

ACCESS SERVICE

7. Special Access Service

7.1 General

Special Access Service provides a transmission path to connect customer designated premises\*, either directly or through a Utility Hub where bridging or multiplexing functions are performed, or to connect a customer designated premises to an EIS point of termination. Special Access includes SONET Ring and Access Service®, OC-192 Dedicated SONET Ring Service and all exchange access not utilizing Utility end office switches.

The connections provided by Special Access Service can be either analog or digital. Analog connections are differentiated by spectrum and bandwidth. Digital connections are differentiated by bit rate.

7.1.1 Channel Types

There are several types of channels used to provide Special Access Services. Each type has its own characteristics. All are subdivided by one or more of the following:

- Transmission specifications,
- Bandwidth,
- Speed (i.e., bit rate),
- Spectrum

- \* Utility Centrex CO-like switches and ports included in Public Packet Switching (PPS) service<sup>#</sup>, \*\*, BITS Timing Clocks, as well as Primary Rate ISDN (PRI) service, are considered to be customer premises for purposes of administering regulations and rates contained in this tariff. Thus, two Channel Termination charges are applicable for each DS1 or other digital transport facility connected to Primary Rate ISDN (PRI) service. (T)  
(T)  
(N)  
|  
(N)
- # Frozen/Grandfathered Service effective October 12, 2004. See General Regulations, Schedule Cal.P.U.C. No. 175-T, Section 2.1.4, (F).
- \*\* Public Packet Switching service withdrawn July 1, 2012.
- @ Frozen/Grandfathered SONET Ring and Access Service effective June 30, 2006, pending CPUC Resolution. See General Regulations, Schedule Cal.P.U.C. No. 175-T, Section 2.1.4, (F).

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.1 General (Cont'd)

7.1.1 Channel Types (Cont'd)

Customers can order a basic channel and select, from a list of available transmission parameters and channel interfaces, those that they desire to meet specific communications requirements.

For purposes of ordering channels, each has been identified as a type of Special Access Service. However, such identification is not intended to limit a customer's use of the channel nor to imply that the channel is limited to a particular use. For example, if a customer's equipment is capable of transmitting voice over a channel that is identified as a Metallic Service in this tariff, there is no restriction against doing so.

Following is a brief description of each type of channel:

Metallic\* - a channel for the transmission of low speed varying signals at rates up to 30 baud.

Telegraph Grade\*\* - a channel for the transmission of binary signals at rates of 0 to 75 baud or 0 to 150 baud.

Voice Grade - a channel for the transmission of analog signals within an approximate bandwidth of 300-3000 Hz.

(D)  
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(D)

Video - a channel for the transmission of standard 525 line/60 field monochrome or National Television Systems Committee color video signal and one to four associated 5 or 15 KHz audio signals. The bandwidth for a video channel is either 30 Hz to 4.5 MHz or 30 Hz to 6.6 Mhz. Or, a digital broadband pipe of uncompressed video and audio at a rate of 270 Mbps.

\* Limited Offering Service provided only to existing customers and services working as of January 1, 1995. See General Regulations 2.1.4, (C) preceding.

\*\* Frozen/Grandfathered Service provided only to existing customers and services working as of the effective date of Advice Letter No. 18405. Additions, deletions, moves, or changes will result in complete disconnection of the service. See General Regulations 2.1.4, (E) preceding.

Continued

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7. Special Access Service (Cont'd)

7.1 General (Cont'd)

7.1.1 Channel Types (Cont'd)

Digital Data - a channel for the digital transmission of synchronous serial data at rates of 2.4, 4.8, 9.6 or 56.0 kbps.

Advanced Digital Network - a channel for the digital transmission of synchronous serial data at the fixed speeds of 2.4, 4.8, 9.6, 19.2, 56, 64 Kbps and 1.544 Mbps. Also variable speed bands of 1.2 to 38.4 Kbps and 1.2 to 64.0 Kbps.\*

High Capacity - a channel for the transmission of isochronous serial digital data at rates of 1.544, 3.152, 6.312, 44.736 or 274.176 Mbps.

SONET Ring and Access Service<sup>#</sup> - a channel for the transmission of synchronous or asynchronous data at the rates of 1.5, 45, 155 and 622 Mbps or 2.4 Gbps, 100 Mbps and 1 Gbps.

GigaMAN<sup>SM</sup> - a channel for the transmission of one-way digital signals at 1 Gbps.

Dedicated OC-192 SONET Ring Service - is a 9.953 Gbps transport Service. OC-192 is designed for transport of lower speed optical services, e.g., OC-3 or OC3c, OC-12 or OC-12c, OC-48 or OC-48c, and 1 Gbps.

Optical Carrier Network (OCN), Point to Point service, designed for transport of synchronous data at the rates of 155.52 Mbps, 622.08 Mbps, 2488.32 Mbps and 9953.28 Mbps.

Multi-service Optical Network Ring service - designed for the physical transport of multiple data signals utilizing each of these wavelengths represents a transmission channel in the MON Ring system and is protocol independent of every other channel in the system, as set forth in Schedule Cal.P.U.C. No. D12.@

(N)

Detailed descriptions of each of the channel types are provided in 7.2 following.

\* Provided only to existing customers and services working as of January 1, 1995.

# Frozen/Grandfathered SONET Ring and Access Service effective June 30, 2006, pending CPUC Resolution. See General Regulations, Schedule Cal.P.U.C. No. 175-T, Section 2.1.4, (F).

@ Effective December 1, 2012, MON Ring Service is Grandfathered and limited to customers with existing service. For additional information see Schedule Cal. P.U.C. No. D12.2, Limited Offer.

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ACCESS SERVICE

7. Special Access Service (Cont'd)

7.1 General (Cont'd)

7.1.1 Channel Types (Cont'd)

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(D)

OC-3, OC-12, OC-48 Dedicated SONET Ring Service provides dedicated bandwidth capacity over a self-healing ring for a single customer for the purpose of transporting the customer's data over a dedicated network.

The customer also has the option of ordering digital High Capacity or Fiber Advantage<sup>SM</sup> facilities (i.e., 1,544 Mbps, 3.152 kbps, 6.312 Mbps, 44.736 Mbps and 274.176 Mbps) to a Utility Hub for multiplexing to individual channels of a lower capacity bandwidth. Descriptions of the types of multiplexing available at the Hubs, as well as the number of individual channels which may be derived from each type of facility, are set forth in 7.2 following. Additionally, the customer may specify optional features for the individual channels derived from the facility to further tailor the channel to meet specific communications requirements. Descriptions of the optional features and functions available are also set forth in 7.2 following.

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ACCESS SERVICE

7. Special Access Service (Cont'd)

7.1 General (Cont'd)

7.1.1 Channel Types (Cont'd)

For example, a customer may order a 3.152 Mbps facility from a customer designated premises to a Utility Hub for multiplexing to two 1.544 Mbps channels. The 1.54 Mbps channels may be further multiplexed at the same or a different Hub to Voice Grade channels or may be extended to other customer designated premises. Optional features may be added to either the 1.544 Mbps or the Voice Grade Channels. (L)

7.1.2 Reserved (L)

(L) Formerly on Sheet 240.

Continued

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7. Special Access Service (Cont'd)

7.1 General (Cont'd)

7.1.3 Rate Categories

There are six basic rate categories which apply to Special Access Service:

- Channel Terminations (described in 7.1.3, (A) following)
- Channel Mileage (described in 7.1.3, (B) following)
- SONET Ring and Access Services\*
- Optional Features and Functions (described in 7.1.3, (E) following)
- OC-192 Dedicated SONET Ring Service
- Optical Carrier Network (OCN) Point to Point Service

In addition, a Special Access Surcharge may apply, as set forth in 7.4.2 following.

(A) Channel Termination/Local Distribution Channel

The Channel Termination rate category provides for the communications path between a customer designated premises and the serving wire center of that premises. Included as part of the Channel Termination is a standard channel interface arrangement which defines the technical characteristics associated with the type of facilities to which the access service is to be connected at the Point of Termination (POT) and the type of signaling capability, if any. The signaling capability itself is provided as an optional feature as set forth in 7.1.4 following. One Channel Termination charge applies per customer designated premises at which the channel is terminated. This charge will apply even if the customer designated premises and the serving wire center are collocated in a Utility building. Thus, two Channel Termination charges are applicable for each DS1 or other digital transport facility connected to Primary Rate ISDN (PRI) service. Channel Termination and Local Distribution Channel may be used interchangeably.

(N)  
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(N)

\* Frozen/Grandfathered SONET Ring and Access Service effective June 30, 2006, pending CPUC Resolution. See General Regulations, Schedule Cal.P.U.C. No. 175-T, Section 2.1.4, (F).

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.1 General (Cont'd)

7.1.3 Rate Categories (Cont'd)

(A) Channel Termination (Cont'd)

For DS1 High Capacity Synchronous Timing Service connecting a customer designated premises or EIS collocation arrangement to a wire center Building Integrated Timing Supply (BITS) timing clock will be charged only one Channel Termination or EISCC. There is no charge of the Channel Termination at the BITS timing clock.

(B) Channel Mileage/Interoffice Transport

(T)

The Channel Mileage rate category provides for the transmission facilities between the serving wire centers associated with two customer designated premises, between the serving wire centers associated with a customer designated premises and a Utility Hub or between two Utility Hubs. Channel mileage is portrayed in mileage bands. There are two rates that apply for each band, i.e., a flat rate per band and a rate per mile. The flat rate Channel Mileage charge is charged on a per segment basis. Refer to 7.4.6 following for rate regulations relating to mileage measurement. Channel Mileage and Interoffice Transport may be used interchangeably.

(T)

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ACCESS SERVICE

7. Special Access Service (Cont'd)

7.1 General (Cont'd)

(T)

7.1.3 Rate Categories (Cont'd)

(D)

(C) SONET Ring and Access Services\*

(N)

SONET Ring and Access Rate Category provides for communications paths for dedicated ring and point to point configurations connecting customer premises. Channel Terminations from High Capacity or Fiber Advantage may be aggregated (a.k.a. multiplexed) onto SONET Ring and Access Services.

\* Frozen/Grandfathered SONET Ring and Access Service effective June 30, 2006, pending CPUC Resolution. See General Regulations, Schedule Cal.P.U.C. No. 175-T, Section 2.1.4, (F).

(N)

(N)

Continue



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7. Special Access Service (Cont'd)

7.1 General (Cont'd)

7.1.3 Rate Categories (Cont'd)

(E) Optional Features and Functions

The Optional Features and Functions rate category provides for optional features and functions which may be added to a Special Access Service to improve its quality or utility to meet specific communications requirements. These are not necessarily identifiable with specific equipment, but rather represent the end result in terms of performance which characteristics may be obtained. These characteristics may be obtained by using various combinations of equipment. Although the equipment necessary to perform a specified function may be installed at various locations along the path of the service, they will be charged for as a single rate element.

Examples of Optional Features and Functions that are available include, but are not limited to, the following:

- Signaling Capability
- Hubbing Functions
- Conditioning
- Transfer Arrangements

A Hub is a Utility designated serving wire center at which bridging or multiplexing functions are performed. The bridging functions performed are to connect three or more customer designated premises in a multipoint arrangement, or connect two Video Services customer premises via a Service Through-Connect. The multiplexing functions are to channelize analog or digital facilities to individual services requiring a lower capacity or bandwidth.

(C)  
(C)

Descriptions for each of the available Optional Features and Functions are set forth in 7.2 following.

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7. Special Access Service (Cont'd)

7.1 General (Cont'd)

7.1.4 Service Configurations

There are three types of service configurations over which Special Access Services are provided: two-point service, multipoint service and SONET Ring and Access Service.

(A) Two-Point Service

A two-point service connects two customer designated premises or connects a customer designated premises to an EIS point of termination, either on a directly connected basis or through a Hub where multiplexing functions are performed.

A two-point Video Service connects two customer-designated premises or connects a customer designated premises to an EIS Point of Termination, through a Utility-designated Hub only by using a Video Service Service Through-Connect.

Applicable rate elements are:

- Channel Terminations\*
- Channel Mileage (as applicable)
- Optional Features and Functions (when applicable)

\* SONET Ring and Access Service equivalents to a Channel Termination are (1) Local Loop Access Links, (2) Premise Access Ports or (3) Customer Provided Nodes as defined in Section 7.2.9 following.

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ACCESS SERVICE

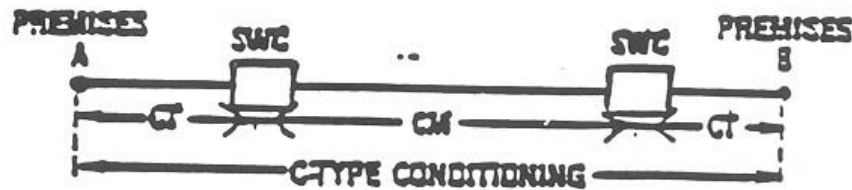
7. Special Access Service (Cont'd)

7.1 General (Cont'd)

7.1.4 Service Configurations (Cont'd)

(A) Two-Point Service (Cont'd)

- (1) The following diagram depicts a two-point Voice Grade service connecting two customer designated premises located 15 miles apart. The service is provided with C-Type Conditioning.



Applicable rate elements are:

- Channel Terminations (2 applicable) (T)
- Channel Mileage (mileage band Over 0 miles) (T)
- C-Type Conditioning Optional Feature

(D)

(D)

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ACCESS SERVICE

7. Special Access Service (Cont'd)

7.1 General (Cont'd)

7.1.4 Service Configurations (Cont'd)

(B) Multipoint Service

Multipoint service connects three or more customer designated premises through a Utility Hub. There is no limitation on the number of mid-links available with Multipoint service. However, when more than three mid-links are provided in tandem, the quality of the service may be degraded. A mid-link is a channel between Hubs (i.e., bridging locations). Only certain types of Special Access Service are provided as multipoint service. These are so designated in the Service Descriptions set forth in 7.2. following.

Multipoint service utilizing a customized technical specifications package as set forth in 7.2 following will be provided when technically possible. If the Utility determines that the requested characteristics for a multipoint service are not compatible, the customer will be advised and given the opportunity to change the order.

When ordering, the customer may specify the desired bridging Hubs selected from The National Exchange Carrier Association (NECA) Tariff F.C.C. No. 4, Section 69. (T)  
For Information on how to obtain copies of the NECA Tariff see Section 14 following. If the customer does not specify the bridging hub location(s), the Utility will designate the appropriate bridging hub location(s) based on the facilities required to provide the service. (N)  
The channel mileage per-mile rate element will be applied on the shortest combination of airline miles which will connect the serving wire centers of the customer designated premises. (T)

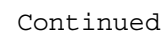
This tariff identifies the type(s) of bridging functions which are available and the serving wire centers at which they are available.

Applicable Rate Elements are:

- Channel Terminations (one per customer designated premises)
- Channel Mileage (as applicable between each serving wire center and the Hub and between Hubs)
- Bridging
- Additional Optional Features (when applicable)

Continued

(T)



ACCESS SERVICE

7. Special Access Service (Cont'd)

7.1 General (Cont'd)

7.1.4 Service Configurations (Cont'd)

(B) Multipoint Service (Cont'd)

Utility specified bridging hub example:

Voice Grade multipoint service connecting four customer  
premises via two customer specified bridging hubs.

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ACCESS SERVICE

7. Special Access Service (Cont'd)

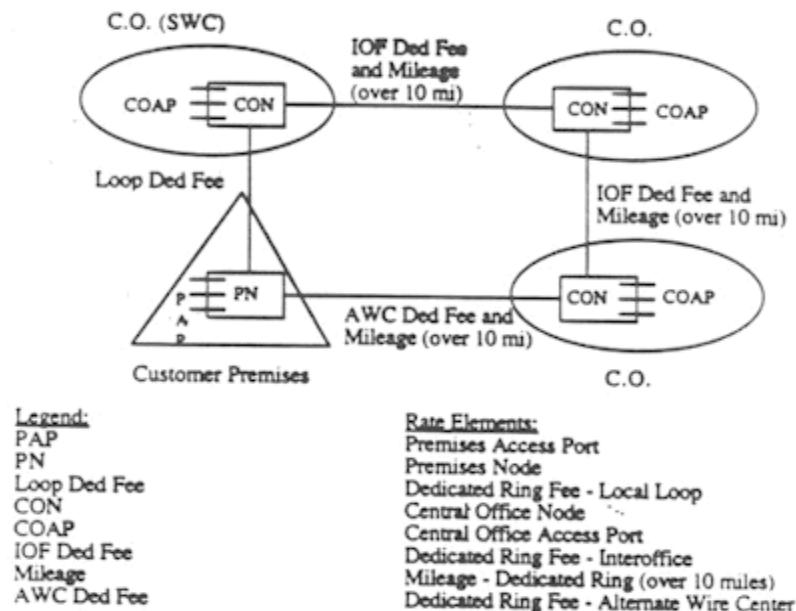
7.1 General (Cont'd)

7.1.4 Service Configuration (Cont'd)

(C) SONET Ring and Access Services\*: Dedicated Ring Service. (N)

The ring interconnects Utility central offices or customer premises or combinations of both. The rings may interconnect to other Special Access Services. The customer subscribes to the full bandwidth capacity of the ring and designates the location and number of nodes. A node aggregates lower bandwidth capacities onto the ring facility.

Rings are defined through use of interoffice or loop facilities in connecting CO Nodes and Premises Nodes. Dedicated rings may be configured using interoffice facilities connecting CO Nodes or using loop facilities connecting one or more Premises Node to a CO Node in a serving wire center. Dedicated rings may also be configured using both loop and interoffice facilities connecting one or more Premises Nodes to multiple CO Nodes.



\* Frozen/Grandfathered SONET Ring and Access Service effective June 30, 2006, (N)  
pending CPUC Resolution. See General Regulations, Schedule Cal.P.U.C.  
No. 175-T, Section 2.1.4, (F). (N)

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# ACCESS SERVICE

## 7. Special Access Service (Cont'd)

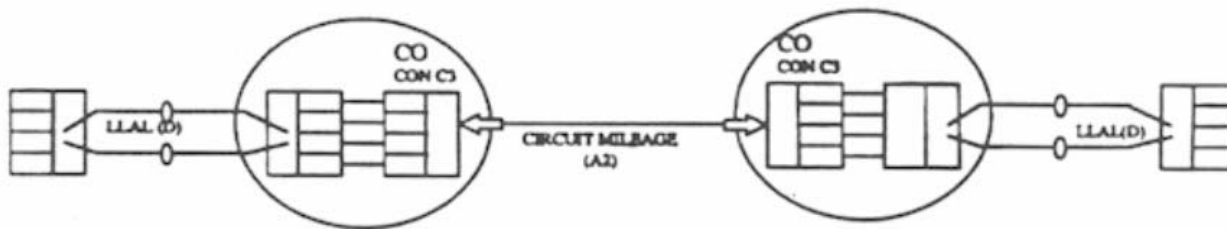
### 7.1 General (Cont'd)

#### 7.1.4 Service Configuration (Cont'd)

##### (C) SONET Ring and Access Service - Circuit Service<sup>#</sup>

(N)

In the circuit service the customer selects bandwidth capacity for an end to end circuit (two point). Local Loop Access Links designate bandwidth for connecting the customer's premises to the central office. In the central office the circuit service connects to an interoffice facility consisting of two CO Nodes and interoffice facility. In the diagram below the applicable rate elements are indicated with an asterik (\*).



#### List of All Rate Elements

- |   |   |
|---|---|
| A1: Mileage for Dedicated IOF Ring                  | C3: CO Node - Circuit Service*                                |
| A2: Mileage for Circuit Service*                    | D: Local Loop Access Link with Equipment*                     |
| B1: Dedicated Ring Fees - Per CO Node on IOF Ring   | E: Premises Access Ports                                      |
| B2: Dedicated Ring Fee - Per Local Loop Access Ring | F: Central Office Access Ports                                |
| C1: CO Node - Dedicated Ring Service                | G: Primary Node Link  |
| C2: Premises Node - Dedicated Ring Service          | H: CO Multiplexing (optional service not depicted in diagram) |

# Frozen/Grandfathered SONET Ring and Access Service effective June 30, 2006, pending CPUC Resolution. See General Regulations, Schedule Cal.P.U.C. No. 175-T, Section 2.1.4, (F).

(N)  
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(N)

Continued



ACCESS SERVICE

7. Special Access Service (Cont'd)

7.1 General (Cont'd)

7.1.4 Service Configurations (Cont'd)

(D) Reserved

(T)

(D)

(D)

Continued

# ACCESS SERVICE

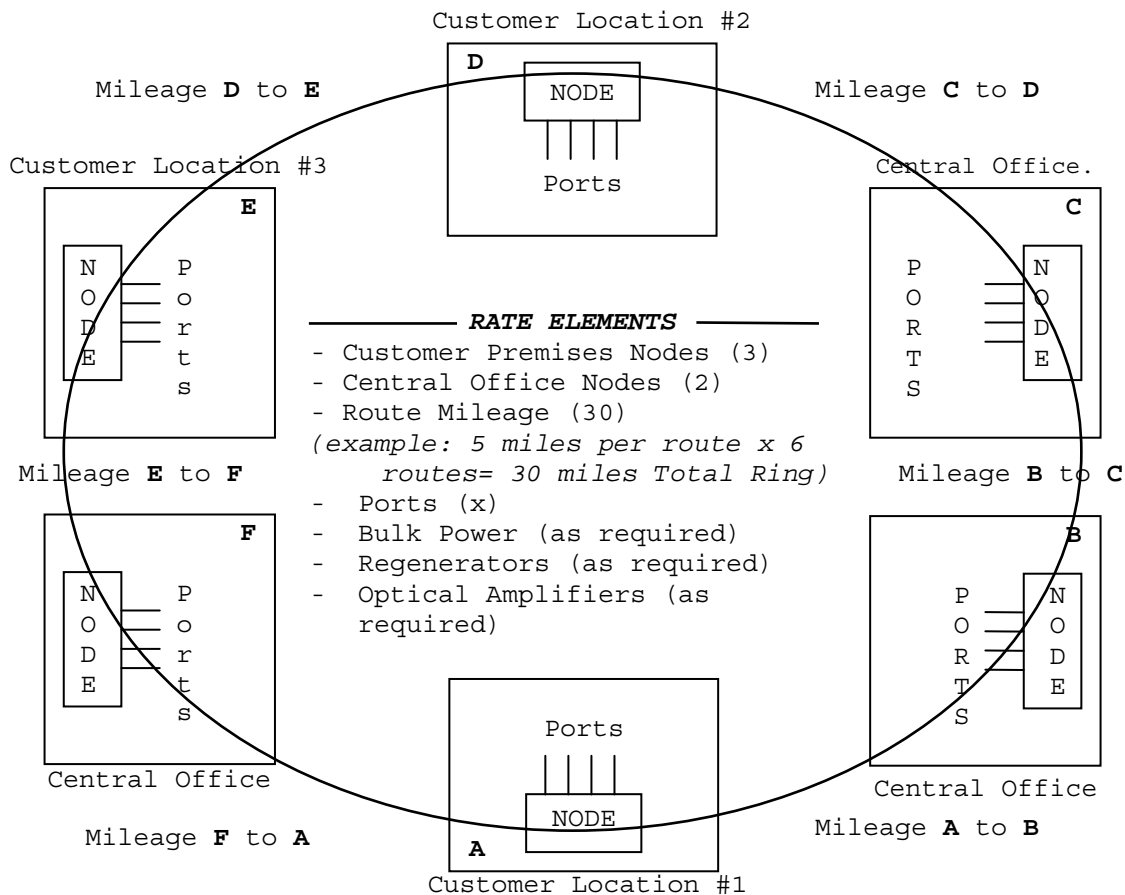
## 7. Special Access Service (Cont'd)

### 7.1 General (Cont'd)

#### 7.1.4 Service Configurations (Cont'd)

(E) Multi-service Optical Network Ring Service (MON)\*, #

(N)



\* For additional information regarding Multi-service Optical Network (MON) Ring service, refer to Schedule Cal.P.U.C. No. D12, Special Access Service, MON Ring Service.

# Effective December 1, 2012, MON Ring Service is Grandfathered and limited to (N) customers with existing service. For additional information see Schedule Cal. P.U.C. No. D12.2, Limited Offer. (N)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.1 General (Cont'd)

7.1.5 Alternate Use

Alternate Use occurs when a service is arranged by the Utility (T) so that the customer can select different types of transmission at different times. A customer may use a service in any privately beneficial manner. However, where technical or engineering changes are required to effectuate an alternate use, the Utility will make such special arrangements available on an individual case basis.

The arrangement required to transfer the service from one operation to the other (i.e., the transfer relay and control leads) will be rated and provided on an individual case basis and filed in Section 12., Specialized Service or Arrangements. The customer will pay the stated tariff rates for the Access Service rate elements for the service ordered (i.e., Channel Terminations, Channel Mileage [as applicable] and Optional Features [if any]). (T)

7.1.6 Special Facilities Routing (L)

A customer may request that the facilities used to provide Special Access Service be specially routed. The regulations, rates and charges for Special Facilities Routing (i.e., Avoidance, Diversity and Cable-Only) are set forth in Section 11. following. (L)

7.1.7 Design Layout Report (L)

At the request of the customer, the Utility will provide to the customer the make-up of the facilities and services provided under this tariff as Special Access Service to aid the customer in designing its overall service. This information will be provided in the form of a Design Layout Report. The Design Layout Report will be provided to the customer at no charge, and will be reissued or updated whenever these facilities are materially changed. (L)

Material on this sheet formerly on Sheet 244.

Material omitted now in different form on Sheet 249.

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.1 General (Cont'd)

(D)

(D)

Material omitted now on in different form on Sheets 249.

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.1 General (Cont'd)

7.1.8 Acceptance Testing

At no additional charge, the Utility will, at the customer's request, cooperatively test at the time of installation, the following parameters:

(A) For Voice Grade analog services, acceptance tests will include tests for loss, 3-tone slope, DC continuity, operational signaling, C-notched noise, and C-message noise when these parameters are applicable and specified in the order for service. Additionally, for Voice Grade Services, a balance (improved return loss) test will be made if the customer has ordered the improved loss optional feature.

(B) For other analog services (i.e., Metallic, Telegraph, Video, Wideband Analog, and Wideband Data) and for digital services (i.e., Digital Data and High Capacity), acceptance tests will include tests for the parameters applicable to the service as specified in the order for service.

(D)

In addition to the above tests, Additional Cooperative Acceptance Testing for Voice Grade Service to test other parameters, as described in Section 13.3.5(B) following, is available at the customer's request. All tests results will be made available to the customer upon request.

Acceptance testing will be performed at the Utility's local loop demarcation point. The Utility may perform additional testing on the customer's side of the local loop demarcation point at the customer's request and expense.

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.1 General (Cont'd)

7.1.9 Ordering Options and Conditions

Special Access Service is ordered under the Access Order provisions set forth in Section 5. preceding. Also included in that section are other charges which may be associated with ordering Special Access Service (e.g., Service Date Change Charges, Cancellation Charges, etc.).

Certain Special Access Services may be offered to a customer through a Sales Agency Program as set forth in Schedule Cal.P.U.C. Nos. A2.1.1, Rule 1 - Definition of Terms. See also, A2.3 - Form, Network Services Marketing Agreement, Form No. UE 0028. The services available under a Sales Agency Program are:

(T)

- Advanced Digital Network (ADN)
- Digital Data Service (DDS)\*
- High Capacity Service (HCS)

(T)

\* Limited Offering Service as of January 1, 1995. See 2.1.4, (C) preceding for description.

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(D)

(D)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.1 General (Cont'd)

7.1.10 Voice Grade Services Conversion Offering

(N)

(A) Description

The Utility will waive all Advanced Digital Network (ADN) nonrecurring charges associated with fixed speed channel terminations for customers with any existing Voice Grade Service who order the conversion to ADN service, and commit to retain it for a minimum of two years (24 months) from the installation date.

(B) Regulations

- (1) This offering is for customers with any existing Voice Grade Service who order the conversion to fixed speed ADN where facilities permit. The Utility will waive the ADN channel termination nonrecurring charges for an equal number of Voice Grade terminations being converted on the existing circuit. If the customer orders ADN terminations that exceed the number of converted Voice Grade terminations, then the appropriate nonrecurring charges will apply.
- (2) The customer is required to retain the ADN service for a minimum period of two years (24 months) from the installation date of said service.
- (3) The customer may make changes, except a disconnection, to the service during the two year minimum period at the applicable tariffed rates and charges.
- (4) If at any time during the two year (24 months) minimum period following installation, the AND service is disconnected as a result of a customer request or disconnection of the customer's service in accordance with the Utility's applicable tariffs, the customer will be charged a portion of the nonrecurring charges waived at the time of installation. Each month the customer retains the service the termination liability will be reduced by 1/24th of the nonrecurring rate in effect at the time of installation.

(N)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.1 General (Cont'd)

7.1.11 Term Offering for High Capacity Service (1.544 Mbps)\* (N)

(A) Description

The Utility will waive the nonrecurring charge for a High Capacity Service (1.544 Mbps) channel termination in areas where the Utility has existing and available fiber facilities between the customer's serving wire center and the customer's premises location. In order to determine whether suitable facilities are available, a service inquiry is initiated through a Utility business office.

(B) Regulations

- (1) The 1.544 Mbps channel termination will be installed and nonrecurring charges waived only at the customer premises where the High Capacity service terminates and facilities permit. All other charges will incur the applicable rates and charges as stated in the tariff.
- (2) The customer is required to retain the service for a minimum period of two-years (24 months)\* from the installation date. (N)
- (3) The customer may make changes, except a disconnection, to the service during the two-year minimum period at the applicable tariffed rates and charges. (T)
- (4) If at any time during the two-year (24 months)\* minimum period following installation, the service is disconnected as a result of a customer request or disconnection of the customer's service in accordance with the Utility's applicable tariffs, the customer will be charged a portion of the nonrecurring charges waived at the time of installation. Each month the customer retains the service the termination liability will be reduced by 1/24th of the nonrecurring rate in effect at the time of installation. (N) (T)

\* As of January 15, 2021, 2- and 3-Year Rate Stability/Term Payment Plans are no longer available to new or renewing subscribers. (N) (N)

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7. Special Access Service (Cont'd)

7.1 General (Cont'd)

7.1.11 Term Offering for High Capacity Service (1.544 Mbps) (Cont'd)

(B) Regulations (Cont'd)

- (5) A change from a channel termination as described in this Schedule to a channel termination as described in the Utility's Tariff F.C.C. No. 1 will be considered a (T) service disconnection, and will be subject to the termination liability as described above.

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Service Descriptions

For the purposes of ordering, these are the categories of  
Special Access Service:

Metallic (MT)\*

(D)

Telegraph Grade (TG)#

Video (TV)

Voice Grade (VG)

Digital Data (DA)\*

- Universal WATS Access  
Line (UWAL)

Advanced Digital Network (ADN)

- Private Virtual Network  
Access Line (PVNAL)

High Capacity (HC)

SONET Ring and Access Service®

Optical Carrier Network  
(OCN) Point to Point  
Service

GigaMAN Service

OC-192 Dedicated SONET Ring  
Service

Multi-service Optical Network  
Point to Point Service

OC-3, OC-12 and OC-48

Multi-service Optical Network

Dedicated SONET Ring Service

Ring Service\*\*

Each service consists of a basic channel to which a technical specifications package (customized or predefined), channel interface and when desired optional features and functions are added to construct the service desired by the customer. Each of the components of the service are described in this section. Technical limitations may exist that affect the provisioning of services as shown in 7.2.1 and 7.2.2, depending on the availability of equipment and facilities. The Utility will provide reasonable notification to the customer of any limitations that materially affect the operating characteristics of the special access service. (See Section 2.1.7 for information concerning changes and substitutions.)

Customized technical specifications packages will be provided where technically feasible. If the Utility determines that the requested parameter specifications are not compatible, the customer will be advised and given the opportunity to change the order.

\* Limited Offering Service provided only to existing customers and services working as of January 1, 1995. See Section 2.1.4 General Regulations preceding. Existing service arrangements will be maintained up to and including the Utility's local loop demarcation point. Work activity beyond the Utility's local loop demarcation point is the responsibility of the customer at the customer's expense.

# Frozen/Grandfathered Service available only to customers and services working as of the effective date of Advice Letter No. 18405. Additions, deletions, moves, or changes will result in complete disconnection of the service. See General Regulations 2.1.4, (E) preceding.

@ Frozen/Grandfathered SONET Ring and Access Service effective June 30, 2006, pending CPUC Resolution. See General Regulations, Schedule Cal.P.U.C. No. 175-T, Section 2.1.4, (F).

\*\* MON Ring Grandfathered effective December 1, 2012. See Schedule Cal.P.U.C. No. 12.2, Limited Offer.

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7. Special Access Service (Cont'd)

7.2 Service Descriptions (Cont'd)

When a customized channel is ordered the customer will be notified whether Additional Engineering Charges apply. In such cases, the customer will be given an estimate of the hours to be billed before any further action is taken on the order.

(L)

The channel description specifies the characteristics of the basic channel and indicates whether the channel is provided between customer designated premises or between a customer designated premises and a Utility Hub where bridging or multiplexing functions are performed.

(L)

(L) Formerly on sheet 249.

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Service Descriptions (Cont'd)

Information pertaining to the technical specifications packages indicates the transmission parameters up to and including the Utility's local loop demarcation point that are available with each package. This information is displayed in a matrix with the transmission parameters listed down the left side and the packages listed across the top. Each package is identified by a code, e.g., VGC. The first two letters of the code indicate the category of Special Access Service to which the parameters are applicable. These two letter codes are shown above in parentheses following the category of Special Access Service. The letter "C" following the two letter code indicates the technical specifications package for a customized service. A numeric or alpha-numeric designation following the two letter code indicates the specific predefined package. For a customized service, the customer may select any parameters available with that category of service as long as the parameters are compatible. When appropriate, the Technical Reference which contains detailed specifications for the parameters is shown following the matrix. (T)

Network channel interfaces at each point of termination on a two-point service may be symmetrical or asymmetrical. On a multipoint service they may also be symmetrical or asymmetrical. However, communications can only be provided between points of termination with compatible channel interfaces. Only certain network channel interfaces are compatible. (T)

Only certain network channel interface combinations are available with the predefined technical specifications packages. These are delineated in the Technical References set forth at the end of 7.2. When a customized channel is requested, all network channel interface combinations available with the specified type of service are available with the customized channel.

The optional features and functions available with each type of Special Access Service are described in this section. The optional features and functions information also indicates with which technical specifications packages they are available. Such information is displayed in a matrix with the optional feature or function listed down the left side and the technical specifications package listed across the top.

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Service Descriptions (Cont'd)

The Utility will maintain existing transmission specifications on services installed prior to the effective date of this tariff except that the existing services with performance specifications exceeding the standard listed in this provision will be maintained at the performance levels specified in this tariff. All services installed after September 6, 1988 will conform to the transmission specification standards contained in the following Technical References for each category of service:

Metallic*	PUB	TR-NPL-000336
Telegraph Grade <sup>#</sup>	PUB	TR-NPL-000336
Voice Grade	PUB	TR-NWT-000335
	PUB	41004, and L-7800042-PB/NB
- WATS Access Line Service		GR-334-CORE
- Universal WATS Access Line Service		GR-334-CORE
- Private Virtual Network Access Line Service	PUB	GR-334-CORE
Program Audio	PUB	TR-NPL-000337
Video	PUB	AM-TR-NIS-000137, L720026PB/NB (C)
Digital Data*	PUB	TR-NWT-000341
	PUB	MDP-326-726
Advanced Digital Network High Capacity	PUB	L-780036-PB
	PUB	62508
		L-780059-PB/NB
- IntraLATA Voice Grade Private Line Service	PUB	TR-NWT-000965 and L-780029-PB
- Data Communications Using Local Area Data Channel	PUB	MDP-326-986
- SONET Ring and Access Service <sup>@</sup>	PUB	L-780046PB/NB
GigaMAN <sup>SM</sup>	PUB	AM-TR-NIS-000104

\* Limited Offering Services - See General Regulations 2.1.4, (C) preceding. Provided only to existing customers and services working as of January 1, 1995. Existing service arrangements will be maintained up to and including the Utility's local loop demarcation point. Work activity beyond the Utility's local loop demarcation point is the responsibility of the customer at the customer's expense.

# Frozen/Grandfathered Service - See General Regulations 2.1.4, (E) preceding.

@ Frozen/Grandfathered SONET Ring and Access Service effective June 30, 2006, pending CPUC Resolution. See General Regulations, Schedule Cal.P.U.C. No. 175-T, Section 2.1.4, (F).

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Service Descriptions (Cont'd)

The Utility will maintain existing transmission specifications on services installed prior to the effective date of this tariff except that the existing services with performance specifications exceeding the standard listed in this provision will be maintained at the performance levels specified in this tariff. All services installed after September 6, 1988 will conform to the transmission specification standards contained in the following Technical References for each category of service: (Cont'd)

OC-n Dedicated SONET Ring Service	PUB	AM TR-NIS-000111	
	PUB	AM TR-TMO-000101	
Optical Carrier Network (OCN) Point to Point Service	PUB	AM-TR-NIS-000111	
	PUB	AM-TR-TMO-000101	
Multi-service Optical Network, Point to Point service	PUB	AM TR-NIS-000100	
		AM TR-NIS-000104	
		AM-TR-NIS-000111	
		AM-TR-TMO-000101	
		AM-TR-TMO-000080	
		AM-TR-MIS-000077	
		IEEE 802.3	
		AM-TR-NIS-000096	
		AM-TR-NIS-000107	
		IBM SA22-7202-XX	
		IBM SA23-0394-XX	
		ANSI X3.T9.3	
		NSI/IEEE 802.3	
Multi-service Optical Ring Network Service (MON Ring)*	PUB	IEEE 802.3x and z	
		ANSI/SMPTE 259M)	
		AM TR-NIS-000100	(N)
		AM TR-NIS-000104	
		AM-TR-NIS-000111	
		AM-TR-TMO-000101	
		AM-TR-TMO-000080	
		AM-TR-NIS-000096	
		AM-TR-NIS-000107	
		IBM SA22-7202-XX	
		IBM SA23-0394-XX	
		ANSI X3.T9.3	
		ANSI/IEEE 802.3	
		IEEE 802.3x and z	
		IEEE 802.3ae	
		ANSI/SMPTE 259M	

\* Effective December 1, 2012, MON Ring Service is Grandfathered and limited to (N) customers with existing service. For additional information see Schedule (N)  
Cal. P.U.C. No. D12.2, Limited Offer.

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Service Descriptions (Cont'd)

(D)

(D)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Service Descriptions (Cont'd)

7.2.1 Metallic Service\*

(A) Basic Channel Description

A Metallic channel is an unconditioned two-wire channel capable of transmitting low speed varying signals at rates up to 30 baud. This channel is provided by metallic or equivalent facilities. Metallic channels are provided between customer designated premises, between a customer designated premises and a Utility Hub where bridging functions are performed, between a customer premises and an EIS Point of Termination, or between an EIS Point of Termination and a Utility Hub when bridging functions are performed. Inter office metallic facilities will be limited in length to a total of five miles per circuit. (C)

(B) Technical Specifications Packages

Parameter	Package MT-			
	<u>C</u>	<u>1</u>	<u>2</u>	<u>3</u>
DC Resistance				
Between Conductors	X	X	X	
Loop Resistance	X		X	
Shunt	X		X	

The technical specifications are delineated in Technical References PUB TR-NPL-000336.

\* Limited Offering Service - Provided only to existing customers and services working as of January 1, 1995. See General Regulations 2.1.4, (C) preceding. Existing service arrangements will be maintained up to and including the Utility's local loop demarcation point. Work activity beyond the Utility's local loop demarcation point is the responsibility of the customer at the customer's expense.

Continued



ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Service Descriptions (Cont'd)

7.2.1 Metallic Service\* (Cont'd)

(C) Network Channel Interfaces

Compatible network channel interfaces are set forth in the Technical References listed in 7.2.1(B) preceding.

(D) Optional Features and Functions

(1) Central Office Bridging Capability

(a) Three Premises Bridging - Provision of tip-to-tip and ring-to-ring connection in a central office of a metallic pair to a third customer designated premises.

(b) Series Bridging of up to 26 customer designated premises.

The following table shows the technical specifications packages with which the optional features and functions are available.

	Available with Technical Specifications Package MT-			
	<u>C</u>	<u>1</u>	<u>2</u>	<u>3</u>
Three Premises Bridging	X	X		X
Series Bridging	X		X	

- Limited Offering Service - Provided only to existing customers and services (T) working as of January 1, 1995. See General Regulations 2.1.4, (C) preceding. (T) Existing service arrangements will be maintained up to and including the Utility's local loop demarcation point. Work activity beyond the Utility's local loop demarcation point is the responsibility of the customer at the customer's expense.

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Service Descriptions (Cont'd)

7.2.2 Telegraph Grade Service\*

(C)

(A) Basic Channel Description

A Telegraph Grade channel is an unconditioned channel capable of transmitting binary signals at rates of 0-75 baud or 0-150 baud. This channel is furnished for half-duplex or duplex operation. Telegraph Grade channels are provided between customer designated premises, between a customer designated premises and a Utility Hub or between a customer designated premises or Utility Hub and an EIS POT.

(B) Technical Specifications Packages

<u>Parameter</u>	<u>Package TG-</u>		
	<u>C</u>	<u>1</u>	<u>2</u>
Telegraph Distortion	X	X	X

The technical specifications are delineated in Technical Reference PUB TR-NPL-000336.

(C) Network Channel Interfaces

Compatible network channel interfaces are set forth in the Technical References listed in 7.2.2(B) preceding.

(D) Optional Features and Functions

(1) Telegraph Bridging (two-wire and four-wire)

The following table shows the technical specifications packages with which the optional features and functions are available.

	<u>Available with Technical Specifications Package TG-</u>		
	<u>C</u>	<u>1</u>	<u>2</u>
Telegraph Bridging	X	X	X

\* Frozen/Grandfathered Service - Provided only to existing customers and services working as of the effective date of Advice Letter No. 18405. See General Regulations 2.1.4(E) preceding.

(C)  
|  
(C)  
(D)  
(D)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Service Descriptions (Cont'd)

7.2.3 Voice Grade Service

(A) Basic Channel Description

A Voice Grade channel is a channel which provides voice frequency transmission capability in the nominal frequency range of 300 to 3000 Hz and may be terminated two-wire or four-wire. Voice Grade channels are provided between customer designated premises, between a customer designated premises and a Utility Hub or between a customer designated premises or Utility Hub and an EIS POT.

(T)  
(C)  
(C)

(B) Technical Specifications Packages

	Package VG-												
Parameter	C*	1	2	3	4	5	6	7	8	9	10	11	12
Attenuation													
Distortion	X	X	X	X	X	X	X	X	X	X	X	X	X
C-Message Noise	X	X	X	X	X	X	X	X	X	X	X	X	X
Echo Control	X	X	X	X		X		X	X			X	X
Envelope Delay													
Distortion	X						X	X	X	X	X	X	X
Frequency Shift	X						X	X	X	X	X	X	X
Impulse Noise	X					X	X	X	X	X	X	X	X
Intermodulation													
Distortion	X						X	X	X	X	X	X	
Loss Deviation	X	X	X	X	X	X	X	X	X	X	X	X	X
Phase Hits, Gain Hits, and Dropouts													
Dropouts	X												
Phase Jitter	X						X	X	X	X	X	X	
Signal-to-C													
Message Noise					X								
Signal-to-C													
Notch Noise	X					X	X	X	X	X	X	X	X

- The desired parameters are selected by the customer from the list of available parameters.

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Service Descriptions (Cont'd)

7.2.3 Voice Grade Service (Cont'd)

(B) Technical Specifications Packages (Cont'd)

The following matrix lists the parameters available on intraLATA Voice Grade Private Line Service as delineated in Technical Reference PUB TR-NWT-000965 and PUB L-780029-PB.

(N)

<u>Parameter</u>	<u>C</u>	<u>Package VG-</u>		
		<u>32</u>	<u>33</u>	<u>36</u>
Attenuation Distortion	X	X	X	X
C-Message Noise	X	X	X	X
Echo Control	X	X	X	X
Envelope Delay Distortion	X			X
Frequency Shift	X			X
Impulse Noise	X			X
Intermodulation Distortion	X			X
Loss Deviation	X	X	X	X
Phase Hits, Gain	X			
Hits, and Dropouts	X			
Phase Jitter	X			
Signal-to-C Message Noise	X			X
Signal-to-C Notch Noise	X			X

(N)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Service Descriptions (Cont'd)

7.2.3 Voice Grade Service (Cont'd)

(B) Technical Specifications Packages (Cont'd)

The technical specifications for these parameters (except for dropouts, gain hits, and phase hits) are delineated in Technical Reference PUB TR-NWT-000335, TR-NWT-000965 and PUB L-780029-PB. The technical specifications for dropouts, phase hits, and gain hits are delineated in Technical Reference PUB 41004.

(T)  
(T)  
(T)  
(D)

(C) Network Channel Interfaces

The following network channel interfaces for Voice Grade service do not require signaling capability: AH, DA, DB, DD, DE, DS, NO, PR, and TF.

The following network channel interfaces for Voice Grade Service require signaling capability: AB, AC, CT, DX, DY, EA, EB, EC, EX, GO, GS, LA, LB, LC, LO, LR, LS, RV, and SF.

Compatible network channel interfaces are set forth in the echnical References listed in 7.2.3(B) preceding.

(D) Optional Features and Functions

(1) Central Office Bridging Capability

- (a) Voice Bridging (two-wire and four-wire)
  - (b) Data Bridging (two-wire and four-wire)
  - (c) Telephoto Bridging (two-wire and four-wire)
  - (d) Reserved (T) z
- (D) z

z Correction - Inadvertently omitted from Advice Letter No. 16797, effective November 8, 1993.

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Service Descriptions (Cont'd)

7.2.3 Voice Grade Service (Cont'd)

(T)

(D) Optional Features and Functions (Cont'd)

(1) Central Office Bridging Capability (Cont'd)

(e) Telemetry and Alarm Bridging

Split Band, Active Bridging  
Passive Bridging  
Summation, Active Bridging

(2) Central Office Multiplexing

Voice to Telegraph Grade: An arrangement that converts a Voice Grade channel to Telegraph Grade channels using frequency division multiplexing.

(3) Conditioning

Conditioning provides more specific transmission characteristics for Voice Grade services. C-Type conditioning controls attenuation distortion and envelope delay distortion. Sealing Current helps maintain continuity on dry metallic loops.

In addition, a customer may desire that either the attenuation distortion or the envelope delay distortion, or both, be improved to more stringent specifications than those provided for C-Type conditioning. In such cases the customer has the option of ordering either Improved Attenuation Distortion or Improved Envelope Delay Distortion, or both, as desired.

For two-point services, the parameters apply to each service. For multipoint services, the parameters apply to each mid link or end link. C-Type conditioning and Data Capability may be combined on the same service.

(T)

Material on this sheet formerly in different form on Sheets 255 through 303.  
Material omitted now in different form on Sheets 255 through 265.

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Service Descriptions (Cont'd)

7.2.3 Voice Grade Service (Cont'd)

(D) Optional Features and Functions (Cont'd)

(3) Conditioning (Cont'd)

(a) C-Type Conditioning

C-Type Conditioning is provided for the additional control of attenuation distortion and envelope delay distortion on data services. The attenuation distortion and envelope delay distortion specifications for C-Type Conditioning are:

Attenuation Distortion  
(Frequency Response)  
Relative to 1004 Hz

<u>Frequency Range (Hz)</u>	<u>Variation (dB)</u>
500-2800	-1.0 to +3.0
300-3000	-2.0 to +6.0

<u>Frequency Range (Hz)</u>	<u>Envelope Delay Distortion Variation (micro- seconds)</u>
1004-2604	500
604-2604	1500
504-2804	3000

Technical specifications for IntraLATA Private Line Service C conditioning are delineated in Technical Reference TR-NWT-000965 and PUB L-780029-PB.

(N)  
|  
(N)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Service Descriptions (Cont'd)

7.2.3 Voice Grade Service (Cont'd)

(T)

(D) Optional Features and Functions (Cont'd)

(3) Conditioning (Cont'd)

(b) Improved Attenuation Distortion

Improved attenuation distortion is provided for additional control of attenuation distortion. The improved attenuation distortion specifications are:

Attenuation Distortion  
(Frequency Response)  
Relative to 1004 Hz

<u>Frequency</u> <u>Range (Hz)</u>	<u>Variation</u> <u>(dB)</u>
400-2800	-1.0 to +2.0
300-3000	-1.0 to +3.0
3000-3200	-2.0 to +6.0

(c) Improved Envelope Delay Distortion

Improved envelope delay distortion is provided for additional control of envelope delay distortion. The improved envelope delay distortion specifications are:

<u>Envelope Delay</u> <u>Distortion</u>	<u>Variation</u>
<u>Frequency</u> <u>Range (Hz)</u>	<u>(micro-</u> <u>seconds)</u>
1000-2600	100
800-2600	200
600-2600	300
500-2800	600
500-3000	3000

(T)

Material on this sheet formerly in different form on Sheets 255 through 303.  
Material omitted now in different form on Sheets 255 through 265.

Continued



ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Service Descriptions (Cont'd)

7.2.3 Voice Grade Service (Cont'd)

(D) Optional Features and Functions (Cont'd)

(3) Conditioning (Cont'd)

(d) Sealing Current Conditioning

Sealing Current Conditioning is provided to help maintain continuity on dry metallic loops. It is usually associated with four-wire DA or NO type network channel interfaces.

(T)  
|  
(T)

Material on this sheet formerly in different form on Sheet 255 through 303.  
Material omitted now in different form on Sheets 255 through 265.

