APPENDIX NETWORK INTERCONNECTION METHODS (NIM)

*[1]This Appendix NIM to Attachment 11: Network Interconnection Architecture designates Network Interconnection Methods (NIMs) to be used by the Parties to obtain interconnection. These include, but are not limited to: Fiber Meet Point Virtual Collocation; SONET Based; Physical Collocation; leasing of SBC MISSOURI facilities; leasing of facilities from a third party; CLEC self-buildout; or other mutually agreeable methods of obtaining interconnection**.**

1. *[2] FIBER MEET POINT

*[2]1.1 Fiber Meet Point between SBC MISSOURI and CLEC can occur at any mutually agreeable, economically and technically feasible point between CLEC's premises and a SBC MISSOURI tandem or end office. This meet will be on a point-to-point linear chain SONET system over single mode fiber optic cable.

*[2]If Fiber Meet Point is the selected method for interconnection**,** MSFMP Fiber Meet Point shall be used to provide interconnection trunking as defined in Appendix ITR to Attachment 11: Network Interconnection Architecture for trunk groups used to carry Section 251(b)(5)/IntraLATA Toll Traffic originating from an end user obtaining local dialtone from CLEC where CLEC is both the Section 251(b)(5) Traffic and IntraLATA Toll provider or IntraLATA Toll Traffic originating from an end user obtaining local dialtone from SBC MISSOURI where SBC MISSOURI is both the Section 251(b)(5) Traffic and IntraLATA Toll provider (hereinafter "Local Interconnection Trunk Groups").

***2 & 3** Fiber Meet Point may be used to provide transport for interconnection trunking as defined in Appendix ITR to Attachment 11: Network Interconnection Architecture (NIA).

*[2]1.2 There are two basic mid-span interconnection designs:

*[2] 1.2.1 Design One: CLEC's fiber cable and SBC MISSOURI' fiber cable are connected at an economically and technically feasible point between the CLEC location and the last entrance manhole at the SBC MISSOURI central office.

*[2] The Parties may agree to a location with access to an existing SBC MISSOURI fiber termination panel. In these cases, the network interconnection point (POI) shall be designated outside of the SBC MISSOURI building, even though the CLEC fiber may be physically terminated on a fiber termination panel inside of a SBC MISSOURI building. In this instance, CLEC will not incur fiber termination charges and SBC MISSOURI will be responsible for connecting the cable to the SBC MISSOURI facility.

*[2] The Parties may agree to a location with access to an existing CLEC fiber termination panel. In these cases, the network interconnection point (POI) shall be designated outside of the CLEC building, even though the SBC MISSOURI fiber may be physically terminated on a fiber termination panel inside of an CLEC building. In this instance, SBC MISSOURI will not incur fiber termination charges and CLEC will be responsible for connecting the cable to the CLEC facility.

*[2] If a suitable location with an existing fiber termination panel cannot be agreed upon, CLEC and SBC MISSOURI shall mutually determine provision of a fiber termination panel housed in an outside, above

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ground cabinet placed at the physical POI. Ownership and the cost of provisioning the panel will be negotiated between the two parties.

*2 1.2.2 Design Two Fiber Meet Point: CLEC will provide fiber cable to the last entrance manhole at the SBC MISSOURI tandem or end office switch with which CLEC wishes to interconnect. CLEC will provide a sufficient length of fiber optic cable for SBC MISSOURI to pull the fiber cable to the SBC MISSOURI cable vault for termination**.** In this case the POI shall be at the manhole location.

1..2.2.1 Each Party is responsible for designing, provisioning, ownership and maintenance of all equipment and facilities on its side of the POI. Each Party is free to select the manufacturer of its Fiber Optic Terminal (FOT). Neither Party will be allowed to access the Data Communication Channel (DCC) of the other Party's FOT.

1.2.2.2The fiber connection point shall occur at the following location:

1.2.2.2.1 A manhole outside of the SBC MISSOURI central office. In this situation, CLEC will provide sufficient fiber optic cable for SBC MISSOURI to pull the cable into the SBC MISSOURI cable vault for termination. The POI will be at the manhole and SBC MISSOURI will assume maintenance responsibility for the fiber cabling from the manhole to the FDF.

*2 1.3 Consistent with this Agreement**,** the Parties will mutually agree upon the precise terms of each mid-span meet point facility. These terms will cover the technical details of the meet point as well as other network interconnection, provisioning and maintenance issues.

