NEVADA BELL TELEPHONE COMPANY
DESCRIPTION AND JUSTIFICATION
October 12, 2007
TRANSMITTAL NO. 169

PURPOSE

With this filing, Nevada Bell Telephone Company (NBTC) is proposing to introduce the Virtual Concatenation (VCAT) functionality. VCAT is a new enhancement to the existing Ethernet over SONET (EoS) offering that allows customers more flexibility and efficiencies when mapping their traffic requirements onto Dedicated SONET Ring Service (DSRS), or dropping Ethernet off their Optical Carrier Network (OCN) Point-to-Point Service. In addition to the new VCAT description, port interfaces, USOCs, monthly and non-recurring charges being added to DSRS, this filing will also include the following revisions: 1) Clarifying language is being added to the existing DSRS EoS Section regarding Single-Mode Fiber and EoS line rates. Ports have always been generic and available per Central Office or Customer Premises. The limitations are in the Central Office and not the customer premises. Verbiage is being added to clearly note that only Single-Mode Fiber is available in the Central Office. Neither copper nor Multi-mode fiber is available. 2) The existing DSRS port interface charts are being modified to include updated Ethernet port interface options. Text changes were also made to the charts to standardize the existing lists.

For OCN, this filing includes the introduction of the Ethernet over SONET feature, along with the VCAT functionality; a new Add/Drop Function; new configurations; two new applications, SONET Mapped Optical Arrangement with a MUX (SMUX), and Dedicated Interconnection Network (DIN); and Ethernet Optical Collocation Cross-Connect. New USOCs, monthly and non-recurring charges and administrative charges are also being introduced to OCN. Additionally, this filing will include the following OCN revisions: 1) The addition of the term, SONET Mapped Optical Arrangement (SMOA), to the already defined application in the OCN tariff; and 2) Text changes were made throughout the General Description Section to remove existing bullets/dashes and replace them with the numerically outlined format. None of the revisions included in this filing will adversely affect existing customers.

DESCRIPTION

Ethernet over SONET allows the efficient transport of Ethernet frames using SONET. Ethernet ports will be available in bandwidths up to the Ethernet interface of 100 Mbps or 1 Gbps on Dedicated SONET Ring Service, and up to 1 Gbps on OCN Point-to-Point Service.

Virtual Concatenation provides the ability and flexibility to size the customer's bandwidth, sub-rate VT1.5 and super-rate STS-1 and 3c service payloads based on their traffic requirements. For transport of payloads that do not fit efficiently into the standard set of VT1.5, STS-1 and STS-Nc payload envelopes, virtual concatenation can be used.

When ordering riding Ethernet services, the bandwidth amount is now more adjustable. The traditional EoS services were limited to the standard SONET levels of STS (50 Mb), STS-3c (150 Mb), STS-12c(600 Mb), and STS-24c(1000 Mb). VCAT will allow the customer to choose bandwidth amounts in between all of these standard levels. For example, the customer can choose a 200 Mb service which results in a STS-1-4v. VCAT also provides additional flexibility and efficiency by not requiring consecutive channels. The customer can now identify non-consecutive STSs for a service (i.e. STS 1, 4, 8, 12 for the above example). VCAT is available in both Low Order (VT-1.5s) and High Order (STSs).

Two new applications, SONET Mapped Optical Arrangement with a Mux (SMUX) and Dedicated Interconnection Network (DIN), were added to OCN. The DIN & SMUX applications were added to OCN, as currently there is no CO-to-CO interconnect optical interfaces between central office nodes off of a DSRS. The existing USOCs and rate elements will support these new applications.

SMUX is a serving arrangement whereby OC-3, OC-12, OC-48 and OC-192 channels may be used to connect a Dedicated SONET Ring Service node in a Telephone Company location where add/drop multiplexing and add/drop functions are performed.

DIN is a serving arrangement whereby OC-3, OC-12, OC-48 and OC-192 channels may be used to connect two Dedicated SONET Facility nodes in the same or different Telephone Company location.

PRICE CAP COMPLIANCE

With this filing, NBTC is introducing the new enhancement, Virtual Concatenation, to the existing offering of Ethernet over SONET for DSRS. Additionally, new features such as Ethernet over SONET, along with the VCAT functionality; a new Add/Drop Function; and two new applications, SMUX and DIN, will be added to the OCN PTP Service. No supporting documentation is required for a new service filing, as discussed in Section 61.49 of the *Code of Federal Regulations*.