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Service Descriptions (Cont'd)

7.2.3 Voice Grade Service (Cont'd)

(D) Optional Features and Functions (Cont'd)

(4) Customer Specified Premises Receive Level

This option allows the customer to specify the receive level at the Point of Termination. The level must be within a specific range on effective four-wire transmission. The ranges are delineated in Technical Reference PUB TR-NWT-000335.

(T)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Service Descriptions (Cont'd)

7.2.3 Voice Grade Service (Cont'd)

(D) Optional Features and Functions (Cont'd)

(5) Improved Return Loss

(a) On effective Four-Wire Transmission at Four-Wire Point of Termination (applicable to each two-wire port): Provides for a fixed 600 ohm impedance, variable level range and simplex reversal. Utility equipment is required at the customer's premises where this option is ordered. The Improved Return Loss parameters are delineated in Technical Reference PUB TR-NWT-000335. (T)

(b) On effective Two-Wire Transmission at Two-Wire Point of Termination: Provides for more stringent Echo Control Specifications. In order for this option to be applicable, the transmission path must be four-wire at one POT and two-wire at the other POT. Placement of Utility equipment may be required at the customer's premises with the two-wire POT. The Improved Return Loss parameters are delineated in Technical Reference PUB TR-NWT-000335. (T)

(6) Data Capability

Data Capability provides transmission characteristics suitable for data communications. Specifically, Data Capability provides for the control of Signal to C-Notched Noise Ratio and intermodulation distortion. It is available for two-point services or multipoint services.

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Service Descriptions (Cont'd)

7.2.3 Voice Grade Service (Cont'd)

(D) Optional Features and Functions (Cont'd)

(6) Data Capability (Cont'd)

The Signal to C-Notched Noise Ratio and intermodulation distortion parameters for Data Capability up to and including the Utility's local loop demarcation point are: (T) (N)

- Signal to C-Notched Noise Ratio is equal to or greater than 32dB
- Intermodulation distortion:
  - Signal to second order modulation products (R2) is equal to or greater than 38dB
  - Signal to third order modulation products (R3) is equal to or greater than 42dB

When a service equipped with Data Capability is used for voice communications, the quality of the voice transmission may not be satisfactory.

(7) Telephoto Capability

Telephoto Capability provides transmission characteristics suitable for telephotographic communications. Specifically Telephoto Capability is provided for the control of attenuation distortion and envelope delay distortion on telephotographic services. The attenuation distortion and envelope delay distortion parameters up to and including the Utility's local loop demarcation point for Telephoto Capability are: (T) (T)

Envelope Delay Distortion

Frequency Variation

Range (Hz)      (mcs)

1000-2600      110

800-2800      180

(1004HZ Reference)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Service Descriptions (Cont'd)

7.2.3 Voice Grade Service (Cont'd)

(T)

(D) Optional Features and Functions (Cont'd)

(7) Telephoto Capability (Cont'd)

Attenuation Distortion	
Frequency	Variation
Range (Hz)	(dB)
500-3000	-0.5 to +1.5
300-3200	-1.0 to +2.5

(8) Signaling Capability

Signaling Capability provides for the process by which one customer premises alerts another customer premises on the same service with which it wishes to communicate.

(9) Selective Signaling Arrangement

An arrangement that permits code selective ringing for up to ten codes on a multipoint service.

(10) Transfer Arrangement

An arrangement that affords the customer an additional measure of flexibility in the use of their access channels(s). The arrangement can be utilized to transfer a leg of a Special Access Service to another channel that terminates in either the same or a different customer premises. A key activated or dial-up control service is required to operate the transfer arrangement as set forth in 7.5.3(C) (11) following. A spare channel, if required, is not included as part of the option.

(T)

Material on this sheet formerly in different form on Sheets 255 through 303.  
Material omitted now in different form on Sheets 255 through 265.

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Service Descriptions (Cont'd)

7.2.3 Voice Grade Service (Cont'd)

(D) Optional Features and Functions (Cont'd)

The following table shows the technical specifications packages with which the optional features and functions are available.

		Available with Technical Specifications Package VG-												
	<u>C</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	<u>11</u>	<u>12</u>	
C-Type Conditioning	X			X	X	X	X	X	X					
Central Office Bridging														
Central Office Capability	X	X		X	X				X	X	X			(T)
Central Office Multiplexing	X			X										
Customer Specified Premises Receive														
Level	X	X	X	X	X	X	X	X	X	X	X	X	X	(T)
Data Capability	X						X	X			X			
Improved Return Loss														
For Effective Four-Wire														
Transmission	X	X	X	X	X	X	X	X	X	X	X	X	X	(T)
For Effective Two-Wire														
Transmission	X		X	X					X					(T)
Sealing Current														
Conditioning	X					X	X							(T)
Selective Signaling														
Arrangement	X		X											
Signaling														
Capability	X	X	X	X				X	X	X				
Telephoto														
Capability	X												X	
Transfer														
Arrangement	X	X	X	X	X	X	X	X	X	X	X	X		

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Service Descriptions (Cont'd)

7.2.3 Voice Grade Service (Cont'd)

(D) Optional Features and Functions (Cont'd)

The following table shows the technical specifications packages with which the optional features and functions are available for IntraLATA Private Line Service.

	Available with Technical Specifications Package VG-				
	<u>C</u>	<u>32</u>	<u>33</u>	<u>36</u>	
Conditioning					
C-Type					
C1	X	X	X	X	
C2	X	X	X	X	
C4	X	X	X	X	
C5	X	X	X	X	
Protective Relaying (C6)	X		X	X*	(N) z
RTOC	X	X	X		
Central Office Bridging					
Capability	X	X	X		
Central Office Multiplexing	X				
Customer Specified Premises					
Receive Level	X				
Data Capability	X		X		
Sealing Current Conditioning	X				
Selective Signaling Arrangement	X				
Signaling Capability	X	X	X		
Switching Capability	X	X	X	X	
Telephoto Capability	X				
Transfer Arrangement	X				

\* Only available on a two-point VG36 furnished to the power industry. (N)  
z correction

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Service Descriptions (Cont'd)

7.2.3 Voice Grade Service

(E) Private Virtual Network Access Line (PVNAL)

(L)

(1) Description

A PVN Access Line provides a channel for voice frequency transmission capability. The service provides a connection between a customer's end user's premises and a PVN Access serving office. It is provided only for use with PVN Access Switched Access Service. PVNAL service is provided with either rotary dial or dual tone multifrequency address signaling and either loop start, ground start E&M, or reverse battery supervisory signaling. The choice of the type of signaling is at the option of the customer and subject to the limitations identified in the Technical PUB GR-334-CORE for voice grade service. PVN Access Line Service is provided as an effective two- wire or an effective four-wire transmission path. Rates and Charges are as set forth in 7.2.1(BB)(3), 7.5.2 and 7.5.4 following.

(L)

(2) Compatible Channel Interfaces

The following interfaces available with PVNAL service:

LO  
LS  
GO  
GS  
RV  
EA  
EB  
DS

(3) Optional Features and Functions

(a) Improved Two-Wire Transmission Specifications.

(L) Formerly on Sheet 265-A.

Continued



ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Service Descriptions (Cont'd)

7.2.3 Voice Grade Service (Cont'd)

(T)

(E) Private Virtual Network Access Line PVNAL (Cont'd)

(3) Optional Features and Functions (Cont'd)

(T)

(b) Signaling Capability

(L)

(c) Voice Grade Bridging

(L)

Material on this sheet formerly in different form on Sheet 330-B.

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Service Descriptions (Cont'd)

7.2.3 Voice Grade Service (Cont'd)

(F) Reserved

(T)

(D)

(D)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Service Descriptions (Cont'd)

7.2.3 Voice Grade Service (Cont'd)

(F) Reserved

(T)

(D)

(D)

(D)

(D)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Service Descriptions (Cont'd)

7.2.3 Voice Grade Service (Cont'd)

(G) Reserved

(T)

(D)

(D)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Service Descriptions (Cont'd)

7.2.3 Voice Grade Service (Cont'd)

(G) Reserved

(T)

(D)

(D)

(D)

(D)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Service Descriptions (Cont'd)

7.2.3 Voice Grade Service (Cont'd)

(H) Local Area Data Channels

A Local Area Data Channel connects two customer designated premises within the same serving wire center as specified in Technical Reference PUB MDP-326-986. It may be terminated two-wire or four-wire and is only available as a two-point service.

Limited Distance Modems (LDM) require transmission facilities with characteristics normally found in metallic wire facilities. Such services will be furnished only where metallic facilities are normally available between the service points.

(L)

(T)

(T)

(L)

(L) Formerly in different form in Schedule Cal.P.U.C. No. B3.2.3,A.3. and B3.2.3,B.3.

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Service Descriptions (Cont'd)

7.2.4 Reserved

(C)

(D)

(D)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Service Descriptions (Cont'd)

7.2.4 Reserved (Cont'd)

(C)

(D)

(D)

Continued



ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Service Descriptions (Cont'd)

7.2.5 Video Service

(A) Basic Channel Description

A Video channel is a channel with one-way transmission capability for a standard 525 line/60 field monochrome, or National Television Systems Committee color, video signal and one or more associated audio signal(s) as described below.

The provision and the bandwidth of the associated audio signal(s) is a function of the channel interface selected by the customer. Video channels are provided between customer designated premises, between a customer designated premises and a Utility Hub, between an EIS Point of Termination and a customer premises, or between a Utility Hub and an EIS Point of Termination.

(1) Analog Video Service\*

(C)

Analog Video Service provides one-way transmission of video signals between two customer-designated premises or between a customer-designated premises and a Utility Hub, where available, using fiber optic facilities. An NTSC video channel provides a standard 525 line/60 field monochrome, or NTSC color video signal, with up to four (4) associated 20 kHz audio signals. The bandwidth for Analog Video Service is 30 Hz to 6.6 MHz.

Analog Video Service is provided where facilities are available. Where facilities are not available, Special Construction may apply.

(2) Reserved

(T)

(D)

\* Effective December 31, 2020, Analog Video Service is Frozen/Grandfathered per General Regulations, Section 2.1.4 (F). The Company currently plans to discontinue this Service on or after December 31, 2021.

(N)

|

(N)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Service Descriptions (Cont'd)

7.2.5 Video Service (Cont'd)

(A) Basic Channel Description (Cont'd) (T)

(b) Reserved (T)

Material omitted now in different form on Sheets 271 and 272.

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Service Descriptions (Cont'd)

7.2.5 Video Service (Cont'd)

(A) Basic Channel Description (Cont'd)

(c) Serial Component Video Service (SCVS) (T)

Serial Component Video Service is a standards-based 270 Mbps digital video transport for the limited purpose of providing one-way transport of high quality digital video signals and audio signals. (T)

(D)

The following standard formats are supported: (T)

- Serial Digital Interface (SDI) - ANSI/Society of Motion Picture and Television Engineers (SMPTE 259M) (T)

- Audio embedding of either four analog channels at 20 KHz or two AES-EBU digital audio channels is available from the Utility. (N)

- Serial Data Transport Interface (SDTI - SMPTE 305M); and (T)

- Digital Video Broadcasting-Asynchronous Serial Interface (DVB-ASI) (D)

- The customer is responsible for combining multiple MPEG video program streams into a transport stream and encapsulating this into a 270 Mbps DVB-ASI format. (T)

SCVS is available on a point-to-point basis or between a customer premises and a Utility Hub location, where available. (T)

Serial Component Video Service is provided where facilities are available. Where facilities are not available, Special Construction may apply. (N)

(D)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Service Descriptions (Cont'd)

7.2.5 Video Service (Cont'd)

(B) Technical Specifications Package

The technical specifications are set forth in Technical  
Reference AM-TR-NIS-000137.

(D)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Service Descriptions (Cont'd)

7.2.5 Video Service

(D)

(C) Network Channel Interfaces

Compatible channel interfaces are set forth in Technical  
Reference AM-TR-NIS-000137.

(D)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Service Descriptions (Cont'd)

7.2.5 Video Service

(D) Optional Features and Functions

- (1) NTSC Analog Interface - Serial Component Video (T)  
Service (T)

This optional feature interface is available with  
Serial Component Video Service and provides customers (T)  
with the ability to hand off a standard Analog Video  
TV-1 Service interface in a digital format.

- (2) Virtual Studio - Serial Component Video Service (T)

The Virtual Studio option is available with Serial (T)  
Component Video Service and provides customers with a (T)  
collection of virtual enhancements that, at the option  
of the customer, could be included in their transport  
stream. A 1.544 Mbps data channel is available as part  
of the Serial Component Video Service. The data (T)  
channel capability is available only where the  
customer has ordered the appropriate Channel  
Termination with video-enabling equipment.

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Service Descriptions (Cont'd)

7.2.5 Video Service (Cont'd)

(D) Optional Features and Functions (Cont'd)

- (3) Service Through-Connect - Analog Video Service\* and (C)  
Serial Component Video Service

The Service Through-Connect allows for the interconnection of parts of a like service with like jurisdiction to form a complete two-point service at a Utility-designated Video Hub where two (2) different customers pay for their part of the service.

The ability to transport DVB-ASI is available on a point to point basis, or through a designated Video Service Hub where available.

Each customer will be responsible for ordering and paying for that part of the Video Service that begins at the point of termination at the customer's premises and ends at the Service Through-Connect. Additionally, the customer ordering the Service Through-Connect is responsible for paying for this feature and any other charges associated with the interconnection.

The customer ordering the Service Through-Connect must provide to the Utility any and all appropriate channel information and written letter of agency obtained from the other customer who is being interconnected.

Disconnecting any part of the service shall be deemed a disconnection of the entire service and termination charges shall apply, where applicable.

The customer that controls the Service Through-Connect shall be the primary customer of the service, including, but not limited to activities such as ordering service changes and reporting service outages.

\* Effective December 31, 2020, Analog Video Service is Frozen/Grandfathered (N)  
per General Regulations, Section 2.1.4 (F). The Company currently plans to (N)  
discontinue this Service on or after December 31, 2021. (N)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Service Descriptions (Cont'd)

7.2.7 Reserved

(T)  
(D)

(D)

(D)

(D)

Continued



ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Service Descriptions (Cont'd)

7.2.7 Reserved

(T)

(D)

(D)

(D)

(D)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Service Descriptions (Cont'd)

7.2.8 Digital Services

(A) Digital Data Service\*

(1) Basic Channel Description

A Digital Data channel is a channel for duplex four-wire transmission of synchronous serial data at the rate of 2.4, 4.8, 9.6, or 56 kbps. The actual bit rate is a function of the channel interface selected by the customer. The channel provides a synchronous service with timing provided by the Utility through the Utility's facilities to the customer in the received bit stream. Digital Data channels are only available via Utility designated hubs and are provided between customer designated premises, between a customer designated premises and a Utility Hub or (T)  
between a customer designated premises, or Utility (T)  
Hub, and an EIS POT.

The customer may provide the Channel Service Unit-type equipment or other Network Channel Terminating Equipment associated with the Digital Data channel at the customer premises. The interim program for interconnection of such equipment is set forth in Technical Reference PUB AS No. 1.

\* Limited Offering Service - Provided only to existing customers and services working as of January 1, 1995. See General Regulations 2.1.4, (C) preceding. Customers will be permitted to add or disconnect legs only.

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Service Descriptions (Cont'd)

7.2.8 Digital Services (Cont'd)

(A) Digital Data Service\* (Cont'd)

(2) Technical Specifications Packages

Parameter	Package DA -			
	1	2	3	4
Error-Free Seconds	X	X	X	X

The Utility will provide a channel capable of meeting a monthly average performance equal to or greater than 99.875% error-free seconds, while the channel is in service, if it is measured through a CSU equivalent which is designed, manufactured, and maintained to conform with specifications contained in Technical Reference PUB MDP-326-726.

Voltages which are compatible with Digital Data Service are delineated in Technical Reference PUB TR-NWT-000341.

(L)

(L)

\* Limited Offering Service - Provided only to existing customers and services working as of January 1, 1995. See General Regulations 2.1.4, (C) preceding. Customers will be permitted to add or disconnect legs only.  
(L) Formerly on Sheet 276.

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Service Descriptions (Cont'd)

7.2.8 Digital Services (Cont'd)

(A) Digital Data Service\* (Cont'd) (T)

(3) Network Channel Interfaces

The following network channel interfaces (NCIs) define the bit rates that are available for a Digital Data channel:

CI	Bit Rate
DU-24	2.4 kbps
DU-48	4.8 kbps
DU-56	56.0 kbps
DU-96	9.6 kbps

Compatible network channel interfaces are set forth in the Technical Reference listed in 7.2.8(A) (2) preceding.

(4) Optional Features and Functions

(a) Central Office Bridging Capability

(b) Transfer Arrangement

An arrangement that affords the customer an additional measure of protection and/or flexibility in the use of their access channel(s) on a 1xN basis. The arrangement can be utilized to transfer a leg of a Special Access Service to either a spare or working channel that terminates in either the same or different customer premises. This arrangement is only available at a Utility designated hub. A key activated or dial up control service is required to operate the transfer arrangement as described in 7.5.8(A) (3) (b). A spare channel, if required, is not included as part of the option.

\* Limited Offering Service - Provided only to existing customers and services working as of January 1, 1995. See General Regulations 2.1.4, (C) preceding. Customers will be permitted to add or disconnect legs only.

(N)  
|  
(N)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Service Descriptions (Cont'd)

7.2.8 Digital Services (Cont'd)

(A) Digital Data Service\* (Cont'd)

(4) Optional Features and Functions (Cont'd)

(c) Public Packet Switching (PPS) Interface<sup>#</sup>, \*\* (N)  
Arrangement

- An arrangement that provides the interface requirements that permit a Digital Data Service to interface with a Public Packet<sup>#</sup> Switching port located in a Utility premises. The interface is compatible with the X.75<sup>#</sup> packet switching protocol as defined by CCITT.

(T)  
|  
(T)

(d) Secondary Channel

- Secondary Channel is an optional feature associated with a primary Digital Data Service channel(s). This offering will be provided with the new installation of Digital Data Service only, and must be ordered at the same time the primary channel(s) is ordered.

Secondary Channel describes a second, totally independent, lower speed channel operating in parallel with the primary channel of a Digital Data Access Service circuit.

\* Limited Offering Service - Provided only to existing customers and services working as of January 1, 1995. See General Regulations 2.1.4, (C) preceding. Customers will be permitted to add or disconnect legs only.

# Frozen/Grandfathered Service effective June 11, 2004. See General Regulations, Schedule Cal.P.U.C. Nos. A2.1.2, A.4 and Guidebook, Part 2, Section 2. (T)

\*\* Public Packet Switching service withdrawn effective July 1, 2012. (N)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Service Descriptions (Cont'd)

7.2.8 Digital Services (Cont'd)

(A) Digital Data Service\* (Cont'd) (T)

(4) Optional Features and Functions (Cont'd)

(d) Secondary Channel (Cont'd) (T)

- The types of secondary channels offered to provide for the simultaneous, independent two-way transmission of digital signals between two or more customer premises each having Secondary Channels are as follows:

Secondary Channel furnished for digital transmission at a synchronous rate of 133 bps, operating in parallel with a primary 2.4 kbps (DA1) channel (per station).

Secondary Channel furnished for digital transmission at a synchronous rate of 266 bps, operating in parallel with a primary 4.8 kbps (DA2) channel (per station).

Secondary Channel furnished for digital transmission at a synchronous rate of 533 bps, operating in parallel with a primary 9.6 kbps (DA3) channel (per station).

Secondary Channel furnished for digital transmission at a synchronous rate of 2,666 bps, operating in parallel with a primary 56 kbps (DA4) channel (per station).

\* Limited Offering Service - Provided only to existing customers and services working as of January 1, 1995. See General Regulations 2.1.4, (C) preceding. Customers will be permitted to add or disconnect legs only.

(N)  
|  
(N)

Material omitted now on Sheet 277-A.

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Service Descriptions (Cont'd)

7.2.8 Digital Services

(B) Advanced Digital Network<sup>#</sup>

(1) Basic Channel Description

Advanced Digital Network service provides full duplex four-wire transmission of synchronous serial data at the fixed rate of 2.4, 4.8, 9.6, 19.2, 56.0 64.0 Kbps and 1.544\* Mbps. Customer speed selectability will be provided when ordered as variable@. There are two variable speed bands; (1) 1.2 to 38.4 Kbps which include digital rates of 1.2, 2.4, 4.8, 9.6, 19.2, 32.0 and 38.4 Kbps, (2) 1.2 to 64.0 Kbps which include digital rates of 1.2, 2.4, 4.8, 9.6, 19.2, 32.0, 38.4 and 64.0 Kbps. Variable speed selection will allow the customer to change bit rate without issuing an order through the Utility. The actual bit rate is a function of Utility equipment and the channel interface selected by the customer. Synchronous timing is provided by the Utility through the Utility's facilities to the customer in the received bit stream. Advanced Digital Network services are provided between customer designated premises through Serving Wire Centers, or through a Utility Advanced Digital Network Hub or between a customer designated premises, or Utility Hub, and an EIS POT. 1.544\* Mbps service is only available via Utility designated Advanced Digital Network Hubs.

Advanced Digital Network Service connected to Access Advantage Plus is only offered between customer designated presence and not a carrier point of presence.

The customer will provide the Network Channel Terminating Equipment compatible with Advanced Digital Network service at the customer premises.

# Advanced Digital Network may be terminated on a channel port of Access Advantage Plus as found in Guidebook, Part 6, Section 7.

(T)

@ Provided only to existing customers and services working as of January 1, 1995. Not available with Access Advantage Plus.

\* Regulations, Rates and Charges for 1.544 Mbps service are set forth in 7.2.8(C) and 7.5.8(C) following.

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Service Descriptions (Cont'd)

7.2.8 Digital Services (Cont'd)

(B) Advanced Digital Network (Cont'd)

(2) Technical Specifications

Technical specifications and examples of application  
are set forth in Technical Reference PUB L-780036-PB.

While in service, the monthly average of error-free  
seconds will be equal to or greater than 99.5%.

(L)

(L)

(L) Formerly on Sheet 276.

Continued



ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Service Descriptions (Cont'd)

7.2.8 Digital Services

(B) Advanced Digital Network (Cont'd)

(3) Channel Interfaces

Compatible channel interfaces are set forth in  
Technical Reference PUB L-780036-PB/NB.

(T)

(4) Optional Features and Functions

(a) Central Office Bridging Capability

(b) Secondary Channel

Secondary Channel is associated with Advanced Digital Network service channel(s) and describes a second, totally independent, lower speed channel operating in parallel with the primary Advanced Digital Network circuit.

Secondary Channel is only available for fixed speeds as set forth following and is not available with Network Control and Diagnostics. All terminations on a circuit must be similarly equipped.

The types of Secondary Channels offered to provide for the simultaneous, independent two-way transmission of digital signals between two or more customer premises, each having Secondary Channels, are as follows:

<u>Advanced Digital Network Data Rate</u>	<u>Associated Secondary Channel Rate</u>
2.4 Kbps	133 bps
4.8 Kbps	266 bps
9.6 Kbps	533 bps
19.2 Kbps	1,066 bps
56.0 Kbps	2,666 bps

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Service Descriptions (Cont'd)

7.2.8 Digital Services (Cont'd)

(B) Advanced Digital Network (Cont'd)

(4) Optional Features and Functions (Cont'd)

(c) Network Control and Diagnostics

Network Control and Diagnostics will provide the ability for the customer to accomplish such tasks as monitoring and isolation testing.

Network Control and Diagnostics is only available with variable speed selection. All terminations in a circuit must be similarly equipped.

(d) Network Reconfiguration Service\*

Effective October 30, 2018, Network Reconfiguration Service (NRS) will no longer be available for purchase by new or existing customers, and NRS service agreements may no longer be renewed. Effective July 31, 2022, the Company will no longer accept new requests for physical changes to existing service arrangements including the upgrade or downgrade of access/port speed, installation of new service, or moves to different service addresses.

(N)

(N)

Network Reconfiguration Service will allow the customer or SBC technician to make changes in the individual circuit segments of their network. These changes can be mapped and stored, and executed automatically based on time of day, or the customer can make on demand changes based on disaster recovery or traffic smoothing requirements.

There are two alternatives that will allow a customer to access the circuits in their Network Reconfiguration Service database; (1) Client RAS or (2) Client VPN.

\* Applicable to 1.544 Mbps service set forth in 7.2.8 (C) following.

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Service Descriptions (Cont'd)

7.2.8 Digital Services (Cont'd)

(B) Advanced Digital Network (Cont'd)

(4) Optional Features and Functions (Cont'd)

(d) Network Reconfiguration Service\* (Cont'd) (T)

(1) Client RAS (Remote Administrator Software) is a dial-up configuration. Using a toll free 8XX number and a SecureID card, the NRS customer is allowed partitioned access to their NRS database for the purpose of making changes within their ADN network.

(2) Client VPN (Virtual Private Networking) access can be granted to a customer who has dedicated Internet access. Utilizing specific software provided by the Utility in addition to the SecureID card, the customer can access their NRS database for the purpose of making changes within their ADN network.

One rate elements shall apply per DS0, DS1 or DS3 channel termination in the Digital Cross Connect machine.

In addition, the customer must separately order the transport service DS0, DS1, DS3 required to connect the customer designated premises to the Port location at a Utility Serving Wire Center.

The customers may order terminations that terminate at the Digital Cross-Connect Switch as part of their overall end to end service.

All terminations on a circuit configuration for the customer's network to be capable of reconfiguration must be similarly equipped.

\* Effective October 30, 2018, Network Reconfiguration Service is (N)  
Frozen/Grandfathered (see General Regulations, Section 2.1.4, (F)). (N)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Service Descriptions (Cont'd)

7.2.8 Digital Services (Cont'd)

(B) Advanced Digital Network (Cont'd)

(4) Optional Features and Functions (Cont'd)

(d) Network Reconfiguration Service\* (Cont'd) (T)

In each of the above alternatives the customer will supply the compatible Network Channel Terminating Equipment designated in Technical Reference PUB L-780036 at their premises. The Utility will provide the Network Channel Terminating Equipment at the Utility site.

\* Effective October 30, 2018, Network Reconfiguration Service is (N)  
Frozen/Grandfathered (see General Regulations, Section 2.1.4, (F)). (N)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Service Descriptions (Cont'd)

7.2.8 Digital Services (Cont'd)

(B) Advanced Digital Network (Cont'd)

(4) Optional Features and Functions (Cont'd)

(d) Network Reconfiguration Service\* (Cont'd) (T)

The customer is responsible for assigning and maintaining a record of all reconfigurations and access. The customer also agrees to provide the Utility with a central point of contact for inquiries, trouble reports and security management involving reconfiguration.

In addition to, and not limiting the other provisions contained in the Utility's tariffs, the Utility will not be responsible for any damage, loss or harm to Advanced Digital Network customers, and/or other Utility customers which results from customer and/or third party misuse, unauthorized use, abuse or error using Advanced Digital Network features and/or failure of the customer to adhere to the security policies, methods and tools associated with this product. Such policies, methods and tools will be provided by the Utility to the customer.

(e) Advanced Digital Network Channel Interface

An Interface which provides an ADN channel to connect to a 1.544 Mbps multiplexer to be transported on a separate 1.544 Mbps service. (T)  
One channel Interface shall apply per channel. (T)

\* Effective October 30, 2018, Network Reconfiguration Service is (C)  
Frozen/Grandfathered (see General Regulations, Section 2.1.4, (F)). (C)  
(D)

Material omitted now on Sheet 278-F.

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Service Descriptions (Cont'd)

7.2.8 Digital Services (Cont'd)

(B) Advanced Digital Network (Cont'd)

(4) Optional Features and Functions (Cont'd)

(f) Central Office Multiplexing

(L)

An arrangement that converts a 56.0 kbps channel to subspeeds of up to twenty 2.4 kbps, ten 4.8 kbps, or five 9.6 kbps channels using digital time division multiplexing.\*

(L)

(g) Through-connect\*

An arrangement that provides a customer the ability to connect two channels of two different 1.544 Mbps facilities terminating in the same digital cross-connect switch (DCS) in an ADN Hub. The two 1.544 Mbps facilities must be billed to the same customer. The customer must provide system and channel assignment data.

\* Available only on a channel of a 1.544 Mbps facility to a Utility ADN Hub. The Network Reconfiguration Service feature is not offered on this arrangement.

(L) Formerly on Sheet 278-E.

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Service Descriptions (Cont'd)

7.2.8 Digital Services (Cont'd)

(C) High Capacity Service

(1) Basic Channel Description

A High Capacity channel is a channel for the transmission of nominal 64.0 kbps\* or 1.544, 3.152, 6.312, 44.736 (DS3, DS3x3 and DS3x12), or 274.176 Mbps isochronous serial data. The actual bit rate and framing format is a function of the network channel interface selected by the customer. DS3, DS3x3 and DS3x12 will be provided with or without Utility provided terminal equipment on the customer's premises. When a customer desires to furnish their own terminal equipment, the Utility will work cooperatively with the customer to provide a physical interface satisfactory to both parties. High Capacity channels are provided between customer designated premises through serving wire centers or between a customer designated premises and a Utility Hub or between a customer designated premises or Utility Hub, and an EIS POT. DS3x12 is only provided between a customer designated premises and the serving wire center serving that premises.

High Capacity service offerings are only available where facilities and operating conditions permit. Where facilities and/or operating conditions do not permit, Special Construction as set forth in Section 15 following shall apply.

Customer may not use Service for the purpose of transporting "NG 9-1-1" calls in the State of California. See AT&T California's Network and Exchange Services Schedule Cal.P.U.C. No. A, Section A21.

(N)  
|  
(N)

- \* Available only as a channel of a 1.544 Mbps facility between two Utility Digital Data Hub or as a cross connect of two channels of two 1.544 Mbps facilities at a Digital Data Hub(s); or as a through-connect of two channels of two 1.544 Mbps facilities at an Advanced Digital Network Hub. The customer must provide system and channel assignment data.

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Service Descriptions (Cont'd)

7.2.8 Digital Services (Cont'd)

(C) High Capacity Service (Cont'd)

(1) Basic Channel Description (Cont'd)

DS3, DS3x3 and DS3x12 services provide a total capacity of one (DS3), three (DS3x3) or twelve (DS3x12) services. DS3x3 services can be point-to-point or connected at the wire center serving that premises to individual terminating DS3 services, or to individual DS3 services for multiplexing at a Hub. DS3x12 service can only be connected at the serving wire center to individual terminating DS3 services, or to individual DS3 services for multiplexing at a Hub. The DS3 to DS1 multiplexing function is only available in Utility Hubs as indicated in The National Exchange Carrier Association (NECA) Tariff F.C.C. No. 4, Section 16. For Information on how to obtain copies of the NECA Tariff see Section 14 following.

(T)  
(N)  
|  
(N)

DS3, DS3x3 and DS3x12 High Capacity service offerings are only available where facilities and operating conditions permit. Where facilities and/or operating conditions do not permit, Special Construction as set forth in Section 15 following shall apply.

Continued



ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Service Descriptions (Cont'd)

7.2.8 Digital Services (Cont'd)

(C) High Capacity Service (Cont'd)

(1) Basic Channel Description (Cont'd)

Fiber Advantage<sup>sm</sup> Service is a high performance service providing transmission of 1.544, 3.152, 6.312, 44.736 (DS3, DS3x3, or DS3x12), or 274.176 Mbps isochronous serial data with reliability parameters designed to limit a single event from interrupting service. Fiber Advantage<sup>sm</sup> Service is offered as end-to-end fiber optic DS1 and DS3 (DS3, DS3x3 and DS3x12) services provided with either an electrical or fiber optic. When the optical interface is selected, the customer must provide the optical line termination at its premises, which must be compatible with the Utility's equipment. Fiber Advantage<sup>sm</sup> Services are only available where facilities and operating conditions permit as determined by the Utility. Upon request, a customer may be placed on a Self Healing Fiber ring, when available. Upon request, Fiber Advantage<sup>sm</sup> service may be placed on diverse fiber facilities where available. Where facilities and/or operating conditions do not permit, Special Construction as set forth in Section 15 shall apply. A customer may order any appropriate High Capacity Optional Feature or Function with Fiber Advantage<sup>sm</sup> Service.

DS3, DS3x3, and DS3x12 High Capacity Service shall only be provided as Fiber Advantage<sup>sm</sup> Service. At the customer's option, DS1 High Capacity Service may be provided as Fiber Advantage<sup>sm</sup> Service.

(N)

(N)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Service Descriptions (Cont'd)

7.2.8 Digital Services (Cont'd)

(C) High Capacity Service (Cont'd)

(1) Basic Channel Description (Cont'd)

Channel mileage associated with High Capacity Service may be ordered at the 1.544 Mbps service level or as Flexible High Capacity Channel Mileage\* available in groups of 4 (256 Kbps), 6 (384 Kbps), 8 (512 Kbps), 12 (768 Kbps) and 24 (1.544 Mbps) DS0 channels. Flexible High Capacity Channel Mileage is available only as a B8ZS/Extended Superframe Format service. Flexible High Capacity Channel Mileage channels are contiguous within the network and can be used to create a wideband circuit. These signals remain separately formatted within the DS-1 signal. (C)

Flexible High Capacity Channel mileage is available between all wire center areas served by the utility where suitable digital transmission facilities are available.

The customer may change from one Flexible High Capacity Channel Mileage service arrangement to another (e.g., the customer has an 8 channel arrangement and increases to an 12 channel arrangement, or has a 24 channel arrangement and decreases to 8 channels). This option is only available when the channel mileage was initially ordered as Flexible High Capacity Channel Mileage. A change in capacity charge will apply.

The customer may provide the Network Channel Terminating Equipment associated with the High Capacity channel at the customer's premises. The interim program for interconnection of such equipment is set forth in Technical Reference PUB AS No. 1.

\* Effective September 21, 2016, customers may not establish new Flexible High Capacity Channel Mileage service. Customers with existing service as of September 21, 2016, may retain service on a month-to-month basis until the service is completely discontinued. (N)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Service Descriptions (Cont'd)

7.2.8 Digital Services (Cont'd)

(C) High Capacity Service (Cont'd)

(2) Technical Specifications Packages

<u>Parameters</u>	<u>Package HC-</u>					
	<u>0</u>	<u>1</u>	<u>1C</u>	<u>2</u>	<u>3</u>	<u>4</u>
Error-Free Seconds		X			X	

A channel with technical specifications package HC1 or HC3 will be capable of an error-free second performance of 98.75% over a continuous 24 hour period as measured at the 1.544 Mbps rate through a CSU equivalent which is designed, manufactured, and maintained to conform with the specifications contained in Technical References L-780059-PB/NB and L-780085-PB/NB.

Fiber Advantage<sup>SM</sup> Service will provide at least 99.999% circuit availability and 100% availability of its fiber optic channel termination on a monthly basis. This applies only to the Utility-provided service and requires customer-provided equipment to be fully compatible and operational under the specifications set forth in Technical Publication L-780059-PB.

(L)

(L)

(N)

(N)

(L) Formerly on Sheet 279-B.

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Service Descriptions (Cont'd)

7.2.8 Digital Services (Cont'd)

(C) High Capacity Service (Cont'd)

(3) Network Channel Interfaces

The following network channel interfaces (NCIs) define the bit rates that are available for a High Capacity channel:

<u>CI</u>	<u>Bit Rate</u>
DS-15*	1.544 Mbps (DS1)
DS-27	274.176 Mbps (DS4)
DS-31	3.152 Mbps (DS1C)
DS-44	44.736 Mbps (DS3)
DS-63	6.312 Mbps (DS2)

Compatible network channel interfaces are set forth in the Technical References listed in 7.2.8(C) (2) preceding.

(4) Optional Features and Functions

(D)

(D)

\* A 64.0 kbps channel is available as a channel(s) of a 1.544 Mbps facility to a Utility Hub.

(D)

(D)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Service Descriptions (Cont'd)

7.2.8 Digital Services (Cont'd)

(C) High Capacity Service (Cont'd)

(4) Optional Features and Functions (Cont'd)

(b) Transfer Arrangement\*

(T)

An arrangement that affords the customer an additional measure of flexibility in the use of their access channel(s). The arrangement can be utilized to transfer a leg of a Special Access Service to either a spare or working channel that terminates in either the same or a different customer premises. A key activated or dial up control service is required to operate the transfer arrangement as described in 7.5.8 (C)(3)(c). A spare channel, if required, is not included as part of the option.

(D)

(D)

\* Provided only to existing customers and services working as of January 1, 1995.

(N)

(N)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Service Descriptions (Cont'd)

7.2.8 Digital Services (Cont'd)

(C) High Capacity Service (Cont'd)

(4) Optional Features and Functions (Cont'd)

(d) Digital Cross-Connect System Interface Arrangements (N)

(i) Advanced Digital Network Interface Arrangement (T)

An arrangement that connects a 1.544 Mbps  
(DS1) or Fiber Advantage<sup>SM</sup> 1.544 Mbps (T)  
service to a digital cross-connect system.  
This DCS may cross-connect an entire (T)  
1.544 Mbps channel or individual channels.  
One ADN Interface Arrangement shall apply per  
termination at the digital cross-connect (T)  
system. (T)

(ii) High Capacity Service Interface Arrangement (N)

An arrangement that connects a 1.544 Mbps  
(DS1) or Fiber Advantage<sup>SM</sup> DS1 service to a  
digital cross-connect system (DCS). This DCS  
may cross-connect an entire DS1 channel to  
another DS1 or DS3 channel. One High  
Capacity Service Interface Arrangement charge  
shall apply per termination at the digital  
cross-connect system. (N)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Service Descriptions (Cont'd)

7.2.8 Digital Services (Cont'd)

(C) High Capacity Service (Cont'd)

(4) Optional Features and Functions (Cont'd)

(e) Central Office Multiplexing

- DS4 to DS1

An arrangement that converts a 274.176 Mbps channel to 168 DS1 channels using digital time division multiplexing.

- DS3 to DS1

There are two options available with this feature.

Option 1

An arrangement that converts a 44.736 Mbps channel to 28 DS1 channels using digital time division multiplexing.

Option 2

An arrangement that converts a 44.736 Mbps channel to up to 28 channels for use with DS1 service when Network Reconfiguration Service\* is requested (T) as set forth in 7.2.8 (B) preceding and 7.5.8 (B) following.

- DS2 to DS1

An arrangement that converts a 6.312 Mbps channel to four DS1 channels using digital time division multiplexing.

\* Effective October 30, 2018, Network Reconfiguration Service is (N)  
Frozen/Grandfathered (see General Regulations, Section 2.1.4, (F)). (N)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Service Descriptions (Cont'd)

7.2.8 Digital Services (Cont'd)

(C) High Capacity Service (Cont'd)

(4) Optional Features and Functions (Cont'd)

(e) Central Office Multiplexing (Cont'd)

- DS1C to DS

An arrangement that converts a 3.152 Mbps channel to two DS1 channels using digital time division multiplexing.

- DS1 to Voice

An arrangement that converts a 1.544 Mbps channel to 24 channels for use with Voice Grade Services. A channel of this DS1 to the Hub can also be used for a Digital Data or Metallic Service.

(T)  
(D)

(f) Synchronous Timing

Synchronous Timing utilizes a point to point DS1 service that connects from a Utility BITS timing clock to another customer premises or an EIS arrangement that must be located within the same serving wire center as the BITS timing clock. Synchronous Timing is solely used for network synchronization via a master timing supply. Synchronous Timing is available only where facilities and equipment are available.

Continued



ACCESS SERVICE

7. Special Access Service (Cont'd)

(N)

7.2 Service Descriptions (Cont'd)

7.2.8 Digital Services (Cont'd)

(C) High Capacity Service (Cont'd)

(4) Optional Features and Functions (Cont'd)

(g) Clear Channel Capability (CCC)

- per Circuit arranged

Clear Channel Capability (CCC) is a feature that provides the customer with an increase in useable bandwidth from 1.344 Mbps to 1.536 Mbps of an unconstrained data stream across the network. CCC is provided on 1.544 Mbps service and provisioning of CCC in the Utility network requires the customer's signal at the channel interface to conform to bipolar with eight zero substitution (B8ZS) line code format. Customer equipment must be compatible with this method of providing the unconstrained signal.

(N)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Service Descriptions (Cont'd)

7.2.8 Digital Services (Cont'd)

(C) High Capacity Service (Cont'd)

(4) Optional Features and Functions (Cont'd)

The following table shows the technical specifications packages with which the optional features and functions are available.

	Available with Technical Specifications Package HC-				
	<u>0</u>	<u>1</u>	<u>1C</u>	<u>2</u>	<u>3</u>
	<u>3x3</u>	<u>4</u>			
Central Office					(D)
Multiplexing:					(D)
DS4 to DS1					X
DS3 to DS1				X	
- Opt.1				X	X
- Opt.2				X	X
DS2 to DS1				X	
DS1C to DS1		X			
DS1 to Voice		X			
Transfer					
Arrangement@		X			
Network Reconfiguration					
Service*			X		X
Advanced Digital					
Network Interface					
Arrangement					
High Capacity Service					
Interface Arrangement			X		
Synchronous Timing			X		

@ Provided only to existing customers and services working as of January 1, 1995.

\* Applicable regulations, rates and charges are set forth in 7.2.8(B) preceding and 7.5.8(B) following.

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Service Descriptions (Cont'd)

7.2.9 SONET Ring and Access Services\* (N)

(A) Basic Service Description

SONET Ring and Access Services provide dedicated bandwidth capacity (bit rate capacity or bit speed) over self-healing ring and two-point (a.k.a. circuit service) facility configurations for a single customer. Connecting facilities carry synchronous and asynchronous transmissions. The service includes enhanced survivability and network management per SONET (Synchronous Optical Network) technology. (T)

Synchronous Transport Signal-level 1 (STS-1) at 51 Mbps is the basic SONET technology building block. Electrical signals in the form of digital pulses are converted to Optical Carrier rates (OC-n) for transmission on fiber optics. (T)

The Utility's service supports synchronous bandwidth capacities at 155 Mbps, 622 Mbps and 2.4 Gbps. The SONET add/drop multiplexer aggregates lesser bit speed services onto the dedicated ring or two point(circuit service) configurations.

Rate elements are:

- Premises and Central Office Nodes for connecting to the ring, using the SONET add/drop multiplexer.
- Premises and Central Office Access Ports that identify facility interfaces.
- Local Loop Access Links that connect a customer's premise to the central office.
- Primary Node Links connecting the primary central office node to the customer's premises or Point of Presence.

Plus Dedicated Ring Fees, Mileage and Optional Features.

An EIS Cross-Connect may connect to a SONET Central Office Access Node or Port.

\* Frozen/Grandfathered SONET Ring and Access Service effective June 30, 2006, pending CPUC Resolution. See General Regulations, Schedule Cal.P.U.C. No. 175-T, Section 2.1.4, (F). (N)  
(N)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Service Descriptions (Cont'd)

7.2.9 SONET Ring and Access Services\* (Cont'd)

(N)

(A) Basic Service Description (Cont'd)

All service configurations have one working and one standby transmission path. In the event of failure of the customer's transmission path, SONET technology will switch, within 50 milliseconds of detection, the customer's transmissions to a dedicated standby path.

SONET Ring and Access Services are planned for the major metropolitan areas of California. By the end of 1996 facilities will be available in many areas of California including the major central offices of the San Francisco, Sacramento and Los Angeles metropolitan areas, plus Orange and San Diego counties. Where facilities and/or operating conditions do not permit the availability of services, Special Construction will apply as set forth in Section 15.

Upon request, SONET Ring and Access Services may be placed on diverse fiber facilities where available. Diversity is available as shown in Section 7.5.8, (C) (7).

(T)

\* Frozen/Grandfathered SONET Ring and Access Service effective June 30, 2006, pending CPUC Resolution. See General Regulations, Schedule Cal.P.U.C. No. 175-T, Section 2.1.4, (F). (N)

(N)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Service Descriptions (Cont'd)

7.2.9 SONET Ring and Access Services\* (Cont'd)

(N)

(A) Basic Service Description (Cont'd)

Channel Interfaces

Compatible channel interfaces are listed in Technical Reference PUB L-780046-PB/NV - Technical Requirements for SONET Ring and Access Services.

For the EoS (Ethernet over SONET) offering of 100 Mbps for SONET Ring service, the compatible channel interface is listed in Technical Reference TP-76-412-000.

Interfaces for Ethernet over SONET (EOS) are listed in Technical Reference No. TP-76-412-000.

\* Frozen/Grandfathered SONET Ring and Access Service effective June 30, 2006, pending CPUC Resolution. See General Regulations, Schedule Cal.P.U.C. No. 175-T, Section 2.1.4, (F).

(N)  
|  
(N)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Service Descriptions (Cont'd)

7.2.9 SONET Ring and Access Services\* (Cont'd)

(N)

(A) Basic Service Description (Cont'd)

(1) Mileage

Mileage charges apply to the varying configurations of the SONET Ring and Access Services. Mileage is charged based on V&H miles determined from National Exchange Carrier Association (NECA) Tariff FCC No. 4. Fractions of a mile are rounded up to the whole mile for rate calculations.

For the dedicated ring recurring mileage is for the interoffice facilities between nodes. The chargeable mileage is that mileage per link exceeding the ten miles included in the Dedicated Ring Fee for Interoffice or Alternate Wire Center. Distances obtained from V&H coordinates set forth in NECA Tariff FCC No. 4, will determine the chargeable mileage on a per link basis. The V&H Coordinates of the normal serving wire center of the customer premises will be used for calculating mileage from Premises Nodes. The monthly mileage charge for the dedicated ring is determined by multiplying the applicable rate times the chargeable mileage.

(D)

For circuit service configurations recurring mileage provides for interoffice facilities between the end point nodes of the circuit. The chargeable mileage is the distance between the central offices with the end point nodes. These distances are determined using the V&H coordinates of NECA Tariff FCC No. 4. The monthly mileage charge for circuit service is determined by multiplying the applicable monthly rate times the chargeable mileage.

\* Frozen/Grandfathered SONET Ring and Access Service effective June 30, 2006, pending CPUC Resolution. See General Regulations, Schedule Cal.P.U.C. No. 175-T, Section 2.1.4, (F).

(N)

|  
(N)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Service Descriptions (Cont'd)

7.2.9 SONET Ring and Access Services\* (Cont'd)

(N)

(A) Basic Service Description (Cont'd)

(2) Dedicated Ring Fee

Dedicated Ring Fees provide for the construction of dedicated transport facilities, related service order activity and ongoing ring maintenance. There are three Fees: (1) Interoffice: for CO Node to CO Node facilities; (2) Local Loop: for facilities connecting a CO Node to one or more Premises Nodes in the customer's normal serving wire center, and (3) Alternate Wire Center: for facilities connecting a Premise Node to a central office outside of the customer's normal serving wire center. The fee does not apply to circuit service configurations.

(3) CO and Premises Node

Nodes, available in Rate Stability Payment Plans, aggregate lower bandwidth capacities onto the ring or circuit service through use of the SONET add/drop multiplexer function. The CO Node is located in the central office; the Premises Node, including Customer Provided Node, at the customer's location. Customer Provided Nodes must connect to Utility nodes. CO Nodes shall be required for extending the range of the ring (i.e., for ring regeneration). Circuit service CO Nodes may be used for interconnection to other rings (appropriate Circuit Service Mileage and CO Access Ports will be charged). For ring nodes bandwidth capacities are 155 Mbps, 622 Mbps, and 2.4 Gbps. For circuit service configurations, bandwidth capacities are 155 Mbps and 622 Mbps. A minimum of one CO Node is required on a ring.

An EIS Cross-Connect may connect to a CO Node.

\* Frozen/Grandfathered SONET Ring and Access Service effective June 30, 2006, pending CPUC Resolution. See General Regulations, Schedule Cal.P.U.C. No. 175-T, Section 2.1.4, (F).

(N)

(N)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Service Descriptions (Cont'd)

7.2.9 SONET Ring and Access Services\* (Cont'd)

(N)

(A) Basic Service Description (Cont'd)

(4) Local Loop Access Link

(a) Local Loop Access Link With Equipment

The Local Loop Access Link provides the equipment for delivering transmissions from the customer's premises to the Utility's dedicated ring or circuit service. Bandwidth is 155 Mbps.

(b) Local Loop Access Link Without Equipment

Reserved for future use

(5) Premises Access Port

The Premises Access Port is associated with a Premises Node at the customer's location. It is identified by 1.5 Mbps, 45 Mbps, 155 Mbps, 100 Mbps and 622 Mbps bandwidth capacities.

An Additional Connection for 2.4 Gbps (OC-48) at 622 Mbps<sup>#</sup> bandwidth capacity connects to a Premises Node to accommodate interfaces at

1.5 Mbps or 155 Mbps. This additional connection port must be purchased for each 622 Mbps<sup>#</sup> bandwidth before the 1.5 Mbps, or 155 Mbps Premises Access Ports will work on an OC-48 Premises Node.

The additional connection for 2.4 Gbps at 622 Mbps<sup>#</sup> is not required for OC-12c (622 Mbps) Premises Access Ports, 155 Mbps Premises Access Ports or DS3 (45 Mbps) Premises Access Ports. However, an OC-48 Premises Node is required to provision 622 Mbps bandwidth service or OC-12c Premises Access Ports.

\* Frozen/Grandfathered SONET Ring and Access Service effective June 30, 2006, pending CPUC Resolution. See General Regulations, Schedule Cal.P.U.C. No. 175-T, Section 2.1.4, (F).

# 622 Mbps Additional Connection interface not applicable to new customers served by new equipment for interface connections to 155 Mbps. Additional Connection still required for 1.5 Mbps capacity. Existing customers with the Additional Connection interface will retain it.

