National Standard for Telecommunications  
-Synchronous Optical Network (SONET) - Tandem Connection

ANSI T1.105.06-199x, American National Standard for Telecommunications -  
Synchronous Optical Network (SONET) - Physical Layer Specifications

ANSI T1.106-1988, American National Standard for Telecommunications -  
Digital Hierarchy - Optical Interface Specifications (Single Mode)

ANSI T1.107-1988, American National Standard for Telecommunications - Digital  
Hierarchy - Formats Specifications

ANSI T1.107a-1990, American National Standard for Telecommunications -  
Digital Hierarchy - Supplement to Formats Specifications (DS3 Format  
Applications)

- ANSI T1.107b-1991, American National Standard for Telecommunications - Digital Hierarchy - Supplement to Formats Specifications
- ANSI T1.117-1991, American National Standard for Telecommunications - Digital Hierarchy - Optical Interface Specifications (SONET) (Single Mode - Short Reach)
- ANSI T1.119-1994, American National Standard for Telecommunications - Synchronous Optical Network (SONET) - Operations, Administration, Maintenance, and Provisioning (OAM&P) Communications
- ANSI T1.119.01-1995, American National Standard for Telecommunications - Synchronous Optical Network (SONET) - Operations, Administration, Maintenance, and Provisioning (OAM&P) Communications Protection Switching Fragment
- ANSI T1.119.02-199x, American National Standard for Telecommunications - Synchronous Optical Network (SONET) - Operations, Administration, Maintenance, and Provisioning (OAM&P) Communications Performance Monitoring Fragment
- ANSI T1.231-1993, American National Standard for Telecommunications - Digital Hierarchy - Layer 1 In-Service Digital Transmission performance monitoring
- ANSI T1.404-1994, Network-to-Customer Installation - DS3 Metallic Interface Specification
- Bellcore FR-440 and TR-NWT-000499, Transport Systems Generic Requirements (TSGR): Common Requirements
- Bellcore GR-820-CORE, Generic Transmission Surveillance: DS1 & DS3 Performance
- Bellcore GR-253-CORE, Synchronous Optical Network Systems (SONET); Common Generic Criteria
- Bellcore TR-NWT 000507, Transmission, Section 7, Issue 5 (Bellcore, December 1993). (A module of LSSGR, FR-NWT-000064.)
- Bellcore TR-NWT-000776, Network Interface Description for ISDN Customer Access
- Bellcore TR-INS-000342, High-Capacity Digital Special Access Service-Transmission Parameter Limits and Interface Combinations, Issue 1, February 1991