1.4 The SBC MISSOURI tandem or end office switch includes all SBC MISSOURI FOT, multiplexing and fiber required to take the optical signal hand-off provided from CLEC for Local Interconnection Trunk Groups as outlined in Appendix ITR. This location is SBC MISSOURI' responsibility to provision and maintain.

*2 1.5 In both designs**,** CLEC and SBC MISSOURI will mutually agree on the capacity of the FOT(s) to be utilized. The capacity will be based on equivalent DS1s that contain Local Interconnection Trunk Groups. Each Party will also agree upon the optical frequency and wavelength necessary to implement the interconnection. The Parties will develop and agree upon methods for the capacity planning and management for these facilities, terms and conditions for over-provisioning facilities, and the necessary processes to implement facilities as indicated below. These methods will meet quality standards as mutually agreed to by CLEC and SBC MISSOURI.

2. AVOIDANCE OF OVER-PROVISIONING

Underutilization is the inefficient deployment and use of the network due to forecasting a need for more capacity than actual usage requires and results in unnecessary costs for SONET systems. To avoid over-provisioning, the Parties will agree to joint facility growth planning as detailed below.

3. JOINT FACILITY GROWTH PLANNING

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3.1 The initial fiber optic system deployed for each interconnection shall be the smallest standard available. For SONET this is an OC-3 system. The following lists the criteria and processes needed to satisfy additional capacity requirements beyond the initial system.

3.2 Criteria:

3.2.1 Investment is to be minimized;

3.2.2 Facilities are to be deployed in a "just in time" fashion.

3.3 Processes:

3.3.1 Discussions to provide relief to existing facilities will be triggered when either Party recognizes that the overall system facility (DS1s) is at 65% capacity.

3.3.2 Both Parties will perform a joint validation to ensure current trunks have not been over-provisioned. If any trunk groups are over-provisioned, trunks will be turned down as appropriate. If any trunk resizing lowers the fill level of the system below 65% the growth planning process will be suspended and will not be reinitiated until a 65% fill level is achieved. Trunk design blocking criteria described in Appendix ITR will be used in determining trunk group sizing requirements and forecasts.

3.3.3 If based on the forecasted equivalent DS1 growth, the existing fiber optic system is not projected to exhaust within one year, the Parties will suspend further relief planning on this interconnection until a date one year prior to the projected exhaust date. If growth patterns change during the suspension period, either Party may re-initiate the joint planning process;

3.3.4 If the placement of a minimum size FOT will not provide adequate augmentation capacity for the joint forecast over a two year period, and the forecast appears reasonable based upon history, the appropriately sized system shall be deployed at the outset. If the forecast indicates volume sufficient to justify a system larger than OC-3, SBC MISSOURI shall provide such a system. If the forecast does not justify installing a system larger than OC-3, another minimally size system (such as on OC-3) should be placed. This criteria assumes both Parties have adequate fibers for either scenario. If adequate fibers do not exist, both Parties would negotiate placement of additional fibers.

3.3.5 Both Parties will negotiate a project service date and corresponding work schedule to construct relief facilities in an effort to achieve "just in time" deployment;

3.3.6 The joint planning process/negotiations should be completed within two months of identification of 70% fill.

4. VIRTUAL COLLOCATION

The description of Virtual Collocation is contained in SBC MISSOURI' Virtual Collocation tariffs (i.e., SBC MISSOURI' Tariff F.C.C. No. 73 and SBC MISSOURI' Virtual Collocation Tariff).

5. SONET-BASED

The description for obtaining interconnection by SONET-Based methods is contained in SBC MISSOURI' SONET-Based Interconnection tariffs (i.e., SBC MISSOURI' Tariff F.C.C. No. 73 *(*Federal Access Tariff for SBC-SOUTHWEST).

6. PHYSICAL COLLOCATION

The terms and conditions governing Physical Collocation are contained in Appendix Collocation to Attachment 13: Ancillary Functions of this Agreement.

7. LEASING OF FACILITIES FROM A THIRD PARTY OR CLEC SELF-BUILDOUT

7.1 CLEC's leasing of facilities from a Third Party Carrier or self-buildout for purposes of Attachment 11: Network Interconnection Architecture shall be up to the discretion of CLEC.

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*1 CLEC's leasing of SBC MISSOURI' facilities for purposes of Attachment 11: Network Interconnection Architecture will be subject to the mutual agreement of the Parties. CLEC will have the option to lease interconnection facilities at the rates found in Appendix Pricing UNE - Schedule of Prices and as specific elsewhere herein.

*1 Issue 1