Continued



ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Service Descriptions (Cont'd)

7.2.9 SONET Ring and Access Services\* (Cont'd)

(N)

(A) Basic Service Description (Cont'd)

(5) Premises Access Port (Cont'd)

Existing customers subscribing to SONET Ring service must have completed at least 36 months in a single or subsequent Term Payment Plan (Rate Stability Plan) and sign a new 3 or 5 Year Term Payment Plan (Rate Stability Plan) in order to qualify for the 100 Mbps or 1 Gbps Ethernet Port offering.

(6) Central Office Access Port

The Central Office Access Port connects Local Loop Access Links, or channel terminations, multiplexers or circuit service facilities to the Central Office Node in dedicated ring configurations. It offers bandwidth capacities of 51 Mbps, 155 Mbps and 622 Mbps.

An EIS Cross-Connect may connect to a Central Office Access Port.

\* Frozen/Grandfathered SONET Ring and Access Service effective June 30, 2006, pending CPUC Resolution. See General Regulations, Schedule Cal.P.U.C. No. 175-T, Section 2.1.4, (F).

(N)

(N)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Service Descriptions (Cont'd)

7.2.9 SONET Ring and Access Services\* (Cont'd)

(N)

(A) Basic Service Description (Cont'd)

(7) Primary Node Link

The Primary Node Link may act as the interface to the dedicated interoffice ring at the customer's designated primary CO Node location (primary node). The Primary Node Link can be located at either a customer's premises or a Point of Presence (POP). The customer can designate one primary node on a ring that has no premises node locations for use with the Primary Node Links. Other nodes on the ring require Central Office Access Ports, Local Loop Access Links and/or channel terminations for the ring interface. The Primary Node Link cannot be used on rings with a Premise Node. Primary Node Link bandwidth capacities are: 1.5 Mbps, 51 Mbps or 155 Mbps. The Primary Node Link can only be used on rings not having a Premises Node.

(8) Optional Features and Functions

(a) Central Office Multiplexing

(i) DS3 to DS1

An arrangement that converts a DS3 channel to 28 DS1 channels using digital time division multiplexing.

(ii) There is no SONET multiplexing arrangement for bandwidth capacities above 51 Mbps.

(b) Additional Connection for 2.4 Gbps (OC-48)

(i) OC3 not offered

(ii) OC-12 to DS1

An arrangement for DS1 limits availability of total drop capacity.

\* Frozen/Grandfathered SONET Ring and Access Service effective June 30, 2006, pending CPUC Resolution. See General Regulations, Schedule Cal.P.U.C. No. 175-T, Section 2.1.4, (F).

(N)

(N)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Service Descriptions (Cont'd)

7.2.9 SONET Ring and Access Services\* (Cont'd)

(N)

(A) Basic Service Description (Cont'd)

(8) Optional Features and Functions (Cont'd)

(b) Customer Provided Node

Customer Provided Nodes, compatible with Utility specifications, may connect from customer premises to Utility provided nodes on the ring. The customer will furnish all equipment between the Utility's optical network interface units serving the customer premises. Through a mutually agreed upon interoperability agreement the Utility will maintain network control and inventory as well as direct all provisioning and maintenance of the ring.

For network security purposes, the customer will place the provided node/transport equipment in a locked cabinet or other appropriate secure arrangement.

\* Frozen/Grandfathered SONET Ring and Access Service effective June 30, 2006, pending CPUC Resolution. See General Regulations, Schedule Cal.P.U.C. No. 175-T, Section 2.1.4, (F).

(N)  
|  
(N)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Service Descriptions (Cont'd)

7.2.9 SONET Ring and Access Services\* (Cont'd)

(N)

(A) Basic Service Description (Cont'd)

(9) Ethernet over SONET (EoS)

Ethernet over SONET (EoS) interfaces have distance limitations from the Utility Serving Wire Center to the customer's demarcation point. These limitations will be discussed with the customer and the Utility and customers will determine the appropriate EoS interface for the customer's SONET Ring service.

Ethernet over SONET (EoS) requires that customers utilize certain settings for their Customer Provided Equipment (CPE). The Utility will work cooperatively with the customer to make sure that customer utilizes the correct settings. In some cases customers may be required to make modifications (including upgrades) to their CPE, which will be entirely at the customer's expense. Failure to use these settings will result in service problems possibly leading to outages for which the customer will not hold the Utility liable.

Ethernet over SONET (EoS) throughputs may vary depending on the type of equipment used to provide the service. Certain protocols may not be available. Additional information on the settings that customers must utilize can be found in Technical Publication TP-76-412-000.

\* Frozen/Grandfathered SONET Ring and Access Service effective June 30, 2006, pending CPUC Resolution. See General Regulations, Schedule Cal.P.U.C. No. 175-T, Section 2.1.4, (F).

(N)  
|  
(N)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Service Descriptions (Cont'd)

7.2.10 OC-192 Dedicated SONET Ring Service

(A) General Description

(1) Basic Service Description

OC-192 Dedicated SONET Ring Service<sup>#</sup> is a 9.953 Gbps transport Service. OC-192 is designed for transport of lower speed optical services, e.g., DS-3, OC-3 or OC3c, OC-12 or OC12c, and OC-48\* or OC48c\*. The dedicated ring is designed to provide increased reliability and functionality by connecting multiple customer locations and specified Utility Serving Wire Centers via self-healing Bi-directional Line Switched Rings (BLSR). OC-192 is a logical extension of existing SONET products and services OC-3, OC-3c, OC-12, OC12c, OC48\*, OC48c\*.

The dedicated ring can connect multiple (between 2 and 16) customer-designated locations and Utility Serving Wire Centers, as described in 7.2.10, (1) (B) following, where SONET facilities and equipment are available.

Rate elements include nodes, ports, mileage, regenerators, and add/drop capability. Rates are specified in 7.5.12 following.

The SONET add/drop multiplexer aggregates lesser bit speed services onto the dedicated ring configuration. Synchronous Transport Signal-level 1 (STS1) at 51 Mbps is the basic SONET technology building block. Electrical signals in the form of digital pulses are converted to Optical Carrier rates (OC-n) for transmission on fiber optics. Connecting facilities carry synchronous and asynchronous transmissions. The service includes enhanced survivability and network management per SONET (Synchronous Optical Network) technology.

All service configurations have one working and one standby transmission path. In the event of a failure of the customer's transmission path, SONET technology will protection switch, within 50 milliseconds of detection, to a dedicated standby path.

OC-192 Dedicated SONET Ring service and its features are (N)  
available only where facilities and operating conditions permit. (N)

\* OC-48/OC-48c riding service is available only to customers purchasing OC-192 Dedicated SONET Ring service and is limited to Customer Premises to Customer Premise Port to port orders. OC-48/OC-48c service cannot be extended beyond the Customer location nodes. OC-48/OC-48c riding service will not be available immediately.

# OC-192 Dedicated SONET Ring is available via Self-Healing Uni-Directional Path Switched Rings (UPSR) or Bi-Directional Line Switched Ring (BLSR).

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Service Descriptions (Cont'd)

7.2.10 OC-192 Dedicated SONET Ring Service (Cont'd)

(A) General Description (Cont'd)

(1) Basic Service Description (Cont'd)

(D)

(D)

EC-1 (Electrical Carrier Level 1) Interface

The EC-1 service interface is implemented as a standardized SONET electrical service interface as specified in Section 5 of ANSI T1.416.03-1999. The EC-1 interface provides the capability for connecting one SONET STS-1 signal across a SONET electrical service interface to a Company provided Optical Carrier Network (OCN) Point to Point or Company provided Dedicated SONET Ring service. The STS-1 signal connecting across an EC-1 interface may only contain: a) one DS3 circuit mapped into the SONET STS-1 signal payload, or b) one STS-1 circuit, without constraint as to payload mapping. Offered as Customer Premises port termination, and as a CO termination where facilities and/operating conditions permit on Dedicated SONET Ring service. (T) (T)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Service Descriptions (Cont'd)

7.2.10 OC-192 Dedicated SONET Ring Service (Cont'd)

(A) General Description (Cont'd)

(2) Service Provisioning

(T)

(3) Manner of Provisioning

(T) (L)

All customers will be served from the nearest suitably equipped Utility Serving Wire Center. Information pertaining to Utility Serving Wire Centers equipped to provide OC-192 Dedicated SONET Ring Service is set forth in the National Exchange Carrier Association, Inc. (NECA) Tariff F.C.C. No. 4. OC-192 Dedicated SONET Ring Service will be provided subject to the availability and limitations of the Utility's Serving Wire Centers and outside plant facilities. OC-192 Dedicated SONET Ring Service is only available where technical capabilities permit such facility distance and type of physical plant. Where facilities are not available, Special Construction charges may apply as shown in Section 15 following.

(L)

(4) Rate Elements

(N)

Rate Elements and rate applications for OC-192 Dedicated SONET Ring are defined in Section 7.4.15 following.

The rate elements associated with OC-192 Dedicated SONET Ring service are:

- Customers Premises and Central Office Nodes
- Customer Premises and Central Office Access Ports
- Mileage between the Serving Wire Centers (Central office Nodes)
- Regenerators
- Add/Drop Capability
- Optional Features

Upon request, OC-192 Dedicated SONET Ring service may be placed upon diverse fiber facilities where available. Where facilities and/or operating conditions do not exist, Special Construction charges as set forth in Section 15, may apply.

Customers may choose to accept the Ring without Diversity (i.e. no dual entrance facility) or prior to cable diversity being available. In this situation out of service Credit Allowances as set forth in Schedule Cal. P.U.C. 175-T, Section 2.4.4 are applicable.

(L) Material formerly located on Sheet 283-H.

(N)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Service Description (Cont'd)

7.2.10 OC-192 Dedicated SONET Ring Services (Cont'd)

(A) General Description (Cont'd) (T)

(D)

(5) Limitations (T)

The Utility does not undertake to originate data, but offers the use of its OC-192 Dedicated SONET Ring Service, where available, to customers for the purpose of transporting data originated by the customer or a third party.

Unprotected services may be interrupted to repair other circuits. In cases where the customer orders OC-192 Dedicated SONET Ring Service with an unprotected 2-fiber service interface, the Utility may provision this unprotected service, with other unprotected services, via a multi-port circuit card. If one unprotected service on the card incurs an outage, the Utility may repair the 2-fiber service interface device by replacing the card, which may temporarily interrupt service on any other unprotected tributary circuits that subtend this same multi-port circuit card. In the event of a service interruption, credit allowance will be provided for the service that suffered the unplanned outage, as outlined in Section 7.2.10 (3), following.

The Utility will maintain and repair the OC-192 Ring Service which it furnishes and will provide the customer reasonable notification of service affecting activities that may occur in the normal operation of business.

(6) Allowance for Service Interruptions (T)

Dedicated Rings provide Automatic Protection to assure 100 percent availability of the services on the ring. Credit allowance for service interruptions is set forth in Section 2.4.4, preceding.

Continued



ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Service Descriptions (Cont'd)

7.2.10 OC-192 Dedicated SONET Ring Service (Cont'd)

(A) General Description (Cont'd)

(7) Responsibility of the Utility

The Utility will provision and maintain OC-192 Dedicated SONET Ring Service for the customer up to and including the Network Interface (NI) as set forth in Section 2.1.1 preceding.

(8) Rights of the Utility

The Utility will not provision OC-192 Dedicated SONET Ring Service if it has reasonably determined that (a) it is not technically feasible over existing facilities or (b) it will cause interference problems within the Utility's network or other facilities as set forth in Section 2.1 preceding.

(9) Responsibility of Customer

The customer is responsible for providing compatible customer provided equipment (CPE) that is used for connection to OC-192 Dedicated SONET Ring Service as set forth in Section 2.3 preceding.

(B) Technical Specifications

Technical specifications for OC-192 Dedicated SONET Ring Service are listed in the following Utility technical publications (TPs):

- AM TR-TMO-000101, Ameritech Digital Service Transmission Parameters for Performance
- AM TR-NIS-000111, Ameritech OC-3, OC-12, OC-48 and OC-192, issued August, 1995, Service Interface Specifications issued August, 1999
- TP-76-412-000, Contains interfaces for Ethernet over SONET (EOS)
- TP 76839 SONET Transmission Requirements Performance and Interface Specifications

These publications may be obtained from:

APEx Support Team (734) 523-7348

(T)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Service Descriptions (Cont'd)

7.2.10 OC-192 Dedicated SONET Ring Service (Cont'd)

(C) SONET Assurance Guarantee

All service configurations have one working and one standby transmission path. In the event of failure of the customer's transmission path, SONET technology will switch, within 50 milliseconds of detection, the customer's transmissions to a dedicated standby path.

(D) Ethernet over SONET (EoS)

Ethernet over SONET (EoS) interfaces have distance limitations from the Utility Serving Wire Center to the customer's demarcation point.

Ethernet over SONET (EoS) requires that customers utilize certain settings for their Customer Provided Equipment (CPE). The Utility will work cooperatively with the customer to make sure that customer utilizes the correct settings. In some cases customers may be required to make modifications (including upgrades) to their CPE, which will be entirely at the customer's expense. Failure to use these settings will result in service problems possibly leading to outages for which the customer will not hold the Utility liable.

Ethernet over SONET (EoS) throughputs may vary depending on the type of equipment used to provide the service. Certain protocols may not be available. Additional information on the settings that customers must utilize can be found in Technical Publication TP-76-412-000.

(D)

(D)

Material omitted now located on Sheet 283-J-1-A.

(N)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Service Descriptions (Cont'd)

7.2.10 OC-192 Dedicated SONET Ring Service (Cont'd)

(D) Ethernet over SONET (EoS) (Cont'd)

EoS allows the efficient transport of Ethernet frames using SONET. (N)  
Ethernet ports will be available in bandwidths up to the Ethernet interface of 100 Mbps or 1 Gbps on an OC-*n* Dedicated Ring Service. As SONET bandwidths will be preset, the customer will be unable to transmit data beyond these preset SONET bandwidths. Interfaces of 100 Mbps or 1 Gbps Ethernet are available only to customers with Next Generation SONET equipment. Only single-mode fiber is available in the Central Office. The EoS line rates are based on the theoretical SONET payload line rates as specified in Telcordia Publication GR-253-CORE, Issue 4. These values are not representative of the true Ethernet transport capacity of the EoS circuit. (N)

Additional features are provided with the Ethernet over SONET (EoS) capability:\*

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

7.2.11 Reserved

7.2.12 Reserved

\* EoS port interfaces offered as 10/100BaseT are only available at the customer premises location.

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Service Descriptions (Cont'd)

7.2.13 GigaMAN® Service

(A) General Description

Effective September 30, 2017, GigaMAN Service will no longer be available for purchase by new or existing customers. The Company will no longer accept orders for adds, moves, changes or new term plans for GigaMAN Service, and existing term plans may not be renewed, converted or extended. Following the expiration of a customer's existing GigaMAN term agreement, service will be provided on a month-to-month basis at the applicable monthly extension rates until the service is discontinued.

(N)

(N)

(1) Basic Service Description

GigaMAN® (Gigabit Metro Area Network) Service is an intraLATA service providing transmission of digital signals at a discrete bit rate of 1 Gigabit per second (Gbps) in Ethernet format (Ethernet IEEE 802.3) between end-user customer premises. GigaMAN® is available in a point to point service configuration.

GigaMAN® service is only available where facilities and operating conditions permit. Where facilities and/or operating conditions do not permit, Special Construction as set forth in Section 15. following shall apply.

(2) Regulations

- (a) The customer provided equipment (CPE) must deliver the data signal for the GigaMAN® transport within the industry specification for the subscribed data service.

Material omitted now located on Sheet 283-K-1

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Service Descriptions (Cont'd)

7.2.13 GigaMAN® Service (Cont'd)

(A) General Description (Cont'd)

(2) Regulations (Cont'd)

- (b) GigaMAN® provides physical layer transport only. (L)  
The Utility assumes no responsibility for the through transmission of signals generated by the customer's CPE, for the quality of, or defects in such transmission, for the reception of signals by the customer's CPE, or address signaling to the extent addressing is performed by the customer's CPE. Error detection and correction of data generated by the customer's CPE is the customer's responsibility.
- (c) GigaMAN® is designed to provide connectivity at the discrete bit rate of 1 Gbps. (L)
- (d) GigaMAN® is available on one, two, three or five year Term Pricing Plan (TPP) offerings.
- (e) Out of service adjustments for credit allowances are set forth in Schedule Cal.P.U.C. No. 175-T, Section 2.4.4 preceding.
- (f) GigaMAN® is not available in a Meet Point billing configuration as set forth in Schedule Cal.P.U.C. 175-T, Sections 2.4.8 and 5.2.10.
- (g) Conversion from other services (e.g., Hicap DS1 1,544 Mbps, etc.) are not available with GigaMAN® service.
- (h) Regulations for moves of a GigaMAN® service are set forth in 7.4.16, (D) (2) following.
- (i) The Minimum period for GigaMAN® service is 12 months.
- (j) GigaMAN® service is not offered with guaranteed throughput thresholds.

(L) Material formerly located on Sheet 283-K  
Material omitted now located on Sheet 283-K-2

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Service Descriptions (Cont'd)

7.2.13 GigaMAN® Service (Cont'd)

(A) General Description (Cont'd)

(2) Regulations (Cont'd)

- (k) A repeater (circuit regenerator) may be used to extend the transmission of GigaMAN® service. The Utility will determine when repeaters are necessary. Repeaters will be located in the Utility Serving Wire Center. (L)

(3) Optional Features

(a) Diversity

GigaMAN® service is offered with Diversity. Diversity requires two GigaMAN® services purchased by the same customer of record.\*

The customer premises locations for the two Diverse GigaMAN® services may differ respectively in A to Z locations for the two circuits and both circuits must be served by the same type of Utility equipment.

Diversity is only available to GigaMAN® customers with service installed after November 13, 2003. Customers with installations completed prior to November 13, 2003 will not be able to order the Diversity options on their GigaMAN® service. Customers with the service installed prior to November 13, 2003 who request Diversity, would be required to convert their existing service per the Rate Regulations set forth in 7.4.16, (2) (A) following.

GigaMAN® diversity (including Channel Termination Diversity, Alternate Wire Center Diversity and Inter-Wire Center Diversity) may be configured to be diverse from other eligible Access services as determined by the Utility.

\* Alternate Wire Center Diversity does not require a second GigaMAN® circuit

(L) Material formerly located on Sheet 283-K-1

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Service Descriptions (Cont'd)

7.2.13 GigaMAN<sup>®</sup> Service (Cont'd)

(A) General Description (Cont'd) (T)

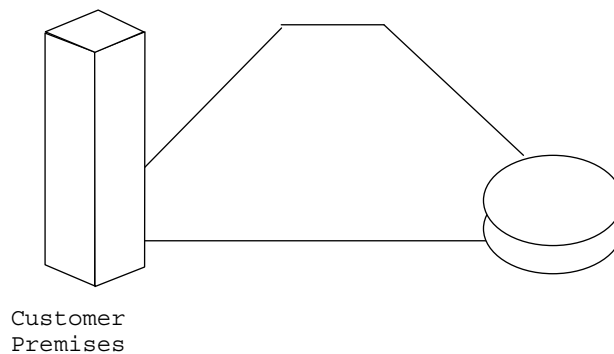
(3) Optional Features (Cont'd) (T)

(a) Diversity (Cont'd) (N)

(i) Channel Termination Diversity (Local Channel Diversity)\* (T)  
(N)

Where facilities and/or operating conditions do not exist, Special Construction charges as set forth in Schedule Cal.P.U.C. 175-T, Section 15. (T) may apply.

Circuit No.2 Diverse  
Route



Channel Termination Diversity (Local Channel Diversity)

Channel Termination Diversity (Local Channel Diversity) provides for a transmission path between a designated customer premises and the standard Serving Wire Center (SWC) that is diverse from the standard transmission path of the GigaMAN<sup>®</sup> service. With this arrangement, a Channel Termination will be provisioned over the standard route and another Channel Termination will be provisioned over the diverse route, both utilizing the same Serving Wire Center.

Channel Termination Diversity (Local Channel Diversity) does not provide for full diversity of the GigaMAN<sup>®</sup> service. It provides diversity from the splice point closest to the customer's property line. Customers requiring full diversity must utilize Special Construction as set forth in Section 15. following. (T)  
(T)

- \* GigaMAN<sup>®</sup> diversity (including Channel Termination Diversity, Alternate Wire Center Diversity and Inter-Wire Center Diversity) may be configured to be diverse from other eligible Access services as determined by the Utility. (N)  
(N)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Service Descriptions (Cont'd)

7.2.13 GigaMAN<sup>®</sup> Service (Cont'd)

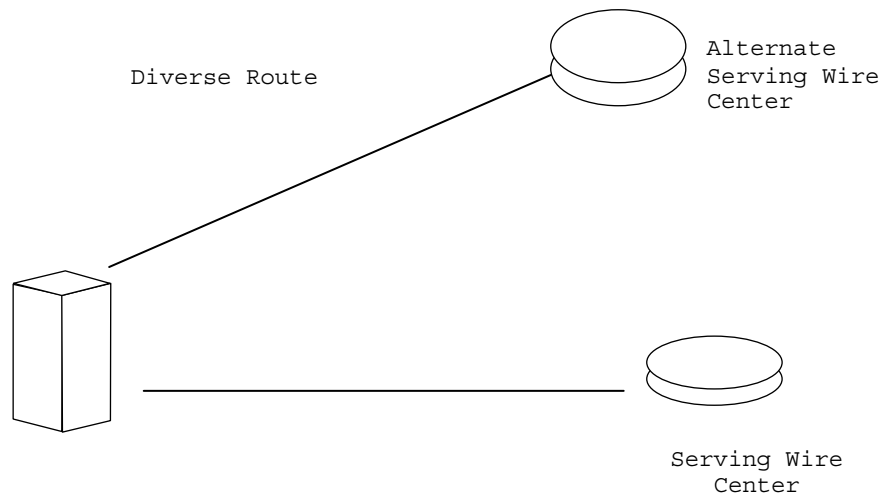
(A) General Description (Cont'd) (T)

(3) Optional Features (Cont'd) (T)

(a) Diversity (Cont'd) (N)

(ii) Alternate Wire Center Diversity (T)

Where facilities and/or operating conditions do not exist, Special Construction charges as set forth in Schedule Cal.P.U.C. No. 175-T, Section 15. may apply. (T)



Alternate Wire Center Diversity

Alternate Wire Center Diversity is offered on the Channel Termination only and may be applicable to one or both Channel Terminations of a GigaMAN<sup>®</sup> service.

Alternate Wire Center Diversity provides for a transmission path from the customer's designated premises through a Serving Wire Center that is not the customer's standard Serving Wire Center. The Utility will select the closest Alternate Wire Center to the customer's premises. (T)

Alternate Wire Center Diversity does not provide full diversity of the GigaMAN<sup>®</sup> service. Customers requiring full diversity must utilize Special Construction as set forth in Section 15. following. (T)

Continued



# ACCESS SERVICE

## 7. Special Access Service (Cont'd)

### 7.2 Service Descriptions (Cont'd)

#### 7.2.13 GigaMAN® Service (Cont'd)

##### (A) General Description (Cont'd)

(T)

##### (3) Optional Features (Cont'd)

(T)

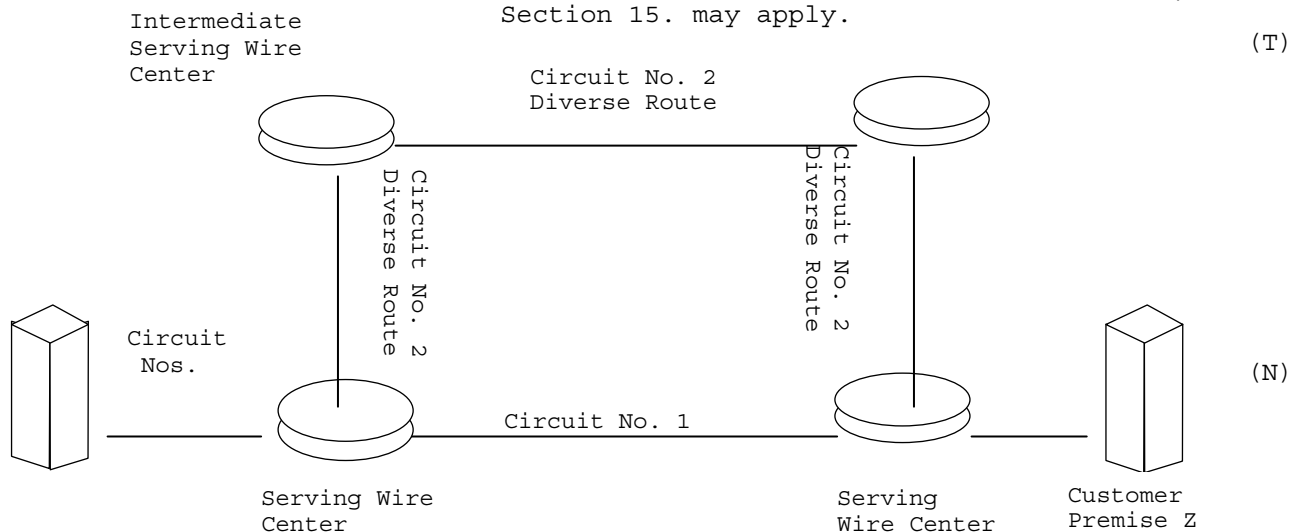
##### (a) Diversity (Cont'd)

(N)

##### (iii) Inter-Wire Center Diversity\*

(N)

Where facilities and/or operating conditions do not exist, Special Construction charges as set forth in Schedule Cal.P.U.C. No. 175-T, Section 15. may apply.



### Inter-Wire Center Diversity

Inter-Wire Center Diversity applies to GigaMAN® service that requires more than one Serving Wire Center to provide the transmission path between the customer premises. Inter-Wire Center Diversity provides for a transmission path that is not the standard transmission path between the Serving Wire Centers of a GigaMAN® service.

The Utility will select the closest diverse Serving Wire Centers to the customer's premises for the Inter-Wire Center Diversity.

Inter-Wire Center Diversity does not provide for full diversity of the GigaMAN® service. It provides a diverse route between Serving Wire Centers. Customers requiring full diversity must utilize Special Construction as set forth in Section 15. following.

(T)

(T)

- \* GigaMAN® diversity (including Channel Termination Diversity, Alternate Wire Center Diversity and Inter-Wire Center Diversity) may be configured to be diverse from other eligible Access services as determined by the Utility.

(N)

|

(N)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Service Descriptions (Cont'd)

7.2.13 GigaMAN<sup>®</sup> Service (Cont'd)

(A) General Description (Cont'd)

(3) Optional Features (Cont'd)

(b) Protection Options

Protection options are available to GigaMAN<sup>®</sup> customers whose orders for GigaMAN<sup>®</sup> service were completed after January 5, 2004. Customers subscribing to GigaMAN<sup>®</sup> service prior to January 5, 2004 requesting Protection options must follow the Change rules set forth in Section 7.4.16 following.

Protection options are provisioned on the customer's GigaMAN<sup>®</sup> service and the customer is not required to purchase a second GigaMAN<sup>®</sup> circuit for Protection options. Protection options are applied on a per GigaMAN<sup>®</sup> circuit basis only. Protection options provide additional levels of reliability to GigaMAN<sup>®</sup> service. There are multiple Protection options offered. The options do not need to be the same, but both Channel Terminations of the GigaMAN<sup>®</sup> service must include some form of protection for the service to be considered protected (except for Power Protection which can be on either one or both ends).

(N)  
|  
(N)

Protection options are available where facilities and/or operating conditions permit. Where facilities and/or operating conditions do not permit, Special Construction charges as set forth in Section 15. following may apply.

The Utility will design the Protection options based upon the configuration of the customer's GigaMAN<sup>®</sup> service.

Additional repeaters may be necessary on the protected path as determined by the Utility as set forth in Section 7.4.16, (2) (B) following.

(T)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Service Descriptions (Cont'd)

7.2.13 GigaMAN<sup>®</sup> Service (Cont'd)

(A) General Description (Cont'd)

(3) Optional Features (Cont'd)

(b) Protection Options (Cont'd)

Protection switching in less than 50 milliseconds will occur on GigaMAN<sup>®</sup> services with Protection options, with the exception of Power Protection which is not Switch protected. Protection options are offered with a Service Level Agreements (SLA) that target a service availability of 99.999%. SLAs are not applicable in the event of a cable cut in any unprotected portion of the GigaMAN<sup>®</sup> service fiber path or when customer requested modifications to the service requires downtime.

GigaMAN<sup>®</sup> Protection options are offered as follows:

- Equipment Only Protection - Per Terminating End
- Equipment Plus Fiber Path Protection
  - Equipment Plus Alternate Wire Center Path Protection - Per Terminating End
  - Equipment Plus Channel Termination Path Protection - Per Terminating End
- Inter-Wire Center Path Protection - Per Circuit (T)  
(D)
- Power Protection

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Service Descriptions (Cont'd)

7.2.13 GigaMAN<sup>®</sup> Service (Cont'd)

(A) General Description (Cont'd) (T)

(3) Optional Features (Cont'd) (T)

(b) Protection Options (Cont'd) (T)

(i) Equipment Only Protection - Per Terminating End (T)

Equipment Only Protection offers one GigaMAN<sup>®</sup> signal routed on two different fiber pairs that co-exist in the same cable and conduit structure that terminate into the same device, but in a separate and distinct module. Protection switching will occur between the modules if necessary.

All protected configurations have one working and one standby path. In the event of a failure of the transmission path, GigaMAN<sup>®</sup> equipment will switch to a dedicated standby path within 50 milliseconds of detection. In the event of a failure to both fiber transmission paths, an Out Of Service condition will result. This form of protection can only be ordered per Channel Termination for each protected GigaMAN<sup>®</sup> service.

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Service Descriptions (Cont'd)

7.2.13 GigaMAN<sup>®</sup> Service (Cont'd)

(A) General Description (Cont'd) (T)

(3) Optional Features (Cont'd) (T)

(b) Protection Options (Cont'd) (T)

(ii) Equipment Plus Fiber Path Protection (T)

Equipment Plus Fiber Path Protection offers varying degrees of path protection for each Channel Termination of the GigaMAN<sup>®</sup> service, and is offered as follows:

(aa) Equipment Plus Alternate Wire Center Path Protection - Per Terminating End (T)

Equipment Plus Alternate Wire Center Path Protection offers one GigaMAN<sup>®</sup> signal routed over one fiber pair of the protected GigaMAN<sup>®</sup> service from the customer's premises to the customer's normal Utility Serving Wire Center, and a duplicate GigaMAN<sup>®</sup> signal routed over a diversely routed fiber pair to the Alternate Wire Center selected by the Utility.

If any location(s) between the two fiber paths is closer than ten feet, the location(s) will be disclosed to the customer. The customer will determine to accept the engineered path or agree to pay Special Construction charges as set forth in Section 15. following to provide a completely diverse route where the ten foot allowance is not acceptable to the customer. (T)

This option can be selected for one or both Channel Terminations of the GigaMAN<sup>®</sup> service.

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Service Descriptions (Cont'd)

7.2.13 GigaMAN<sup>®</sup> Service (Cont'd)

(A) General Description (Cont'd) (T)

(3) Optional Features (Cont'd) (T)

(b) Protection Options (Cont'd) (T)

(ii) Equipment Plus Fiber Path Protection (Cont'd) (T)

Equipment Plus Fiber Path Protection offers varying degrees of path protection for each Channel Termination of the GigaMAN<sup>®</sup> service, and is offered as follows: (Cont'd)

(aa) Equipment Plus Alternate Wire Center Path Protection - Per Terminating End (Cont'd) (T)

All protected configurations have one working and one standby path. In the event of a failure of the transmission path, GigaMAN<sup>®</sup> equipment will switch to a dedicated standby path within 50 milliseconds of detection. In the event of a failure to both fiber transmission paths, an Out of Service condition will result. This form of protection can only be ordered per Channel Termination for each protected GigaMAN<sup>®</sup> service.

If a customer requests complete protection extending to the Utility Serving Wire Center from their premises location when utilizing Equipment Protection Plus Alternate Wire Center Path Protection, they must request diverse entrance facilities into their premises at each end from the nearest Utility splice point closest to the customer premises location. This work is subject to Special Construction charges as set forth in Section 15. following. (T)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Service Descriptions (Cont'd)

7.2.13 GigaMAN<sup>®</sup> Service (Cont'd)

(A) General Description (Cont'd) (T)

(3) Optional Features (Cont'd) (T)

(b) Protection Options (Cont'd) (T)

(ii) Equipment Plus Fiber Path Protection (Cont'd) (T)

Equipment Plus Fiber Path Protection offers varying degrees of path protection for each Channel Termination of the GigaMAN<sup>®</sup> service, and is offered as follows: (Cont'd)

(bb) Equipment Plus Channel Termination Path Protection - Per Terminating End (T)

Equipment Plus Channel Termination Path Protection offers a duplicate GigaMAN<sup>®</sup> signal routed over two diversely routed fiber paths to the customer's normal Utility Serving Wire Center. (T)

If any location(s) between the two fiber paths is closer than ten feet, the location(s) will be disclosed to the customer. The customer will determine to accept the engineered path or agree to pay Special Construction charges as set forth in Section 15. following to provide a completely diverse route where the ten foot allowance is not acceptable to the customer. (T)

All protected configurations have one working and one standby path. In the event of a failure of the transmission path, GigaMAN<sup>®</sup> equipment will switch to a dedicated standby path within 50 milliseconds of detection. In the event of a failure to both fiber transmission paths, an Out of Service condition will result. (T)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Service Descriptions (Cont'd)

7.2.13 GigaMAN<sup>®</sup> Service (Cont'd)

(A) General Description (Cont'd) (T)

(3) Optional Features (Cont'd) (T)

(b) Protection Options (Cont'd) (T)

(ii) Equipment Plus Fiber Path Protection (Cont'd) (T)

Equipment Plus Fiber Path Protection offers varying degrees of path protection for each Channel Termination of the GigaMAN<sup>®</sup> service, and is offered as follows: (Cont'd)

(bb) Equipment Plus Channel Termination Path Protection - Per Terminating End (Cont'd) (T)

This form of protection can only be ordered per Channel Termination for each protected GigaMAN<sup>®</sup> service, from the customer's premises location, or from the Utility manhole/splice point nearest the customer premises, to the Utility Serving Wire Center.

If a customer requests complete protection extending to the Utility Serving Wire Center from their premises location when utilizing Equipment Protection Plus Channel Termination Path Protection, they must request diverse entrance facilities into their premises at each end from the nearest Utility splice point closest to the customer premises location. This work is subject to Special Construction charges as set forth in Section 15. following. (T)

Continued



ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Service Descriptions (Cont'd)

7.2.13 GigaMAN<sup>®</sup> Service (Cont'd)

(A) General Description (Cont'd)

(3) Optional Features (Cont'd)

(b) Protection Options (Cont'd)

(iii) Inter-Wire Center Path Protection - Per Circuit

(T)

Inter-Wire Center Path Protection offers a duplicate GigaMAN<sup>®</sup> signal routed over two diversely routed fiber paths, between the two Utility Serving Wire Centers or a SWC and an Alternate Wire Center. Path protection starts at the nearest Utility manhole outside the Utility Serving Wire Center.

If any location(s) between the two fiber paths is closer than ten feet, the location(s) will be disclosed to the customer. The customer will determine to accept the engineered path or agree to pay Special Construction charges as set forth in Section 15. following to provide a completely diverse route where the ten foot allowance is not acceptable to the customer.

All protected configurations have one working and one standby path. In the event of a failure of the transmission path, GigaMAN<sup>®</sup> equipment will switch to a dedicated standby path within 50 milliseconds of detection. In the event of a failure to both fiber transmission paths, an Out of Service condition will result.

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Service Descriptions (Cont'd)

7.2.13 GigaMAN<sup>®</sup> Service (Cont'd)

(A) General Description (Cont'd)

(3) Optional Features (Cont'd)

(b) Protection Options (Cont'd)

(iv) Power Protection

Power Protection provides GigaMAN<sup>®</sup> customers with battery backup for up to eight (8) hours to maintain GigaMAN<sup>®</sup> equipment in the event of a power failure.

(D)

Power Protection is offered on a per rack or per cabinet basis, per customer premises, as determined by the Utility. Requests for Power Protection are subject to equipment availability and compatibility. The Utility will determine the availability, design and engineering requirements for Power Protection, and the appropriate number of service elements to apply. Power protection is available at either one end or both ends of the GigaMAN<sup>®</sup> service.

(N)

(N)

(N)

(N)

Customers in multi-tenant buildings will require separate equipment and bays dedicated to each customer.

The addition of Power Protection to existing GigaMAN<sup>®</sup> service may result in temporary service interruption.

Power Protection is not available for installations using the wall mounted cabinet.

Customers are responsible for providing floor space for power equipment as set forth in Section 2.3.3 preceding.

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Service Descriptions (Cont'd)

7.2.13 GigaMAN<sup>®</sup> Service (Cont'd)

(B) Technical Specifications Packages

Technical specifications are set forth in the following technical references:

Ethernet Standards - SBC TP 76412-000

This publication may be obtained from:

APEx Support Team  
(734) 523-7348

(T)  
(T)

(C) Moves

Regulations regarding moves are set forth in Section 7.4.16 following.

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Service Descriptions (Cont'd)

7.2.14 Optical Carrier Network (OCN) Point-to-Point Service

Optical Point-to-Point service will be designed to provide the customer with a custom point-to-point linear network. Optical Carrier Network (OCN) Point-to-Point service offers a highly reliable transport service that connects customer premises and Utility Serving Wire Center in point-to-point linear configuration. OCN supports voice, data, video, imaging, Internet traffic and other advanced broadband applications.

OCN Point-to-Point channels provide high speed synchronous optical fiber-based full duplex data transmission capabilities between two points. These services provide optical data transmission with the following characteristics:

- OC-3/OC-3c provides channels operating at the terminating bit rate of 155.52 Mbps;
- OC-12/OC-12c provides channels operating at the terminating bit rate of 622.08 Mbps;
- OC-48/OC-48c provides channels operating at the terminating bit rate of 2488.32 Mbps;
- OC-192/OC-192c provides channels operating at the terminating bit rate of 9953.28 Mbps;

OC-3, OC-12, OC-48 and OC-192 channels may be used to connect:

- a customer designated premises to another customer designated premises, without add/drop multiplexing capability.
- a customer designated premises to a Utility Serving Wire Center where add/drop multiplexing and add/drop functions are performed.

Optical Transmission paths for OC-3/OC-3c, OC-12/OC-12c, OC-48/OC-48c and OC-192/OC-192c, differentiated by bit rate and the quality of transmission is as delineated by the Optical Interface definitions in the appropriate technical reference publication(s) for the service ordered.

(L)

OC-3, OC-12, and OC-48 may be connected by (1) using the appropriate OC-3, OC-12 or OC-48 add/drop multiplexer (mux) along with the add/drop function to a DS1 and/or DS3 at suitably equipped wire centers, or (2) by using the full bandwidth premises to premises.

(T)

Optical Carrier Network (OCN) Point-to-Point service is only available where facilities and/or operating conditions permit. Where facilities and/or operating conditions do not permit, Special Construction as set forth in Section 15. following shall apply.

(T)

(L)

(L) Material formerly located on Sheet 283-L-2.

(N)

Continued

ACCESS SERVICE

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Service Descriptions (Cont'd)

7.2.14 Optical Carrier Network (OCN) Point-to-Point Service (Cont'd)

Ethernet Over SONET (EoS)

EoS allows the efficient transport of Ethernet frames using SONET. Ethernet Optical Add/Drop capability will be available in bandwidths up to 1 Gbps on an OCN Point-to-Point Service. As SONET bandwidths will be preset, the customer will be unable to transmit data beyond these preset SONET bandwidths. Only single-mode fiber is available in the Central Office. The EoS line rates are based on the theoretical SONET payload line rates as specified in Telcordia Publication GR-253-CORE, Issue 4. These values are not representative of the true Ethernet transport capacity of the EoS circuit.

(N)  
|  
(N)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Service Descriptions (Cont'd)

7.2.14 Optical Carrier Network (OCN) Point-to-Point Service (Cont'd)

The customer is responsible via the ordering process to identify what STS signal configuration is to be contained in each OC-3/OC-3c, OC-12/OC-12c, OC-48/OC-48c and OC-192/OC-192c service connection and each STS-1, STS-3 and/or STS-12 payload content. This information is required for routing and connection purposes in the network. OCN Point-to-Point service does not extend the SONET data communication channel overhead across the network interface to the customer's equipment.

OCN Point-to-Point Diversity

(N)

OCN Point-to-Point Diversity provides a separate transmission path that is diversely routed from the first and normally routed transmission path. The second OCN service must be at the same line speed level as the first OCN service.

OCN Point-to-Point Diversity requires the two circuits to be purchased by the same customer of record for the service. The customer premises locations for the two Diverse OCN services may differ respectively in A to Z locations for the two circuits and both circuits must be served by the same type of Utility equipment. Two Channel termination are applicable to the diverse circuit in addition to the original circuit. Network Survivability (Protection) options as set forth in Section 7.4.17, (C) (3) following are also available on the Diverse service. When the premises locations of the first and the Diverse service are the same, and the customer does not order any Protection with Route Survivability features, the rate element for Per Quarter Route Mile (S2DXY) as set forth in 7.5.14 following applies and does not require the related Protection rate element P8T.

(N)

Material omitted now located on Sheets 283-L-1 and 283-L-3.

(N)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Service Descriptions (Cont'd)

7.2.14 Optical Carrier Network (OCN) Point-to-Point Service (Cont'd)

Configurations:

OCN Point-to-Point services OC-3/OC-3c, OC-12/OC-12c, OC-48/OC-48c and OC-192/OC-192c can be configured in any of the following ways based upon customer requirements:

(A) OC-3

(1) Three STS-1 (Synchronous Transport Signals) channels, which each contain:

- one DS3 that is STS-1 mapped; or
- up to 28 asynchronous DS1s that are VT-mapped; or
- an STS-1 channel without constraint to payload mapping when the STS-1 channel does not terminate via an add/drop function to DS1 or DS3 services within the network.

- 1 Gbps Ethernet STS-1, 1-2v

(N)

(2) A single concatenated STS-3c channel.

Continued



ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Service Descriptions (Cont'd)

7.2.14 Optical Carrier Network (OCN) Point-To-Point Service (Cont'd)

Configurations (Cont'd) (N)

(B) OC-12

(1) Twelve STS-1 channels, which each contain:

- one DS3 that is STS-1 mapped; or
- up to 28 asynchronous DS1s that are VT-mapped; or
- an STS-1 channel without constraint to payload mapping when the STS-1 channel does not terminate via an add/drop function to DS1 or DS3 services within the network;

- 1 Gbps Ethernet STS-1, 1-9v (N)

- 1 Gbps Ethernet STS-3c, 1-3v (N)

(2) Four concatenated STS-3c channels.

(3) From one to three STS-3c channels mixed with from three to nine STS-1 channels subject to utilization of the total OC-12 capacity.

(4) A single concatenated STS-12c channel.

Material omitted now located on Sheet 283-L-5.

(N)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Service Descriptions (Cont'd)

7.2.14 Optical Carrier Network (OCN) Point-to-Point Service (Cont'd)

Configurations (Cont'd) (N)

(C) OC-48 (L)

(1) Forty-eight STS-1 channels each which each contain:

- one DS3 that is STS-1 mapped; or
- up to 28 asynchronous DS1s that are VT-mapped; or
- an STS-1 channel without constraint to payload mapping when the STS-1 channel does not terminate via an add/drop function to DS1 or DS3 services within the network. (L)

• 1 Gbps Ethernet STS-1, 1-21v (N)

• 1 Gbps Ethernet STS-3c, 1-7v (N)

(2) Sixteen concatenated STS-3c channels. (L)

(3) From one to fifteen concatenated STS-3c channels, mixed with from three to forty-five STS-1 channels subject to utilization of the total OC-48 capacity.

(4) Four concatenated STS-12c channels.

(5) From one to three concatenated STS-12c channels, mixed with from twelve to thirty-six STS-1 channels subject to utilization of the total OC-48 capacity. (L)

(6) From one to three concatenated STS-12c channels, mixed with from four to twelve concatenated STS-3C channels, also mixed with from three to thirty-three STS-1 channels subject to utilization of the total OC-48 capacity.

(7) From one to three concatenated STS-12c channels, mixed with from one to eleven concatenated STS-3c channels, also mixed with from three to thirty-three STS-1 channels, subject to utilization of the total OC-48 capacity.

(L) Material formerly located on Sheet 283-L-4. (N)

Material omitted now located on Sheet 283-L-5-A. (N)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Service Descriptions (Cont'd)

7.2.14 Optical Carrier Network (OCN) Point-to-Point Service (Cont'd)

Configurations (Cont'd)

(N)

(D) OC-192

(L)

(1) One hundred ninety-two interleaved STS-1 Channels which each contain:

- One DS3 that is STS-1 mapped; or
- Up to 28 asynchronous DS1s that are VT-mapped; or
- An STS-1 channel without constraint to payload mapping when the STS-1 channel does not terminate via an add/drop function to DS1 or DS3 services within the network.

(L)

- 1 Gbps Ethernet STS-1, 1-21v

(N)

- 1 Gbps Ethernet STS-3c, 1-7v

(N)

(2) Sixty-four interleaved concatenated STS-3 channels.

(L)

(3) From one to sixty-three interleaved concatenated STS-3c channels, mixed with from three to one hundred and eighty-nine STS-1 channels, subject to utilization of the total STS-192 capacity.

(4) Sixteen interleaved concatenated STS-12c channels.

(5) From one to fifteen interleaved concatenated STS-12c channels mixed with from twelve to one hundred and eighty STS-1 channels, subject utilization of the total STS-192 capacity.

(6) From one to fifteen interleaved concatenated STS-12c channels, mixed with from four to sixty concatenated STS-3c channels subject to utilization of the total STS-192 capacity.

(L)

(L) Material formerly located on Sheet 283-L-5.

(N)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Service Descriptions (Cont'd)

7.2.14 Optical Carrier Network (OCN) Point-to-Point Service (Cont'd)

(D) OC-192 (Cont'd)

- (7) From one to fifteen interleaved concatenated STS-12c channels, mixed from one to fifty-nine concatenated STS-3c channels, also mixed with from three to one hundred and seventy-seven STS-1 channels, subject to utilization of the total STS-192 capacity. (L)
- (8) Four interleaved concatenated STS-48c channels.
- (9) From one to three interleaved concatenated STS-48c channels, mixed with from forty-eight to one hundred and forty-four STS-1 channels, subject to utilization of the total STS-192 capacity.
- (10) From one to three interleaved concatenated STS-48c channels, mixed with from sixteen to forty-eight STS-3c channels, subject to utilization of the total STS-192 capacity.
- (11) From one to three interleaved concatenated STS-48c channels, mixed with from four to twelve STS-12c channels, subject to utilization of the total STS-192 capacity.
- (12) From one to three interleaved concatenated STS-48c channels, mixed with from one to forty-seven concatenated STS-3c channels, also mixed with from three to one hundred and forty-one STS-1 channels, subject to utilization of the total STS-192 capacity.
- (13) From one to three interleaved concatenated STS-48c channels, mixed with from one to eleven concatenated STS-12c channels, also mixed with from twelve to one hundred and thirty two STS-1 channels, subject to utilization of the total STS-192 capacity. (L)
- (14) From one to three interleaved concatenated STS-48c channels, mixed with from one to eleven concatenated STS-12c channels, also mixed with from four to forty-four concatenated STS-3c channels, subject to utilization of the total STS-192 capacity.
- (15) From one to three interleaved concatenated STS-48c channels, mixed with from one to eleven concatenated STS-12c channels, also mixed with from three to one hundred twenty-nine STS-1 channels, subject to utilization for the total STS-192 capacity.
- (16) A single concatenated STS-192c channel.

(L) Material formerly located on Sheet 283-L-5.  
Material omitted now located on sheet 283-L-6-A.

(N)  
(N)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Service Descriptions (Cont'd)

7.2.14 Optical Carrier Network (OCN) Point-to-Point Service (Cont'd)

(E) Technical Specifications

The technical specifications for OC-3, OC-12 and OC-48 are specified in Section 7.2 preceding. In addition, the following technical reference also applies:

Network Channel and Network Channel Interface Codes  
AM-TR-TMO-000080

Synchronous Optical Network (SONET) Transport Systems:  
Common Generic Criteria, Telcordia Technologies,  
GR-253-CORE, Issue 4

(N)  
|  
(N)

These publications may be obtained from:

APEx Support Team (734) 523-7348

The Telcordia publication can be obtained from:

(N)

Telcordia Technologies  
One Telcordia Drive, RRC 1B-180  
Piscataway, New Jersey 08854

(N)

(F) Network Channel Interfaces

The network channel interfaces define the bit rates that are available for OC-3/OC-3c, OC-12/OC-12c and OC-48/OC-48c and OC-192 services operating at speeds of 155.52 Mbps, 622.08 Mbps, 2488.32 Mbps and 9953.28 Mbps, respectively. Network Channel interfaces and codes are described in the Technical Publication referenced in Section 7.2.

(G) Demarcation

Denotes the point (referred to as Demarcation Point or Network Interface) of interconnection between the Utility's facilities and the wiring at the subscriber's premises. The Demarcation Point shall consist of wire or a jack conforming to Subpart F of Part 68 of the F.C.C. Rules and Regulations.

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Service Description (Cont'd)

7.2.15 OC-3, OC-12 and OC-48 Dedicated SONET Ring Service

(A) Basic Service Description

OC-3, OC-12 and OC-48 Dedicated SONET Ring service provides dedicated bandwidth capacity over a self-healing ring for a single customer for the purpose of transporting the customer's data.

OC-3, OC-12 and OC-48 Dedicated SONET Ring is offered between customer's premises and Utility Serving Wire Centers (SWCs) and is provided where facilities and/or operating conditions exist. Where facilities and/or operating conditions do not exist, Special Construction charges, as set forth in Section 15, may apply.

The network is in a ring architecture, including sub-rings (or ARC sub-rings provisioned on appropriate Next Generation SONET equipment), designed to provide increased reliability and functionality.

(N)  
|  
(N)

A minimum of two nodes is required (excluding sub-ring nodes and ARC sub-ring nodes) and cannot exceed 16 nodes, including regenerators. At least one of the nodes must be located at the Utility SWC.

(T)  
(N)

The Utility's service supports synchronous bandwidth capacities at OC-3 (155 Mbps), OC-12 (622 Mbps) and OC-48 (2.4 Gbps). The SONET add/drop multiplexer aggregates lesser bit speed services onto the dedicated ring configuration. Synchronous Transport Signal-level 1 (STS-1) at 51 Mbps is the basic SONET technology building block. Electrical signals in the form of digital pulses are converted to Optical Carrier rates (OC-n) for transmission on fiber optics.

Connecting facilities carry synchronous and asynchronous transmissions. The service includes enhanced survivability and network management per SONET (Synchronous Optical Network) technology.

All service configurations have one working and one standby transmission path. In the event of a failure of the customer's transmission path, SONET technology will protection switch, within 50 milliseconds of detection, to a dedicated standby path.

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Service Description (Cont'd))

7.2.15 OC-3, OC-12 and OC-48 Dedicated SONET Ring Service (Cont'd) (N)

(A) Basic Service Description (Cont'd)

The rate elements associated with OC-3, OC-12 and OC-48 Dedicated SONET Ring service are:

- Customers Premises and Central Office Nodes
- Ports that identify facility interfaces
- Mileage between the Serving Wire Centers (Central office Nodes)
- Regenerators
- Add/Drop Capability
- Optional Features

Upon request, OC-3, OC-12 and OC-48 Dedicated SONET Ring service may be placed upon diverse fiber facilities where available. Where facilities and/or operating conditions do not exist, Special Construction charges as set forth in Section 15, may apply.

Customers may choose to accept the Ring without Diversity (i.e., no dual entrance facility) or prior to cable diversity being available. In this situation out of service Credit Allowances as set forth in Section 2.4.4 are applicable.

(N)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Service Description (Cont'd)

7.2.15 OC-3, OC-12 and OC-48 Dedicated SONET Ring Service (Cont'd)

(A) Basic Service Description (Cont'd)

(1) Nodes

Customers Premises Nodes and Central Office Nodes

Nodes aggregate lower bandwidth capacities onto the ring through use of the SONET add/drop multiplexer function. The CO Node is located in the Company SWC; the Premises Node, at the customer's location. For ring nodes bandwidth capacities are 155 Mbps (OC-3), 622 Mbps (OC-12), and 2.4 Gbps (OC-48). A Ring must have a minimum of two nodes, excluding sub-rings and ARC sub-rings. One node must be located in the Company SWC. A maximum of 16 nodes including regenerators will be allowed per ring. (T)

When a customer premises node is located in the same building as a CO Node, diversity between the two nodes may not be available. (T)

Additional Node

If a customer requests and has installed two customer premises nodes of the same speed, on the same dedicated ring, at the same customer premises location, the additional node will be billed rates and charges as set forth in 7.5.15 following. The lower rate does not qualify when the additional node is located in another room or building from the first node. This option does not guarantee diversity between these two nodes and the rest of the ring.

(D)

(D)

Continued



ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Service Description (Cont'd)

7.2.15 OC-3, OC-12 and OC-48 Dedicated SONET Ring Service (Cont'd)

(A) Basic Service Description (Cont'd)

(1) Nodes (Cont'd)

(D)

(D)

Flex Ring Node

Flex-Ring feature provides a second independent ring equal to the line rate (bandwidth) of the first ring, located on the same shelf on the same node(s) as the first ring.

Flex Ring Node allows a single customer the ability to add an additional ring of the same line rate. A Flex Ring Node is applicable to only one end user customer and the Flex Ring customer must be the same customer of record for the Dedicated SONET Ring. Flex Ring Node is offered on an OC-12 and OC-48 Dedicated SONET Ring and is limited to two rings (a primary and a secondary ring) per Flex Ring arranged. This feature will provide two rings from the same shelf.

A customer with the Flex Ring option must maintain equal parity on both rings (Primary and Flex). If the customer chooses to add or remove nodes from either Ring in the Flex ring option, but not on both rings, the customer forfeits the Flex Ring option and must purchase two separate Dedicated SONET Rings, and the Flex Ring option will be removed.

(D)  
Continued

## ACCESS SERVICE

### 7. Special Access Service (Cont'd)

#### 7.2 Service Description (Cont'd)

##### 7.2.15 OC-3, OC-12 and OC-48 Dedicated SONET Ring Service (Cont'd)

##### (A) Basic Service Description (Cont'd)

##### (1) Nodes (Cont'd)

##### Flex Ring Node (Cont'd)

In the event that a customer has a Flex Ring configuration and subsequently disconnects the first (Primary) ring, rate elements and rates and charges as set forth in Section 7.5.15 following for the first ring must be assigned to the Flex Ring nodes (which will be understood to have become the Primary Ring nodes) absent a Flex Ring configuration. Riding services on the disconnected ring may be moved to the Primary Ring depending upon the availability on the Ring to accommodate the riding services, which will be determined by the Utility. Rates and charges applicable to these circuit rearrangements are set forth in Section 5.2.8 preceding. Early Termination Liability charges as set forth in 7.4.18, (E) following are applicable to the forfeited Ring.

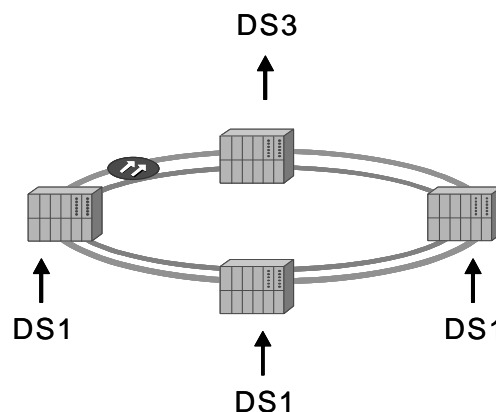
##### DS3 Transmux

DS-3 Transmux provides the ability to aggregate multiple DS-1s to a DS-3 within SONET and also on a single interface. DS1s are aggregated across the SONET network and terminated into a single DS3 interface at a Ring node. The handoff will be a channelized DS3. Aggregation of DS-1s can occur across multiple DS-3/STSS.

When DS3 transmux is provided on an OC-48 dedicated SONET Ring a maximum of 28 DS1s per node is available.

DS-3 Transmux is available where facilities and operating conditions permit.

(D)  
(D)  
(N)  
  
(N)



Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Service Description (Cont'd))

7.2.15 OC-3, OC-12 and OC-48 Dedicated SONET Ring Service (Cont'd)

(A) Basic Service Description (Cont'd)

(1) Nodes (Cont'd)

Sub-Ring Node

A sub-ring node is a lower speed optical extension off a main ring. A sub-ring node traverses one or more main ring nodes via the use of OC-N port connections on and off the main ring. The primary use of sub-ring nodes is to provide the ability to fully utilize the bandwidth around the ring when the customer requires DS1/VT1.5 circuit paths.

An optional sub-ring node is available at OC-3 and OC-12 speeds from an OC-48 main ring and OC-3 speed from an OC-12 main ring. A sub-ring node may only connect to the main ring at the same or an adjacent main ring node. With Next Generation SONET equipment, a sub-ring node may connect to another sub-ring node. (C)  
(C)

Any service that enters the main ring via a port on a sub-ring node must also exit via a port on another sub-ring node (sub-ring on - sub-ring off). Cascading sub-rings are not permitted off a main ring. Service circuits may not be established between sub-ring nodes connecting to the same main ring node or between a sub-ring node and a port on the same main ring node to which it connects.

Each sub-ring must be implemented as an OC-M on an OC-N ring with full complement of STS-1s, STS-3s or STS-12s depending on the bandwidth of the sub-ring, appearing together at all associated sub-ring nodes on a given sub-ring.

Two OC-N ports and associated node charges apply for each sub-ring node connected to the main ring, as well as applicable mileage for the sub-ring\*. (N)

\* Mileage charges apply when the sub-ring is in a different location than the main ring. (N)

Material omitted now located on Sheet 283-L-12-A (N)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Service Description (Cont'd)

7.2.15 OC-3, OC-12 and OC-48 Dedicated SONET Ring Service (Cont'd)

(A) Basic Service Description (Cont'd)

(1) Nodes (Cont'd)

Sub-Ring Node (Cont'd)

A sub-ring node that is located on the same premises with a main ring node located at the customer's premises (for the same dedicated ring) will be billed as an "Additional Node" per 7.5.15, (A) following. A sub-ring is not available with a two-node main ring configuration. Sub-rings are only available where facilities and/or operating conditions permit as determined by the Utility. (L)

ARC Sub-Ring Node

ARC sub-ring nodes are only available on appropriate Next Generation SONET equipment. An ARC sub-ring node is a lower speed optical extension off a main ring. It connects to one main ring node via the use of OC-N port connections from and to a main ring. The primary use of ARC sub-ring nodes is to add other locations to the ring that will utilize minimal amounts of bandwidth from the main ring. ARC sub-rings are only available off of UPSR main rings. ARC sub-rings are only available where facilities and/or operating conditions permit as determined by the Utility.

An optional ARC sub-ring node is available at OC-3 and OC-12 speeds from an OC-48 main ring, and OC-3 speeds from an OC-12 main ring. An ARC sub-ring node may connect to the main ring at any main ring node.

Cascading ARC sub-rings are not permitted off a main ring. Services entering an ARC sub-ring node cannot drop from the directly connecting main ring node (hairpinning).

Material omitted now located on Sheet 283-L-12-B

(N)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Service Description (Cont'd)

7.2.15 OC-3, OC-12 and OC-48 Dedicated SONET Ring Service (Cont'd)

(A) Basic Service Description (Cont'd)

(1) Nodes (Cont'd)

ARC Sub-Ring Node (Cont'd)

More than one ARC sub-ring may be added to a main ring. Each ARC sub-ring must be implemented as an OC-M on an OC-N ring with a full complement of STS-1s, STS-3s or STS-12s, depending on the bandwidth of the ARC sub-ring, appearing together at all associated ARC sub-ring nodes on a given ARC sub-ring.

(L)

Two OC-N ports apply for each ARC sub-ring connected to the main ring. A node charge applies for each ARC sub-ring location. Mileage charges are applicable when the ARC sub-ring is in a different location than the main ring. An ARC sub-ring which is co-located in the same room with a main ring node at the customer's premises (for the same dedicated ring) will be billed as an "Additional Node".

ARC sub-rings do not reduce bandwidth capacity of the main ring. As services are added to the main or ARC sub-ring, only the bandwidth capacity of the service is reduced.

(L)

ARC sub-rings can be provisioned in two basic configurations:

- Single-node, single-homed ARC
- Multi-node, single-homed ARC

Circuit traffic can be added/dropped from an ARC sub-ring node to another ARC sub-ring node within the same ARC (known as intra-ARC) or between ARCs (known as inter-ARC). Intra-ARC circuits can only be provisioned as unprotected, due to technical limitations. Circuit traffic can also originate on an ARC sub-ring node and route across and drop from a main ring node, but only when UPSR protection schemes are used.

(L) Material formerly on Sheet 283-L-12-A

(N)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Service Description (Cont'd))

7.2.15 OC-3, OC-12 and OC-48 Dedicated SONET Ring Service (Cont'd)

(A) Basic Service Description (Cont'd)

(2) Add/Drop Capacity

OC-48 Add/Drop Capability

OC-48 Add/Drop Capability provides the capability to add/drop lower speed channels from an OC-48 Dedicated Ring node location via OC-12, OC-3 ports. OC-48 Add/Drop Capability at an OC-48 Dedicated Ring Service node location will support any combination of service traffic not to exceed 48 STS-1 equivalents.

The add/drop capability charge is a monthly, per-node charge that will be applied once a node has 25 or more DS-3 ports. (C)  
(C)

Effective December 16, 2020, regarding Add/Drop capabilities, if the number of ports falls below 25 DS-3 ports, customer must notify its Company account team/sales representative, in writing, to eliminate the charge. Upon receipt of customer's notice and upon eligibility confirmation, Company will remove the charge within two billing cycles. (N)  
(N)

Depending upon the combination of drops an OC-48 Add/Drop Capability may be required to drop the full capacity of the ring. When this occurs, the OC-48 Add/Drop Capability rate applies.

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Service Description (Cont'd)

7.2.15 OC-3, OC-12 and OC-48 Dedicated SONET Ring Service (Cont'd)

(L)

(A) Basic Service Description (Cont'd)

(3) Ports

Lower speed channels are accessible at Nodes via port terminations. Ports provide access to lower-speed services at each Node (e.g., DS-1, DS3, OC-3, OC-12) depending on the bandwidth of the SONET Ring. Port configuration requirements are provided by the customer when the Dedicated SONET Ring service is ordered. The capacity of the selected OC-3, OC-12 or OC-48 Dedicated SONET Ring service is determined by the number of individual port-to-port connections available between all nodes on the ring.

Accepted interfaces are as follows:

	OC-3 Node	OC-12 Node	OC-48 Node
DS1 Ports	X (Max. 84/Node)	X (Max. 84/OC-3 or OC-3c Port) *	X (Max. 84/OC-3 or OC-3c Port) *
DS3 Ports	X (Max. 3/Node)	X (Max. 12/Node)	X (Max. 48/Node)
EC-1 Ports	X (Max. 3/Node)	X (Max. 12/Node)	X (Max. 48/Node)
OC-3 or OC-3c Ports <sup>#</sup>	X (Max 1/Node)	X (Max. 4/Node)	X (Max. 16/Node)
OC-12, or OC-12c Ports <sup>#</sup>	N/A	X (Max 1/Node)	X (Max. 4/Node)
OC-48 Ports	N/A	N/A	X (Max. 1/Node)

(L)

\* Optical to Electrical DS1 add/drop capability as described in 7.2.15(1) (e) following is needed along with an OC-3.

(L)

# OC-3 and OC-3c ports support both OC-3 and OC-3c bandwidths. OC-12 and OC-12c ports support both OC-12 and OC-12c Bandwidths. OC-48 and OC-48c ports support both OC-48 and OC-48c bandwidths.

(L)

(L) Material formerly located on Sheet 283-L-14.

(N)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Service Description (Cont'd)

(N)

7.2.15 OC-3, OC-12 and OC-48 Dedicated SONET Ring Service (Cont'd)

(A) Basic Service Description (Cont'd)

(3) Ports (Cont'd)

Accepted interfaces are as follows: (Cont'd)

	OC-3 Node	OC-12 Node	OC-48 Node
10/100BaseT Ethernet Port			
-VT1.5-1v (1.6 Mbps)	X (Max. 84/node)	X (Max. 84/OC-3)	X (Max. 84/OC-3)
-VT1.5-2v (3.2 Mbps)	X (Max 42/Node)	X (Max. 42/OC-3)	X (Max. 42/OC-3)
-VT1.5-3v (4.8 Mbps)	X (Max 28/Node)	X (Max. 28/OC-3)	X (Max. 28/OC-3)
-VT1.5-4v (6.4 Mbps)	X (Max. 21 Node)	X (Max. 21/OC-3)	X (Max. 21/OC-3)
-VT1.5-5v (8.0 Mbps)	X (Max 16/Node)	X (Max. 16/OC-3)	X (Max. 16/OC-3)
-VT1.5-6v (9.6 Mbps)	X (Max 14/Node)	X (Max. 14/OC-3)	X (Max. 14/OC-3)
-VT1.5-7v (11.2 Mbps)	X (Max. 12/Node)	X (Max. 12/OC-3)	X (Max. 12/OC-3)
-VT1.5-8v (12.4 Mbps)	X (Max 10/Node)	X (Max. 10/OC-3)	X (Max. 10/OC-3)
-VT1.5-10v (16.0 Mbps)	X (Max 8/Node)	X (Max. 8/OC-3)	X (Max. 8/OC-3)
-VT1.5-13v (20.8 Mbps)	X (Max. 6/Node)	X (Max. 6/OC-3)	X (Max. 6/OC-3)
-STS-1-1v (48.384 Mbps)	X (Max. 3/Node)	X (Max. 12/Node)	X (Max. 48/Node)
-STS-1-2v (96.768 Mbps)	X (Max. 1/Node)	X (Max. 6/Node)	X (Max. 24/Node)
1000BaseSX/LX Ethernet Port			
STS-1-1v (48.384 Mbps)	X (Max. 3/Node)	X (Max. 12/Node)	X (Max. 48/Node)
STS-1-2v (96.768 Mbps)	X (Max. 1/Node)	X (Max. 6/Node)	X (Max. 24/Node)
STS-1-3v (145.154 Mbps)	X (Max. 1/Node)	X (Max. 4/Node)	X (Max 16/Node)

(N)

Continued



ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Service Description (Cont'd)

7.2.15 OC-3, OC-12 and OC-48 Dedicated SONET Ring Service (Cont'd)

(A) Basic Service Description (Cont'd)

(3) Ports (Cont'd)

(T)

Accepted interfaces are as follows: (Cont'd)

	OC-3 Node	OC-12 Node	OC-48 Node
1000BaseSX/LX Ethernet Port (Cont'd)			
STS-1-4v (193.536 Mbps)	N/A	X (Max. 3/Node)	X (Max. 12/Node)
STS-1-5v (241.94 Mbps)	N/A	X (Max. 2/Node)	X (Max. 9/Node)
STS-1-6v (290.304 Mbps)	N/A	X (Max. 2/Node)	X (Max. 8/Node)
STS-1-9v (435.456 Mbps)	N/A	X (Max. 1/Node)	X (Max. 5/Node)
STS-1-12v (580.608 Mbps)	N/A	X (Max. 1/Node)	X (Max. 4/Node)
STS-1-21v (1016.064 Mbps)	N/A	N/A	X (Max. 2/Node)
STS-3c-1v (149.76 Mbps)	N/A	X (Max. 4/Node)	X (Max. 16/Node)
STS-3c-2v (299.52 Mbps)	N/A	X (Max. 2/Node)	X (Max. 8/Node)
STS-3c-3v (449.28 Mbps)	N/A	X (Max. 1/Node)	X (Max. 5/Node)
STS-3c-4v (599.04 Mbps)	N/A	X (Max. 1/Node)	X (Max. 4/Node)
STS-3c-7v (1048.32 Mbps)	N/A	N/A	X (Max. 2/Node)
1 Gbps (STS-1) Ethernet Port	N/A	X (Max. 12/Node)	x (Max. 32/Node)
1 Gbps (STS-3c) Ethernet Port	N/A	x (Max. 4/Node)	x (Max. 16/Node)
1 Gbps (STS-12c) Ethernet Port	N/A	N/A	x (Max. 4/Node)
1 Gbps (STS-24c) Ethernet Port	N/A	N/A	x (Max. 2/Node)

(N)

(N)

Material omitted now located on Sheet 283-L-13-A.

(N)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Service Description (Cont'd)

7.2.15 OC-3, OC-12 and OC-48 Dedicated SONET Ring Service (Cont'd)

(A) Basic Service Description (Cont'd)

(3) Ports (Cont'd)

By utilizing Optical Carrier Network (OCN) Point-to-Point Service as set forth in Section 7.2.14 preceding, specifically the existing OC-3 or OC-12 point-to-point service and associated cross-connection capability, the OC-3 point-to-point service may connect to an OC-3 port of an OC-12 or OC-48 Dedicated SONET Ring service, or OC-12 point-to-point service may connect to an OC-12 port of an OC-48 Dedicated SONET Ring service. The port must be located in a Utility SWC.

An OC-3 port will permit the connection of STS-1 channels to other STS-1 channels across the OC-12 or OC-48 Dedicated SONET Ring service, subject to the overall ring capacity limits described in 7.2.15, (A) (8) following. Additionally, an STS-1 channel with DS1 payload mapping accessing an OC-12 Dedicated SONET Ring via an OC-3 port may be connected to the Optical to Electrical DS1 Add/Drop Capability as set forth in 7.2.15, (E) following for the purpose of connecting up to 28 DS1 ports. An STS-1 channel with DS3 payload mapping accessing the OC-12 or OC-48 Dedicated SONET Ring via an OC-3 port may individually connect to a DS3 or EC-1 port.

Ethernet over SONET (EoS)

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 Ring Services as set forth in respective tariffs. As SONET bandwidths will be preset, the customer will be unable to transmit data beyond these preset SONET bandwidths.

Ethernet over SONET (EoS) interfaces have distance limitations from the Utility Serving Wire Center to the customer's demarcation point. These limitations will be discussed during the Cooperative Planning process and the Utility and customers will determine the appropriate EoS interface for the customer's SONET Ring service. (D)  
(D)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Service Description (Cont'd)

7.2.15 OC-3, OC-12 and OC-48 Dedicated SONET Ring Service (Cont'd)

(A) Basic Service Description (Cont'd)

(3) Ports (Cont'd)

Ethernet over SONET (EoS) requires that customers utilize certain settings for their Customer Provided Equipment (CPE). The Utility will work cooperatively with the customer to make sure that the customer utilizes the correct settings. In some cases customers may be required to make modifications (including upgrades) to their CPE, which will be entirely at the customer's expense. Failure to use these settings will result in service problems possibly leading to outages for which the customer will not hold the Utility liable.

Ethernet over SONET (EoS) throughputs may vary depending on the type of equipment used to provide the service. Certain protocols may not be available. Additional information on the settings that customers must utilize can be found in Technical Publication TP-76-412-000. EoS is available where facilities and/or operating conditions permit.

EoS 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 an OC-n Dedicated Ring Service. As SONET bandwidths will be preset, the customer will be unable to transmit data beyond these preset SONET bandwidths. Interfaces of 100 Mbps or 1 Gbps Ethernet are available only to customers with Next Generation SONET equipment. Only single-mode fiber is available in the Central Office. The EoS line rates are based on the theoretical SONET payload line rates as specified in Telcordia Publication GR-253-CORE, Issue 4. These values are not representative of the true Ethernet transport capacity of the EoS circuit.

(N)

(N)

Additional features are provided with the Ethernet over SONET (EoS) capability:\*

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

\* EoS port interfaces offered as 10/100BaseT are only available at the customer premises location.

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Service Description (Cont'd)

7.2.15 OC-3, OC-12 and OC-48 Dedicated SONET Ring Service (Cont'd)

(A) Basic Service Description (Cont'd)

(4) Mileage

Mileage charges apply to the varying configurations of the OC-3, OC-12, OC-48 Dedicated SONET Ring Service as set forth in Section 7.1.3, (B) preceding. Mileage is charged based on V&H miles determined from National Exchange Carrier Association (NECA) Tariff FCC No. 4. Fractions of a mile are rounded up to the whole mile for rate calculations.

For the dedicated ring, recurring mileage is for the interoffice facilities between nodes, the total airline distance between the serving wire center of each node involved on the ring. The chargeable mileage is that mileage per link. Distances obtained from V&H coordinates set forth in NECA Tariff, FCC No. 4, will determine the chargeable mileage on a per link basis. The V&H Coordinates of the normal serving wire center of the customer premises will be used for calculating mileage from Premises Nodes. The monthly mileage charge for the dedicated ring is determined by multiplying the applicable rate times the chargeable mileage.

A one-mile minimum will be billed between nodes. A two-node ring configuration has a two-mile minimum; one mile from the wire center node to the customer premises node and one mile from the customer premises node to the wire center node.

(5) Electrical Carrier Level 1 (EC-1) Port Interface (N)

The EC-1 service interface is implemented as a standardized SONET electrical service interface as specified in Section 5 of ANSI T1.416.03-1999. The EC-1 interface provides the capability for connecting one SONET STS-1 signal across a SONET electrical service interface to a Utility provided Optical Carrier Network (OCN) Point to Point or Utility provided Dedicated SONET Ring service. The STS-1 signal connecting across an EC-1 interface may only contain a) one DS3 circuit mapped into the SONET STS-1 signal payload; or b) one STS-1 circuit, without constraint as to payload mapping. Offered as Customer premises port termination, and as a CO termination where facilities and/operating conditions permit on Dedicated SONET Ring service. (N)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Service Description (Cont'd)

7.2.15 OC-3, OC-12 and OC-48 Dedicated SONET Ring Service (Cont'd)

(A) Basic Service Description (Cont'd)

(6) Optical to Electrical Add/Drop Capacity

Optical-to-Electrical Add/Drop Capacity DS1 allows an electrical DS1 to be derived from an optical OC-12 or OC-48 ring by using this capability to add/drop the electrical DS1 from an OC-3 port.

Rate regulations for Optical-to-Electrical Add/Drop Capacity are set forth in 7.4.18, (P) following.

(T)

(7) Dedicated Ring Regenerator

Regenerators provide essential detection and retransmission of SONET signals between nodes. Regenerators will only be provided as required by the Utility when actual fiber facility distances between nodes exceed inter-nodal design limits. Regenerators will be located exclusively in Utility SWCs and do not allow ports to access customer service connections.

(8) Dedicated Ring Connection Capacity

Maximum transport capacity of OC-3, OC-12 and OC-48 Dedicated Ring Service is characterized by the total quantity of individual port-to-port connections allowed between all nodes on the ring.

For OC-3 Dedicated Ring Service, the maximum ring capacity will be equal to one of the following combinations:

DS3 Port to DS3 Port Connections		DS1 Port to DS1 Port Connections	
Three	and	None	
Two	and	Up to 28	
One	and	Up to 56	
None	and	Up to 84	

An OC-3 sub-ring (or ARC sub-ring) provided as part of an OC-12 or OC-48 Dedicated SONET Ring service has a maximum capacity equal to one of the above combinations.

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Service Description (Cont'd)

7.2.15 OC-3, OC-12 and OC-48 Dedicated SONET Ring Service (Cont'd)

(A) Basic Service Description (Cont'd)

(8) Dedicated Ring Connection Capacity (Cont'd)

For OC-3 Dedicated Ring Service, and OC-3 sub-rings (or (T)  
ARC sub-rings) as part of an OC-12 or OC-48 dedicated SONET (N)  
Ring service, individual DS1 port-to-DS1 port and DS3  
port-to-DS3 port connections capacities may be incrementally  
distributed between nodes on the ring in any manner.

An OC-3 sub-ring provided as part of an OC-12 Dedicated SONET  
Ring service reduces the remaining OC-12 ring capacity by the  
equivalent of three DS3 port-to-DS3-port connections or 84 DS1  
port-to-DS1-port connections.

(D)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Service Description (Cont'd)

7.2.15 OC-3, OC-12 and OC-48 Dedicated SONET Ring Service (Cont'd)

(A) Basic Service Description (Cont'd)

(8) Dedicated Ring Connection Capacity (Cont'd)

For OC-12 Dedicated Ring Service, the maximum ring capacity may be equal to one of the following combinations. This chart is intended to illustrate general combinations and does not represent every combination of service possible as each individual ring capacity varies by service requested. Subsequent capacity changes to the Dedicated Ring service may be service affecting and may require an out of service condition. Each request will be evaluated on an individual case basis.

DS3 Port to DS3 Port Connections		DS1 Port to DS1 Port Connections	
Twelve	and	None	
Eleven	and	One Group of 28	
Ten	and	Two Groups of 28 (56)	
Nine	and	Three Groups of 28 (84)	
Eight	and	Four Groups of 28 (112)	
Seven	and	Five Groups of 28 (140)	

Six	and	Six Groups of 28 (168)
Five	and	Seven Groups of 28 (196)
Four	and	Eight Groups of 28 (224)
Three	and	Nine Groups of 28 (252)
Two	and	Ten Groups of 28 (280)
One	and	Eleven Groups of 28 (308)
None	and	Twelve Groups of 28 (336)

An OC-12 sub-ring (or ARC sub-ring) provided as part of an OC-48 Dedicated SONET Ring service has a maximum capacity equal to one of the above combinations. (N)

For OC-12 Dedicated SONET Ring Service, and OC-12 sub-rings (or ARC sub-rings) as part of an OC-48 Dedicated SONET Ring service, individual DS1 port-to-DS1 port connection capacity and DS3 port to DS3 port connection capacity may be incrementally distributed between nodes on the ring in any manner. (N)

OC-12 Dedicated SONET Ring Service will also provide capability for node-to-node connection of STS-1 or STS-3C channels using OC-3 or OC-3c ports on the OC-12 ring. Each STS-1 to STS-1 channel connection or STS-1 channel to DS3 port connection requested by the customer will reduce the remaining ring capacity by the equivalent of one DS3 port-to-DS3 port connection or 28 DS1 port-to-DS1 port connections. Each STS-3C to STS-3C channel connection requested by the customer will reduce the remaining ring capacity by the equivalent of three DS3 port-to-DS3 port connections or 84 DS1 port-to-DS1 port connections.

- \* The maximum node capacity is equal to 12 STS equivalents with any combination of DS-1s, DS-3s and OC-3s, 100 Mbps Ethernet and 1 Gbps Ethernet ports. (D)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Service Description (Cont'd))

7.2.15 OC-3, OC-12 and OC-48 Dedicated SONET Ring Service (Cont'd)

(A) Basic Service Description (Cont'd)

(8) Dedicated Ring Connection Capacity (Cont'd)

(L)

Depending upon the combination of drops, an Optical to Electrical DS-1 Add/Drop Capability may be required to drop the full capacity of the ring. When this occurs, the Optical to Electrical DS-1 Add/Drop Capability rate applies.

The DS3 Port connections can be exchanged with EC-1 Port Connections and the Utility will decide the appropriate capacity for these connections.

(L)

(L) Material formerly located on Sheet 283-L-17.

(N)

Continued



ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Service Description (Cont'd)

7.2.15 OC-3, OC-12 and OC-48 Dedicated SONET Ring Service (Cont'd)

(A) Basic Service Description (Cont'd)

(8) Dedicated Ring Connection Capacity (Cont'd)

For OC-48 Dedicated Ring Service, the maximum ring capacity may be equal to one of the following combinations\*. This chart is intended to illustrate general combinations and does not represent every combination of service possible as each individual ring capacity varies by service requested. Subsequent capacity changes to the Dedicated Ring service may be service effecting and may require an out of service condition. Each request will be evaluated on an individual case basis.

DS3 Port-to-DS3 Port Connections	DS1 Port-to-DS1 Port Connections
Forty-eight	and None
Forty-seven	and One Group of 28
Forty-six	and Two Groups of 28 (56)
Forty-five	and Three Groups of 28 (84)
Forty-four	and Four Groups of 28 (112)
Forty-three	and Five Groups of 28 (140)
Forty-two	and Six Groups of 28 (168)

DS3 Port-to-DS3 Port Connections	DS1 Port-to-DS1 Port Connections
Forty-one	and Seven Groups of 28 (196)
Forty	and Eight Groups of 28 (224)
Thirty-nine	and Nine Groups of 28 (252)
Thirty-eight	and Ten Groups of 28 (280)
Thirty-seven	and Eleven Groups of 28 (308)
Thirty-six	and Twelve Groups of 28 (336)
Continuing down the scale to: None	and Forty-eight Groups of 28 (1344)

For OC-48 Dedicated Ring Service, individual DS1 port-to-DS1 port connection capacities may be distributed only in incremental groups of 28 between any two nodes on the ring. Individual DS3 port-to-DS3 port connection capacities may be incrementally distributed between nodes on the ring in any manner.

The DS3 Port connections can be exchanged with EC-1 Port Connections and the Utility will decide the appropriate capacity for these connections. (N)  
(N)

\* The maximum node to node capacity is equal to 48 STS equivalents with any combination of DS-1s, DS-3s and OC-3s, 100 Mbps Ethernet and 1 Gbps Ethernet ports.

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Service Description (Cont'd))

7.2.15 OC-3, OC-12 and OC-48 Dedicated SONET Ring Service (Cont'd)

(A) Basic Service Description (Cont'd)

(8) Dedicated Ring Connection Capacity (Cont'd)

OC-48 Dedicated SONET ring service also provides capability for node-to-node connection of STS-1 or STS-3c channels using OC-3 or OC-12 on the OC-48 ring. Each STS-1 to STS-1 channel connection or STS-1 channel to DS3 port connection requested by the customer reduces the remaining ring capacity by the equivalent of one DS3 port-to-port connection or 28 DS1 port-to-port connections. Each STS-3c to STS-3c channel requested by the customer reduces the ring capacity by the equivalent of three DS3 port-to-DS3-port connections or 84 DS1 port-to-DS1-port connections.

Depending upon the combination of drops, an Optical to Electrical DS-1 Add/Drop Capability may be required to drop the full capacity of the ring. When this occurs, the optical to Electrical DS1 Add/Drop Capability rate element applies.

(9) Unprotected Channel Transport

(N)

Unprotected Channel Transport will allow customers to transport traffic over a ring without enabling SONET protection schemes. This is intended for applications in which the customer provides protection for the circuit through means other than those available through SONET. If a fault occurs on the ring along the transport path, the traffic will not be switched to a protection channel. Service will be interrupted on that circuit until the fault is corrected. If a fault occurs in the ring but does not occur along the transport route, service will not be interrupted on that circuit. Without protection, SONET is unable to meet the normal availability, so Credit Allowance credits do not apply and credits will not occur upon an outage of an Unprotected Channel Transport. Credits will not be provided for the whole service when the fault on the ring creates the outage. If a riding service extends off a ring, Credit Allowances for that riding service may be applicable per the respective product tariff. This capability is limited to customers with OC-3, OC-12 and OC-48 Dedicated SONET Ring service installed after July 2, 2007.

(N)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Service Description (Cont'd)

7.2.15 OC-3, OC-12 and OC-48 Dedicated SONET Ring Service (Cont'd)

(B) Technical Specifications

(N)

Technical Specification for OC-3, OC-12, and OC-48 Dedicated SONET Ring service are set forth in the following Utility technical publications and may be obtained by contacting Network Helpdesk and Documentation Center (734) 523-7348.

SONET	ANSI T1.105-2001
50 mm Multi-Mode Fiber	
(North American Standard)	ANS/TIA/EIA 492AAAB
Single Mode Fiber	
(North American Standard)	ANS/TIA/EIA 492CAAA
RJ-45 Cabling	ANSI//TIA/EIA 568B
SONET Transport Systems Generic	
Criteria	GR-253-CORE
SONET ADM	GR-496-CORE
Transport Systems Generic	
Requirements	GR-499-CORE
BLSR Rings	GR-1230-CORE
SONET Private Line Service	
Interface	GR-1365-CORE
Inter-Carrier Interface Physical	
Layer for Carriers	GR-1374-CORE
Dual-Fed Unidirectional Path	
Switched Ring	GR-1400-CORE
NEBS	TP76200MP
Demarcation	TP76510MP

High Capacity Digital	
Service Self-Healing Transport	
Network Specifications and	
Transmission Limits	TP 76635

SONET Transmission Requirements	
Performance and	
Interface Specifications	TP 76839

Ameritech OC-3, OC-12, OC-48	
Service Interface	AM TR-NIS-000111

(N)

Continued

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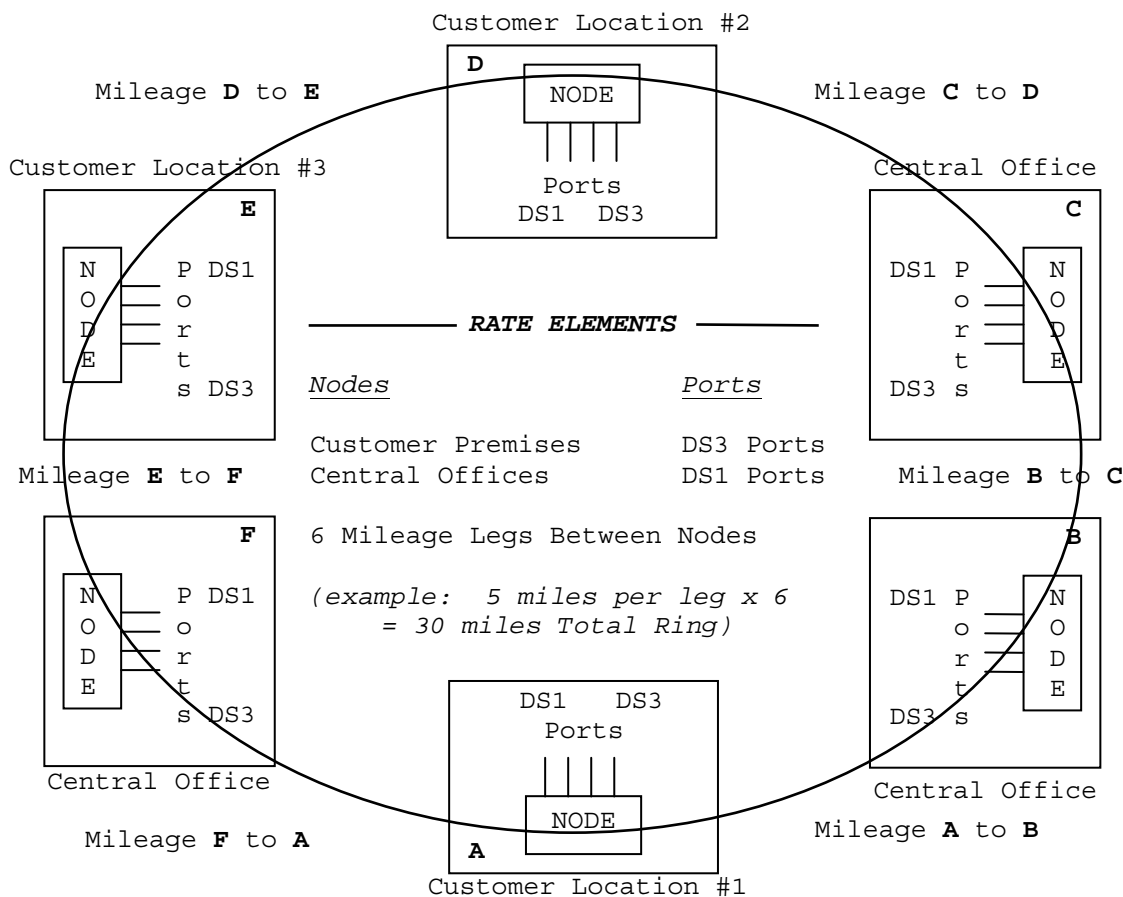
## 7. Special Access Service (Cont'd)

### 7.2 Service Description (Cont'd)

#### 7.2.15 OC-3, OC-12 and OC-48 Dedicated SONET Ring Service (Cont'd)

##### (C) Feature Functionality

Diagram of OC-3 Dedicated SONET Ring Service



(N)

(N)

Continued

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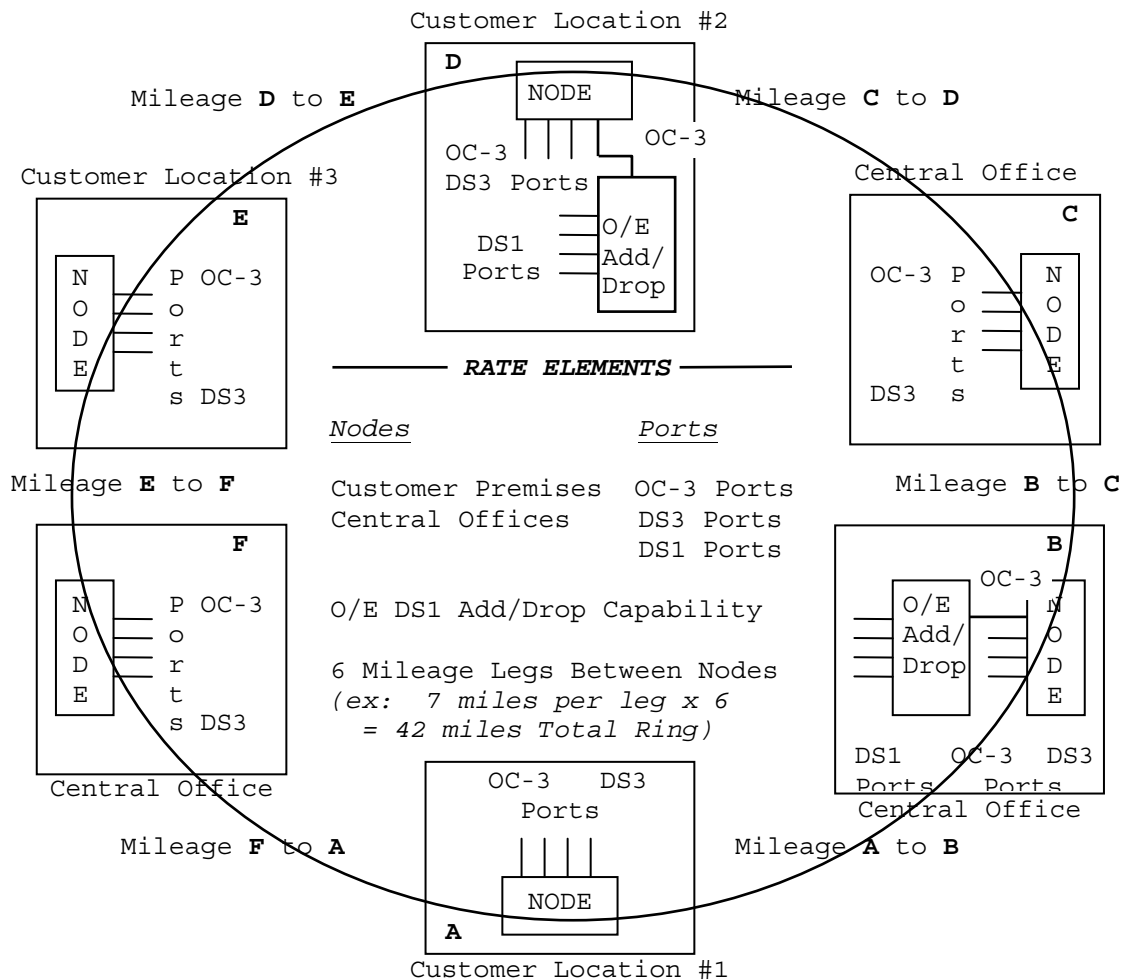
## 7. Special Access Service (Cont'd)

### 7.2 Service Description (Cont'd)

#### 7.2.15 OC-3, OC-12 and OC-48 Dedicated SONET Ring Service (Cont'd)

##### (C) Feature Functionality (Cont'd)

### OC-12 Dedicated SONET Ring Diagram



(N)

(N)

Continued

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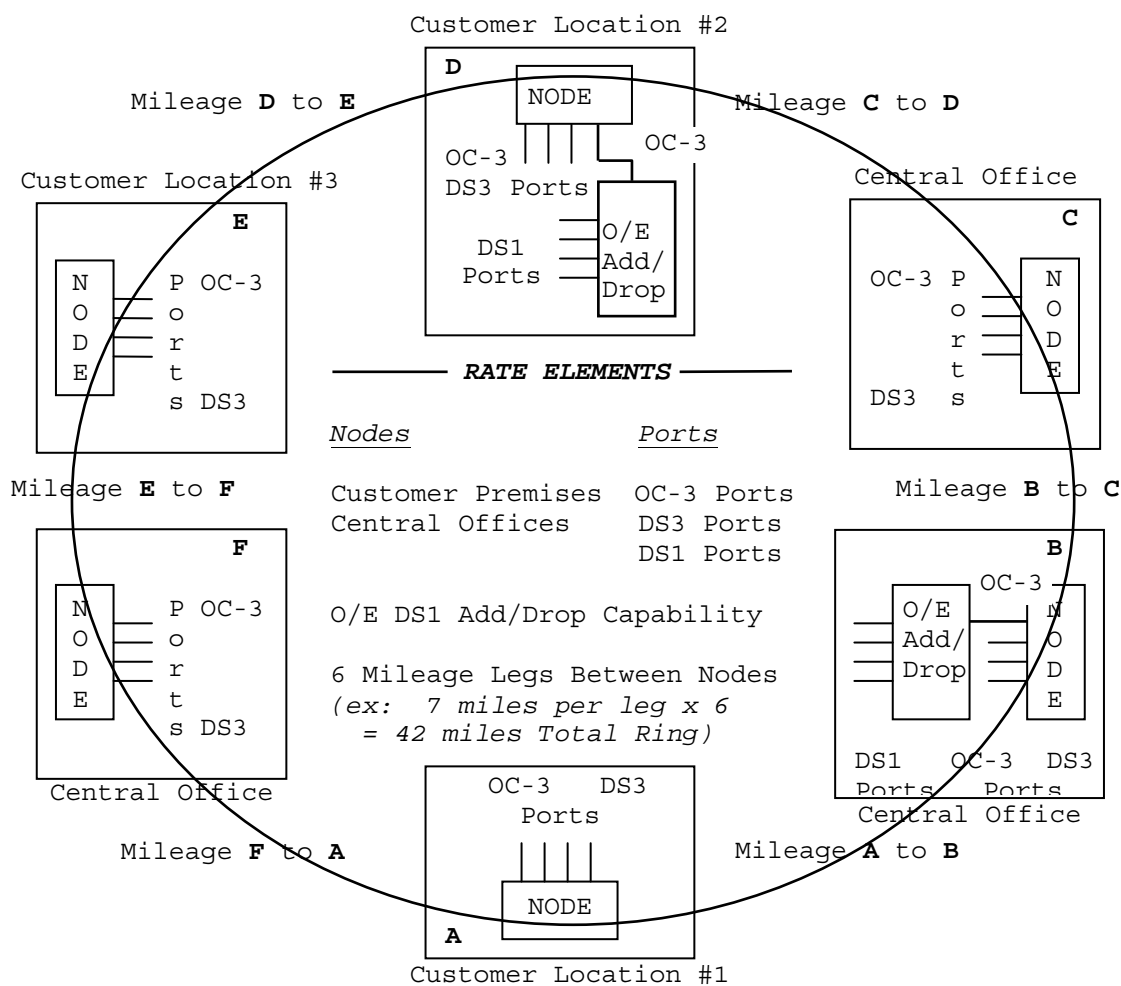
## 7. Special Access Service (Cont'd)

### 7.2 Service Description (Cont'd)

#### 7.2.15 OC-3, OC-12 and OC-48 Dedicated SONET Ring Service (Cont'd)

##### (C) Feature Functionality (Cont'd)

OC-48 Dedicated SONET Ring Diagram



(N)

(N)

Continued

ACCESS SERVICE

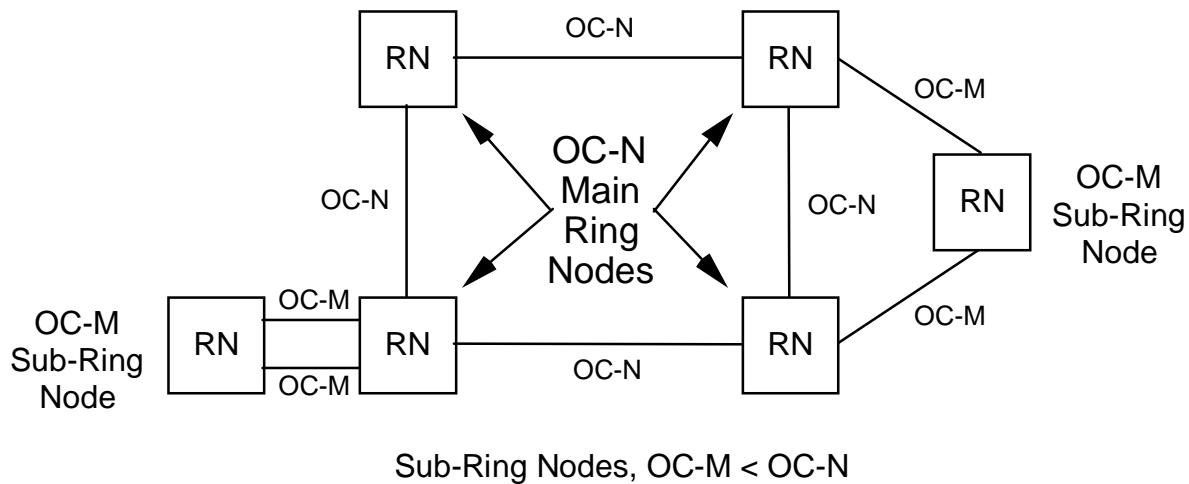
7. Special Access Service (Cont'd)

7.2 Service Description (Cont'd)

7.2.15 OC-3, OC-12 and OC-48 Dedicated SONET Ring Service

(C) Feature Functionality (Cont'd)

Diagram Sub-Ring Node



Continued

ACCESS SERVICE

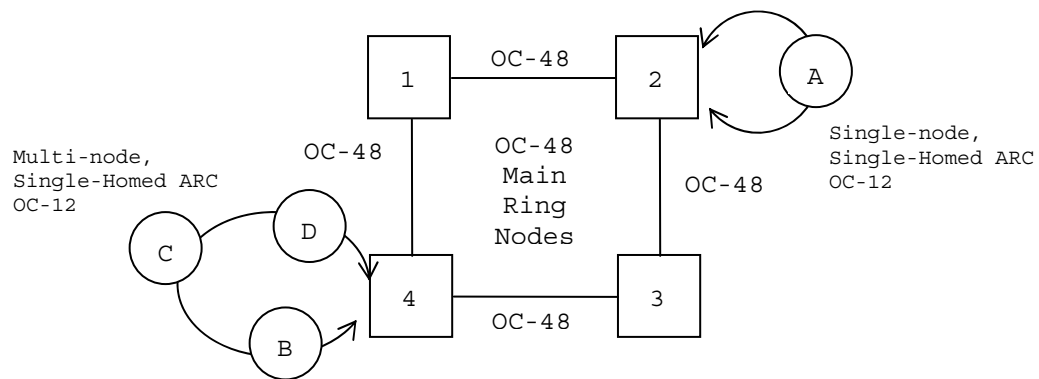
7. Special Access Service (Cont'd)

7.2 Service Description (Cont'd)

7.2.15 OC-3, OC-12 and OC-48 Dedicated SONET Ring Service (Cont'd)

(C) Feature Functionality (Cont'd)

Diagram ARC Sub-Ring Node



ARC Sub-Ring Nodes,  $OC-m < OC-n$

OC-48 Dedicated SONET Ring shown as an example

(N)

(N)

Continued



ACCESS SERVICE

7. Special Access Service (Cont'd)

7.3 Network Channel Interface and Network Channel Codes

(T)

This section explains where to locate the Network Channel Interface codes and Network Channel codes that the customer must specify when ordering Special Access Service. Availability of interfaces and network channel codes is set forth in Technical References listed in 7.2 preceding. Included is an example which explains the specific characters of the code, as well as a Service Designator/Network Channel code conversion table.

Example: If the customer specifies a NT Network Channel Code and a 2DC8-3 Network Channel Interface at the customer's premises, the following is being requested:

NT = Metallic Channel with a Predefined Technical  
Specification Package (1))  
2 = Number of physical wires at customer premises  
DC = Facility interface for direct current or voltage  
8 = Variable impedance level  
3 = Metallic facilities (DC continuity) for direct  
current/low frequency control signals or slow speed data  
(30 baud)

(T)

Network Channel Interface matrices appear in the Technical References  
for each category of service listed in 7.2 preceding.

(N)

(N)

7.3.1

(D)

(D)

(D)

(D)

Material on this sheet formerly in different form on Sheet 381.  
Material omitted now in different form on Sheets 255 through 265.

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.3 Network Channel Interface and Network Channel Codes (Cont'd) (T)

7.3.1

Material omitted now in different form on Sheets 255 through 265.

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.3 Network Channel Interface and Network Channel Codes (Cont'd) (T)

7.3.1

Material omitted now in different form on Sheets 255 through 265.

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.3 Network Channel Interface and Network Channel Codes (Cont'd) (T)

7.3.1

Material omitted now in different form on Sheets 255 through 265.

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.3 Network Channel Interface and Network Channel Codes (Cont'd) (T)

7.3.1

Material omitted now in different form on Sheets 255 through 265.

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.3 Network Channel Interface and Network Channel Codes (Cont'd) (T)

7.3.2

Material omitted now in different form on Sheets 255 through 265.

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.3 Network Channel Interface and Network Channel Codes (Cont'd)

7.3.3 Service Designator/Network Channel Code Conversion Table

The purpose of this table is to show the relationship between the service designator codes (e.g. VGC, NB2, etc.) and the network channel codes that are used for various administrative purposes.

<u>Service Designator Code</u>	<u>Network Channel Code</u>	
MTC	MQ	
MT1	NT	
MT2	NU	
MT3	NV	
TGC	NQ	
TG1	NW	
TG2	NY	
VGC	LQ	
VG1	LB	
VG2	LC	
VG3	LD	(L)
VG4	LE	
VG5	LF	
VG6	LG	
VG7	LH	
VG8	LJ	
VG9	LK	
VG10	LN	
VG11	LP	
VG12	LR	(L)
LADC	LA	(N)
VG32	UC	
VG33	UD	
VG36	UG	(N)

(L) Formerly on Sheet 291.

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.3 Network Channel Interface and Network Channel Codes (Cont'd)

7.3.3 Service Designator/Network Channel Code Conversion Table  
(Cont'd)

<u>Service Designator Code</u>	<u>Network Channel Code</u>
APC	PQ
AP1	PE
AP2	PF
AP3	PJ
AP4	PK
TVC	TQ
TV1	TV
TV2	TW
WA1	WJ
WA1T	WQ
WA2	WL
WA2A	WR
WA3	WN
WA4	WP
WD1	WB
WD2	WE
WD3	WF
DA1	XA, XAB
DA2	XB, XBB
DA3	XG, XGB
DA4	XH, XHB
HCO	HS
HC1	HC
HC1C	HD
HC2	HE
HC3	HF
HC4	HG

Material omitted now on Sheet 290.

Continued



ACCESS SERVICE

7. Special Access Service (Cont'd)

7.4 Rate Regulations

This section contains the specific regulations governing the rates and charges that apply for Special Access Service.

7.4.1 Types of Rates and Charges

There are three types of rates and charges. These are monthly rates, daily rates and nonrecurring charges. The rates and charges are described as follows:

(A) Monthly Rates

Monthly rates are flat recurring rates that apply each month or fraction thereof that a Special Access Service is provided. For billing purposes, each month is considered to have 30 days.

(B) Daily Rates

Daily rates are flat recurring rates that apply to each 24-hour period or fraction thereof that a Video Special Access Service is provided for part-time or occasional use. For purposes of applying daily rates, the 24-hour period is not limited to a calendar day. (D)  
(T)

The application of daily rates for Video services during a consecutive 30-day period is as follows. (D)  
(T)  
Daily rates will be topped at an amount equal to the monthly rate (i.e., the charge to the customer for usage billed at daily rates will not exceed the monthly rate). For each day or part day of usage after the daily rates have been topped, a charge equal to 1/30th of the monthly rate will apply.

(D)  
(D)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.4 Rate Regulations (Cont'd)

7.4.1 Types of Rates and Charges (Cont'd)

(C) Nonrecurring Charges

Nonrecurring charges are one-time charges that apply for (T)  
specific work activity (i.e., installation or change to  
an existing service). The types of nonrecurring charges (T)  
that apply for Special Access Service are: installation  
of service, installation of optional features and  
functions, and service rearrangements.

(1) Installation of Service

Nonrecurring charges apply to each service installed.  
When multiple identical services (i.e., services (T)  
between the same locations and for the same customer)  
are ordered and installed at the same time, there is  
charge for the first service installed and a lower  
charge for each additional identical service  
installed. The nonrecurring charges for the  
installation of service are set forth in 7.5 following  
as a nonrecurring charge for the Channel Termination  
rate element. (T)

(2) Installation of Optional Features and Functions (T)

Nonrecurring charges apply for the installation (T)  
of some(T) of the optional features and  
functions available with Special Access Service.  
For some features and functions there is a lower  
charge if installed coincident with the service  
and a higher charge if installed subsequent to  
the installation of the service.

Material on this sheet formerly in different form on Sheets 387 and 388.  
Material omitted now in different form on Sheets 255 thru 265.

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.4 Rate Regulations (Cont'd)

7.4.1 Types of Rates and Charges (Cont'd)

(C) Nonrecurring Charges (Cont'd)

(2) Installation of Optional Features and Functions  
(Cont'd)

The optional features for which nonrecurring  
charges apply are identified in Section 7.5  
following.

(C)

(C)

(D)

(D)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.4 Rate Regulations (Cont'd)

7.4.1 Types of Rates and Charges (Cont'd)

(C) Nonrecurring Charges (Cont'd)

(3) Service Rearrangements

Service rearrangements are changes to existing (installed) services which do not result in either a change in the minimum period requirements (i.e , change from one type of Special Access to another or a change from one type of channel termination to another) or a change in the physical location of the point of termination at a customer designated premises. Changes in the physical location of the point of termination are treated as moves and are described and charged as set forth in 7.4.4 following.

The charge to the customer for the service rearrangement is dependent on whether the change is administrative only in nature or involves actual physical change to the service.

These are 3 types of Service Rearrangements:  
Administrative Changes, Service Changes, and  
Rollover Changes.

(a) Administrative Changes

Administrative changes will be made without charge(s) to the customer. Administrative changes are set forth in 5.2.8, preceding.

(N)

(N)

(T)

(D)

(D)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.4 Rate Regulations (Cont'd)

7.4.1 Types of Rates and Charges (Cont'd)

(C) Nonrecurring Charges (Cont'd)

(3) Service Rearrangements (Cont'd)

(b) Service Changes

Service Changes listed below, are physical changes to existing service, excluding Rollover Changes as set forth in (C) following, and moves as set forth in 7.4.4 following. Charges will apply as specified below.

- If the change involves the addition of another leg to an existing multipoint service, the nonrecurring charge for the channel termination rate element will apply. The charge will apply only for the leg that is being added. (T)

(D)

(D)

- If the change involves the addition of an optional feature or function which has a separate nonrecurring charge, that nonrecurring charge will apply.

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.4 Rate Regulations (Cont'd)

7.4.1 Types of Rates and Charges (Cont'd)

(C) Nonrecurring Charges (Cont'd)

(3) Service Rearrangements (Cont'd)

(b) Service Changes (Cont'd)

- If the change involves changing the type of signaling on a Voice Grade service, a charge equal to the Voice Grade channel termination rate element nonrecurring charge will apply. The charge will apply per service termination affected.
- For all other changes, including the addition of optional features without separate nonrecurring charges, a charge equal to a channel termination rate element nonrecurring charge will apply. Only one such charge will apply per service, per change.

(c) Rollover Changes

Rollover changes listed below, are physical changes to existing service excluding (B) preceding, when all changes are performed at the same Utility Wire Center, set forth below, and there is no change in point of termination or EIS Point of Termination. A Rollover Change charge for Special Access Service will apply as set forth in 7.5, following. No charge will apply for subtending services of the service being rolled over as long as there is no change to the subtending services.

(T)  
(C)  
(C)

- Rearranging an existing service from one port to another port in the same multiplexer.
- Rearranging an existing service from one multiplexer to another multiplexer in the same wire center.
- Rearranging an existing lower speed service to an existing multiplexed higher speed service in the same serving wire center.

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.4 Rate Regulations (Cont'd)

7.4.1 Types Of Rates And Charges (Cont'd)

(C) Nonrecurring Charges (Cont'd)

(3) Service Rearrangements (Cont'd)

(c) Rollover Changes (Cont'd)

- Rearranging an existing service to the dedicated ring configuration of SONET Ring and Access Services. (N)
- When the existing service is rolling to a SONET Ring and Access Service that has a Rate Stability Payment Plan of 5 Years, the rollover charge will be waived. (N)

In addition, a Rollover Change will occur when existing Special Access Service is rearranged to other existing Special Access Service and there is a change in the point of termination or EIS point of termination of the rolled service. Except as noted below, all facilities and equipment required for the activity must already exist. No charge will apply for subtending services of the service being rolled over as long as there is no change to the subtending services.

- Rearranging an existing service from one multiplexer to another multiplexer.
- Rearranging an existing lower speed service to an existing multiplexed higher speed service.
- Rearranging an existing service to the dedicated ring configuration of SONET Ring and Access Services. (N)
- When the existing service is rolling to a SONET Ring and Access Service with a Rate Stability Payment Plan of 5 Years, the customer will receive a credit equal to the change charge applicable to a rollover with no change in termination. (N)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.4 Rate Regulations (Cont'd)

7.4.1 Types of Rates and Charges (Cont'd)

(C) Nonrecurring Charges (Cont'd)

(4) Record Transfer Charge

Record transfer nonrecurring charges are applicable  
under the following condition: (T)

(D)

(D)

- (a) Upon receipt of a request to transfer billing and (T)  
circuit provisioning records from Pacific Bell to  
an Interexchange Carrier. (T)

Record transfer charges are based on the nonrecurring  
charges associated with the work activities required to  
accomplish the changes.

Continued



ACCESS SERVICE

7. Special Access Service (Cont'd)

7.4 Rate Regulations (Cont'd)

7.4.2 Special Access Service Surcharge

(A) General

In addition to the rates and charges described in 7.4.1 preceding, there is a monthly Surcharge of \$25.00 that applies to Voice Grade and equivalent Voice Grade Special Access Services (e.g., the surcharge for a High Capacity 1.544 would be \$600.00 or 24 x \$25.00). For multipoint services, the \$25.00 surcharge applies for each customer location on the service. This surcharge is to compensate the Utility for use of the local exchange network by Special Access Services that are classified as intrastate interLATA.

(B) Exceptions to the Surcharge Application

Recognizing that not all services can utilize the local exchange network, certain uses of Special Access Service are exempt from the surcharge. Following is a listing of the exempt categories:

- (1) Any termination of an analog service that is used for television transmission. (D)
- (2) Any termination of a service that is used for Telex service.
- (3) Any termination of a service that by nature of its operating characteristics could not make use of common lines.
- (4) Any termination of a service that is associated with Switched Access Service that is subject to Carrier Common Line Charges.

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.4 Rate Regulations (Cont'd)

7.4.2 Special Access Service Surcharge (Cont'd)

(T)

(C) Self Reporting

(L)

In order for the Utility to determine the application of the surcharge with respect to specific services, the customer must report the intended use of all services when placing orders for Special Access Service. In addition, when ordering high capacity digital services, the customer must also report the use for each voice equivalent channel of the high capacity service. When any service or channel of a service is reported to be the used in any manner described in (B) preceding, the surcharge will not apply. If the intended use is not reported, the Utility will automatically bill the appropriate surcharge on each Special Access Service installed.

The Utility reserves the right to audit the use of the service at any time. If the service is found to be used for a type of operation other than that reported by the customer, and a surcharge would apply for that type of operation, the Utility will notify the customer and will begin to apply the surcharge.

(D) Crediting the Surcharge

If, at any time after the installation of a service which is subject to the surcharge, the customer reports that the service is being used in association with a Switched Access Service that is subject to Carrier Common Line Charges, the Utility will credit the customer for the surcharge. The credit will be effective on the date that the Special Access Service became associated with the Switched Access Service.

(L)

Material on this sheet formerly on Sheet 392.

Material omitted now in different form on Sheets 255 thru 265.

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.4 Rate Regulations (Cont'd)

7.4.2 Special Access Service Surcharge (Cont'd)

(T)

(E) IntraLATA Private Line Service

(N)

All intraLATA Special Access circuits, i.e. circuits which are wholly within a LATA and do not have interLATA access capability, are exempt from the Special Access Service Surcharge. In order to receive this exemption, all customers ordering intraLATA Special Access Service on or after January 1, 1995 must notify the Utility according to the self reporting procedure described in (C) preceding. All IntraLATA service provisioned prior to January 1, 1995 will automatically receive this exemption. All customers must notify the Utility if changes are made to circuits which make them no longer entitled to this exemption according to the self reporting procedure described in (C) preceding.

This exemption is necessitated by Decision 94-09-065 dated September 15, 1994, which authorized the consolidation of most of Schedule Cal.P.U.C. No. B. Private Line Services with Special Access Service contained in this tariff schedule. The surcharge does not apply to intraLATA circuits because the surcharge is intended to compensate the Utility for use of the local exchange network by Special Access Services that are classified as intrastate interLATA as described in (A) preceding.

(N)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.4 Rate Regulations (Cont'd)

7.4.3 Minimum Periods

Except as set forth following the minimum service period for all services is one month.

The minimum service period for part-time and occasional Video is one day (i.e., a continuous 24-hour period not limited to a calendar day).

The minimum period for Video Payment Plans, GigaMAN<sup>SM</sup> Term Pricing Plans, or Fiber Advantage<sup>SM</sup> DS3# or DS3x3# service is a one-year Rate Stability Payment Plan. (T)

The minimum period for Fiber Advantage<sup>SM</sup> DS3x12 service is a 3-year Rate Stability Payment Plan.# (N)

The minimum period for SONET Ring and Access Services\* dedicated ring configuration is a 3-year Rate Stability Payment Plan. (T)

The minimum period for Serial Component Video Service is 3 months.

\* Frozen/Grandfathered SONET Ring and Access Service effective June 30, 2006, pending CPUC Resolution. See General Regulations, Schedule Cal.P.U.C. No. 175-T, Section 2.1.4, (F).

# As of January 15, 2021, 3-Year Rate Stability Payment Plans are no longer available to new or renewing subscribers. (N)  
(N)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.4 Rate Regulations (Cont'd)

7.4.4 Moves

A move involves a change in the physical location of one of the following:

- The Point of Termination at the customer's premises
- The customer's premises

The charges for the move are dependent on whether the move is to a new location within the same building or to a different building.

(A) Moves Within the Same Building

When the move is to a new location within the same building, the charge for the move will be an amount equal to one half of the nonrecurring (i.e., installation) charge for the termination affected. There will be no change in the minimum period requirements.

(B) Moves To a Different Building

Moves to a different building will be treated as a discontinuance and start of service and all associated nonrecurring charges will apply. New minimum period requirements will be established for the new services. The customer will also remain responsible for satisfying all outstanding minimum period charges for the discontinued service.

(L) x

(L)

(T)

(T)

(L)

(L)

(T)

(T) x

(L) y

(L) y

x Material formerly in different form on Sheet 393.

y Material formerly on Sheet 394.

Material omitted now in different form on Sheets 255 thru 265.

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.4 Rate Regulations (Cont'd)

7.4.5 Reserved

7.4.6 Mileage Measurement

The mileage to be used to determine the monthly rate for the Channel Mileage is calculated on the airline distance between the locations involved (i.e., the serving wire centers associated with two customer designated premises), a serving wire center associated with a customer designated premises and a Utility Hub, or two Utility Hubs. The serving wire center associated with a customer designated premises is the serving wire center from which the customer designated premises would normally obtain dial tone.

(A) Two-point Service

Mileage is shown in 7.5 following in terms of mileage bands. To determine the rate to be billed, first compute the mileage using the V&H coordinates method, as set forth in The National Exchange Carrier Association (NECA) Tariff (T) F.C.C. No. 4, Sections 11 and 16. For Information on how (N) to obtain copies of the NECA Tariff see Section 14 (T) following, then find the band into which the computed mileage falls and apply the rates shown for that band. When the calculation results in a fraction of a mile, always round up to the next whole mile before determining the mileage band and applying the rates.

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.4 Rate Regulations (Cont'd)

7.4.6 Mileage Measurement (Cont'd)

(B) Multipoint Service

For the calculation of Channel Mileage rates, the customer may select either (1) or (2) following:

(1) Utility Specified Hub/Bridge

The mileage is the shortest combination of airline mileages which will connect the serving wire centers of the customer designated premises, each section is determined as specified in (A) preceding.

(2) Customer Specified Hub/Bridge

The mileage is computed and rates applied separately for each section of the Channel Mileage, i.e., customer designated premises to Hub, Hub to Hub and/or Hub to customer designated premises serving wire center. However, when any service is routed through a Hub for purposes other than customer specified bridging or multiplexing (e.g., the Utility chooses to so route for test access purposes), rates will be applied only to the distance calculated between the serving wire centers associated with the customer designated premises.

(D)

(D)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.4 Rate Regulations (Cont'd)

7.4.7 Facility Hubs

A customer has the option of ordering Voice Grade facilities or digital high capacity facilities (i.e., DS1, DS1C, DS2, DS3 or DS4) to a facility Hub for channelizing to individual services requiring lower capacity facilities (e.g., Telegraph, Voice, etc.). (D)

Different locations may be designated as Hubs for different facility capacities, e.g., multiplexing from digital to digital may occur at one location while multiplexing from digital to analog may occur at a different location. When ordering the customer will specify the desired multiplexing Hub(s) selected from The National Exchange Carrier Association (NECA) Tariff F.C.C. No. 4, Section 16. For Information on how to obtain copies of the NECA Tariff see Section 14 following. NECA 4 identifies the type(s) of multiplexing functions which are available and the serving wire centers at which they are available.

Some of the types of multiplexing available include the following:

- from higher to lower bit rate
- from higher to lower bandwidth
- from digital to voice frequency channels

End to end services may be provided on channels of these facilities to a Hub. The transmission performance for the end to end service provided between customer designated premises will be that of the lower capacity or bit rate. For example, when a 1.544 Mbps facility is multiplexed to voice frequency channels, the transmission performance of the channelized services will be Voice Grade, not High Capacity.

Continued



ACCESS SERVICE

7. Special Access Service (Cont'd)

7.4 Rate Regulations (Cont'd)

7.4.7 Facility Hubs (Cont'd)

The Utility will commence billing the monthly rate for the facility to the Hub on the date specified by the customer on the service order. Individual services utilizing these facilities may be installed coincident with the installation of the facility to the Hub, or may be ordered and/or installed at a later date, at the option of the customer. The customer will be billed for a Voice Grade or a high capacity digital Channel Termination, Channel Mileage (when applicable), and the multiplexer at the time the facility is installed. Individual service rates (by service type) will apply for a Channel Termination and additional Channel Mileage (as required) for each channelized service. These will be billed to the customer as each individual service is installed.

z

Cascading multiplexing occurs when a high capacity digital channel is de-multiplexed to provide channels with a lesser capacity and one of the lesser capacity channels is further de-multiplexed. For example, a DS3 facility is de-multiplexed to 28 DS1 facilities and then one of the DS1 facilities is further de-multiplexed to individual voice grade channels.

(T)

(T)

(T)

When cascading multiplexing is performed, whether in the same or a different Hub, a charge for the additional multiplexing unit also applies. When cascading multiplexing is performed at different Hubbing locations, Channel Mileage charges also apply between the Hubs.

When a DS3x3 or DS3x12 is hubbed and segregated into individual DS3 services, a separate multiplexer charge is not required between the DS3x3 or DS3x12 service and the individual DS3 services, DS3 rates and charges will apply to the individual DS3 services as required (e.g., channel terminations, channel mileage and optional features if requested). If multiplexing is used to multiplex DS3x3 or DS3x12 service to DS1 service, then at least one DS3 to DS1 multiplexer is required.

(N)

(N)

Material inadvertently omitted on Advice Letter No. 16797.

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.4 Rate Regulations (Cont'd)

(D)

(D)

7.4.8 Shared Use Digital High Capacity Service, SONET Ring and Access service\* and Optical Carrier Network (OCN) Point to Point Service

Shared use occurs when Special Access Service and Switched Access Service are provided over the same High Capacity facilities through a common interface. The facility will be ordered, provided and rated as Special Access Service (i.e., Channel Termination, Channel Mileage, SONET rate element, OCN rate element, or as appropriate, OCN and multiplexer). The nonrecurring charge that applies when the shared use facility is installed will be the nonrecurring charge associated with the appropriate Special Access High Capacity Channel Termination. Individual service (i.e., Switched or Special Access) nonrecurring charges will not apply to the individual channels of the shared use facility. Rating as Special Access will continue until such time as the customer chooses to use a portion of the available capacity for providing Switched Access Service. As each individual channel is activated for Switched Access Service, Special Access Channel Termination, Channel Mileage, SONET rate element, OCN Point to Point rate element,

\* Frozen/Grandfathered SONET Ring and Access Service effective June 30, 2006, pending CPUC Resolution. See General Regulations, Schedule Cal.P.U.C. No. 175-T, Section 2.1.4, (F).

(D)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.4 Rate Regulations (Cont'd)

7.4.8 Shared Use Digital High Capacity Service, SONET Ring and Access service\* and Optical Carrier Network (OCN) Point to Point service (Cont'd) (N)

and Multiplexer rates will be reduced accordingly (e.g., (L)  
1/24th for a DS1 service, 1/672nd for a DS3 service, (T)  
1/2016th for DS3x3 or OC-3 service, 1/8064th for OC-12 or (T)  
equivalent service, etc). The customer must place an order for  
each individual Switched or Special Access Service utilizing  
the Shared Use Facilities and specify the channel assignment  
for each service.

Switched Access Service rates and charges as set forth in  
Section 6.8 preceding will apply for each channel of the  
shared use facility that is used to provide Switched Access  
Service. Where Special Access Service is provided utilizing  
a channel of the shared facility to the Hub, High Capacity  
rates and charges will apply for the facility to the Hub  
as set forth preceding and individual service rates and (N)  
charges will apply from the Hub to the customer designated  
premises. The rates and charges that will apply to the  
portion from the Hub to the customer designated premises will  
be dependent on the specific type of Special Access Service  
that is provided (e.g., Voice Grade, Telegraph, etc.). The  
applicable rates and charges will include a Channel  
Termination and Channel Mileage, if applicable. Rates and  
charges for optional features and functions, if any,  
associated with the service, if any, will apply as set forth  
in 7.5 following.

\* Frozen/Grandfathered SONET Ring and Access Service effective June 30, 2006, (D)  
pending CPUC Resolution. See General Regulations, Schedule Cal.P.U.C. (N)  
No. 175-T, Section 2.1.4, (F).

(L) Formerly located on Sheet 307. (N)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.4 Rate Regulations (Cont'd)

7.4.9 Split Billing Arrangement

Split Billing Arrangement allows for the interconnection of two or more different customer's Special Access Services in Utility Serving Wire Centers for billing purposes only. This arrangement is only available when a service is hubbed for multiplexing (e.g., DS3 to DS1 or DS1 to DS0) and each customer must have a minimum of one channel termination at their designated premises. Separate billing arrangements for Shared Network Arrangement associated with SONET Ring services\* are set forth in 7.4.12 and 7.4.15 following. (N)

Hubbing locations are set forth in The National Exchange Carrier Association (NECA) Tariff F.C.C. No. 4, Section 16. For information on how to obtain copies of the NECA Tariff see Section 14 following. (T)

Each customer may order their individual service(s) separately from the Utility. However, the customer with the higher bit rate service (e.g., DS3 or DS1) must provide the channel assignment to the customer with the lower bit rate service prior to the ordering of the lower bit rate service.

Each customer will be billed the applicable tariff rates and charges set forth in 7.5 following, for their individual service(s). Multiplexing will be billed to the customer with the higher bit rate service.

The customer that controls the higher bit rate service shall be the primary customer for reporting service outages. Out of service adjustments will be handled in accordance with Credit Allowance for Service Interruptions as set forth in Section 2.4.4 preceding.

\* Frozen/Grandfathered SONET Ring and Access Service effective June 30, 2006, pending CPUC Resolution. See General Regulations, Schedule Cal.P.U.C. No. 175-T, Section 2.1.4, (F). (N)  
(N)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.4 Rate Regulations (Cont'd)

7.4.10 DS1 and Fiber Advantage<sup>SM</sup> Service

(A) Payment Plans\*,# (N)

(1) Rate Stability Plans for Fiber Advantage<sup>SM</sup> DS1, DS3, DS3x3 And DS3x12\*,# (N)

Rates and Charges for DS1, DS3 and DS3x3 service are offered with a 1, 3 or 5 year Rate Stability Payment Plan. DS3x12 service is offered with a 3 or 5 year Rate Stability Payment Plan.

For customers that subscribe to a 1, 3 or 5 year Rate Stability Payment Plan, the monthly rates in effect at the time the service is installed will not increase during the payment plan period.

The customer has the option to order a Rate Stability Payment Plan for each individual DS1 or DS3 service hubbed with a DS3 or DS3x3 service.

(2) Term Payment Plans for DS1 1.544 Mbps Service\*,# (N)

DS1 1.544 mbps service (non Fiber Advantage) provides the customer Term Payment Plans (TPP's) for one, two, three or five-year terms. Rates for the plans are the rates in effect at the time the service is installed.

During the length of the selected TPP, monthly rates for services ordered under the plan will automatically change (increase or decrease) as the result of Company initiated rate changes or a Commission Order or Decision. However, under no circumstances will any rate change cause the monthly rates for the service to exceed the rate that was in effect at the time the service was installed for the TPP selected.

\* As of November 1, 2013, Rate Stability/Term Payment Plan terms greater than 36 months are no longer available for new or renewing subscribers. (T)

# As of January 15, 2021, 3-Year Rate Stability/Term Payment Plans are no longer available to new or renewing subscribers. (N)  
(N)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.4 Rate Regulations (Cont'd)

7.4.10 DS1 and Fiber Advantage<sup>sm</sup> Service (Cont'd)

(A) Payment Plans\*,# (Cont'd) (N)

(2) Term Payment Plans for DS1 1.544 Mbps Service\*,#(Cont'd) (N)

For customers ordering new DS1 1.544 mbps service who choose a Term Payment Plan (TPP) period of 3 years or greater in length, the Nonrecurring Charge will not apply for new service. However, customers requesting termination of service prior to the completion of a minimum of 3 years or greater TPP will become liable for full payment of Nonrecurring Charges.\*

For customers ordering new DS1 1.544 mbps service who choose a Term Payment Plan (TPP) period of 2 years (End User Channel Termination only), the Nonrecurring Charge will not apply for new service.

The customer may choose to terminate an existing TPP before the end of the one, two, three or five year period and negotiate a new TPP as set forth in (a) following.

Any special construction charges incurred for services billed under a TPP will be applicable as provided for in Section 15 of this tariff.

(a) Upgrades

During a customer's TPP term, conversion may be made to a new TPP term of the same or different length or to a higher speed service, if the expiration date for the new service or TPP term is beyond the end of the original TPP term.\* The new TPP term becomes effective upon execution. Existing customer may change from a month-to-month arrangement to a TPP. No credit for months under the previous TPP may be transferred to the new TPP. The customer incurs no liability for the remaining months on the original TPP, since the change is not considered a termination of service.

Nonrecurring charges as appropriate will apply if a customer converts to a higher speed service. The rates applicable for the new term are those currently in effect for new customers.

\* As of November 1, 2013, Term Payment Plan terms greater than 36 months are no longer available for new or renewing subscribers. (T)

# As of January 15, 2021, 2- and 3-Year Term Payment Plans are no longer available to new or renewing subscribers. (N)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.4 Rate Regulations (Cont'd)

7.4.10 DS1 and Fiber Advantage<sup>sm</sup> Service (Cont'd)

(A) Payment Plans\*,# (Cont'd) (N)

(2) Term Payment Plans for DS1 1.544 Mbps Service\*,# (N)  
(Cont'd)

(b) Moves

During a TPP term, a customer may move one Channel Termination (Local Distribution Channel) of a DS1 service to another location in the same LATA and keep the TPP in force, provided no lapse in service occurs. Moves to a different serving office however may result in a change in the monthly charges. Nonrecurring charges as appropriate are applicable. The nonrecurring charge that is currently in effect for month-to-month service offering will apply.

If the customer moves both ends of the service concurrently the customer will be liable for Termination Liability charges. Rules and regulations for Moves in Section 5.2.9 preceding are applicable.

(c) Renewals# (N)

At the end of a TPP term, the customer may elect a new TPP term with the rates in effect at that time. If the customer elects not to renew the TPP, or does not notify the Company of their intent to establish a new TPP, the service will automatically be billed under the tariffed month-to-month rates in effect at the time the TPP expires.

\* As of November 1, 2013, Term Payment Plan terms greater than 36 months are (T)  
no longer available for new or renewing subscribers.

# As of January 15, 2021, 2- and 3-Year Term Payment Plans are no longer (N)  
available to new or renewing subscribers. (N)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.4 Rate Regulations (Cont'd)

7.4.10 DS1 and Fiber Advantage<sup>sm</sup> Service (Cont'd) (T)

(B) Termination Liability Charges for Payment Plans (N)

(1) Termination Liability for DS1 1.544 Mbps Service Term Payment Plans

Customers requesting the termination of a TPP prior to the expiration date, excluding TPP terminated as a result of a renegotiation, will be charged a termination charge as indicated below. These charges shall become due and owing as of the effective date of the termination and are payable within 30 days of the bill date, subject to interest penalty on the unpaid balance.

The customer's termination charge shall be equal to all waived and/or unpaid nonrecurring charges at currently effective month to month rates, plus 50% of the remaining months multiplied by the monthly recurring charges.

(N)

(2) Termination Liability Charges For Fiber Advantage<sup>sm</sup> DS1, DS3, DS3x3 And DS3x12 Rate Stability Payment Plans. (T) (L)

Minimum Periods for Fiber Advantage<sup>sm</sup> DS1, DS3, DS3x3 and DS3x12 service apply as set forth in Section 5.2.5 and Section 7.4.3 preceding.

For Rate Stability Payment Plans (e.g. 1, 3 and 5 year plans) discontinued prior to the end of their Payment Plan period, the Termination Liability Charges will apply as follows:

For Rate Stability Payment Plans discontinued prior to the end of the first year of the Rate Stability Payment Plan period, the customer will be liable for 75% of the total monthly charges for the unexpired portion of the first year of service. In addition, the customer will be liable for 70% of the second year, 60% of the third year, 50% of the fourth year and 40% of the fifth year, of the total monthly charges for the remaining portion of the Rate Stability Payment Plan.

L

(L) Material Formerly on Sheet 308-B.

Continued



ACCESS SERVICE

7. Special Access Service (Cont'd)

7.4 Rate Regulations (Cont'd)

7.4.10 DS1 and Fiber Advantage<sup>SM</sup> Service (Cont'd)

(B) Termination Liability Charges for Payment Plans

(2) Termination Liability Charges For Fiber Advantage<sup>SM</sup>  
DS1, DS3, DS3x3 And DS3x12 Rate Stability Payment Plans  
(Cont'd)

For Rate Stability Payment Plans discontinued beyond the first year of the Rate Stability Payment Plan period, the customer will be liable for 70% of the total monthly charges for next 12 month period of the Rate Stability Payment Plan, 60% for the 13th through 24 months of the Rate Stability Payment Plan period, 50% for the 25th through 36 months, and 40% for the 37th through 48 months, as applicable, for the remaining portion of the Rate Stability Payment Plan period.

(C) Renewal Plan for Fiber Advantage<sup>SM</sup> DS1, DS3, DS3x3 and  
DS3x12 Rate Stability Payment Plans<sup>#</sup>

(N)

(1) For Fiber Advantage DS3, DS3x3 and DS3x12 Rate  
Stability Payment Plans

For all orders completed prior to August 15, 2006, at the end of the Rate Stability Payment Plan, the customer may renew, for any Rate Stability Payment Plan in effect, without a new nonrecurring charge being applied, as long as the physical serving arrangement is not changed or the customer may continue service at the original rate on a month-to-month basis up to one full year after the original Rate Stability Payment Plan ends, at which time the customer must either (1) elect a new term pricing plan, (2) terminate the service, or (3) the Utility will automatically convert the customer to the Monthly Extension Rate.

For orders completed on or after August 15, 2006, all new subscriptions to Fiber Advantage DS3, DS3x3 and DS3x12 Rate Stability Payment Plans are subject to the following Renewal Plan: If the customer elects not to renew an expired Rate Stability Payment Plan or does not notify the Utility of their intent to renew the Rate Stability Payment Plan, the customer's services will automatically be billed under the tariffed Monthly Extension rate in effect at the time the term Plan expires.

# As of January 15, 2021, 2- and 3-Year Rate Stability Payment Plans  
are no longer available to new or renewing subscribers.

(N)

(N)

Material omitted now located on Sheet 308-C-1.

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.4 Rate Regulations (Cont'd)

7.4.10 DS1 and Fiber Advantage<sup>SM</sup> Service (Cont'd)

(C) Renewal Plan for Fiber Advantage<sup>SM</sup> DS1, DS3, DS3x3 and DS3x12 Rate Stability Payment Plans<sup>#</sup> (Cont'd) (N)

(1) For Fiber Advantage DS3, DS3x3 and DS3x12 Rate Stability Payment Plans (Cont'd)

Monthly Extension rates are not available to new subscriptions to the service as they are applicable when a new term plan has not been renegotiated. (L)  
(L)

(2) For Fiber Advantage DS1 Rate Stability Plans  
At the end of the Rate Stability Payment Plan, the customer may renew for any Rate Stability Payment Plan in effect, without a new nonrecurring charge being applied, as long as the physical serving arrangement is not changed or the customer may continue at the original rate on a month-to month basis up to one full year after the original Rate Stability Payment Plan ends at which time the customer must select a new term pricing plan.

# As of January 15, 2021, 2- and 3-Year Rate Stability Payment Plans are no longer available to new or renewing subscribers. (N)  
(N)

(L) Material formerly located on Sheet 308-C.

Material omitted now located on Sheet 308-C-2.

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.4 Rate Regulations (Cont'd)

7.4.10 DS1 and Fiber Advantage<sup>SM</sup> Service (Cont'd)

(D) Change of Fiber Advantage<sup>SM</sup> DS1, DS3, DS3x3 or DS3x12  
Rate Stability Payment Plans<sup>#</sup>

(L)  
(N)

At any time, a customer has the option to change their current payment plan to an equivalent or longer payment plan (e.g., 1 year to 3 year) without any Termination Liability Charges applicable to the current Rate Stability Payment Plan and without new nonrecurring charges applicable to the new equivalent or longer payment plan, as long as all other aspects of the service and facilities remain unchanged. In addition, the new equivalent or longer Rate Stability Payment Plan the customer selects begins on the service order completion date and is treated as a new Rate Stability Payment Plan period.

Customers may change to a shorter Rate Stability Payment Plan by paying the associated Termination Liability Charges with the original Rate Stability Payment Plan. The rates that will apply will be the current rates in effect for the Rate Stability Payment Plan ordered. However, no new nonrecurring charges will apply.

(L)

# As of January 15, 2021, 2- and 3-Year Rate Stability Payment Plans are no longer available to new or renewing subscribers.

(N)  
(N)

(L) Material formerly located on Sheet 308-C-1.

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.4 Rate Regulations (Cont'd)

7.4.10 DS1 and Fiber Advantage<sup>sm</sup> Service (Cont'd)

(E) Upgrades to DS3x3 and DS3x12 Services Provided Through Rate Stability Payment Plans<sup>#</sup>

(N)

Customers with a three or five year Rate Stability Payment Plan\* may at any time upgrade any DS3 service to a greater DS3 service, e.g., DS3 to DS3x12, at the same premises without incurring the DS3 Termination Liability Charge provided that:

- the customer subscribes to a new higher speed Rate Stability Payment Plan term that is equal to, or greater than 36 months;
- the expiration date for the new Rate Stability Payment Plan term is beyond the end of the original Rate Stability Plan term.

All appropriate upgrades, e.g., DS3x12 rates and charges will apply (i.e., Recurring and Nonrecurring).

(F) DS3, DS3x3 and DS3x12 Service Transition<sup>#</sup>

(N)

Customers with DS3 service provided under Individual Case Basis (ICB) term contract arrangements in other portions of this tariff who wish to convert their service to a DS3, DS3x3 or DS3x12 service may do so without penalty or assessment of new nonrecurring charges, providing there is no physical change in the service arrangement.

(G) Moves for Fiber Advantage<sup>sm</sup> DS3x3 and DS3x12

Regulations for Moves for Fiber Advantage<sup>sm</sup> DS3x3 and DS3x12 are set forth in Section 5.2.9 preceding.

\* As of November 1, 2013, Rate Stability Payment Plan terms greater than 36 months are no longer available for new or renewing subscribers. (T)

# As of January 15, 2021, 2- and 3-Year Rate Stability Payment Plans are no longer available to new or renewing subscribers. (N)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.4 Rate Regulations (Cont'd)

7.4.10 DS1 and Fiber Advantage<sup>SM</sup> Service (Cont'd)

(H) Changes from Fiber Advantage DS3 (DS3, DS3x3, DS3x12)  
service to Higher Speed Services

Customers with a three or five year Rate Stability Payment Plan may at any time upgrade from a DS3# service to (N)  
a higher speed Special Access service (e.g., GigaMAN, SONET Ring and Access, OC-192 Dedicated Ring\*, OCN Point to Point\*, MON Ring) without incurring Termination Liability charges for the customer's existing DS3 service providing the following criteria are met:

- The customer subscribes to a Term Pricing Plan period that is equal to, or greater than 36 months;
- The expiration date for the new Term Pricing Plan period is beyond the end of the original Term Pricing Plan period;
- No lapse in service occurs;
- Nonrecurring charges will apply when applicable;
- The monthly rates for the new service(s) shall be those rates in effect at the time the new service(s) is installed;
- The new service is provided between the same customer locations and with the same customer of record as the disconnected service;
- The original location of all nodes must be included in the new service;
- Billed recurring revenue for each month of the first eighteen months of the new service is equal to or greater than the billed recurring revenue for the last month of the service(s) being converted;
- Customer agrees not to convert the new service term pricing plan to a pricing plan with a lower rate for the period of eighteen months after conversion; and
- Spare facilities and equipment must be available or Special Construction charges, as set forth in Section 15, following, shall apply.

\* As of November 1, 2013, Rate Stability/Term Payment Plan terms greater than 36 months are no longer available for new or renewing OC-192 Dedicated Ring or OCN Point to Point subscribers. (T)

# As of January 15, 2021, 3-Year Rate Stability/Term Payment Plans are no longer available to new or renewing subscribers. (N)  
(N)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.4 Rate Regulations (Cont'd)

7.4.10 Fiber Advantage<sup>sm</sup> Service (Cont'd)

(I) Service Transition From Individual Case Basis (ICB)  
Contracts To Tariff Service<sup>#</sup>

(N)

When a customer's ICB DS3 service is terminated and the customer chooses to convert to general tariff service provided by the Utility, the customer shall be credited with the length of time their ICB contract was in place.

For example, a customer has a 5-year ICB contract for DS3 (T) service and is in the 36th month of that service arrangement at the time of conversion. The customer will be provided the option to move into a 5-year Rate (T) Stability Payment Plan to obtain the lowest possible monthly rate and will be credited with the 36 months of service which have already elapsed. Only 24 months of service will be required under the 5-year Rate Stability (T) Payment Plan to avoid a Termination Liability Charge under the tariffed Rate Stability Payment Plan.

In this example, in the event the customer terminates service prior to 24 months, Termination Liability Charges will apply for the remainder of the Rate Stability Payment Plan period. The customer also has the option to move into a shorter Rate Stability Payment Plan as described in preceding. In either case, no Nonrecurring or Termination Liability Charges shall apply to the ICB contract arrangement.

# As of January 15, 2021, 2- and 3-Year Rate Stability Payment Plans  
are no longer available to new or renewing subscribers.

(N)  
(N)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.4 Rate Regulations (Cont'd)

7.4.11 Resale of Private Line Services\*

The following services are available for resale: Metallic Service in Section 7.2.1, Telegraph Grade Service in Section 7.2.2, Voice Grade Service in Section 7.2.3, Video Service (D) in Section 7.2.5, Digital Data Service in Section 7.2.8, (A), (D) Advanced Digital Network in Section 7.2.8, (B), High Capacity Service in Section 7.2.8, (C), SONET Ring and Access Services# 7.2.9, GigaMAN in Section 7.2.13, Optical Carrier Network (OCN) Point to Point Service in Section 7.2.14, OC-3, OC-12 and OC-48 Dedicated SONET Ring Service in Section 7.2.15, OC-192 Dedicated SONET Ring Service in Section 7.2.10. Regulations for resale of Private Line Services are found in Section 18.1. following. Rates and Charges for resale of Private Line services are found in Section 18.2 following.

\* See General Regulations 2.1.4, (C) and (D) preceding.

# Frozen/Grandfathered SONET Ring and Access Service effective June 30, 2006, pending CPUC Resolution. See General Regulations, Schedule Cal.P.U.C. No. 175-T, Section 2.1.4, (F).

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.4 Rate Regulations (Cont'd)

7.4.12 SONET Ring and Access Services\*

(N)

Terms and Conditions

(A) 1, 3 and 5 Year Rate Stability Payment Plans and  
Termination Liability Charges

The Utility provides 1, 3 or 5 Year (term) Rate Stability Payment Plans (RSPP). For the dedicated ring configuration Rate Stability Plan Payment Plans have 3 and 5 year terms; for the circuit service the Rate Stability Payment Plans have 1, 3, and 5 year terms. The RSPP allows the customer to order service at rates commensurate with the length of the term. If rates decrease during a RSPP term, the new rate, if it is lower, would automatically apply to the remainder of the fixed term. At the end of the RSPP, the customer may order a new Rate Stability Payment Plan, terminate service or, if no choice is made, the service will convert to monthly rates corresponding to the equivalent term just expired, subject to any future rate changes. If a customer does not complete the time period or term of the RSPP, Termination Liability Charges will apply, unless exceptions are met as listed in the following.

(T)

If a customer chooses to discontinue the Rate Stability Payment Plan prior to the completion of the term period, termination liabilities will apply with the exception of the following early release option. With this option, a customer under a 5 Year term, giving 6 months notice prior to disconnecting service after the start of the 48th month of the RSPP, will be released from the Termination Liability Charges.

(T)

\* Frozen/Grandfathered SONET Ring and Access Service effective June 30, 2006, pending CPUC Resolution. See General Regulations, Schedule Cal.P.U.C. No. 175-T, Section 2.1.4, (F).

(N)

|  
(N)

Continued



ACCESS SERVICE

7. Special Access Service (Cont'd)

7.4 Rate Regulations (Cont'd)

7.4.12 SONET Ring and Access Services\* (Cont'd)

(N)

- (A) 1, 3 and 5 Year Rate Stability Payment Plans and Termination Liability Charges (Cont'd)

For Rate Stability Payment Plans discontinued prior to the end of the first year of the Rate Stability Payment Plan period the customer's Termination Liability Charge will be 75% of the total monthly charges on the unexpired portion of the first year of service. In addition, the customer will be liable for 60% of the second year, 50% of the third year, 20% of the fourth year and 15% of the fifth year of the total monthly charges for the remaining portion of the Rate Stability Payment Plan Period.

For Rate Stability Payment Plans disconnected after the end of the first year of service, the customer will be liable for payments for the unused portion of the RSPP. The Terminating Liability Charge will be calculated based upon a percentage of monthly payments remaining in the RSPP. Percentages of monthly payments due for unused service are: 60% for year two, 50% for year three, 20% for year four and 15% for year five, (e.g., a customer disconnecting after using fourteen months of a five year plan would owe: 10 months at 60%, 12 months at 50%, 12 months at 20% and 12 months at 15%).

(T)

- (B) Upgrades to SONET Ring and Access Services provided through Rate Stability Payment Plans.

Customers may upgrade, when conditions are met, DS3 or DS1 at the same premises without incurring the Termination Liability Charge providing that a Rate Stability Payment Plan of equivalent or longer period is selected.

\* Frozen/Grandfathered SONET Ring and Access Service effective June 30, 2006, pending CPUC Resolution. See General Regulations, Schedule Cal.P.U.C. No. 175-T, Section 2.1.4, (F).

(N)

(N)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.4 Rate Regulations (Cont'd)

7.4.12 SONET Ring and Access Services\* (Cont'd)

(N)

(C) Migration onto SONET Ring and Access Services

A period of up to six months will be established for migrating existing services onto a new dedicated ring. When services move onto the ring the customer will be billed for a prorata share of the rate elements being used (Nodes, Ports, Mileage and Dedicated Ring Fees). Use of the ring's services will be determined by an equivalent DS3 prorata share of the ring's rate element recurring charges (1/3rd of the charges for an OC-3 ring, 1/12th of the charges for an OC-12 ring, 1/48th of the charges for an OC-48 ring) determined on a monthly basis. For example, when the customer migrates an existing DS3 service to the ring the Utility will charge a proration of the recurring charges for the ring elements and discontinue billing for the fixed and variable mileage and the related portion of the channel termination at the customer entrance facility which the SONET ring completely replaces. Existing channel termination proration applies when the existing service (i.e., DS3x3 or DS3x12) will be disconnected as part of the migration plan. At the completion of the migration period, billing will commence for all rate elements of the ring purchased by the customer (this is the commencement of the rate stability payment period). This does not apply to two point (a.k.a circuit service) configurations.

(T)  
|  
(T)

The six month migration period may be extended for an additional two months following the initial period. The extension must be agreed upon by the customer and the Utility. Either party can request an extension to deal with developing situations. For example, if either party cannot meet the ring provisioning dates, or rollover of existing services to the ring, due to circumstances beyond their control during the initial migration period (e.g., labor disputes, resource limitations, or natural disasters), either party can request an extension. Both parties must cooperatively plan a new timeline that will not exceed two months from the date of the extension agreement.

\* Frozen/Grandfathered SONET Ring and Access Service effective June 30, 2006, pending CPUC Resolution. See General Regulations, Schedule Cal.P.U.C. No. 175-T, Section 2.1.4, (F).

(N)  
|  
(N)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.4 Rate Regulations (Cont'd)

7.4.12 SONET Ring and Access Services\* (Cont'd)

(N)

(D) Renewal of SONET Ring and Access Services Rate Stability Payment Plans

At the end of the term of a RSPP the customer may renew its RSPP without incurring the payment of a nonrecurring charge, if the physical serving arrangement is not changed. If a plan is not renewed, service will continue on a month to month basis with the rates as specified in 7.4.11 above.

With an increase in bandwidth capacity and no change in locations receiving service, the customer can forego payment of existing Terminating Liability Charges. New Terminating Liability Charges based on the term of service chosen will apply for the new Rate Stability Payment Plan chosen by the customer.

(E) Change of SONET Ring and Access Services Rate Stability Payment Plan

The customer also has the option to change the current payment plan to an equivalent or longer payment plan (e.g., 1 year to 3 year) without incurring the Termination Liability Charge applicable to the current Rate Stability Payment Plan or new nonrecurring charges applicable to the new equivalent or longer payment plan, if other aspects of the service and facilities remain unchanged. The new equivalent or longer Rate Stability Payment Plan of the customer begins on the service order completion date and is treated as a new Rate Stability Payment Plan period.

Customers may change to a shorter Rate Stability Payment Plan by paying the associated Termination Liability Charges with the original Rate Stability Payment Plan. The rates that will apply will be the current rates in effect for the Rate Stability Payment Plan ordered. However, no new nonrecurring charges will apply.

\* Frozen/Grandfathered SONET Ring and Access Service effective June 30, 2006, pending CPUC Resolution. See General Regulations, Schedule Cal.P.U.C. No. 175-T, Section 2.1.4, (F).

(N)

|

(N)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.4 Rate Regulations (Cont'd)

7.4.12 SONET Ring and Access Services\* (Cont'd)

(N)

(F) Portability

No Termination Liability Charge will apply to the disconnect of a Local Loop Access Link or channel termination if a like service with the same bandwidth capacity and the same RSPP term is added to the same dedicated ring. The disconnect and new connect orders must be concurrent and related to insure that the termination liability can be suppressed for the disconnect order.

(G) Service Transition from Individual Case Basis (ICB) Contracts to Tariffed Service

When a customer's ICB DS3 or OC3/c service is terminated and the customer chooses to convert to tariffed service from the Utility, the customer shall be credited with the length of time their ICB contract was in place.

For example, a customer has a 5 year ICB contract for DS3 (T) service and is in the 36th month of that service arrangement at the time of conversion. The Customer will be provided the option to move into a 5 year Rate Stability Payment Plan (RSPP) to obtain the lowest possible monthly rate and will be credited with the 36 months of service which have already elapsed. Only 24 months of service will be required under the 5 year RSPP to avoid a Termination Liability Charge under the tariffed RSPP.

In this example, in the event the customer terminates service prior to 24 months, Termination Liability Charges will apply for the remainder of the RSPP period. The customer also has the option to move into a shorter RSPP described in (E) preceding. In either case, no nonrecurring or Termination Liability Charges shall apply to the ICB contract arrangement.

\* Frozen/Grandfathered SONET Ring and Access Service effective June 30, 2006, pending CPUC Resolution. See General Regulations, Schedule Cal.P.U.C. No. 175-T, Section 2.1.4, (F).

(D)  
(N)  
|  
(N)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.4 Rate Regulations (Cont'd) (T)

7.4.12 SONET Ring and Access Services\* (Cont'd) (N)

(H) SONET Multiplexing

There is no SONET multiplexing arrangement for bandwidth capacities above 51 Mbps.

(I) Protected Services

Within the Utility network, SONET services are protection switched. The provisioning of premises access ports, either OC-3c or OC-12c, is a non-protected drop, e.g., one (T)  
pair of fibers at the network interface. (T)

(J) OC-12c/622 Mbps Bandwidth Service (T)

OC-12c/622 Mbps Bandwidth Service is provisioned via (T)  
access ports on a SONET OC48 Node. (T)

(1) OC-12c/622 Mbps Bandwidth Service can originate and (T)  
terminate on a Dedicated SONET OC-48 Ring, e.g., (T)  
provide a point-to-point service between two premise  
nodes on a dedicated ring, or

(2) OC-12c/622 Mbps<sup>#</sup> Bandwidth Service can originate on (T)  
a Dedicated SONET OC-48 Ring and terminate in the (T)  
Utility Central Office, traversing available SONET  
IOF. Applicable, chargeable recurring mileage is the  
distance between the central offices with the  
customer's CO Node and the endpoint CO node.

\* Frozen/Grandfathered SONET Ring and Access Service effective June 30, 2006, (N)  
pending CPUC Resolution. See General Regulations, Schedule Cal.P.U.C.  
No. 175-T, Section 2.1.4, (F). (N)

# STS-12 is manufactured discontinued and grandfathered to existing (T)  
customers. (D)

(D)  
(D)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.4 Rate Regulations (Cont'd)

7.4.12 SONET Ring and Access Services\* (Cont'd)

(N)

(K) Ethernet Port<sup>#,®</sup>

A nonrecurring charge as set forth in 7.5.11 following is applicable only when the Ethernet Port is ordered for an existing SONET Ring service. The nonrecurring charge for the Ethernet port will not be applicable to customers ordering a new SONET Ring service.

Effective November 26, 2003, new orders for SONET Ring Service with the Ethernet over SONET (EoS) enhancement will be served by different equipment than the equipment used for customers who placed SONET Ring Service orders that were completed prior to November 26, 2003 when the EoS option was not available. Customers subscribing to SONET Ring Service prior to November 26, 2003, subsequently requesting EoS for their existing Ring may be required to change to the new equipment, and may incur early termination charges for their existing SONET Ring Service. In these cases, disconnect of the existing SONET Ring Service and placement of an order for a new SONET Ring service with the EoS enhancement is required. The monthly rates for the new service(s) shall be those rates in effect at the time the new service(s) is installed.

(L) Shared Network Arrangement

(L)

Shared Network is a service offering that enables a customer ("Service User") to connect subtending services to a SONET Ring service of another customer (the "Host Subscriber"), with the Utility maintaining separate billing for each. Each customer will be billed for those rate elements associated with their own portion of the service configuration. The Host Subscriber will be responsible for all SONET Ring Service rate elements, for example, node, ports and mileage, etc. Under no circumstances will the rates or charges for individual rate elements be split.

This offering is limited to service configurations where a Service User orders a subtending service dropped from a Host subscriber's SONET Ring wire center node. Under Shared Network, the Utility may share record information with the Host Subscriber pertaining to the services of other users of the shared network. Such disclosure will be under the sole discretion of the Utility and is necessary to perform billing reconciliation and/or other functions required in connection with maintaining account records.

Rates for Shared Network Arrangement are set forth in Section 7.5.11, (I) following.

(T) (L)

(L) Formerly on Sheet 308-J-2.

(T)

\* Frozen/Grandfathered SONET Ring and Access Service effective June 30, 2006, pending CPUC Resolution. See General Regulations, Schedule Cal.P.U.C. No. 175-T, Section 2.1.4, (F).

(N)

# Ethernet Port offering is available only as Prem Access Port.

(N)

@ Not available on SONET Ring (STS-1) service.

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.4 Rate Regulations (Cont'd)

7.4.12 SONET Ring and Access Services\* (Cont'd)

(N)

(M) Conversion from SONET Ring and Access Service to  
OC-3, OC-12, OC-48 Dedicated SONET Ring Service

Existing customers of SONET Ring Service may convert to OC-3, OC-12, OC-48 Dedicated SONET Ring service as offered in Section 7.2.15 without incurring early termination liability for their existing SONET Ring service when the following conditions are met:

- the customer subscribes to a term plan period that is equal to or greater than thirty-six months, and
- the expiration date for the new term plan period is beyond the original term plan period, and
- no lapse in service occurs, and
- the monthly rates for the new service will be those rates in effect for the new service at the time the new service is installed, and
- nonrecurring charges will apply, where applicable, and
- the new ring service is provided between the same customer locations with the same customer of record as the existing ring service, and
- the original location of all nodes must be included in the new service.

(N)

Material omitted now located on Sheet 308-J-1.

(T)

\* Frozen/Grandfathered SONET Ring and Access Service effective June 30, 2006, pending CPUC Resolution. See General Regulations, Schedule Cal.P.U.C. No. 175-T, Section 2.1.4, (F).

(N)

(N)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.4 Rate Regulations (Cont'd)

7.4.12 SONET Ring and Access Services\* (Cont'd)

(N)

(M) Conversion from SONET Ring and Access Service to  
OC-3, OC-12, OC-48 Dedicated SONET Ring Service  
(Cont'd)

If you upgrade to the new OC-3, OC-12, OC-48 Dedicated SONET Ring Service\* and your current SONET Ring and Access Service configuration includes SONTET circuit service, you will be required to order Optical Carrier Network (OCN) Point to Point service in lieu of the circuit service. (IOF Protection for OCN Point to Point service will become available approximately June 2006.)

As a current subscriber to SONET Ring and Access Service, you will be able to add or remove lower speed services (port changes) to existing nodes on your SONET ring and Access Service Ring. Additional ports will be billed at the same Term Pricing Plan as the Ring Node.

Physical changes to individual nodes or the physical SONET Ring and Access Service Ring are not allowed (e.g., moves or addition of nodes, increases in bandwidth). Requests for this activity will require a conversion to the new Dedicated SONET Ring Service\*. Disconnect of a node(s) is allowable within the specified minimum requirements.

\* Frozen/Grandfathered SONET Ring and Access Service effective June 30, 2006, pending CPUC Resolution. See General Regulations, Schedule Cal.P.U.C. No. 175-T, Section 2.1.4, (F).

(N)

Continued



ACCESS SERVICE

7. Special Access Service (Cont'd)

7.4 Rate Regulations (Cont'd)

7.4.13 OC-192 Dedicated SONET Ring Service (Cont'd)

(A) Rate Elements

(1) Nodes

The ring will provide connectivity to multiple customer designated locations (nodes). However, a ring must have a minimum of two nodes. At least one must be a Utility Serving Wire Center node, but not both. A maximum of 16 nodes including regenerators will be allowed per ring. The Utility reserves the right to determine the order of the nodes on the ring.

When a customer premises node is located in the same building as a CO node, diversity between the two nodes is not available.

If a customer requests and has installed two customer premises nodes of the same speed, on the same dedicated ring, on the same premises, the additional node will be billed as shown in 7.5 following. This option does not guarantee diversity between these two nodes and the rest of the ring.

The customer will be billed on a time and material basis as set forth in Section 13 preceding for any additional charges incurred by the Utility in locating Utility equipment at the customer premises.

Customers Premises Nodes and Central Office Nodes

Nodes aggregate lower bandwidth capacities onto the ring through use of the SONET add/drop multiplexer function. The CO Node is located in the Utility SWC; the Premises Node, at the customer's location. CO Nodes shall be required for extending the range of the ring (i.e., for ring regeneration). CO Nodes may be used for interconnection to other rings. For OC-192 ring nodes bandwidth capacity is 9.9523 Gbps. A Ring must have a minimum of two nodes. One node must be located in the Utility SWC. A maximum of 16 nodes including regenerators will be allowed per ring. An EIS Cross-Connect may connect to a CO Node. (D)

When a customer premises node is located in the same building as a CO Node, diversity between the two nodes may not be available.

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.4 Rate Regulations (Cont'd)

7.4.13 OC-192 Dedicated SONET Ring Service (Cont'd)

(A) Rate Elements (Cont'd)

(2) Ports (Cont'd)

Ports provide access to the ring and to lower speed channels (e.g., DS-3, OC-3, OC-3c, OC-12, OC-12c, OC-48, OC-48c, 100 Mbps, EC-1 and 1 Gbps Ethernet) between nodes. Lower speed channels are accessible at nodes via port terminations.

Accepted interfaces are as follows:

**OC-192 Node**

DS1 Ports	X (Max 84/OC-3 Port)
DS3 Ports	X (Max 192/Node)
OC-3, OC-3c Ports*	64
OC-12, OC-12c Ports*	16
OC-48, OC-48c Ports*	4
100 Mbps Ethernet Ports (STS-1)	48
100 Mbps Ethernet Ports (STS-3c)	16
1 Gbps Ethernet Ports (STS-1)	32
1 Gbps Ethernet Ports (STS-3c)	16
1 Gbps Ethernet Ports (STS-12c)	2
1 Gbps Ethernet Ports (STS-24c)	2
EC-1 (STS-1)	X (max 192/Node)

(D)  
|  
(D)

\* OC-3/OC-3c ports support both OC-3/OC-3c bandwidths, OC-12/OC-12c ports support both OC-12/OC-12c bandwidths, OC-48/OC-48c ports support both OC-48/OC-48c bandwidths.

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.4 Rate Regulations (Cont'd)

7.4.13 OC-192 Dedicated SONET Ring Service (Cont'd)

(A) Rate Elements (Cont'd)

(2) Ports (Cont'd)

Accepted interfaces are as follows: (Cont'd)

**OC-192 Node (Cont'd)**

10/100BaseT Ethernet Port	OC-192-Node
-VT1.5-1v (1.6 Mbps)	X (Max 84/OC-3)
-VT1.5-2v (3.2 Mbps)	X (Max 42/OC-3)
-VT1.5-3v (4.8 Mbps)	X (Max 28/OC-3)
-VT1.5-4v (6.4 Mbps)	X (Max 21/OC-3)
-VT1.5-5v (8.0 Mbps)	X (Max 16/OC-3)
-VT1.5-6v (9.6 Mbps)	X (Max 14/OC-3)
-VT1.5-7v (11.2 Mbps)	X (Max 12/OC-3)
-VT1.5-8v (12.4 Mbps)	X (Max 10/OC-3)
-VT1.5-10v (16.0 Mbps)	X (Max 8/OC-3)
-VT1.5-13v (20.8 Mbps)	X (Max 6/OC-3)
-STS-1-1v (48.384 Mbps)	X (Max. 192/Node)
-STS-1-2v (96.768 Mbps)	X (Max. 96/Node)

(N)

(N)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.4 Rate Regulations (Cont'd)

7.4.13 OC-192 Dedicated SONET Ring Service (Cont'd)

(A) Rate Elements (Cont'd)

(2) Ports (Cont'd)

Accepted interfaces are as follows: (Cont'd)

**OC-192 Node (Cont'd)**

1000BaseSX/LX Ethernet Port	OC-192 Node
STS-1-1v (48.384 Mbps)	X (Max. 192/Node)
STS-1-2v (96.768 Mbps)	X (Max. 96/Node)
STS-1-3v (145.154 Mbps)	X (Max. 64/Node)
STS-1-4v (193.536 Mbps)	X (Max. 48/Node)
STS-1-5v (241.94 Mbps)	X (Max. 38/Node)
STS-1-6v (290.304 Mbps)	X (Max. 32/Node)
STS-1-9v (435.456 Mbps)	X (Max. 21/Node)
STS-1-12v (580.608 Mbps)	X (Max. 16/Node)
STS-1-21v (1016.064 Mbps)	X (Max. 9/Node)
STS-3c-1v (149.76 Mbps)	X (Max. 64/Node)
STS-3c-2v (299.52 Mbps)	X (Max. 32/Node)
STS-3c-3v (449.28 Mbps)	X (Max. 21/Node)
STS-3c-4v (599.04 Mbps)	X (Max. 16/Node)
STS-3c-7v (1048.32 Mbps)	X (Max. 9/Node)

(T)

(T)

(T)

(T)

(T)

(T)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.4 Rate Regulations (Cont'd)

7.4.13 OC-192 Dedicated SONET Ring Service (Cont'd)) (T)

(A) Rate Elements (Cont'd)

(3) Mileage

Mileage is charged as specified in 7.2.9 preceding. Fractions of a mile are rounded up to the whole mile for rate calculations. A one-mile minimum will be billed between nodes. A two-node ring configuration has a two-mile minimum; one mile from the wire center node to the customer premises node, and one mile from the customer premises node to the wire center node.

(4) Ring Regenerator

Regenerators provide essential detection and retransmission of the SONET Optical 9.953 Gbps signal between nodes. Regenerators will only be provided as required by the Utility when actual fiber facility distances between customer designated nodes exceed inter-nodal design limits. Regenerators will be located exclusively in Utility COs and do not allow ports to access customer service connections.

(5) Dedicated Ring Connection Capacity

Maximum transport capacity of OC-192 Dedicated SONET Ring Service is characterized by the total quantity of individual port-to-port connections allowed between all nodes on the ring.

(D)  
|  
(D)

OC-192 Dedicated SONET Ring Service will provide capability for node-to-node connections of STS-1 or STS-3C channels using OC3, OC-3c, OC-12, OC-12c, OC-48 or OC-48c ports on the OC-192 ring.

OC-192 Dedicated SONET Ring Service will provide capability for node-to-node connections of STS-12C channels using OC-12c or OC-48c ports on the OC-192 ring.

(D)

OC-192 Dedicated SONET Ring Service will provide capability for node-to-node connections of STS-48C channels using OC-48c portson the OC-192 ring.

(D)

Continued

ACCESS SERVICE

7. Special Access Services (Cont'd)

7.4 Rate Regulations (Cont'd)

7.4.13 OC-192 Dedicated SONET Ring Service (Cont'd)

(A) Rate Elements (Cont'd)

(6) Add/Drop Capability

Add/Drop Capability provides the capability to add/drop lower speed channels from an OC-192 Dedicated SONET Ring node location via OC-48, OC-48c, OC-12, OC-12c, OC-3, OC-3c, or DS-3 ports. OC-192 Add/Drop Capability at an OC-192 Dedicated SONET Ring Service node location will support various combinations of service not to exceed 192 STS-1 equivalents, contingent upon limitations of drop port capacity.

When electrical drops are required the optical-to-electrical Add/Drop Capability charge, as set forth in 7.5.12 following is applicable when the 25th DS3 port is applied per Node.

Effective December 16, 2020, regarding Add/Drop capabilities, if the number of ports falls below 25 DS-3 ports, the customer must notify its Company account team/sales representative, in writing, to eliminate the charge. Upon receipt of the customer's notice and upon eligibility confirmation, the Company will remove the charge within two billing cycles. (N)

(7) Ethernet Port

A nonrecurring charge as set forth in 7.5.12, (I) following is applicable only when the Ethernet Port is ordered for an existing OC-192 Dedicated SONET Ring service. The nonrecurring charge for the Ethernet Port will not be applicable to customers ordering a new OC-192 Dedicated SONET Ring Service. (N)

(8) Unprotected Channel Transport

Unprotected Channel Transport will allow customers to transport traffic over a ring without enabling SONET protection schemes. This is intended for applications in which the customer provides protection for the circuit through means other than those available through SONET. If a fault occurs on the ring along the transport path, the traffic will not be switched to a protection channel. Service will be interrupted on that circuit until the fault is corrected. If a fault occurs in the ring but does not occur along the transport route, service will not be interrupted on that circuit. Without protection, SONET is unable to meet the normal availability, so Credit Allowance credits do not apply and credits will not occur upon an outage of an Unprotected Channel Transport. Credits will not be provided for the whole service when the fault on the ring creates the outage. If a riding service extends off a ring, Credit Allowances for that riding service may be applicable per the respective product tariff. This capability is limited to customers with OC-192 Dedicated SONET Ring service installed after July 2, 2007.

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.4 Rate Regulations (Cont'd)

7.4.13 OC-192 Dedicated SONET Ring Service (Cont'd) (T)

(B) Term Pricing Plan

(1) General Description

OC-192 Dedicated SONET Rings are available for either three or five year Term Pricing Plan (TPP) periods. Monthly recurring charges apply for the nodes, ports and mileage.

(2) Nonrecurring Charges

Nonrecurring Charges, including the Administrative Charge, as set forth in 7.5.12 following will apply for those arrangements ordered under the OC-192 Dedicated SONET Ring TPP.

(3) Rate Flow Through

Any decreases in recurring tariff rates will be passed on to customers who participate in the TPP. The Utility will notify customers participating in the TPP when monthly rates are decreased. Should the Utility increase its rates during the TPP period, the customer will pay the increased rates as long as the increase does not exceed the original tariffed rate in effect at the time the customer established service under the TPP.

(4) Adding Nodes to the Ring

If a node is added after the initial installation of the dedicated ring, the new node will carry the same TPP rate as the initial ring and be co-terminus with that TPP. However, if a node is added during the last 12 months or less of a TPP, the customer will be billed the initial node rate for a minimum period of 12 months. All applicable Nonrecurring Charges as set forth in Section 7.5.12 following will apply. (T)

Continued

ACCESS SERVICE

7. Special Access Services (Cont'd)

7.4 Rate Regulations (Cont'd)

7.4.13 OC-192 Dedicated SONET Ring Service (Cont'd) (T)

(B) Term Pricing Plan (Cont'd)

(5) TPP Renegotiation

The customer may choose to terminate an existing TPP any time prior to the end of the three or five year period and negotiate a new TPP without termination liability provided the new TPP meets the following requirements:

- (a) The minimum period for the new TPP must be greater than the remaining period currently in effect and
- (b) The renegotiated TPP will be based on the current rates.

When the customer converts to a new TPP, actual time in service for the original TPP will be applied. However, no credits or refunds will apply for the billing or actual time in service for the previous TPP.

(6) Termination of Service

If a customer cancels a service order or terminates services before the completion of the term for any reason whatsoever other than the result of a service renegotiation, the customer agrees to pay to the Utility termination liability charges, which are defined below. These charges shall become due and owing as of the effective date of the cancellation or termination and are payable within 30 days of the invoice date, subject to interest penalty on the unpaid balance.

Customer's termination liability for cancellation of service shall be equal to:

- (a) all waived and/or unpaid nonrecurring charges, plus;
- (b) Fifty (50) percent of all recurring charges for the balance of the customer's term.

Continued



ACCESS SERVICE

7. Special Access Service (Cont'd)

7.4 Rate Regulations (Cont'd)

7.4.13 OC-192 Dedicated SONET Ring Service (Cont'd) (T)

(B) Term Pricing Plan (Cont'd)

(7) Renewal

The customer must provide the Utility with a written notice of intent to renew a TPP no later than 60 days prior to its expiration.

The customer will continue to be billed at the current TPP rates.

If the customer does not renew the TPP, or does not notify the Utility of its intent to renew the TPP, the customer's service will convert to the Monthly Extension rate as set forth in 7.5.12 following until the customer cancels or renews the service with a new TPP term. Monthly Extension Rates are not available to new subscriptions. (T)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.4 Rate Regulations (Cont'd)

7.4.13 OC-192 Dedicated SONET Ring Service (Cont'd) (T)

(B) Term Pricing Plan (Cont'd)

(8) Moves

(a) Moves Within a Customer's Premises

Moves of Dedicated SONET Ring nodes within a customers existing premises will be provided at the customer's request on a time sensitive charge basis (time and material) as set forth in Section 13 following. A move involves a change in the physical location of the Point of termination on the customer's premises. Such moves will be treated as an extension of OC-192 Dedicated SONET Ring facilities. Extension of OC-192 Dedicated SONET Ring facilities will be provided, at the customer's request, on a time-sensitive charge basis. The labor rates that apply are set forth in Section 13 following. There will be no change in the TPP term requirements, the customer's existing TPP for the moved node will remain intact. (T)

The charges for a subsequent installation, as set forth in Section 7.5.15 following, for the specific Dedicated SONET Ring node being modified will apply in addition to Design and CO charge as set forth in 7.5.15 following per customer order. The applicable labor rates are set forth in Section 13 following. No change in billing period is required. Early Termination liability charges will not apply to moves of Dedicated SONET Ring Nodes. (T)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.4 Rate Regulations (Cont'd)

7.4.13 OC-192 Dedicated SONET Ring Service (Cont'd) (T)

(B) Term Pricing Plan (Cont'd)

(8) Moves (Cont'd)

(b) Moves of OC-192 Dedicated Ring Nodes

Moves of OC-192 Dedicated SONET Ring nodes to a different customer premises location will be provided, at the customer's request, on a time-sensitive charge basis (time and material) as set forth in Section 13 following. The charge will not exceed the Nonrecurring Charge for subsequent installation, as set forth (T) in Section 7.5.12, (A) following, for the specific OC-192 Dedicated SONET Ring node being modified. Labor rates as set forth in Section 13 following are applicable.

Where facilities and operating conditions are not available, Special Construction charges as set forth in Section 15 following may apply.

No change in billing period is required. Termination charges will not apply to moves of OC-192 Dedicated SONET Ring nodes. Termination charges will not apply to moves of Dedicated SONET OC-192 Ring nodes.

A move involves a change in the physical location of the Point of Termination from one customer premises to another. Such moves will be treated as an extension of Dedicated SONET Ring facilities. The customer's existing TPP for the moved node will (T) remain intact.

The charges for a subsequent installation, as set forth in Section 7.5.15 following, for the specific Dedicated SONET Ring node being modified will apply in addition to Design and CO charge, as set forth in 7.5.15 following, per customer order. (T) The applicable labor rates are set forth in Section 13 following. No change in billing period is required. Early Termination liability charges will not apply to moves of Dedicated SONET Ring Nodes.

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.4 Rate Regulations (Cont'd)

7.4.13 OC-192 Dedicated SONET Ring Service (Cont'd)

(B) Term Pricing Plan (Cont'd)

(9) Ethernet Port \* (D)

Effective November 26, 2003, new orders for OC-192 Dedicated SONET Ring Service with the Ethernet over SONET (EoS) enhancement will be served by different equipment than the equipment used for customers who placed OC-192 Dedicated SONET Ring Service orders that were completed prior to November 26, 2003 when the EoS option was not available. Customers subscribing to OC-192 Dedicated SONET Ring Service prior to November 26, 2003, subsequently requesting EoS for their existing Ring may be required to change to the new equipment, and may incur early termination charges for their existing OC-192 Dedicated SONET Ring Service. In these cases, disconnect of the existing OC-192 Dedicated SONET Ring Service and placement of an order for a new OC-192 Dedicated SONET Ring service with the EoS enhancement is required. The monthly rates for the new service(s) shall be those rates in effect at the time the new service(s) is installed.

\* Not available on OC-192 Dedicated SONET Ring (STS-1).

(D)

Continued

ACCESS SERVICE

7. Special Access (Cont'd)

7.4 Rate Regulations (Cont'd)

7.4.13 OC-192 Dedicated SONET Ring Service (Cont'd) (T)

(5) Upgrade to OC-192 Ring Service from Lower Speed Services

Customers with three or five year Rate Stability Payment Plans (D)  
may at any time upgrade from a SONET Ring and Access service  
OC-48 Ring to a OC-192 Dedicated SONET Ring service without  
incurring Termination Liability charges for the customer's  
existing OC-48 service providing the following criteria are met\*:

- The customer subscribes to a Term Pricing Plan period that is  
equal to or greater than 36 months; (T)
- The expiration date for the new Term Pricing Plan period is  
beyond the end of the original Term Pricing (Rate Stability)  
Plan period;
- No lapse in service occurs;
- Nonrecurring charges will apply when applicable;
- The monthly rates for the new service(s) shall be those rates in  
effect at the time the new service(s) is/are installed;
- The new service is provided between the same customer locations  
and with the same customer of record as the disconnected  
service;
- The original location of all nodes\* must be included in the new  
service;
- Billed recurring revenue for each month of the first eighteen  
months of the new service is equal to or greater than the billed  
recurring revenue for the last month of the service(s) being  
converted;
- Customer agrees not to convert the new service term pricing plan  
to a pricing plan with a lower rate for the period of eighteen  
months after conversion; and
- Spare facilities and equipment must be available or Special  
Construction charges as set forth in Section 15. following (T)  
shall apply.

\* Customer owned Prem Nodes on existing OC-48 Sonet Rings will not be  
converted to the new OC-192 Ring service. These Nodes will be excluded  
from the conversion process. Utility provided Prem Nodes are required for  
O to E conversion.

Continued

ACCESS SERVICE

7. Special Access (Cont'd)

7.4 Rate Regulations (Cont'd)

7.4.13 OC-192 Dedicated SONET Ring Service (Cont'd)

(6) Migration onto OC-192 Dedicated SONET Ring

Billing for the OC-192 Dedicated Ring Service will commence upon service order completion for all rate elements. Billing for the existing OC-48 SONET Ring service will continue until the migration of all circuit services on to the new OC-192 Ring is complete at which time the OC-48 Ring service will be disconnected.

(7) Optical to Electrical DS3 Add/Drop Capability

This option allows an Electrical DS3 to be derived from an Optical OC-3, OC-12, OC-48 or OC-192 shelf. The manner in which a DS3 is dropped will be designed based upon forecast and equipment hierarchy. DS1s are not available with OC-192 Optical to Electrical Add/Drop Capability, however, a customer may purchase multiplexing at the Central Office\*. Customers requiring multiplexing at a Customer Premises Node must provide this functionality, and it must be compatible with the Utility's equipment. The Optical to Electrical Add/Drop Capability is in addition to the Add/Drop Capability charge set forth in Section 7.

(T)

Effective December 16, 2020, regarding Add/Drop capabilities, if the number of ports falls below 25 DS-3 ports, the customer must notify its Company account team/sales representative, in writing, to eliminate the charge. Upon receipt of the customer's notice and upon eligibility confirmation, the Company will remove the charge within two billing cycles.

(N)

(N)

\* Central Office Multiplexing as set forth in Sections 7.1 and 7.2 preceding.

Continued

ACCESS SERVICE

7. Special Access (Cont'd)

7.4 Rate Regulations (Cont'd)

7.4.13 OC-192 Dedicated SONET Ring Service (Cont'd) (T)

(7) Shared Network

Shared Network is a service offering that enables a customer ("Service User") to connect subtending services to an OC-192 Dedicated SONET Ring service of another customer (the "Host Subscriber"), with the Utility maintaining separate billing for each. Each customer will be billed for those rate elements associated with their own portion of the service configuration. The Host Subscriber will be responsible for all OC-192 Dedicated SONET Ring Service rate elements, for example, node, ports and mileage, etc. Under no circumstances will the rates or charges for individual rate elements be split.

This offering is limited to service configurations where a Service User orders a subtending service dropped from a Host Subscriber's OC-192 Dedicated SONET Ring wire center node. Under Shared Network, the Utility may share record information with the Host Subscriber pertaining to the services of other users of the shared network. Such disclosure will be under the sole discretion of the Utility and is necessary to perform billing reconciliation and/or other functions required in connection with maintaining account records. (T)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.4 Rate Regulations (Cont'd) (T)

7.4.14 Education First (T)

The installation and monthly charges for Special Access DS1 (Advanced Digital Network or High Capacity Service) in connection with the provisioning of PRI ISDN used for data and video applications associated with distance learning shall be waived for a period of one (1) year for Public Schools, Libraries, and Community Colleges as well as Private Schools, as defined in Schedule Cal.P.U.C. No. A2. (T)  
participating in the Education First Program. A private or Public School, Library, or Community College may request this special waiver from the effective date of this tariff revision through December 31, 1977.

At hub locations participants changing from Basic Rate Interface (BRI) to Primary Rate Interface (PRI) may not benefit from the waiver of charges for more than one year from the initial installation date of the BRI service. Any participant desiring to withdraw from the program may do so at any time.

Continued



ACCESS SERVICE

7. Special Access Service (Cont'd)

7.4 Rate Regulations (Cont'd)

7.4.15 Video Service

(T)

(A) Video Hubs

The Utility will designate certain Hubs for bridging Video Services. Full-time service will be provided between a customer designated premises and a Hub and billed accordingly at the monthly rates set forth in 7.5.5 following for a Channel Termination, Optional Features and Functions, and Channel Mileage, as applicable. The rate elements required to provide the part-time or occasional service (i.e., Channel Termination, Optional Features and Functions, and Channel Mileage, as applicable) will be billed at daily rates for the duration of the service requested. By ordering a Service Through-Connect, applicable Video Services of different customers can be connected in a two-point service configuration with each customer being billed for its portion of the service.

(T)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.4 Rate Regulations (Cont'd)

7.4.15 Video Service (Cont'd)

(T)

(B) Video Pricing Plans

Video Pricing Plans (VPP) provide the customer with rate stabilization and discounted tariff rates.

Rates and charges for Video Pricing Plans are offered with a 1, 3, or 5 year Rate Stability Payment Plan.

For customers that subscribe to a 1, 3, or 5 year Rate Stability Payment Plan, the monthly rates in effect at the time the service is installed will be in effect. If the Utility initiates rate changes resulting in a decrease of rates for an existing service with a 1, 3, or 5 year fixed service period, those rate changes will be passed along to the customer. Rate changes resulting in an increase of rates for an existing service will not exceed the original rate for that selected serviced period unless mandated by the California Public Utilities Commission.

The customer has the option to order a Video Payment Plan for each individual rate element available under VPP.

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.4 Rate Regulations (Cont'd)

7.4.15 Video Service (Cont'd)

(T)

(C) Renewal Plan for Video Pricing Plans

At the end of the Video Pricing Plan, the customer may renew with a written notice of intent to renew provided to the Utility no later than 60 days prior to its expiration, for any Rate Stability Payment Plan in effect without a new nonrecurring charge being applied, as long as the physical serving arrangement is not changed.

The renewal rates will be the rates in effect on the date of renewal. The renewal date is the date on which the VPP that is being renewed expires.

(T)

If the customer elects not to renew the VPP or does not notify the Utility of its intent to renew the VPP, the customer's service will immediately revert to monthly service at the tariffed rates for monthly service in effect at the time the VPP expires. The customer will not be charged any associated nonrecurring charges as long as the physical serving arrangement does not change.

(T)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.4 Rate Regulations (Cont'd)

7.4.15 Video Service (Cont'd)

(N)

(D) Change of Video Pricing Plans

At any time, a customer has the option to change their current payment plan to an equivalent or longer payment plan (e.g., 1 year to 3 years) without any Termination Liability Charges applicable to the current VPP and without new nonrecurring charges applicable to the new equivalent or longer payment plan as long as all other aspects of the service and facilities remain unchanged. In addition, the new equivalent or longer VPP the customer chooses begins on the service order completion date and is treated as a new Video Pricing Plan period.

Customer may change to a short VPP by paying the associated termination Liability Charges with the current rates in effect for the VPP ordered on the date of conversion. However no new nonrecurring charges will apply.

(E) Other changes to Video Pricing Plans

Any change to a VPP arrangement not otherwise permitted by the regulations, shall constitute a discontinuance of the existing service and all applicable termination charges shall apply. The new service will be subject to all applicable rates and charges (i.e., recurring, nonrecurring, and termination) in effect on the date of the service change.

(N)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.4 Rate Regulations (Cont'd)

7.4.15 Video Service (Cont'd) (T)

(F) Termination Liability Charges - Video Pricing Plans (T)

Minimum periods for Video Pricing Plans shall apply as set forth in Sections 5.2.5 and 7.4.3 preceding. (T)

For VPPs (e.g., 1, 3, and 5 year plans) discontinued prior to the end of their Payment Plan period, the Termination Liability Charges will apply as follows:

<u>VPP</u>	<u>Termination Percentage</u>
1 Year	30%
3 Years	20%
5 Years	10%

The termination charge will be calculated as follows:

$$\begin{array}{rcl} \text{VPP} & \times & \text{Months remaining} & \times & \text{Termination} \\ \text{Monthly Rate} & & \text{in VPP} & & \text{Percentage} \\ & & & & \\ & = & \text{Termination Charge} & & \end{array} \quad (T)$$

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.4 Rate Regulations (Cont'd)

7.4.16 GigaMAN<sup>®</sup> Service

Effective September 30, 2017, GigaMAN Service will no longer be available for purchase by new or existing customers. The Company will no longer accept orders for adds, moves, changes or new term plans for GigaMAN Service, and existing term plans may not be renewed, converted or extended. Following the expiration of a customer's existing GigaMAN term agreement, service will be provided on a month-to-month basis at the applicable monthly extension rates until the service is discontinued.

(N)

(N)

(1) Term Pricing Plans

(A) General Information

Rates and charges are offered with a 1, 2, 3, or 5 year Term Pricing Plan (TPP). For customers that subscribe to a 1, 2, 3, or 5 year TPP, the monthly rates in effect at the time the service is installed will be in effect. If the Utility initiates rate changes resulting in a decrease of rates for an existing service with a 1, 2, 3, or 5 year fixed service period, those rate changes will be passed along to the customer. Rate changes resulting in an increase of rates for an existing service will not exceed the original rate for that selected service period unless mandated by the California Public Utilities Commission.

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.4 Rate Regulations (Cont'd)

7.4.16 GigaMAN<sup>®</sup> Service (Cont'd) (T)

(1) Term Pricing Plans (Cont'd) (T)

(B) Renewal of Term Pricing Plan

At the end of a Term Pricing Plan, the customer may renew with a written notice of intent to renew no later than 90 days prior to its expiration, for any TPP in effect without incurring new nonrecurring charges.

If the customer elects not to renew the TPP or does not notify the Utility of its intent to renew the TPP, the service will automatically be billed under the Monthly Extension rates in effect at the time the TPP expires until the customer cancels or renews the service with a new TPP term. Subsequently, customers under the Monthly Extension rates may convert their existing service to either a 1, 2, 3, or 5 year TPP. (N)  
The customer will not be assessed any associated nonrecurring charges as long as the physical serving arrangement does not change.

Monthly Extensions are not available to new service.

Effective for the period November 13, 2003 through (N)  
November 13, 2004, customers may renew an expired Term Pricing Plan as set forth in 2 (A) following. (N)

(C) Change of Term Pricing Plan

At any time a customer may change an existing TPP to a new TPP only when the new TPP payment period is longer than the remaining period currently in effect, without any Termination Liability Charges or nonrecurring charges applying as long as all other aspects of the service and facilities remain unchanged. The new TPP begins on the service order completion date and is treated as a new TPP period.

Customers may change to a shorter TPP by paying the associated Termination Liability Charges with the current TPP. The rates that will apply will be the current rates in effect for the TPP ordered on the date of conversion, however no new nonrecurring charges apply as long as all other aspects of the service and facilities remain unchanged.

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.4 Rate Regulations (Cont'd)

7.4.16 GigaMAN<sup>®</sup> Service (Cont'd)

(1) Term Pricing Plans (Cont'd)

(D) Other Changes to Term Pricing Plans

Any change to a TPP arrangement not otherwise permitted shall constitute a discontinuance of the existing service and all applicable Termination Liability Charges shall apply. The new service will be subject to all applicable rates and charges (e.g., nonrecurring, recurring, and termination) in effect on the date of the service change.

(E) Termination Liability Charges

Minimum periods for Term Pricing Plans shall apply as set forth in Sections 5.2.5 and 7.4.3 preceding.

For a TPP discontinued prior to the end of its payment plan period, excluding Term Pricing Plans terminated as a result of renegotiations, the Termination Liability Charge shall apply as follows:

All unpaid Special Construction or nonrecurring charges (excluding any waived charges),

plus

Fifty percent (50%) of all recurring charges of the remaining months of the customer's term as follows: (D)

<u>Term Pricing Plan</u>	<u>Termination Percentage</u>
1, 2, 3 and 5 year	50%

(C)

(D)

(D)

The termination charge is calculated as follows:

Months remaining in    x    Recurring    x    Termination    =    Termination Charge  
Term Pricing Plan        Charges        Percentage

Continued



ACCESS SERVICE

7. Special Access Service (Cont'd)

7.4 Rate Regulations (Cont'd)

7.4.16 GigaMAN<sup>®</sup> Service (Cont'd)

(2) Rate Regulations

(A) Changes

- (1) Effective January 5, 2004, and concurrent with the removal of the 31 mile (29dB loss) limitation, new subscriptions to GigaMAN<sup>®</sup> service will be served by different equipment than the equipment used for subscribers who placed orders that were completed prior to January 5, 2004.

Customers subscribing to GigaMAN<sup>®</sup> service prior to January 5, 2004 will remain on their current equipment unless, as a result of a Utility change in the service as set forth in 2.1.7 Changes and Substitutions preceding, the Utility deems it necessary to modify the customers existing service requiring new equipment.

Diversity and Protection Options are not available to customers served by the pre-January 5, 2004 equipment completion date.

(D)

(D)

Customers subscribing to GigaMAN<sup>®</sup> service prior to January 5, 2004, may request a change to the new equipment without incurring the Early Termination Liability charges for their existing GigaMAN<sup>®</sup> service, providing the following criteria are met, contingent upon the availability of fiber from premises to premises.

(D)

(D)

(D)

(D)

(D)

- The customer subscribes to a new Term Pricing Plan period that is greater than the remaining months in the existing term Payment Plan,
- Nonrecurring charges will apply where applicable,

With this change, the customer will experience an Out of Service condition.

Continued

ACCESS SERVICE

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.4 Rate Regulations (Cont'd)

7.4.16 GigaMAN<sup>®</sup> Service (Cont'd)

(2) Rate Regulations (Cont'd)

(A) Changes (Cont'd)

(1) (Cont'd)

- The new service is provided between the same customer locations requiring a disconnect of the existing GigaMAN<sup>®</sup> service and placement of an order for the new GigaMAN<sup>®</sup> service for the same customer of record as the disconnected service,
- Spare facilities and equipment must be available or Special Construction charges, as set forth in Section 15, following, shall apply.

The monthly rates for the new service(s) shall be those rates in effect at the time the new service(s) is being installed requiring a disconnect of the existing GigaMAN<sup>®</sup> service and placement of an order for new GigaMAN<sup>®</sup> service.

- (2) Effective for the period January 5, 2004 through November 13, 2004, customers served by the equipment available prior to January 5, 2004 may renew an expired Term Plan with a new Term Plan not to exceed three (3) years and may remain on the existing GigaMAN<sup>®</sup> equipment. (T)

If, however, during the new three year Term Plan the customer orders any optional features requiring the new equipment that became available after January 5, 2004, the rules set forth under Rate Regulations (A) (1) above for changing are applicable. (D)  
(D)  
(T)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.4 Rate Regulations (Cont'd)

7.4.16 GigaMAN® Service (Cont'd)

(2) Rate Regulations (Cont'd)

(A) Changes (Cont'd)

- (3) For the period November 13, 2003 through November 13, 2004, requests for renewal to a five (5) year Term Plan will require customers to order a new GigaMAN® service that is on the new equipment that was made available effective November 13, 2003, and an order for new service must be placed for the desired five year Term Plan. Concurrent with installation of the new five (5) Year Term plan for GigaMAN® service, the customer's expired Term Plan GigaMAN® service will be disconnected. All nonrecurring charges will apply for the new service. Spare facilities and equipment must be available or Special Construction charges, as set forth in Section 15. following, shall apply. (T)
- (4) For GigaMAN® service installed without Protection and customers subsequently request Protection options after the GigaMAN® order has been completed, and customer premises locations remain the same, a change to the customer premises based Utility equipment is required. This change will be treated as an upgrade to the GigaMAN® service, and a new nonrecurring charge is applicable. This change will require a disconnect of the existing GigaMAN® service and placement of an order for the new GigaMAN® service, except in the case of Power Protection which does not require a disconnect of the existing service) for the same customer of record. With this upgrade the customer will experience an Out of Service condition. (N)  
(N)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.4 Rate Regulations (Cont'd)

7.4.16 GigaMAN<sup>®</sup> Service (Cont'd)

(2) Rate Regulations (Cont'd)

(A) Changes (Cont'd)

(N)

(5) Conversion from GigaMAN<sup>®</sup> to Higher Speed Services

A GigaMAN<sup>®</sup> customer may convert to a higher speed Special Access service without incurring the Early Termination Liability charges for their existing GigaMAN<sup>®</sup> service, providing the following criteria are met, contingent upon the availability of fiber from premises to premises.

Customers with less than 12 months (for the 2 Year Term Plan), 15 months (for the 3 Year Term Plan), and 18 months (for the 5 Year Term Plan) of existing GigaMAN<sup>®</sup> service will not be eligible to have Termination Liability waived with this request. One year term plan GigaMAN<sup>®</sup> customers are not eligible to have the Termination Liability waived.

- The customer subscribes to a new Term Pricing Plan period that is equal to or greater than 36 months;
- The expiration date for the new TPP period is beyond the end of the original TPP period;
- No lapse in service occurs;
- Nonrecurring charges will apply where applicable;
- The monthly rates for the new service shall be those rates in effect at the time the new service is installed;
- Spare facilities and equipment must be available or Special Construction charges as set forth in Section 15 following shall apply.
- The new service is provided between the same customer locations with the same customer of record as the disconnected service;

(N)

Material omitted now located on Sheet 308-R-6.

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.4 Rate Regulations (Cont'd)

7.4.16 GigaMAN® Service (Cont'd)

(2) Rate Regulations (Cont'd)

(A) Changes (Cont'd)

(6) Migration to AT&T Dedicated Ethernet

(N)

Customers subscribing to GigaMAN Service may migrate to AT&T Dedicated Ethernet provided by the Company without incurring Termination Liability Charges, subject to the following conditions:

- The new AT&T Dedicated Ethernet and the existing GigaMAN Service must be billed to the same customer of record at the same customer locations.
- The customer's existing service must have been in place for at least 12 months.
- The minimum term for the new service must be at least 12 months and must be equal to or greater than the number of months remaining in the customer's existing Term Payment Plan (TPP) term.
- The speed (capacity/bandwidth) of the new service must be equal to or greater than that of the existing service.
- The customer must issue a disconnect order for the replaced GigaMAN Service to be effective within 90 days after the AT&T Dedicated Ethernet installation date. The disconnect and new orders must be coordinated through the Company.
- If overlapping service is required, the period will be limited to not more than 90 days and billing will apply to both services during the time both services available.

(N)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.4 Rate Regulations (Cont'd)

7.4.16 GigaMAN® Service (Cont'd)

(L)

(B) Repeater

GigaMAN® service will be designed with a minimum of one repeater at no additional charge to the customer. Additional repeaters determined necessary by the Utility will be charged at rates set forth in 7.5.13(C) following.

When Protection Options as set forth in Section 7.2.13(C) (4) preceding, are ordered, additional repeaters may be necessary on the protected path as determined by the Utility. The Repeater rate element will be applied to a protected circuit per fiber pair.

(C) Mileage

For the Inter-Wire Center Diversity and Protection offering, Interoffice mileage will be calculated between the intermediate Serving Wire Centers along the circuit path of the Diversely routed or Protected GigaMAN® service.

(N)

(N)

For protected GigaMAN® service, mileage charges are applicable on both paths of the protected service.

(D) Moves

(1) Customers whose orders for GigaMAN® service were completed prior to January 5, 2004 may make the following moves when spare fiber facilities are available or Special Construction charges as set forth in Section 15 following will apply, and allow for the service to be temporarily interrupted during the move:

- may move one Channel Termination of a GigaMAN® service to another premises in the same LATA and keep the Term Plan in force without assessment of Early Termination Liability, provided no lapse in billing occurs. Nonrecurring charge as appropriate are applicable, and a change in monthly charges may result.

(T)

- who move both ends of the service concurrently the customer will be liable for Termination Liability charges as this is considered a complete disconnect of the service.

(L)

(L) Material formerly located on Sheet 308-R-5.

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.4 Rate Regulations (Cont'd)

7.4.16 GigaMAN<sup>®</sup> Service (Cont'd)

(L)

(D) Moves (Cont'd)

- (2) Customers whose orders for GigaMAN<sup>®</sup> service were completed after January 5, 2004:

GigaMAN<sup>®</sup> customers subscribing to two (2), three (3) and five (5) year Term Pricing Plans may move one end of the GigaMAN<sup>®</sup> service per the following regulations:

- (a) may move one end of the GigaMAN<sup>®</sup> service to a different premises in the same LATA without incurring the Early Termination Liability charges for their existing GigaMAN<sup>®</sup> service, providing the following criteria are met, contingent upon the availability of fiber from premises to premises. Customers with less than 12 months (for the 2 Year Term Plan), 15 months (for the 3 Year Term Plan), and 18 months (for the 5 Year Term Plan) of existing GigaMAN<sup>®</sup> service will not be eligible to have Termination Liability waived.

- The customer subscribes to a new Term Pricing Plan period that is greater than the remaining months in the existing term Payment Plan,
- Nonrecurring charges will apply where applicable,
- Spare facilities and equipment must be available or Special Construction charges, as set forth in Section 15 following shall apply.

The moved service will require a disconnect of the existing GigaMAN<sup>®</sup> service and placement of an order for the new GigaMAN<sup>®</sup> service for the same customer of record as the disconnected service.

The monthly rates for the new service(s) shall be those rates in effect at the time the new service(s) is being installed requiring a disconnect of the existing GigaMAN<sup>®</sup> service and placement of an order for new GigaMAN<sup>®</sup> service. (L)

(L) Material formerly located on Sheet 308-R-6.

Continued



ACCESS SERVICE

7. Special Access Service (Cont'd)

7.4 Rate Regulations (Cont'd)

(N)

7.4.16 GigaMAN<sup>®</sup> Service (Cont'd)

(D) Moves (Cont'd)

- (2) Customers whose orders for GigaMAN<sup>®</sup> service were completed after January 5, 2004: (Cont'd)

GigaMAN<sup>®</sup> customers subscribing to two (2), three (3) and five (5) Year Term Pricing Plan may move one end of the GigaMAN<sup>®</sup> service per the following regulations: (Cont'd)

- (b) The GigaMAN<sup>®</sup> service was installed with Protection options and the customers subsequently requests a move of the Channel Termination within the same building afterwards. This request may require a change to the customer premises based Utility equipment which will be determined by the Utility. Nonrecurring charges are applicable in the amount of one-half the Nonrecurring charge for the Channel Termination. With this upgrade the customer will experience an Out of Service condition.

(E) Power Protection

Power Protection is applicable on a per equipment bay capacity basis, per customer premises, and depending upon the number of GigaMAN<sup>®</sup> services for the GigaMAN<sup>®</sup> customer of record, the Utility will determine how many Power Protection rate elements are applicable. One or more Power Protection rate elements may apply per customer premises.

(N)

Material omitted now located on Sheet 308-R-5.

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.4 Rate Regulations (Cont'd)

7.4.17 Optical Carrier Network (OCN) Point-to-Point Service

This section contains the specific regulations governing the rates and charges which may apply to Optical Carrier Network (OCN) Point-to-Point Service. The rates and charges in effect at the time the OCN Point-to-Point Service is installed and accepted by the customer are the rates and charges that will be billed to the customer requesting the service. The rates and charges in effect at the time may not be the same as those rates and charges in effect at the time the customer requests the service.

Optical Carrier Network (OCN) Point-to-Point Service is offered under a Term Payment Plan\*. (N)

If the Company initiates rate changes resulting in a decrease (T)  
of rates for an existing service with a 3 or 5 year Term Plan\* (N)  
period, those rate changes will be passed along to the  
customer. Should the Company increase its rates during the (T)  
Term Pricing Plan period as a result of a Company initiated (T)  
price change or pursuant to a commission decision or order, the  
customer will continue to pay the rates in effect at the time  
the customer elected to establish service under the Term  
Pricing Plan.

\* As of November 1, 2013, Term Pricing Plan terms greater than 36 months are no (N)  
longer available for new or renewing subscribers. (N)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.4 Rate Regulations (Cont'd)

7.4.17 Optical Carrier Network (OCN) Point-to-Point Service (Cont'd)

The rate elements for OCN Point-to-Point Service are as follows:

(A) Channel Termination/Local Distribution Channel (LDC)

Channel Terminations/LDC's are offered only without Utility provided and maintained terminal ADM equipment at the customer designated premises and will hand off basic 2-fiber or 4-fiber optical cables, depending upon the feature (as ordered). One Channel Termination (LDC) is applied per customer designated premises where the channel is terminated.

OC-3/OC-3c, OC-12/OC-12c, OC-48/OC-48c, and OC-192/OC-192c (N) Channel Terminations (LDCs) provide point-to-point optical connection between the Utility Serving Wire Center (SWC) and the customer premises.

The customer is required to provide an ADM that is compatible with the Utility Serving wire center ADM as is described in Tech-Pub GR-253-CORE.

All Channel Terminations/Local Distribution Channels comprising a channel must have the same terminating bit rate unless multiplexing is performed at a Utility hub location.

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.4 Rate Regulations (Cont'd)

7.4.17 Optical Carrier Network (OCN) Point-to-Point Service (Cont'd)

(B) Channel Mileage/Interoffice Transport

Channel Mileage/interoffice transport is available with:

OC-3/OC-3c Channel Terms  
OC-12/OC-12c Channel Terms  
OC-48/OC-48c Channel Terms  
OC-192/OC-192c Channel Terms

(N)

In addition, Channel Mileage/interoffice transport can be connected between wire centers with Add/Drop multiplexing at a lower OC-N speed than the Channel Terminations/Local Distribution Channels, if the transport is between a lower speed Add/Drop Function and:

- another lower speed Add/Drop Function;
- another lower speed Channel Termination (LDC);
- a lower speed Dedicated Ring Port

All of the above terminations must be the same speed as the transport.

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.4 Rate Regulations (Cont'd)

7.4.17 Optical Carrier Network (OCN) Point-to-Point Service (Cont'd)

(C) Optional Features and Functions

The following optional features and functions are available with OCN:

Central Office features which consist of:

- Add/Drop Multiplexing (ADM)
- Add/Drop Function (ADM function)

OC-N Network Survivability which consists of:

- 1+1 Protection (OC-3/OC-3c, OC-12/OC-12c, OC-48/OC-48c, and OC-192/OC-192c)
- 1+1 Protection with Cable Survivability (OC-/OC-3c, OC-12/OC-12c, OC-48/OC-48c and OC-192/OC-192c)
- 1+1 Protection with Route Survivability (OC-3/OC-3c, OC-12/OC-12c, C-48/OC-48c and OC-192/OC-192c)
- OCN Point-to-Point with Diversity (N)

Regenerators which consist of:

- OC-48
- OC-192

Connection Arrangements:

- Shared Network Arrangement

(1) Add/Drop Multiplexing

A Utility Serving Wire Center arrangement that allows non-concatenated OC-3, OC-12, OC-48 or OC-192 channels operating at a terminating speed of 155.52 Mbps, 622.08 Mbps, 2488.32 Mbps, 9953.28 Mbps, respectively, (T) to add/drop a lower speed channel by using this feature along with the add/drop function as stated in (b) (T) following. The mix of multiplexing signals cannot exceed the maximum bandwidth of the higher speed OCN circuit termination on the Utility Central Office multiplexer.

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.4 Rate Regulations (Cont'd)

7.4.17 Optical Carrier Network (OCN) Point-to-Point Service (Cont'd) (N)

(C) Optional Features and Functions (Cont'd)

(1) Add/Drop Multiplexing (Cont'd)

For example, OC-3 add/drop multiplexing at a Utility Serving Wire center will provide the capability to support the full add/drop function capacity of OC-3 Service bandwidth with up to 3 (three) DS3 add/drop functions or equivalently up to 3 (three) groups of 28 DS1 add/drop functions.

At the time of ordering any of the following basic rate categories, the customer must provide configuration information for the entire multiplexing option at the time the order for service is placed. In addition, concatenated services OC-3, OC-12, OC-48 cannot be ordered as offered in optional Features and Functions, Section (C) proceeding as the Utility cannot convert individual STS-1 signals to concatenated (non-channelized) channels.

OC-12 add/drop multiplexing at a Utility Serving Wire Center will provide the capability to support the full add/drop function capacity of OC-12 service bandwidth with up to four (4) OC-3 add/drop functions or up to twelve (12) DS3 add/drop functions or equivalent combinations of OC-3 and DS3 add/drop functions.

(N)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.4 Rate Regulations (Cont'd)

7.4.17 Optical Carrier Network (OCN) Point-to-Point Service (Cont'd) (N)

(C) Optional Features and Functions (Cont'd)

(1) Add/Drop Multiplexing (Cont'd)

If asynchronous DS1 ports are required on an OC-12 OCN circuit, then the OC-3 add/drop multiplexing feature and associated DS1 add/drop function must be ordered in addition to the OC-12 add/drop multiplexing feature.

OC-48 add/drop multiplexing at a Utility Serving Wire Center will provide the capability to support the full add/drop function capacity of OC-48 service bandwidth with up to four (4) OC-12 add/drop functions or up to twelve DS3 add/drop functions or equivalent combination of OC-3 and DS3 add/drop functions. If DS1's are required for the OC-12 then the preceding guidelines established in 7.2.14.1 (C) can be followed.

OC-192 add/drop multiplexing at a Utility Serving Wire Center will provide the capability to support full add/drop function capacity of OC-192 service bandwidth. Up to four OC-48 add/drop functions, or up to 16 OC-12 add/drop functions, or up to 64 OC-3 add/drop functions or equivalent combinations of OC-48, OC-12 and OC-3 add/drop functions are supported.

(N)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.4 Rate Regulations (Cont'd)

7.4.17 Optical Carrier Network (OCN) Point-to-Point Service (Cont'd)

(C) Optional Features and Functions (Cont'd)

(2) Add/Drop Function

The OC-3, OC-12, OC-48 and OC-192 are able to add or drop lower level signals as shown in the matrix following. The add/drop function is offered at a circuit level. For example, if a customer wants to drop one DS3 signal from an OC-12 service, one add/drop function charge for the DS3 would be applicable in addition to the OC-12 add/drop multiplexing charge.

OC-3, OC-12, OC-48 and OC-192 circuits are only able to add or drop the services that have been identified by payload content (mapping) within the bandwidth. DS1 mapped STS-1 signals are only able to connect to a DS1, and DS3 mapped STS-1 signals are only able to connect to a DS3. If a change is required it may be accomplished by the customer's CPE or through the current asynchronous environment for multiplexing of DS3 and DS1 services as set forth in Section 7.2.

The options in (1) and (2) preceding are specified by the customer and cannot be used with OC-3, OC-12 or OC-48 configured by the customer to contain a single non-channelized (concatenated) STS-3C or STS-12C signal, respectively.

Ethernet over SONET (EoS) is supported by an Add/Drop function. The quantities allowed will depend upon the VT or STS bandwidth assigned over the port.

ADD/DROP Function						
	DS1	DS3	OC-3	OC-12	OC-48	1000 BaseLX
OC-192	No	No	Yes	Yes	Yes	Yes
OC-48	No	Yes	Yes	Yes	N/A	Yes
OC-12	No	Yes	Yes	N/A	N/A	Yes
OC-3	Yes	Yes	N/A	N/A	N/A	Yes

(N)

(N)

Continued



ACCESS SERVICE

7. Special Access Service (Cont'd)

7.4 Rate Regulations (Cont'd)

7.4.17 Optical Carrier Network (OCN) Point-to-Point Service (Cont'd)

(C) Optional Features and Functions (Cont'd)

(3) OCN Point-to-Point Network Survivability\* (N)

There are four components of OCN Network Survivability: (N)

(a) 1+1 Protection

This option provides two identical fiber pairs that are placed in the same cable and follows the same route. If the working pair fails, traffic shifts to the protect fiber pair. This option does not protect against a fiber cable cut.

The protected OC-3/OC-3c, OC-12/OC-12c, OC-48/OC-48c and OC-192 Services are offered with four fibers in the same cable, and the protection card is activated when this option is ordered. This will allow customers to order protection if their CPE can accommodate it.

(b) 1+1 Protection with Cable Survivability

With this option, the working fiber pairs and the protect fiber pairs are located in two separate cables within the same conduit. If the working fiber pair cable experiences damage or a fiber cut, transmission will switch to the protect fiber pair in a separate cable. Since these cables are located in the same conduit, if the conduit is cut, there is no protection.

This option provides 1+1 protection and additional loop survivability as the working fiber pair and protect fiber pair are in separate cables within the same conduit.

\* OCN Point-to-Point Network Survivability is available on OC3/OC-3c, (N)  
OC-12/OC-12c and OC-48/OC-48c service only. (N)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.4 Rate Regulations (Cont'd)

7.4.17 Optical Carrier Network (OCN) Point-to-Point Service (Cont'd)

(C) Optional Features and Functions (Cont'd)

(3) OCN Point-to-Point Network Survivability Cont'd)

(c) 1+1 Protection with Route Survivability

This option will provide 1+1 protection and offer additional protection from fiber cable cuts by routing the working fiber pair via the primary route and the protected fiber pair via a physically diverse alternate route.

The protected fiber is billed on a distance sensitive basis, in addition to the protection optical rate and is based on quarter route miles, from the customer premises to the serving wire center. This option assures 100 percent availability of the service.

Credit allowances for service interruptions for this (N)  
option are set forth in Section 2.4.4 preceding. (N)

Material omitted now located on Sheet 25-A-4.

(N)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.4 Rate Regulations (Cont'd)

7.4.17 Optical Carrier Network (OCN) Point-to-Point Service (Cont'd)

(C) Optional Features and Functions (Cont'd)

(3) OCN Point-to-Point Network Survivability (Cont'd)

(c) 1+1 Protection with Route Survivability (Cont'd)

All other terms and conditions for Credit Allowances as stated in 2.4.4 preceding will apply. (T)

Prior to confirming an order for service, the Utility will provide a proposed route diagram to the customer. The diagram will include the number of quarter route miles and method used to support the quantity needed to provide the alternate route. In order to avoid compromising Route Survivability information, the Utility will provide this information only to the ordering customer.

Installation of the 1+1 protection with Route Survivability option will not begin until the customer has accepted the proposed routing by the Utility.

(d) OCN Point-to-Point Diversity

(N)

OCN Point-to-Point is offered with Diversity. Diversity requires two OCN services purchased by the same customer of record.

The customer premises locations of the two Diverse OCN Point-to-Point services may differ respectively in A to Z locations of the two circuits.

Prior to confirming an order for the service, the Utility will provide proposed route diagram to the customer. The diagram will include the number of quarter route miles and method used to support the miles required to provide the alternate route.

Installation of the Diversity option will not begin until the customer has accepted the proposed routing by the Utility.

Route Survivability Options (Protection) as set forth in 7.5.14 following are offered for each end of the Diverse circuit and is in addition to the Diversity rate elements.

(N)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

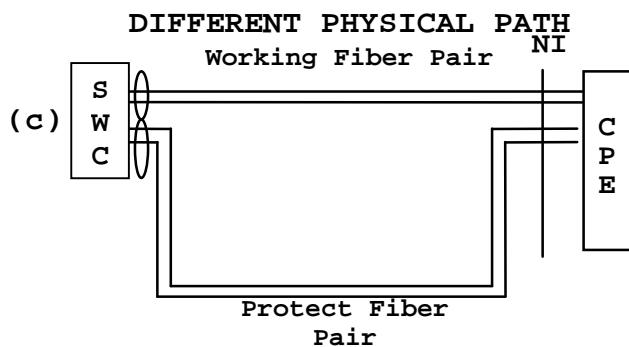
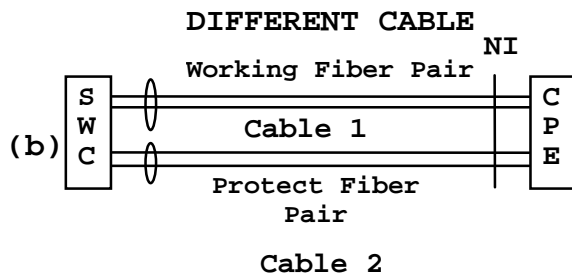
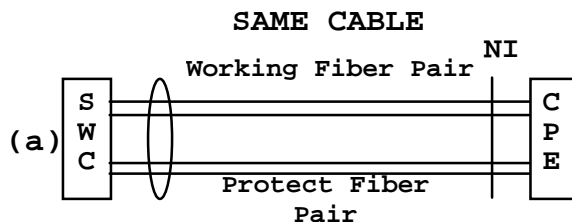
7.4 Rate Regulations (Cont'd)

7.4.17 Optical Carrier Network (OCN) Point-to-Point Service (Cont'd)

(C) Optional Features and Functions (Cont'd)

(3) OCN Point-to-Point Network Survivability (Cont'd)

The following diagrams provide an example of (a), (b), (T)  
(c) and (d) preceding: (N)



Continued

$$\begin{array}{c} \text{(N)} \\ | \\ \text{(N)} \end{array}$$

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.4 Rate Regulations (Cont'd)

7.4.17 Optical Carrier Network (OCN) Point-to-Point Service (Cont'd) (N)

(C) Optional Features and Functions (Cont'd)

(4) Point-to-Point OC-48 and OC-192 Regenerator

Regenerators provide essential detection and retransmission of SONET Optical 2488.32Mbps and 9953.28 Mbps signals between customer premises. Regenerators will only be provided as required by the Utility when actual fiber facility distances between customer designated premises and/or Utility central office locations exceed design limits (typically 25 to 30 miles). Regenerators will be located exclusively in Utility central offices.

(5) Connection Arrangement

(a) Shared Network Arrangement

A Shared Network Arrangement is a service offering that enables a customer ("Service User") to connect subtending services to the multiplexed OC-3, OC-12 or OC-48 service of another customer (the "Host Subscriber"), with the Utility maintaining separate billing for each. Each customer will be billed for those rate elements associated with their own portion of the service configuration. Under no circumstances will the rates or charges for individual rate elements be split. This offering is limited to service configurations where a Service User obtains either subtending DS3 or DS1 from a Host's multiplexed OC-3 service or an OC-3 service from a Host's multiplexed OC-12 service or an OC-12 service from a Host's multiplexed OC-48 service.

Under the Shared Network Arrangement, the Utility may share record information with the Host subscriber pertaining to the services of other users of the shared network. Such disclosure will be under the sole discretion of the Utility and is necessary to perform billing reconciliation and/or other functions required in connection with maintaining account records.

A nonrecurring charge only, is applicable to the Shared Network Arrangement.

(N)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.4 Rate Regulations (Cont'd)

7.4.17 Optical Carrier Network (OCN) Point-to-Point Service (Cont'd) (N)

(D) Monthly Extension Rates

At the expiration of the TPP term and if the customer wishes to continue OC-3/OC-3c, OC-12/OC-12c, OC-48/OC-48c, and OC-192, the customer may select a new TPP at the prevailing TPP rate.

If a customer does not wish to renew the TPP at the expiration of the term, the Monthly Extension Rates will apply until the customer cancels or renews the service with a new TPP term. The Monthly Extension Rate will become effective with the end of the TPP. Monthly Extension Rates are not available to new subscriptions.

(E) Nonrecurring Charges

Described in Section 7.4.1 preceding.

(F) Minimum Periods

The Minimum Period for the OCN Point-to-Point Service is 3 years. In the event OCN Point-to-Point Service is terminated prior to completion of the minimum period, termination liabilities as set forth in (G) following will apply.

(N)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.4 Rate Regulations (Cont'd)

7.4.17 Optical Carrier Network (OCN) Point-to-Point Service (Cont'd)

(G) Term Pricing Plans (TPP)\* (N)

(1) General Description

Term Pricing Plans (TPP) are available on Channel Terminations (Local Distribution Channels), Interoffice Transport and Central Office Multiplexing monthly rate elements. The TPP stabilizes rates for OCN Point-to-Point Service for the specified period of time. OCN Point to Point service is offered as follows:

- Three Year (36 month) TPP or
- Five Year (60 month) TPP\* (N)

(2) Modifications

When additional like-speed OCN Point-to-Point Service circuits are purchased, the customer may include the additional circuits in an existing TPP if:

- The customer renegotiates their TPP for a period of time equal to or greater than the time remaining on the existing TPP;
- The circuits are the same speed; and
- The circuits are located between the same customer designated premises.

\* As of November 1, 2013, Term Pricing Plan terms greater than 36 months are (N)  
no longer available for new or renewing subscribers. (N)

Continued



ACCESS SERVICE

7. Special Access Service (Cont'd)

7.4 Rate Regulations (Cont'd)

7.4.17 Optical Carrier Network (OCN) Point-to-Point Service (Cont'd)

(G) Term Pricing Plans (TPP)\* (Cont'd) (N)

(3) Renewals

At the end of a TPP period, the customer must select one of the following options within one month prior to the expiration date:

- (a) Renew the service for a three or five year TPP\* as provided in this tariff; (N)
- (b) Elect to disconnect the service upon expiration of the billing period; or
- (c) Continue the service on a monthly basis at the current monthly extension rates.

All services under an existing TPP that are not renewed within the period stated above will revert to Option (3)(c) above and be billed at the current Monthly Extension rates.

If the customer's TPP expires and the customer does not choose to renew the term plan for any of the Company Access Services including OCN Point-to-Point, or if the customer fails to notify the Company of their plans to renew the term plan upon expiration of the current term plan, all TPPs will become subject to Monthly Extension Rates as set forth in Section 7.5.14 following. (T)

When a new TPP is requested by the customer, the Monthly Extension rate will be replaced with the appropriate TPP rate upon completion of the order for the new TPP. (T)

\* As of November 1, 2013, Term Pricing Plan terms greater than 36 months are no longer available for new or renewing subscribers. (N)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.4 Rate Regulations (Cont'd)

7.4.17 Optical Carrier Network (OCN) Point-to-Point Service (Cont'd)

(G) Term Pricing Plans (TPP)\* (N)

(4) Conversions from existing OCN Point-to-Point service

If at least one month is remaining on an existing OCN 3 year TPP, the customer may convert the service to a higher term OCN Point to Point TPP without incurring termination liability and at the same time retain the service for the period remaining on the higher term TPP. Retroactive TPP discounts will not apply prior to the date of the Access order for conversion.

For example; a customer with an existing 3 Year OCN Point to Point TPP with 11 months remaining elects to convert to a 5 Year OCN Point to Point TPP. At the time of the order, the customer will be billed the 5 year TPP rate for the remaining period of 2 years and 11 months (35 months) on the new TPP.

\* As of November 1, 2013, Term Pricing Plan terms greater than 36 months are (N)  
no longer available for new or renewing subscribers. (N)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.4 Rate Regulations (Cont'd)

7.4.17 Optical Carrier Network (OCN) Point-to-Point Service (Cont'd)

(G) Term Pricing Plans (TPP)\* (Cont'd) (N)

(5) Transitioning from Other Special Access Services to OCN Point-to-Point

The customer may at any time convert to an OCN Point-to-Point service from Special Access Point-to-Point provided the following conditions are met. The new OCN Point-to-Point service must:

- (a) be the same or greater bandwidth than the service being disconnected; and
- (b) be located between the same two customer designated premises and Company Service Wire Centers; and (T)
- (c) have a minimum billing period that is equal to or greater than the remaining billing period revenue for the service being disconnected service; and
- (d) represent equal or greater of the total minimum billing period revenue as the remaining billing period revenue of the service being disconnected.

\* As of November 1, 2013, Term Pricing Plan terms greater than 36 months are (N)  
no longer available for new or renewing subscribers. (N)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.4 Rate Regulations (Cont'd)

7.4.17 Optical Carrier Network (OCN) Point-to-Point Service (Cont'd) (N)

(H) Termination Liability

Customers requesting termination of service prior to the expiration date of the OCN Point to Point TPP will be liable for a termination charge. The termination charge for all TPP terms with an Optical Interface, will be calculated as follows:

<u>Billing Period</u>	<u>Termination Percentage</u>
3 years	50%
5 years	50%

The termination liability is calculated as follows:

Monthly recurring rate	X	Months remaining in billing	X	Termination percentage
---------------------------	---	--------------------------------	---	---------------------------

Example:

An OCN Point to Point customer with a \$20,000 monthly rate terminates service after 2 years with 1 year (12 months) remaining in a 3 year TPP. The termination liability would be calculated as:

$\$20,000 \times 12 \times .50 = \$120,000$  Termination Liability (N)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.4 Rate Regulations (Cont'd)

7.4.17 Optical Carrier Network (OCN) Point-to-Point Service (Cont'd)

(H) Termination Liability (Cont'd)

A termination charge will not apply under the following conditions:

- |  |     |
|--|-----|
| (1) Moves as set forth in Section 5. preceding without decreasing the number of OCN Point-to-Point circuits.   | (T) |
| (2) Modifications of services as described in Section 5. preceding.  | (T) |
| (3) Conversions from OCN Point-to-Point to other special access service if:  | (N) |
| (a) service is the same speed or higher speed, and   | (N) |
| (b) the customer subscribes to a new term payment plan that is equal to or greater than the original term plan for the lower speed service, and                        | (N) |
| (c) the billed recurring revenue for the new term payment plan is equal to or greater than the billed recurring revenue for the Term Plan for the lower speed service. | (N) |

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.4 Rate Regulations (Cont'd)

7.4.17 Optical Carrier Network (OCN) Point-to-Point Service (Cont'd) (N)

(I) Moves

Moves involve a change in the physical location of one of the following:

- Service rearrangement;
- Point of Termination at the customer's premises; or
- Customer's premises

Move charges depend upon the type of move requested by the customer.

(1) Service Rearrangement

As set forth in Section 5.2.8.

(2) Moves of Point of Termination

A move of a Point of Termination of an existing service to a new location within the same customer premises may be provided, at the customer's request, on a time sensitive basis. Rates and charges as set forth in Section 5.2.9, preceding, will apply. No change in billing period is required.

(3) Moving Customer Premises

Moves to a different customer premises will be treated as a discontinuance of service, and establishment of new service as set forth in Section 5.2.9 preceding. (N)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.4 Rate Regulations (Cont'd)

7.4.17 Optical Carrier Network (OCN) Point-to-Point Service (Cont'd)

(J) Mileage Measurement

Mileage charges apply as set forth in Section 7.1.3 preceding.

(K) Modification of Access Service

As set forth in Section 5.2.2 preceding.

(L) Shared Use

As set forth in Section 7.4.8, preceding

(M) Jointly Provided Service

Jointly provided service is also referred to as Meet Point Billing" arrangement. Regulations as set forth in sections 2.4.8 and 5.2.11 preceding, are applicable.

The service consists of one end of a concatenated OCN Point-to-Point circuit located in one exchange telephone company operating territory and the other end of service located in another exchange telephone company operating territory. Meet point arrangements with independent or other exchange telephone company's are limited to concatenated services only and are dependent upon whether similar compatible services exist in the independent's or other exchange telephone company's territory.

(N)

(N)

(N) Ordering Options and Conditions

As set forth in Section 5 preceding.

(O) Monthly Extension Rates

At the expiration of the TPP term and if the Customer wishes to continue OC-3, OC-12, OC-48 or OC-192 service, the customer may select a new TPP at the prevailing TPP rate. If a customer does not wish to renew the TPP at the expiration of the term, the customer's service will automatically convert to Monthly Extension Rates. The Monthly Extension Rates will apply until the customer cancels or renews the service with a new TPP term. Monthly Extension Rates are not available to new subscriptions.

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.4 Rate Regulations (Cont'd)

7.4.17 Optical Carrier Network (OCN) Point-to-Point Service (Cont'd)

(P) Upgrade to OCN Point to Point from lower speeds\* (N)

Customers with three or five year\* OCN Point to Point TPPs (N)  
may at any time upgrade to higher speed OCN Point to Point  
service (e.g. OC-12 to OC-48) without incurring the  
Termination Liability charge providing that the following  
criteria are met:

- The customer subscribes to a term Pricing Plan period that is equal to or greater than 36 months;
- The expiration date form the new Term Pricing Plan is beyond the end of the original term Pricing Plan period;
- No lapse in service occurs;
- 100% of any waived or unamortized nonrecurring charges will apply, when applicable;
- The monthly rates for the new service(s) will be those rates in effect at the time the new service(s) are installed;
- The new service is provided between the same customer locations and with the same customer of record as the disconnected service;
- The billed monthly recurring revenue for the new service is equal to or greater than the billed monthly recurring revenue remaining in the service being converted; and
- Spare facilities and equipment must be available or Special Construction as set forth in Section 15. is applicable.

\* As of November 1, 2013, Term Pricing Plan terms greater than 36 months are (N)  
no longer available for new or renewing subscribers. (N)

Continued



ACCESS SERVICE

7. Special Access Service (Cont'd)

7.4 Rate Regulations (Cont'd)

7.4.18 OC-3, OC-12 and OC-48 Dedicated SONET Ring Service

(N)

(A) Term Pricing Plans

OC-3, OC-12, OC-48 Dedicated SONET Ring service is offered as a 36 or 60 month Term Pricing Plan (TPP) offering; the minimum term available is 36 months. The monthly rates that are applicable for the new term are those rates currently in effect for new customers.

The TPPs allows the customer to order service at rates commensurate with the length of the term. Any decrease in recurring tariff rates during a term will result in a decrease of monthly rates for an existing Term plan.

At the end of the TPP, the customer may order a new TPP, terminate service or, if no choice is made, the service will convert to the Monthly Extension Rates, subject to any future rate changes. If a customer does not complete the time period or term of the TPP, Termination Liability Charges will apply.

Rate changes resulting in an increase of rates for an existing service will not exceed the original rate for that selected Term Payment service period unless mandated by the California Public Utility Commission.

(N)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.4 Rate Regulations (Cont'd)

7.4.18 OC-3, OC-12 and OC-48 Dedicated SONET Ring Service (Cont'd)

(B.) Term Pricing Plan Renegotiation

(N)

The customer may choose to terminate an existing TPP any time prior to the end of the 36 or 60 month period and negotiate a new TPP without the application of termination liability provided the new TPP meets the following requirements:

- the minimum period for the new TPP must be greater than the remaining period currently in effect and has not expired;
- the customer has had the existing service for a period of 12 months;
- the renegotiated TPP will be based on the current rates;
- no lapse in service occurs;
- nonrecurring charges will apply, when applicable;
- the monthly rates for the new service will be those rates in effect at the time the new service is installed;
- The new TPP is provided between the same customer locations;
- spare facilities and equipment must be available or a Special Construction charges, as set forth in Section 15, may apply.

When the customer converts to a 60 month year TPP, actual time in service for the original TPP will be applied. However, no credits or refunds will apply for the billing or actual time in service for the previous TPP.

(N)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.4 Rate Regulations (Cont'd)

7.4.18 OC-3, OC-12 and OC-48 Dedicated SONET Ring Service (Cont'd)

(C) Term Pricing Plan Renewal

(N)

The customer must provide the Utility with a written notice of intent to renew a TPP no later than 60 days prior to its expiration.

The customer will continue to be billed at the current TPP rates.

The new TPP must be for a 36 or 60 month period.

If the customer does not renew the TPP, or does not notify the Utility of its intent to renew the TPP, the customer's service will convert to the Monthly Extension rate as set forth in Section 7.5.15 following, until the customer cancels or renews the service with a new TPP term. Monthly Extension Rates are not available to new subscriptions.

(D) Subsequent Activity on the Ring

If a new rate element(s), as described in Section 7.5.15 following, are added after the initial installation of the Dedicated SONET Ring, the new rate elements(s) will be assigned the same TPP term as the initial Ring. The TPPs for the new rate elements added after the initial implementation will be independent of the term of the initial ring as follows:

- if a new rate element is added during the last 12 months or less of a TPP, the customer will be billed the TPP rate for that element for a minimum period of 12 months.
- if the Ring is disconnected before the new rate element's term expires, termination liability for the new rate element will apply.

(N)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.4 Rate Regulations (Cont'd)

7.4.18 OC-3, OC-12 and OC-48 Dedicated SONET Ring Service (Cont'd)

(E) Termination of Service

(N)

If a customer terminates services before the completion of the TPP for any reason whatsoever other than the result of a service renegotiation, the customer agrees to pay to the Utility termination liability charges which are defined below. These charges shall become due and owing as of the effective date of the cancellation or termination and are payable within 30 days of the invoice date, subject to interest penalty on the unpaid balance.

Customer's termination liability for cancellation of service shall be equal to:

- (1) all waived and/or unpaid nonrecurring charges, plus;
- (2) Fifty (50) percent of all recurring charges for the balance of the customer's term.

(F) Upgrade to Higher Bandwidth Dedicated SONET Ring Service

- (1) Customers subscribing to an OC-3 Dedicated SONET Ring service may expand the service to an OC-12, OC-48 Dedicated SONET Ring service or to an OC-192 Dedicated SONET Ring.

Customers subscribing to an OC-12 Dedicated SONET Ring service may expand the service to an OC-48 and OC-192 Dedicated SONET Ring.

Customers subscribing to an OC-48 Dedicated SONET Ring service may expand the service to an OC-192 Dedicated SONET Ring.

This upgrade amounts to a conversion from one Ring service to another and requires placement of a new Dedicated SONET Ring service order for the higher bandwidth Ring service. A disconnect service order for the lower bandwidth SONET Ring service must be placed when the migration period (if one is required) is complete.

(N)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.4 Rate Regulations (Cont'd)

7.4.18 OC-3, OC-12 and OC-48 Dedicated SONET Ring Service (Cont'd)

(F) Upgrade to Higher Bandwidth Dedicated SONET Ring Service  
(Cont'd)

- (2) OC-3, OC-12, and OC-48 Dedicated SONET Ring customers (N)  
with 36 or 60 month TPPs may at any time upgrade to a  
higher speed Dedicated SONET Ring Service as described  
in (F)(1) preceding without incurring Termination  
Liability charges, providing the following criteria are  
met:
- the customer subscribes to a Term Plan period that  
is equal to or greater than thirty-six months;
  - the customer has had the existing service for a  
period of 12 months;
  - the expiration date for the new Term Plan period is  
beyond the end of the original Optional Payment Plan  
period;
  - no lapse in service occurs;
  - nonrecurring charges will apply, when applicable;
  - the monthly rates for the new service(s) will be  
those rates in effect at the time the new service(s)  
is/are installed;
  - the new service is provided between the same  
customer locations and with the same customer of  
record as the disconnected service;
  - billed recurring revenue for each month of the first  
eighteen months of the new service is equal to or  
greater than the billed recurring revenue for the  
last month of the service(s) being converted; and
  - spare facilities and equipment must be available or  
Special Construction charges, as set forth in  
Section 15 following, may be applicable. (N)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.4 Rate Regulations (Cont'd)

7.4.18 OC-3, OC-12 and OC-48 Dedicated SONET Ring Service (Cont'd)

(G) Nodes

A minimum of two nodes is required, excluding sub-rings (or ARC sub-rings). A maximum of 16 nodes including regenerators will be allowed per ring.

(H) Ports

The capacity of the selected OC-3, OC-12 or OC-48 Dedicated SONET Ring services is determined by the number to individual port-to-port connections available between all nodes on the ring.

(I) Mileage

Mileage is charged as specified in Section 7.1.3. Mileage charges apply to the SONET Ring service. Mileage is charged based on V&H miles determined from National Exchange Carrier Association (NECA) tariff FCC No. 4. Fractions of a mile are rounded up to the whole mile for rate calculations. A one-mile minimum will be billed between nodes. A two-node ring configuration has a two-mile minimum; one mile from the wire center node to the customer premises node, and one mile from the customer premises node to the wire center node.

(J) Ring Regenerator

Regenerators provide essential detection and retransmission of the SONET Optical signals between nodes. Regenerators will only be provided as required by the Utility when actual fiber facility distances between customer designated nodes exceed inter-nodal design limits. Regenerators will be located exclusively in Utility SWCs and do not allow ports to access customer service connections.

(K) OC-48 Add/Drop Capability

The add/drop capacity charge as set forth in 7.5.15, (3) following is a monthly, per-node charge that is applied a Node has 25 DS3 ports. (C)  
(C)

Effective December 16, 2020, regarding Add/Drop capabilities, if the number of ports falls below 25 DS-3 ports per OC-48 node, the customer must notify its Company account team/sales representative, in writing, to eliminate the charge. Upon receipt of the customer's notice and upon eligibility confirmation, the Company will remove the charge within two billing cycles. (N)  
(N)

Depending upon the combination of drops, an OC-48 Add/Drop Capability may be required to drop the full capacity of the ring. When this occurs, the OC-48 Add/Drop Capability rate applies.

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.4 Rate Regulations (Cont'd)

7.4.18 OC-3, OC-12 and OC-48 Dedicated SONET Ring Service (Cont'd)

(L) Dedicated SONET Ring Connection Capacity

Maximum transport capacity of OC-3, OC-12 and OC-48 Dedicated SONET Ring Service is characterized by the total quantity of individual port-to-port connections allowed between all nodes on the ring.

(M) Moves within a Customer Premises

Moves of Dedicated SONET Ring nodes within a customer's existing premises will be provided at the customer's request on a time sensitive charge basis (time and material) as set forth in Section 13 following. A move involves a change in the physical location of the Point of Termination on the customer's premises. Such moves will be treated as an extension of Dedicated SONET Ring facilities. The customers existing TPP for the moved node will remain intact.

The charges for a subsequent installation, as set forth in Section 7.5.15 following for the specific Dedicated SONET Ring node being modified will apply in addition to Design and CO charge as set forth in 7.5.15 following, per customer order. The applicable labor rates are set forth in Section 13 following. No change in billing period is required. Early Termination liability charges will not apply to moves of Dedicated SONET Ring Nodes.

(N) Moves of Dedicated SONET Ring Nodes

Moves of Dedicated SONET Ring nodes to a different customer premises location will be provided at the customer's request on a time sensitive charge basis (time and material) as set forth in Section 13 following. A move involves a change in the physical location of the Point of Termination from one customer premises to another. Such moves will be treated as an extension of Dedicated SONET Ring facilities. The customer's existing TPP for the moved node will remain intact.

The charges for a subsequent installation, as set forth in Section 7.5.15 following for the specific Dedicated SONET Ring node being modified will apply in addition to Design and CO charge as set forth in 7.5.15 following, per customer order. The applicable labor rates are set forth in Section 13 following. No change in billing period is required. Early Termination liability charges will not apply to moves of Dedicated SONET Ring Nodes.

(N)

(N)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.4 Rate Regulations (Cont'd)

7.4.18 OC-3, OC-12 and OC-48 Dedicated SONET Ring Service (Cont'd)

(O) Shared Network Arrangement

Shared Network is a service offering that enables a customer ("Service User") to connect subtending services to an OC-3, OC-12 or OC-48 Dedicated SONET Ring service of another customer (the "Host Subscriber"), with the Utility maintaining separate billing for each. Each customer will be billed for those rate elements associated with their own portion of the service configuration. The Host Subscriber will be responsible for all OC-3, OC-12, OC-48 Dedicated SONET Ring Service rate elements, for example, node, ports and mileage, etc. Under no circumstances will the rates or charges for individual rate elements be split.

This offering is limited to service configurations where a Service User orders a subtending service dropped from a Host subscriber's OC-3, OC-12, OC-48 Dedicated SONET Ring wire center node. Under Shared Network, the Utility may share record information with the Host Subscriber pertaining to the services of other users of the shared network. Such disclosure will be under the sole discretion of the Utility and is necessary to perform billing reconciliation and/or other functions required in connection with maintaining account records.

(P) Optical to Electrical DS1 Add/Drop Capability

The Optical-to-Electrical DS1 Add/Drop capability charge is applied when the 85th DS1 port is purchased per OC-12 node and required for the first DS-1 port purchased per OC-48 node. Additional charges will apply per each subsequent increment of 84 DS1 ports.

The Optical-to-Electrical DS1 Add/Drop capability as described in 7.2.15, (1) (e) preceding is required in addition to an OC-3 port.

(Q) Sub-Ring and ARC Sub-Ring

(N)

Mileage charges are applicable when the Sub-Ring (or ARC Sub-Ring) is in a different location from the main ring.

(N)

Continued



ACCESS SERVICE

7. Special Access Service (Cont'd)

7.5 Rates and Charges

7.5.1 Metallic Service\*

		USOC	Monthly Rates	Nonrecurring Charges	
				1st	Add'l.
(A) <u>Channel Termination</u>					
<u>Per point of Termination</u>					
- at an End User location					
- Two-wire	T6ECS	\$15.60	\$375.49	\$364.11	
- Four-wire	T6E4D	26.40	375.49	364.11	
- at Utility	T6EC2	None	375.49	364.11	
C.O. location					
- at an IC POT	T6PCS	11.95	375.49	364.11	
location					
(B) <u>Channel Mileage</u>					
		USOC	Monthly Rates		
			Fixed	Per Mile	
Mileage Bands					
0	1L5XX		None	None	
Over 0	1L5XX		\$2.93	\$3.52	
(C) <u>Optional Features and</u>					
<u>Functions</u>					
		USOC	Monthly Rates	Nonrecurring Charges	
				Init.	Subseq.
(1) Bridging					
(a) Three Premises					
Bridging					
- Per Port	BCNM3		\$4.76	\$33.19	\$76.81
(b) Series Bridging					
- Per Port	BCNMS/BCNM5		4.76	33.19	76.81 (T)

\* Limited Offering Service - Provided only to existing customers and services working as of January 1, 1995. See General Regulations 2.1.4, (C) preceding. Existing service arrangements will be maintained up to and including the Utility's local loop demarcation point. Work activity beyond the Utility's local loop demarcation point is the responsibility of the customer at the customer's expense.

z Correction

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.5 Rates and Charges (Cont'd)

7.5.2 Telegraph Grade Service\*

		USOC	Monthly Rates	Nonrecurring Charges		
				1st	Add'l.	
(A) Channel Termination						
- Per Point of termination						
- at an End User location						
- Two-Wire	T6E2X	\$19.16 (R)	\$375.49 (R)	\$364.11	(R)	
- Four-Wire	T6E4X	26.49	375.49	364.11		
- at an IC POT location						
- Two-Wire	T6P2X	\$16.69	\$375.49	\$364.11		
- Four-Wire	T6P4X	17.26 (R)	375.49 (R)	364.11	(R)	
(B) Channel Mileage						
		Monthly Rates				
<u>Mileage Bands</u>		<u>Fixed</u>		<u>Per Mile</u>		
0	1L5XX	None		None		
Over 0	1L5XX	\$6.12 (R)		\$4.02 (R)		
		Monthly Rates	Nonrecurring Charges			
		<u>Rates</u>	<u>Init.</u>	<u>Subseq.</u>		
(C) Optional Features and Functions						
(1) Telegraph Bridging						
Two-Wire and Four-Wire						
- Per Port						
- Two-Wire	BCNT2	\$ 4.76 (R)	\$33.19 (R)	\$76.81	(R)	
- Four-Wire	BCNT4	4.76 (R)	33.19 (R)	76.81	(R)	

\* Frozen/Grandfathered Service - Provided only to existing customers and services working as of the effective date of Advice Letter No. 18405. See General Regulations 2.1.4(E) preceding.

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.5 Rates and Charges (Cont'd)

7.5.3 Voice Grade Service

(A) Channel Termination	USOC	Monthly Rates	Nonrecurring <sup>@</sup> Charges	
			1st	Add'l.
- Per Point of termination				
*- at an End User location				
- Two-wire	T6E2X	\$31.67	\$565.13	\$497.81
- Four-wire	T6E4X	40.20	565.13	497.81
**- at an IC POT location				
- Two-Wire	T6P2X	23.25	565.13	497.81
- Four-Wire	T6P4X	31.63	565.13	497.81
#- Per Point of termination With DC Continuity				
- at an End User location				
- Two-wire	T6E2D	31.67	565.13	497.81
- Four-wire	T6E4D	40.20	565.13	497.81
- at an IC POT location				
- Two-Wire	T6P2D	23.25	565.13	497.81
- Four-Wire	T6P4D	31.63	565.13	497.81

\*\* Access Advantage Plus can only be terminated at an end user location. (T)

\* When service terminates on an Access Advantage Plus Channel port a channel termination charge will not apply. (T)

# DC continuity is not allowed at any point of termination on Access Advantage Plus. (T)

@ Non-recurring charges associated with the installation of Access Advantage Plus on a 3 year Term Pricing Plan are waived. (T)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.5 Rates and Charges (Cont'd)

7.5.3 Voice Grade Service (Cont'd)

(A) Channel Termination (Cont'd)

	<u>USOC</u>	<u>Monthly Rates</u>	<u>Nonrecurring<sup>@</sup> Charges</u>	
			<u>1st</u>	<u>Add'l.</u>
- Per Point of termination				
- at Utility Central Office				
- Two-wire	T6EC2	\$31.67	565.13 (R)	497.81
- Four-wire	T6EC4	40.20	565.13 (R)	497.81

@ Non-recurring charges associated with the installation of Access Advantage (T)  
Plus on a 3 year Term Pricing Plan are waived. (T)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Service Descriptions (Cont'd)

7.2.3 Voice Grade Service (Cont'd)

	<u>USOC</u>	<u>Monthly Rates</u>	<u>Nonrecurring Charges</u>	
			<u>1st</u>	<u>Add'l.</u>
(A) <u>Channel Termination</u> (Cont'd)				
				(D)
				(D)
Private Virtual Network Access Line and Extensions				
- Per Point of Termination				
- Two-Wire	PVN2W	20.35	487.38	211.45
- Four-Wire	PVN4W	32.06	487.38	211.45

(D)

(D)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.5 Rates and Charges (Cont'd)

7.5.3 Voice Grade Service (Cont'd)

(B) Channel Mileage

(D)  
|  
(D)

<u>Mileage Bands</u>	<u>USOC</u>	<u>Monthly Rates</u>	
		<u>Fixed</u>	<u>Per Mile</u>
0	1L5XX	None	None
Over 0	1L5XX	\$23.71	\$ 2.06

(C) Optional Features and Functions

(1) Bridging

(a) <u>Voice Bridging*</u>			<u>Nonrecurring Charges</u>		z
			<u>Monthly Rates</u>	<u>Init.</u> <u>Subseq.</u>	
Two-Wire/ Four Wire					
- Per Port					
- Two-Wire	BCNV2	\$4.76	\$33.19	\$76.81	
- Four-Wire	BCNV4	4.76	\$33.19	76.81	

\* Applicable to Private Virtual Network Access Line Service.  
z Correction

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.5 Rates and Charges (Cont'd)

7.5.3 Voice Grade Service (Cont'd)

				Nonrecurring Charges	
		USOC	Monthly Rates	Init.	Subseq.
(C) <u>Optional Features and Functions</u> (Cont'd)					
(1) Bridging (Cont'd)					
(b) Data Bridging					
Two-Wire/ Four-Wire					
- Per port					
- Two-Wire		BCND2	\$ 4.76 (R)	\$33.19 (R)	\$76.81 (R)
- FourWire		BCND4	4.76	33.19	76.81
(c) Telephoto Bridging					
Two-Wire/ Four-Wire					
- Per port					
- Two-Wire		BCNF2	4.76	33.19	76.81
- FourWire		BCNF4	4.76 (R)	33.19 (R)	76.81 (R)
(d) Reserved					

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.5 Rates and Charges (Cont'd)

7.5.3 Voice Grade Service (Cont'd)

	USOC	Monthly Rates	Nonrecurring Charges	
			Init.	Subseq.
(C) <u>Optional Features and Functions</u> (Cont'd)				
(1) Bridging (Cont'd)				
(e) Telemetry and Alarm Bridging				
Active Bridging Channel Connections				
Split Band				
- Per channel connected	CNLRX	\$4.76 (R)	\$33.19 (R)	\$76.81 (R)
Summation				
- Per channel connected	BCNSA	4.76 (R)	33.19 (R)	76.81 (R)

Continued



ACCESS SERVICE

7. Special Access Service (Cont'd)

7.5 Rates and Charges (Cont'd)

7.5.3 Voice Grade Service (Cont'd)

		USOC	Monthly Rates	Nonrecurring Charges	
				Init.	Subseq.
(C) Optional Features and Functions (Cont'd)					
(1) Bridging (Cont'd)					
(e) Telemetry and Alarm <u>Bridging</u> (Cont'd)					
Passive Bridging Channel Connections					
- Per channel connected					
	BCNTP		\$4.76	\$33.19	\$ 76.81
(2) Conditioning					
- Per Point of Termination					
C - Type	X1CPT	31.39		123.98	293.95
C1	P2W	31.39		123.98	293.95
C2	P3H	31.39		123.98	293.95
C4	P4G	31.39		123.98	293.95
C5	UHD	31.39		123.98	293.95
Protective Relay(C6) *	U9Q	31.39		123.98	293.95
RT0C	GN3RR	31.39		123.98	293.95
Improved Attenuation Distortion					
	UHW	None		123.98	263.46
Improved Envelope Delay Distortion					
	UHY	21.95		294.46	410.68
Sealing Current					
	1HBPT	None		None	None

\* Two-point VG36 only furnished to the power industry.

(T)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.5 Rates and Charges (Cont'd)

7.5.3 Voice Grade Service (Cont'd)

		Monthly	Nonrecurring	
		Rates	Charges	
			Init.	Subseq.
(C) Optional Features and Functions (Cont'd)				
(3) Improved Return Loss				
36.64for Effective Two-Wire or Four-Wire Transmission				
- Per point of termination				
- Two-Wire	1RL2W	\$12.26	\$35.64	\$151.10
- Four-Wire	1RL4W	9.69	35.64	151.10
(4) Customer Specified Receive Level				
- Per point of termination				
	RLS	4.28	None	None
(5) Multiplexing Voice to Telegraph Grade				
- Per arrangement				
	MQX	77.49	None	None
(6) Data Capability				
- Per point of termination				
	XDCPT	None	131.73	271.21
(7) Telephoto Capability				
- Per point of termination				
	XTCPT	None	96.86	232.46
			Nonrecurring	
			Charges	
			1st	Add'l
(D) Rollover				
- Per Termination	NRBRA/SVR	None	\$341.36	\$165.94 (T)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.5 Rates and Charges (Cont'd)

7.5.3 Voice Grade Service (Cont'd)

	<u>USOC</u>	<u>Monthly Rates</u>	<u>Nonrecurring Charges</u>	
			<u>Init.</u>	<u>Subseq.</u>
(C) Optional Features and Functions (Cont'd)				
(8) Signaling Capability*				
- Per point of termination	XSS++	\$0.46 (R)	None	None
- In lieu of ++, substitute appro- priate two digit code from following list to specify type of signaling.				
AB				
AC				
CT				
DX				
DY				
EA				
EB				
EC				
EX				
GO				
GS				
LA				
LB				
LC				
LO				
LR				
LS				
RV				
SF				

\* Applicable to Private Virtual Network Access Lines, WATS Access Lines  
and Universal WATS Access Lines.

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.5 Rates and Charges (Cont'd)

7.5.3 Voice Grade Service (Cont'd)

		Monthly	Nonrecurring	
		Rates	Charges	
	USOC		Init.	Subseq.
(C) <u>Optional Features and Functions</u> (Cont'd)				
(9) Selective Signaling Arrangement				
- Per arrangement	USZ	\$5.60 (R)	\$41.72 (R)	\$132.75 (R)
(10) Transfer Arrangement (key activated* or dial up**)				
- Per four port arrangement including control channel termination***	USY None	1.10	None	
- Per five port arrangement including control channel termination***	US5 None	1.10 (R)	None	
(11) Improved Two-Wire Transmission Specifications				
- Per two-wire point of termination	X2T None	None	None	

\* The key activated control Channel is rated as a Metallic Channel Termination (use USOC: T6EME in lieu of T6ECS) and Channel Mileage, if applicable (use USOC: 1L5MX in lieu of 1L5XX). The key activated option requires the customer to provide the key switch.

\*\* The Dial-up option requires the customer to purchase the Controller Arrangement (USOC: XTDDU) from Section 13.3.10 following.

\*\*\* An additional Channel Termination charge will apply whenever a spare Channel is configured to the customer's premises. Additional channel mileage charges will also apply when the transfer arrangement is not located in the customer premises serving wire center.

Z

ACCESS SERVICE

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.5 Rates and Charges (Cont'd)

7.5.4 Reserved

(C)

(D)

(D)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.5 Rates and Charges (Cont'd)

7.5.4 Reserved (Cont'd)

(C)

(D)

(D)

Continued

ACCESS SERVICE

(N)

7. Special Access Service (Cont'd)

7.5 Rates and Charges (Cont'd)

7.5.5 Video Service

	<u>USOC</u>	<u>Monthly Rates</u>	<u>Daily Rates</u>	
(A) <u>Channel Termination*</u>				
- Per point of termination				
(1) Analog Video Service**				(C)
- TV-1 or 2	TMEV1	\$503.50	\$83.95	
- 4TV-5	TMEV4	503.50	83.95	
- 6TV-5	TMEV6	503.50	83.95	
- TV-15	TMEV5	503.50	83.95	
(2) Reserved				
(3) Reserved				
(4) Serial Component Video Service				
	<u>USOC</u>	<u>Monthly Rate</u>	<u>Nonrecurring Charge 1st</u>	<u>Charge Add'l</u>
Monthly	AVSVM	\$900.00	\$1,000.00	\$500.00
Daily	AVSVD	315.00	1,866.00	755.00

\* In addition to Monthly and Daily Rates, Special Construction Charges are applicable.

\*\* Effective December 31, 2020, Analog Video Service is Frozen/Grandfathered per General Regulations, Section 2.1.4 (F). The Company currently plans to discontinue this Service on or after December 31, 2021. (N)

Continued



ACCESS SERVICE

7. Special Access Service (Cont'd)

7.5 Rates and Charges (Cont'd)

7.5.5 Video Service (Cont'd)

(A) Channel Termination\* (Cont'd)  
- Per point of termination

Video Pricing Plans

	<u>USOC</u>	<u>Monthly Rates</u>	<u>Nonrecurring Charges</u>	
			<u>1st</u>	<u>Add'l</u>
(4) Serial Component Video Service				(T)
1 Year Plan	AVSVM/AVSV1	\$855.00	\$500.00	\$250.00
3 Year Plan	AVSVM/AVSV3	\$810.00	\$ 0.00	\$ 0.00
5 Year Plan	AVSVM/AVSV5	\$765.00	\$ 0.00	\$ 0.00

\* In addition to Monthly and Daily Rates, Special Construction Charges are applicable.

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.5 Rates and Charges (Cont'd)

7.5.5 Video Service

(B) Channel Mileage

	USOC	<u>Monthly Rates</u>		<u>Daily Rates</u>		(C)
		<u>Fixed</u>	<u>Per Mile</u>	<u>Fixed</u>	<u>Per Mile</u>	
(1) Analog Video Service*						
0 to over 50	1L5XX	\$109.77	\$83.95	\$18.30	\$14.00	
(2) Reserved						
(3) Reserved						
(4) Serial Component Video Service						
0 - < 21	1L5XW/1L5	\$ 50.00	\$20.00	\$20.00	\$20.00	
21 - < 41	1L5XW/1L5	250.00	20.00	185.00	20.00	
41 - < 61	1L5XW/1L5	450.00	20.00	355.00	20.00	
61 - < 80	1L5XW/1L5	650.00	20.00	525.00	20.00	
Over 80	1L5XW/1L5	ICB	ICB	ICB	ICB	

\* Effective December 31, 2020, Analog Video Service is Frozen/Grandfathered (N)  
per General Regulations, Section 2.1.4 (F). The Company currently plans to  
discontinue this Service on or after December 31, 2021. (N)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.5 Rates and Charges (Cont'd)

7.5.5 Video Service

(B) Channel Mileage (Cont'd)

(4) Serial Component Video Service (Cont'd) (T)

Video Pricing Plans	USOC	Monthly Rates	
		Fixed	Per Mile
Mileage Bands			
1 Year Plan			
0 - < 21	1L5XW/1L5	\$ 48.00	\$19.00
21 - < 41	1L5XW/1L5	238.00	19.00
41 - < 61	1L5XW/1L5	428.00	19.00
61 - < 80	1L5XW/1L5	618.00	19.00
80 & over	1L5XW/1L5	ICB	ICB
3 Year Plan			
0 - < 21	1L5XW/1L5	\$ 45.00	\$18.00
21 - < 41	1L5XW/1L5	225.00	18.00
41 - < 61	1L5XW/1L5	405.00	18.00
61 - < 80	1L5XW/1L5	585.00	18.00
80 & over	1L5XW/1L5	ICB	ICB
5 Year Plan			
0 - < 21	1L5XW/1L5	\$ 43.00	\$17.00
21 - < 41	1L5XW/1L5	213.00	17.00
41 - < 61	1L5XW/1L5	383.00	17.00
61 - < 80	1L5XW/1L5	553.00	17.00
80 & over	1L5	ICB	ICB

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.5 Rates and Charges (Cont'd)

7.5.5 Video Service

(C) Optional Features and Functions

	<u>USOC</u>	<u>Monthly Rate</u>	<u>Daily Rate</u>	<u>Nonrecurring Charge</u>	
(1) Serial Component Video Service					(T)
NTSC Analog Interface	NTSCM/NTSC+	\$200.00	\$50.00	\$500.00*	(T)
Video Pricing Plan					
1 Year Plan	NTSCM/NTSC1	\$190.00	n/a	\$500.00*	(T)
3 Year Plan	NTSCM/NTSC3	180.00	n/a	500.00*	
5 Year Plan	NTSCM/NTSC5	170.00	n/a	500.00*	(T)
(2) Serial Component Video Service					(T)
Virtual Studio	27VSM/27VS+	\$100.00	\$25.00	\$500.00*	(T)
Video Pricing Plan					
1 Year Plan	27VSM/27VS1	\$ 95.00	n/a	\$500.00*	(T)
3 Year Plan	27VSM/27VS3	90.00	n/a	500.00*	
5 Year Plan	27VSM/27VS5	80.00	n/a	500.00*	(T)
(3) Service Through- Connect	BCSTC	n/a	n/a	\$200.00	

\* Nonrecurring charge is waived when feature is ordered and installed concurrently with associated Channel Termination. (T)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.5 Rates and Charges (Cont'd)

7.5.7 Reserved

(T)

(D)

(D)

(D)

(D)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.5 Rates and Charges (Cont'd)

7.5.7 Reserved

(T)  
(D)

(D)

(D)

(D)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.5 Rates and Charges (Cont'd)

7.5.7 Reserved

(T)

(D)

(D)

(D)

(D)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.5 Rates and Charges (Cont'd)

7.5.8 Digital Services

(A) Digital Data Service\*

	<u>USOC</u>	<u>Monthly Rates</u>	<u>Nonrecurring Charges</u>		(z)
			<u>1st</u>	<u>Add'l.</u>	
(1) Channel Termination					
- Per point of termination					
- 2.4 kbps	T6ECS	\$47.41	\$597.37	\$597.37	
- 4.8 kbps	T6ECS	47.41	597.37	597.37	
- 9.6 kbps	T6ECS	47.41	597.37	597.37	
- 56.0 kbps	T6ECS	47.41	597.37	597.37	(z)

\* Limited Offering Service - Provided only to existing customers and services working as of January 1, 1995. See General Regulations 2.1.4, (C) preceding. Customers will be permitted to add or disconnect legs only.

z correction to re-align columns

Continued



ACCESS SERVICE

7. Special Access Service (Cont'd)

7.5 Rates and Charges (Cont'd)

7.5.8 Digital Services\* (Cont'd)

(A) Digital Data Service\* (Cont'd)

(2) Channel Mileage

(a) 2.4 kbps

	USOC	Monthly Rates		z
		Fixed	Per Mile	
Mileage Bands				
0	1L5XX	None	None	
Over 0	1L5XX	\$ 4.74	\$ 5.22	

(b) 4.8 kbps

Mileage Bands				
0	1L5XX	None	None	
Over 0	1L5XX	\$ 4.74	\$ 5.22	

(c) 9.6 kbps

Mileage Bands				
0	1L5XX	None	None	
Over 0	1L5XX	\$ 4.74	\$ 5.22	

\* Limited Offering Service - Provided only to existing customers and services working as of January 1, 1995. See General Regulations 2.1.4, (C) preceding. Customers will be permitted to add or disconnect legs only.

z Correction

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.5 Rates and Charges (Cont'd)

7.5.8 Digital Services (Cont'd)

(A) Digital Data Service# (Cont'd)

(2) Channel Mileage (Cont'd)

(d) 56 kbps

	<u>USOC</u>	<u>Monthly Rates</u>		z
		<u>Fixed</u>	<u>Per Mile</u>	
Mileage Bands				
0	1L5XX	None	None	
Over 0	1L5XX	\$4.74	\$5.22	
(R)				

\* (e) 64 kbps

<u>Mileage Bands</u>		<u>Monthly Rates</u>		(T)
		<u>Fixed</u>	<u>Per Mile</u>	
0	1L5TC	\$10.57	None	

Nonrecurring  
Monthly Charges  
Rates Init. Subseq. (T)

(3) Optional Features and  
Functions

(a) Bridging

7-Per port	BCNDA	\$5.69	None	None
------------	-------	--------	------	------

\* Applied to through connections of 2.4, 4.8, 9.6, 56.0 and 64 kbps.

# Limited Offering Service - Provided only to existing customers and services working as of January 1, 1995. See General Regulations 2.1.4, (C) preceding. Customers will be permitted to add or disconnect legs only.

z Correction

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.5 Rates and Charges (Cont'd)

7.5.8 Digital Services (Cont'd)

(A) Digital Data Service# (Cont'd)

		Nonrecurrin	
		g	
		USOC	Monthly Rates Subseq.
			Charges Init.
(3) Optional Features and Functions (Cont.)			
(b) Loop Transfer Arrangement (Key activated* or Dial-up**)			
-Per initial three port arrangement (includes a spareline)***		XTD \$ 81.38 (R)	None
(4) Multiplexing DS1 to DSO		None	
- Per arrangement		QMU 341.83 (R)	None
- Per arrangement with Secondary Channel Capability		QMUA1 341.83 (R)	None

# Limited Offering Service - Provided only to existing customers and services working as of January 1, 1995. See General Regulations 2.1.4, (C) preceding. Customers will be permitted to add or disconnect legs only.

\* The key activated control channel is rated as a Metallic Channel Termination (use USOC T6EME in lieu of T6ECS) and Channel Mileage, if applicable (use USOC 1LM5X in lieu of 1L5XX). The key activated option requires the customer to provide the key switch.

\*\* The Dial-up option requires the customer to purchase the Controller Arrangement (USOC XTDDU) from Section 13.3.10 following.

\*\*\* An additional channel termination charge will apply whenever a spare channel is configured as a leg to the customer premises. Additional channel mileage charges will also apply when the transfer arrangement is not located in the customer premises serving wire center.

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.5 Rates and Charges (Cont'd)

7.5.8 Digital Services (Cont'd)

(A) Digital Data Service@ (Cont'd)

	<u>USOC</u>	<u>Monthly Rates</u>	<u>Nonrecurring Charges</u>	
			<u>Init.</u>	<u>Subseq.</u>
(4) <u>Multiplexing</u> (Cont'd)				
DSO to Subrates				
- Per arrangement				
- Up to 20 2.4 kbps services	QSU24	\$415.08	None	None
	QSC24#	415.08	None	None
- Up to 10 4.8 kbps services	QSU48	236.03	None	None
	QSC48#	236.03	None	None
- Up to 5 9.6 kbps services	QSU96	170.91	None	None
	QSC96#	170.91	None	None
(5) <u>Secondary Channel</u> *				
- Per station				
- 133 bps	DSC24	11.38	None	None
- 266 bps	DSC48	14.22	None	None
- 533 bps	DSC96	18.02	None	None
- 2666 bps	DSC56	28.45	None	None
			<u>Nonrecurring Charges</u>	
			<u>1st</u>	<u>Add'l</u>
(6) <u>Rollover</u>				
- Per Termination	NRBRA/SVR	None	\$402.99	\$199.12 (T)

@ Limited Offering Service - Provided only to existing customers and services working as of January 1, 1995. See General Regulations 2.1.4, (C) preceding. Customers will be permitted to add or disconnect legs only. z

# Secondary Channel capability.

\* Secondary Channel can only be ordered in conjunction with Digital Data Multiplexing and/or Digital Data Access Services.

z Correction

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.5 Rates and Charges (Cont'd)

7.5.8 Digital Services (Cont'd)

(B) Advanced Digital Network

		<u>USOC</u>		<u>Monthly Rates</u>	<u>Nonrecurring<sup>@</sup> Charges</u>	
(1) <u>Channel Termination#</u>						(T)
-Per point of Termination						
Fixed Speeds						
2.4 Kbps	VAN0D/VAN0P/VAN0W			\$47.41	\$597.37	(T)
4.8 Kbps	VAN1D/VAN1P/VAN1W			47.41	597.37	
9.6 Kbps	VAN2D/VAN2P/VAN2W			47.41	597.37	
19.2 Kbps	VAN3D/VAN3P/VAN3W			47.41	597.37	
56.0 Kbps	VAN4D/VAN4P/VAN4W			47.41	597.37	
64.0 Kbps	VAN5D/VAN5P/VAN7W			47.41	597.37	(T)
Variable Speeds*						
- 1.2 to 38.4 Kbps	VAN5D/VAN5P/VAN5W			63.39	597.37	(T)
- 1.2 to 64.0 Kbps	VAN6D/VAN6P/VAN6W			71.35	597.37	(T)

		<u>USOC</u>		<u>Monthly Rates</u>		
(2) <u>Channel Mileage</u>				<u>Fixed</u>	<u>Per Mile</u>	
- Per Mile						
Fixed Speeds						
2.4 Kbps	1L5XX			\$4.74	\$5.22	
4.8 Kbps	1L5XX			4.74	5.22	
9.6 Kbps	1L5XX			4.74	5.22	
19.2 Kbps	1L5XX			4.74	5.22	
56.0 Kbps	1L5XX			4.74	5.22	
64.0 Kbps	1L5XX			4.74	5.22	
Variable Speeds*						
1.2 to 38.4 Kbps	1L5XX			4.74	5.22	
1.2 to 64.0 Kbps	1L5XX			4.74	5.22	

\* Provided only to existing customers and services working as of January 1, 1995.

@ Non-recurring charges associated with the installation of Access Advantage Plus on a 3 year Term Pricing Plan are waived.

# All USOCs are used in CABS and CRIS billing systems.

(N)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.5 Rates and Charges (Cont'd)

7.5.8 Digital Services (Cont'd)

(B) Advanced Digital Network (Cont'd)

	USOC CABS/CRIS	Monthly Rates	Nonrecurring Charges	
(3) Optional Features and Functions (Cont'd)				
(d) Network Reconfiguration Service*				(T)
- per Channel Termination				
- DS0	DFOCO	\$ 10.00	None	
- DS1	DFOCO	40.00	None	
- Per service arrangement				
- 4 DS0	N8RPX/DFOC4	12.50	None	
- 6 DS0	N8RQX/DFOC6	15.00	None	
- 8 DS0	N8RRX/DFOC8	17.50	None	
- 12 DS0	N8ROX/DFOC1	20.00	None	
- 24 DS0	DFOCO	40.00	None	
Network Reconfiguration Service Database				(L)
- Per Customer database	FN6DD	120.00	\$2,400.00	
Network Reconfiguration Service Access Arrangement				
- per Secure ID Card	RNQPA	120.00	None	(L)

\* Effective October 30, 2018, Network Reconfiguration Service is (N)  
Frozen/Grandfathered (see General Regulations, Section 2.1.4, (F)). (N)

(L) Material formerly on Sheet 330-C-1.

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.5 Rates and Charges (Cont'd)

7.5.8 Digital Services (Cont'd)

(B) Advanced Digital Network (Cont'd)

		USOC CABS/CRIS	Monthly Rates	Nonrecurring Charges
(3) Optional Features and Functions (Cont'd)				
(e) Advanced Digital Network Channel Interface				
- per channel	PYVD8/MQQ		\$25.03	\$338.51
(f) Central Office Multiplexing				
- Per arrangement				
- Up to 20 2.4 kbps services	QSU24		118.53	None
- Up to 10 4.8 kbps services	QSU48		118.53	None
- Up to 5 9.6 kbps services	QSU96		118.53	None

Material omitted now on Sheet 330-C.

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.5 Rates and Charges (Cont'd)

7.5.8 Digital Services (Cont'd)

(B) Advanced Digital Network (Cont'd)

	USOC CABS/CRIS	Monthly Rates	Nonrecurring Charges (N)
(3) Optional Features and Functions (Cont'd)			
(g) Through-connect, 64 kbps cross- connection			(L)
- Per cross-connect	THA/DFOTC	None	\$28.45 (L)

(L) Formerly on Sheet 330-C-1.

Continued



ACCESS SERVICE

7. Special Access Service (Cont'd)

7.5 Rates and Charges (Cont'd)

7.5.8 Digital Services (Cont'd)

(B) Advanced Digital Network (Cont'd)

	<u>USOC</u>	<u>Monthly Rates</u>	<u>Nonrecurring Charges</u>	
			<u>1st</u>	<u>Add'l</u>
(4) Rollover				
- Per Termination NRBRA/SVR	None	\$189.64	\$104.30	(T)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.5 Rates and Charges (Cont'd)

7.5.8 Digital Services (Cont'd)

(C) High Capacity Service

	USOC	Monthly Rates	Nonrecurring Charges	
			1st	Add'l.
	CABS/CRIS			
(1) Channel Termination				
- Per point of termination				
(a) <u>DS1 1.544 Mbps Service</u>				
Month to Month				
- at an End User location	TMECS/TMECS	\$165.94	\$600.69	NA* (T)
Month to Month				
- at an IC POT location	TMEPS/TMEPS	71.12	600.69	NA* (T)
- 1 Year Term Plan at an End User location	TMECS/T6XG1	160.00	600.69	NA* (T)
- 1 Year Term Plan at an IC POT location	TMEPS/T6XL1	71.12	600.69	NA* (T)
- 2 Year Term Plan# at an End User location	TMECS/T6XG2	155.00	None (R)	NA* (T) (N)
- 2 Year Term Plan# at an IC POT location	TMEPS/T6XL2	71.12	600.69	NA* (T) (N)

\* For DS1 1.544 Mbps service, the charge for each point of termination is the charge shown for the 1st charge. (T)

# As of January 15, 2021, 2-Year Term Plans are no longer available to new or renewing subscribers. (N)  
(N)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.5 Rates and Charges (Cont'd)

7.5.8 Digital Services (Cont'd)

(C) High Capacity Service (Cont'd)

			Monthly	Nonrecurring	
			Rates	Charges	
	USOC			1st	Add'l.
	CABS/CRIS				
(1) Channel Termination					
- Per point of termination (Cont'd)					
- 3 Year Term Plan® at an End User location	TMECS/T6XG3	140.00	None*	NA	(N)
- 3 Year Term Plan® at an IC POT location	TMEPS/T6XL3	71.12	None*	NA	(N)
- 5 Year Term# Plan at an End User location	TMECS/T6XG5	130.00	None*	NA	
- 5 Year Term# Plan at an IC POT location	TMEPS/T6XL5	71.12	None*	NA	

\* For customers ordering a new DS1 service who choose a Term Payment Plan (TPP) period of 3 years of greater in length, the Nonrecurring Charge (NRC) will not apply for new service; however customers requesting termination of service prior to the completion of a minimum of 3 years or greater TPP will be liable for full payment of NRC charges at currently effective month-to-month rates.

# As of November 1, 2013, Term Plan terms greater than 36 months are no longer available for new or renewing subscribers. (T)

@ As of January 15, 2021, 2- and 3-Year Term Plans are no longer available to new or renewing subscribers. (N)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.5 Rates and Charges (Cont'd)

7.5.8 Digital Services (Cont'd)

(C) High Capacity Service (Cont'd)

	USOC	Monthly Rates	Nonrecurring Charges	
			1st	Add'l
	CABS/CRIS			
(1) Channel Termination (Cont'd)				
- Per point of termination				
Fiber Advantage <sup>SM</sup> DS1				
- 1 Year Rate Stability Plan				
- at an End User location	FAMCP/FA1CP	156.45	600.69	NA*
- at an IC POT location	FAMPP/FA1PP	113.79	600.69	NA*
- 3 Year Rate Stability Plan <sup>@</sup>				(N)
- at an End User location	FAMCP/FA3CP	146.97	None	None
- at an IC POT location	FAMPP/FA3PP	109.04	None	None
- 5 Year Rate <sup>#</sup> Stability Plan				
- at an End User location	FAMCP/FA5CP	137.49	None	None
- at an IC POT location	FAMPP/FA5PP	104.30	None	None
(b) 3.152 Mbps	TWT++	ICB <sup>#,@</sup>	ICB <sup>#,@</sup>	ICB <sup>#,@</sup> (N)
(c) 6.312 Mbps	TWT++	ICB <sup>#,@</sup>	ICB <sup>#,@</sup>	ICB <sup>#,@</sup> (N)

\* For DS1 1.544 service, the charge for each point of termination is the charge shown for the 1st charge.

# As of November 1, 2013, Rate Stability Payment Plan terms greater than 36 months are no longer available for new or renewing subscribers. (T)

@ As of January 15, 2021, 3-Year Rate Stability Payment Plans are no longer available to new or renewing subscribers. (N)  
(N)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.5 Rates and Charges (Cont'd)

7.5.8 Digital Services (Cont'd)

(C) High Capacity Service (Cont'd)

	USOC CABS/CRIS	Monthly Rates	Nonrecurring Charges		
			1st	Add'l	(T)
(1) Channel Termination (Cont'd)					(T) (D)
(d) Fiber Advantage <sup>SM</sup> DS3 and DS3x3 Rate Stability Payment Plan					(T)
(i) 1 Year Plan					
- Fiber Advantage <sup>SM</sup> DS3 with Terminal Equipment at an End User location	Z3MAC/Z31AC	\$2,560.17	\$2,370.53	NA*	(T)
Monthly Extension Rate					(N)
	Z3MAC/TVJ8X	3,500.00	NA	NA	(N)
- Fiber Advantage <sup>SM</sup> DS3 with Terminal Equipment at an IC POT location	Z3MAP/Z31AP	1,991.24	2,370.53	NA*	(T)
Monthly Extension Rate					(N)
	Z3MAP/TVJ4X	2,750.00	NA	NA	(N)
- Fiber Advantage <sup>SM</sup> DS3 without Terminal Equipment at an End User location	Z0MAC/Z01AC	1,754.19	1,991.24	NA*	(T)
Monthly Extension Rate					(N)
	Z0MAC/TVJ9X	2,400.00	NA	NA	(N)

\* For DS3 service, the charge for each point of termination is the charge shown (T) for the 1st charge.

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.5 Rates and Charges (Cont'd)

7.5.8 Digital Services (Cont'd)

(C) High Capacity Service (Cont'd)

	USOC CABS/CRIS	Monthly Rates	Nonrecurring Charges		(T) (D)
			1st	Add'l.	
(1) Channel Termination (Cont'd)					(T) (D)
- Per point of termination					
(d) Fiber Advantage <sup>SM</sup> DS3 and DS3x3 Rate Stability Payment Plan (Cont'd)					(T)
(i) 1 Year Plan (Cont'd)					(T) (D)
- Fiber Advantage <sup>SM</sup> DS3 without Terminal Equipment at an IC POT location	Z0MAP/Z01AP	\$1,469.73	\$1,991.24	NA*	(T)
Monthly Extension Rate					(N)
	Z0MAP/TVJ6X	2,000.00	NA	NA	(N)
- Fiber Advantage <sup>SM</sup> DS3x3 with Terminal Equipment at an End User location	Z3MAC/Z31AC	6,827.11	3,318.74	NA*	(T)
Monthly Extension Rate					(N)
	Z3MAC/TVJ8X	9,250.00	NA	NA	(N)
- Fiber Advantage <sup>SM</sup> DS3x3 with Terminal Equipment at an IC POT location	Z3MAP/Z31AP	5,689.26	3,318.74	NA*	(T)
Monthly Extension Rate					(N)
	Z3MAP/TVJ4X	7,750.00	NA	NA	(N)
* For DS3 service, the charge for each point of termination is the charge shown for the 1st charge.					(T)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.5 Rates and Charges (Cont'd)

7.5.8 Digital Services (Cont'd)

(C) High Capacity Service (Cont'd)

	USOC CABS/CRIS	Monthly Rates	Nonrecurring Charges		
			1st	Add'l.	(T)
(1) Channel Termination (Cont'd)					(T) (D)
- Per point of termination					
(d) Fiber Advantage <sup>SM</sup> DS3 and DS3x3 Rate Stability Payment Plan (Cont'd)					(T)
(i) 1 Year Plan (Cont'd)					(T) (D)
- Fiber Advantage <sup>SM</sup> DS3x3 without Terminal Equipment at an End User location	ZOMAC/ZO1AC	\$4,077.30	\$2,939.45	NA*	(T)
Monthly Extension Rate					(N)
	ZOMAC/TVJ9X	5,500.00	NA	NA	(N)
- Fiber Advantage <sup>SM</sup> DS3x3 without Terminal Equipment at an IC POT location	ZOMAP/ZO1AP	3,318.74	2,939.45	NA*	(T)
Monthly Extension Rate					(N)
	ZOMAP/TVJ6X	4,500.00	NA	NA	(N)

\* For DS3 service, the charge for each point of termination is the charge shown for the 1st charge.

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.5 Rates and Charges (Cont'd)

7.5.8 Digital Services (Cont'd)

(C) High Capacity Service (Cont'd)

	USOC CABS/CRIS	Monthly Rates	Nonrecurring Charges 1st	Add'l.
(1) Channel Termination (Cont'd)				
- Per point of termination				
(d) Fiber Advantage <sup>SM</sup> DS3 and DS3x3 Rate Stability Payment Plan (Cont'd)				
(ii) 3 Year Plan#				(N)
- Fiber Advantage <sup>SM</sup> DS3 with Terminal Equipment at an End User location	Z3MAC/Z33AC	\$2,086.06	NONE	NA*
Monthly Extension Rate	Z3MAC/TVJ8X	3,500.00	NA	NA
- Fiber Advantage <sup>SM</sup> DS3 with Terminal Equipment at an IC POT location	Z3MAP/Z33AP	1,706.78	NONE	NA*
Monthly Extension Rate	Z3MAP/TVJ4X	2,750.00	NA	NA

\* For DS3 service, the charge for each point of termination is the charge shown for the 1st charge.

# As of January 15, 2021, 3-Year Rate Stability Payment Plans are no longer available to new or renewing subscribers. (N)

Continued



ACCESS SERVICE

7. Special Access Service (Cont'd)

7.5 Rates and Charges (Cont'd)

7.5.8 Digital Services (Cont'd)

(C) High Capacity Service (Cont'd)

	USOC	Monthly	Nonrecurring	
	CABS/CRIS	Rates	1st	Add'l.

(1) Channel Termination (Cont'd)

- Per point of  
termination

(d) Fiber Advantage<sup>SM</sup>  
DS3 and DS3x3  
Rate Stability  
Payment Plan  
(Cont'd)

(ii) 3 Year Plan<sup>#</sup> (Cont'd)

(N)

- Fiber Advantage <sup>SM</sup> DS3 without Terminal Equipment at an End User location	ZOMAC/ZO3AC	\$1,517.14	NONE	NA*
--	-------------	------------	------	-----

Monthly Extension Rate	ZOMAC/TVJ9X	2,400.00	NA	NA
------------------------	-------------	----------	----	----

- Fiber Advantage <sup>SM</sup> DS3 without Terminal Equipment at an IC POT location	ZOMAP/ZO3AP	1,185.26	NONE	NA*
--	-------------	----------	------	-----

Monthly Extension Rate	ZOMAP/TVJ6X	2,000.00	NA	NA
------------------------	-------------	----------	----	----

\* For DS3 service, the charge for each point of termination is the charge shown for the 1st charge.

# As of January 15, 2021, 3-Year Rate Stability Payment Plans are no longer available to new or renewing subscribers. (N)  
(N)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.5 Rates and Charges (Cont'd)

7.5.8 Digital Services (Cont'd)

(C) High Capacity Service (Cont'd)

	USOC CABS/CRIS	Monthly Rates	Nonrecurring Charges	
			1st	Add'l.
(1) Channel Termination (Cont'd)				

- Per point of termination

(d) Fiber Advantage<sup>SM</sup>  
DS3 and DS3x3 Rate Stability  
Payment Plan (Cont'd)

(ii) 3 Year Plan# (Cont'd) (N)

- Fiber Advantage<sup>SM</sup>  
DS3x3 with  
Terminal  
Equipment at  
an End User  
location Z3MAC/Z33AC \$4,077.30 NONE NA\*

Monthly Extension Rate  
Z3MAC/TVJ8X 9,250.00 NA NA

- Fiber Advantage<sup>SM</sup>  
DS3x3 with  
Terminal  
Equipment at  
an IC POT  
location Z3MAP/Z33AP 3,318.74 NONE NA\*

Monthly Extension Rate  
Z3MAP/TVJ4X 7,750.00 NA NA

- Fiber Advantage<sup>SM</sup>  
DS3x3  
without  
Terminal  
Equipment at  
an End User  
location Z0MAC/Z03AC 2,560.17 NONE NA\*

Monthly Extension Rate  
Z0MAC/TVJ9X 5,500.00 NA NA

\* For DS3 service, the charge for each point of termination is the charge shown for the 1st charge.

# As of January 15, 2021, 3-Year Rate Stability Payment Plans are no longer available to new or renewing subscribers. (N)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.5 Rates and Charges (Cont'd)

7.5.8 Digital Services (Cont'd)

(C) High Capacity Service (Cont'd)

	USOC CABS/CRIS	Monthly Rates	Nonrecurring Charges	
			1st	Add'l.
(1) Channel Termination (Cont'd)				
- Per point of termination				
(d) Fiber Advantage <sup>SM</sup>				
DS3 and DS3x3 Rate Stability Payment Plan (Cont'd)				
(ii) 3 Year Plan# (Cont'd)				(N)
- Fiber Advantage <sup>SM</sup>				
DS3x3 without Terminal Equipment at an IC POT location				(T) (T)
ZOMAP/ZO3AP		\$1,896.42	NONE	NA*
Monthly Extension Rate				
ZOMAP/TVJ6X		4,500.00	NA	NA
- Fiber Advantage <sup>SM</sup>				
DS3x12 with Terminal Equipment at an End User location				(T) (T)
Z3MAC/Z23EE		11,378.52	NONE	NA*
Monthly Extension Rate				
Z3MAC/TVJ8X		15,400.00	NA	NA
- Fiber Advantage <sup>SM</sup>				
DS3x12 with Terminal Equipment at an IC POT location				(T) (T)
Z3MAP/Z23AE		10,430.31	NONE	NA*
Monthly Extension Rate				
Z3MAP/TVJ4X		14,100.00	NA	NA

\* For DS3 service, the charge for each point of termination is the charge shown for the 1st charge.

# As of January 15, 2021, 3-Year Rate Stability Payment Plans are no longer available to new or renewing subscribers. (N)  
(N)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.5 Rates and Charges (Cont'd)

7.5.8 Digital Services (Cont'd)

(C) High Capacity Service (Cont'd)

	USOC	Monthly	Nonrecurring	
	CABS/CRIS	Rates	Charges	
			1st	Add'l.
(1) Channel Termination (Cont'd)				
- Per point of termination				
(d) Fiber Advantage <sup>SM</sup>				
DS3 and DS3x3				
Rate Stability				
Payment Plan				
(Cont'd)				
(ii) 3 Year Plan <sup>#</sup> (Cont'd)				
				(N)
- Fiber Advantage <sup>SM</sup>				
- DS3x12				
without				
Terminal				
Equipment				
at an				
End User				
location	ZOMAC/Z23EO	\$8,344.25	NONE	NA*
Monthly Extension Rate				
	ZOMAC/TVJ9X	11,250.00	NA	NA
- Fiber Advantage <sup>SM</sup>				
DS3x12				
without				
Terminal				
Equipment				
at an				
IC POT				
location	ZOMAP/Z23AO	7,396.04	NONE	NA*
Monthly Extension Rate				
	ZOMAP/TVJ6X	10,000.00	NA	NA

\* For DS3 service, the charge for each point of termination is the charge shown for the 1st charge.

# As of January 15, 2021, 3-Year Rate Stability Payment Plans are no longer available to new or renewing subscribers. (N)  
(N)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.5 Rates and Charges (Cont'd)

7.5.8 Digital Services (Cont'd)

(C) High Capacity Service (Cont'd)

	USOC CABS/CRIS	Monthly Rates	Nonrecurring Charges	
			1st	Add'l.
(1) Channel Termination (Cont'd)				
- Per point of termination				
(d) Fiber Advantage <sup>SM</sup> DS3 and DS3x3 Rate Stability Payment Plan (Cont'd)				
(iii) 5 Year Plan#				(N)
- Fiber Advantage <sup>SM</sup> DS3 with Terminal Equipment at an End User location	Z3MAC/Z35AC	\$1,896.42	NONE	NA*
Monthly Extension Rate	Z3MAC/TVJ8X	3,500.00	NA	NA
- Fiber Advantage <sup>SM</sup> DS3 with Terminal Equipment at an IC POT location	Z3MAP/Z35AP	1,517.14	NONE	NA*
Monthly Extension Rate	Z3MAP/TVJ4X	2,750.00	NA	NA
- Fiber Advantage <sup>SM</sup> DS3 without Terminal Equipment at an End User location	Z0MAC/Z05AC	1,327.49	NONE	NA*
Monthly Extension Rate	Z0MAC/TVJ9X	2,400.00	NA	NA

\* For DS3 service, the charge for each point of termination is the charge shown for the 1st charge.

# As of November 1, 2013, Term Pricing Plan terms greater than 36 months are (N)  
no longer available for new or renewing subscribers. (N)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.5 Rates and Charges (Cont'd)

7.5.8 Digital Services (Cont'd)

(C) High Capacity Service (Cont'd)

	USOC CABS/CRIS	Monthly Rates	Nonrecurring Charges	
			1st	Add'l.
(1) Channel Termination (Cont'd)				
- Per point of termination				
(d) Fiber Advantage <sup>SM</sup> DS3 and DS3x3 Rate Stability Payment Plan (Cont'd)				
(iii) 5 Year Plan# (Cont'd)				(N)
- Fiber Advantage <sup>SM</sup> DS3 without Terminal Equipment at an IC POT location	Z0MAP/Z05AP	\$1,090.44	NO	NA*
Monthly Extension Rate	Z0MAP/TVJ6X	2,000.00	NA	NA
- Fiber Advantage <sup>SM</sup> DS3x3 with Terminal Equipment at an End User location	Z3MAC/Z35AC	3,603.20	NONE	NA*
Monthly Extension Rate	Z3MAC/TVJ8X	9,250.00	NA	NA
- Fiber Advantage <sup>SM</sup> DS3x3 with Terminal Equipment at an IC POT location	Z3MAP/Z35AP	2,844.63	NO	NA*
Monthly Extension Rate	Z3MAP/TVJ4X	7,750.00	NA	NA

\* For DS3 service, the charge for each point of termination is the charge shown for the 1st charge.

# As of November 1, 2013, Term Pricing Plan terms greater than 36 months are no longer available for new or renewing subscribers.

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.5 Rates and Charges (Cont'd)

7.5.8 Digital Services (Cont'd)

(C) High Capacity Service (Cont'd)

	USOC CABS/CRIS	Monthly Rates	Nonrecurring Charges	
			1st	Add'l.
(1) Channel Termination (Cont'd)				
- Per point of termination				
(d) Fiber Advantage <sup>SM</sup> DS3 and DS3x3 Rate Stability Payment Plan (Cont'd)				
(iii) 5 Year Plan# (Cont'd)				(N)
- Fiber Advantage <sup>SM</sup> DS3x3 without Terminal Equipment at an End User location	ZOMAC/ZO5AC	\$2,180.88	NONE	NA*
Monthly Extension Rate	ZOMAC/TVJ9X	5,500.00	NA	NA
- Fiber Advantage <sup>SM</sup> DS3x3 without Terminal Equipment at an IC POT location	ZOMAP/ZO5AP	1,706.78	NO	NA*
Monthly Extension Rate	ZOMAP/TVJ6X	4,500.00	NA	NA

\* For DS3 service, the charge for each point of termination is the charge shown for the 1st charge.

# As of November 1, 2013, Term Pricing Plan terms greater than 36 months are no longer available for new or renewing subscribers.

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.5 Rates and Charges (Cont'd)

7.5.8 Digital Services (Cont'd)

(C) High Capacity Service (Cont'd)

	USOC CABS/CRIS	Monthly Rates	Nonrecurring Charges	
			1st	Add'l.
(1) Channel Termination (Cont'd)				
- Per point of termination				
(d) Fiber Advantage <sup>SM</sup> DS3 and DS3x3 Rate Stability Payment Plan (Cont'd)				
(iii) 5 Year Plan# (Cont'd)				(N)
- Fiber Advantage <sup>SM</sup> DS3x12 with Terminal Equipment at an End User location	Z3MAC/Z25EE	\$9,008.00	NONE	NA*
Monthly Extension Rate	Z3MAC/TVJ8X	15,400.00	NA	NA
- Fiber Advantage <sup>SM</sup> DS3x12 with Terminal Equipment at an IC POT location	Z3MAP/Z25AE	8,059.79	NONE	NA*
Monthly Extension Rate	Z3MAP/TVJ4X	14,100.00	NA	NA
- Fiber Advantage <sup>SM</sup> DS3x12 without Terminal Equipment at an End User location	Z0MAC/Z25EO	6,732.29	NONE	NA*
Monthly Extension Rate	Z0MAC/TVJ9X	11,250.00	NA	NA

\* For DS3 service, the charge for each point of termination is the charge shown for the 1st charge.

# As of November 1, 2013, Term Pricing Plan terms greater than 36 months are no longer available for new or renewing subscribers.

Continued



ACCESS SERVICE

7. Special Access Service (Cont'd)

7.5 Rates and Charges (Cont'd)

7.5.8 Digital Services (Cont'd)

(C) High Capacity Service (Cont'd)

	USOC CABS/CRIS	Monthly Rates	Nonrecurring Charges	
			1st	Add'l.
(1) Channel Termination (Cont'd)				
- Per point of termination				
(d) Fiber Advantage <sup>SM</sup> DS3 and DS3x3 Rate Stability Payment Plan (Cont'd)				
(iii) 5 Year Plan# (Cont'd)				(N)
- Fiber Advantage <sup>SM</sup> DS3x12 without Terminal Equipment at an IC POT location	ZOMAP/Z25AO	\$5,784.08	NONE	NA*
Monthly Extension Rate ZOMAP/TVJ6X		10,000.00	NA	NA
(e) 274.176 Mbps TWT++		ICB#	ICB	ICB (N)

\* For DS3 service, the charge for each point of termination is the charge shown for the 1st charge.

# As of November 1, 2013, Term Pricing Plan terms greater than 36 months are no longer available for new or renewing subscribers. (N)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.5 Rates and Charges (Cont'd)

7.5.8 Digital Services (Cont'd)

(C) High Capacity Service (Cont'd)

(2) Channel Mileage

		Monthly Rates	
	USOC	Fixed	Per Mile
	CABS/CRIS		
(a) <u>1.544 Mbps</u>			
(i) Mileage Bands			
Month-to-month			
0	1L5XX/1L5XX	None	None
Over 0	1L5XX/1L5XX	\$118.53	\$23.71
One Year Term Plan			
0	1L5XX/1L5X1	None	None
Over 0	1L5XX/1L5X1	\$105.00	\$20.00
Two Year Term Plan#			(N)
0	1L5XX/1L5PS	None	None
Over 0	1L5XX/1L5PS	\$95.00	\$18.00
Three Year Term Plan#			(N)
0	1L5XX/1L5X3	None	None
Over 0	1L5XX/1L5X3	\$85.00	\$17.00
Five Year Term Plan*			
0	1L5XX/1L5X5	None	None
Over 0	1L5XX/1L5X5	\$75.00	\$16.00
Fiber Advantage <sup>sm</sup>			
0	1L5XX	None	None
Over 0	1L5XX	118.53	\$23.71

\* As of November 1, 2013, Term Pricing Plan terms greater than 36 months are no longer available for new or renewing subscribers.

# As of January 15, 2021, 2- and 3-Year Term Plans are no longer available to new or renewing subscribers.

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.5 Rates and Charges (Cont'd)

7.5.8 Digital Services (Cont'd)

(C) High Capacity Service (Cont'd)

(2) Channel Mileage

	<u>USOC</u>	<u>Monthly Rates</u>	
		<u>Fixed</u>	<u>Per Mile</u>
(a) 1.544 Mbps			
(ii) Flexible Mileage*			(C)
4 Channels			
0	1YSCS/FT1M4	None	None
Over 0	1YSCS/FT1M4	\$118.53	\$ 7.59
6 Channels			
0	1YSDS/FT1M6	None	None
Over 0	1YSDS/FT1M6	118.53	9.01
8 Channels			
0	1YSES/FT1M8	None	None
Over 0	1YSES/FT1M8	118.53	10.43
12 Channels			
0	1YSFS/FT1M1	None	None
Over 0	1YSFS/FT1M1	118.53	12.33
24 Channels			
0	1YSGS/FT1M2	None	None
Over 0	1YSGS/FT1M2	118.53	23.71
Change in Capacity		<u>Nonrecurring Charge</u>	
Per circuit	NRBFZ/SCCFT	\$237.05	

\* Effective September 21, 2016, customers may not establish new Flexible High Capacity Channel Mileage service. Customers with existing service as of September 21, 2016, may retain service on a month-to-month basis until the service is completely discontinued. (N)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.5 Rates and Charges (Cont'd)

7.5.8 Digital Services (Cont'd)

(C) High Capacity Service (Cont'd)

(2) Channel Mileage (Cont'd)

		<u>USOC</u>	<u>Monthly Rates</u>		
			<u>Fixed</u>	<u>Per Mile</u>	
(b)	3.152 Mbps				
Mileage Bands					
	0	1LO++	None	None	
Over	0	1LO++	ICB*	ICB*	(N)
Fiber Advantage <sup>sm</sup>					
	0	1LO++	None	None	
Over	0	1LO++	ICB*	ICB*	(N)

\* As of January 15, 2021, ICB contracts greater than 1-year are no longer available to new or renewing subscribers. (N)  
(N)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.5 Rates and Charges (Cont'd)

Material omitted now on Sheet 330-D and 330-F.

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.5 Rates and Charges (Cont'd)

7.5.8 Digital Services (Cont'd)

(C) High Capacity Service (Cont'd)

(2) Channel Mileage (Cont'd)

(c) 6.312 Mbps

		<u>USOC</u>	<u>Monthly Rates</u>		
			<u>Fixed</u>	<u>Per Mile</u>	
Mileage Bands					
	0	1LO++	None	None	
Over	0	1LO++	ICB*	ICB*	(N)
Fiber Advantage <sup>sm</sup>					
	0	1LO++	None	None	
Over	0	1LO++	ICB*	ICB*	(N)

\* As of January 15, 2021, ICB contracts over 1-year are no longer available to (N)  
new or renewing subscribers. (N)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.5 Rates and Charges (Cont'd)

7.5.8 Digital Services (Cont'd)

(C) High Capacity Service (Cont'd)

(2) Channel Mileage

(d) Fiber Advantage<sup>SM</sup> 44.736 Mbps\*

		USOC	<u>Monthly Rates</u>	
		<u>CRIS/CABS</u>	<u>Fixed</u>	<u>Per Mile</u>
Mileage Bands				
- 1 Year Plan				
	0	1L5XX	None	None
Over	0	1L5XX	\$ 789.86	\$62.58
Monthly Extension Rate - 1 Year Plan				
	0	1YA1X/1L5XX	None	None
Over	0	1YA1X/1L5XX	1,075.00	85.00
- 3 Year Plan##				
	0	1L5X3/1L5XX	None	None
Over	0	1L5X3/1L5XX	640.04	41.72
Monthly Extension Rate - 3 Year Plan##				
	0	1YA1X/1L5XX	None	None
Over	0	1YA1X/1L5XX	1,075.00	85.00
- 5 Year Plan#				
	0	1L5X5/1L5XX	None	None
Over	0	1L5X5/1L5XX	616.34	41.72
Monthly Extension Rate - 5 Year Plan#				
	0	1YA1X/1L5XX	None	None
Over	0	1YA1X/1L5XX	1,075.00	85.00
Fiber Advantage <sup>SM</sup>				
	0	1LO++	None	None
Over	0	1LO++	ICB##	ICB## (N)

\* If a customer chooses to order a DS3x3 service, the channel mileage applicable to that service would be three times the appropriate channel mileage rates.

# As of November 1, 2013, Term Plan terms greater than 36 months are no longer available for new or renewing subscribers. (T)

## As of January 15, 2021, 3-Year Term Plans and ICB contracts greater than 1-Year are no longer available to new or renewing subscribers. (N)

Material omitted now appears on Sheet 334-A

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.5 Rates and Charges (Cont'd)

7.5.8 Digital Services (Cont'd)

(C) High Capacity Service (Cont'd)

(2) Channel Mileage

(L)

(e) 274.176 Mbps

		USOC	Monthly Rates		
		<u>CRIS/CABS</u>	<u>Fixed</u>	<u>Per Mile</u>	
Mileage Bands					
	0	1L0++	None	None	
Over	0	1L0++	ICB#	ICB#	
Fiber Advantage <sup>SM</sup>					
	0	1L0++	None	None	
Over	0	1L0++	ICB#	ICB#	(L)

# As of January 15, 2021, ICB contracts greater than 1-Year are no longer available to new or renewing subscribers. (N)  
(N)

(L) Material formerly appeared on Sheet 334.

Continued



ACCESS SERVICE

7. Special Access Service (Cont'd)

7.5 Rates and Charges (Cont'd)

7.5.8 Digital Services (Cont'd)

(C) High Capacity Service (Cont'd)

	USOC	Monthly Rates	Nonrecurring Charges		
			1st	Add'l	
	CABS/CRIS				
(3) Optional Features and Functions					
(a) Multiplexing					
<u>DS4 to DS1 or Fiber</u> <u>Advantage<sup>SM</sup> DS1</u>					
- Per arrangement	MXA++	ICB##	None	None	(N)
<u>DS3 to DS1 or Fiber</u> <u>Advantage<sup>SM</sup> DS1</u>					
- Per arrangement					
Option 1@	MQ3#	\$379.28	\$379.28	\$284.46	
Option 2@@	MQ4#	\$379.28	\$379.28	\$284.46	
Three Year Term Plan##					(N)
- Per arrangement					
Option 1@	MQ3/MQ3X3	340.00	379.28	284.46	
Option 2@@	MQ4/MXNU3	340.00	379.28	284.46	
Five Year Term Plan**					
- Per Arrangement					
Option 1@	MQ3/MQ3X5	310.00	379.28	284.46	
Option 2@@	MQ4/MXNU5	310.00	379.28	284.46	

@ A channel of this DS3 can be connected to a DS1.

@@ A channel of this DS3 can be connected to a DS1 and reconfigured within the DCS hub.

\* A channel of this DS1 to the Hub can be used for a Digital Data Service.

\*\* As of November 1, 2013, Term Plan terms greater than 36 months are no longer available for new or renewing subscribers. (T)

# Both USOCs are used in CABS and CRIS billing systems.

## As of January 15, 2021, 3-Year Term Plans are no longer available to new or renewing subscribers. (N)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.5 Rates and Charges (Cont'd)

7.5.8 Digital Services (Cont'd)

(C) High Capacity Service (Cont'd)

	USOC	Monthly Rates	Nonrecurring Charges		
			1st	Add'l	
CABS/CRIS					
(3) <u>Optional Features and Functions</u> (Cont'd)					
(a) Multiplexing (Cont'd)					
<u>DS2 to DS1 or Fiber Advantage<sup>sm</sup> DS1</u>					
- Per arrangement	MXD++	ICB®	None	None	(N)
DS1C to DS1 or Fiber					
<u>Advantage<sup>sm</sup> DS1</u>					
- Per arrangement	MXH++	ICB®	None	None	(N)
<u>Fiber Advantage<sup>sm</sup> DS1 to Voice (VG) *</u>					
- Per arrangement	MQ1#	\$ 308.17	None	None	
<u>DS1 1.544 DS1 to Voice (VG)</u>					
- Per arrangement	MQ1	308.17	None	None	
Month-to-Month					
<u>DS1 to Voice (VG) *</u>					
- Per arrangement	MQ1#/MXNT1	\$ 290.00	None	None	
One Year Term Plan					
<u>DS1 to Voice (VG) *</u>					
- Per arrangement	MQ1#/MXNT2	\$ 265.00	None	None	
Two Year Term Plan®					
					(N)

\* A channel of this DS1 to the Hub can be used for a Digital Data Service.

# Both USOCs are used in CABS and CRIS billing systems.

@ As of January 15, 2021, ICB contracts greater than 1-Year and the Two Year Term Plan are no longer available to new or renewing subscribers. (N)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.5 Rates and Charges (Cont'd)

7.5.8 Digital Services (Cont'd)

(C) High Capacity Service (Cont'd)

<u>USOC</u>	<u>Monthly Rates</u>	<u>Nonrecurring Charges</u>	
		<u>1st</u>	<u>Add'l</u>

CABS/CRIS

(3) Optional Features and  
Functions (Cont'd)

(a) Multiplexing (Cont'd)

DS1 to Voice (VG) \*

- Per arrangement  
Three Year Term Plan

MQ1#/MXNT3 \$255.00 None None

DS1 to Voice (VG) \*

- Per arrangement  
Five Year Term Plan\*\*

MQ1#/MXNT5 245.00 None None

(N)

\* A channel of this DS1 to the Hub can be used for a Digital Data Service.

\*\* As of November 1, 2013, Term Pricing Plan terms greater than 36 months are no longer available for new or renewing subscribers. (N)

# Both USOCs are used in CABS and CRIS billing systems. (N)

Continued

## Resolution No.

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.5 Rates and Charges (Cont'd)

7.5.8 Digital Services (Cont'd)

(C) High Capacity Service (Cont'd)

	<u>USOC</u>	<u>Monthly Rates</u>	<u>Nonrecurring Charges</u>	
(3) Optional Features and Functions (Cont'd)				
(d) Synchronous Timing - per port	SYNTM	\$71.12	None	
(e) Digital Cross-Connect System Interface Arrangement				
(i) Advanced Digital Network Interface Arrangement - per termination	MQO	80.79	None	(T)
(ii) High Capacity Service Interface Arrangement - per termination	MQO	80.79	None	(T)
(f) Network Reconfiguration# Service - per Fiber Advantage <sup>sm</sup> DS3 termination**, per channel termination	CNND3	300.00	None	(T)
(g) Clear Channel Capability* - Per Circuit Arranged	CCO	None	\$375.00	

\* Nonrecurring Charge applies only to subsequent installation or removal of the Clear Channel Capability feature. Not applicable if Clear Channel provided upon original installation of the 1.544 Mbps Hicap.

\*\* Allows arrangements as set forth in 7.2.8, (B) (1) preceding. (T)

# Effective October 30, 2018, Network Reconfiguration Service is (N)  
Frozen/Grandfather (see General Regulations, Section 2.1.4, (F)). (N)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.5 Rates and Charges (Cont'd)

7.5.8 Digital Services (Cont'd)

(C) High Capacity Service (Cont'd)

(4) Rollover

	<u>USOC</u>	<u>Nonrecurring Charges</u>		
		<u>1st</u>	<u>Add'l</u>	
	CABS/CRIS			(N)
- Per point of Termination				
- DS1	NRBRH/NRBR1/SVR <sup>#</sup>	\$355.58	\$237.05	(T)
- DS3	NRBR3/SVR	218.09	195.33	
- DS3x3	NRBR3/SVR	654.26	585.99	

(5) Rollover when Point of Termination Changes

- Per point of Termination				
- DS1	NRBRO/SVRPT	404.89	304.38	
- DS3	NRBRO/SVRPT	404.89	304.38	

(6) Change or Addition of circuit packs, each

- voice circuit pack	CHNVC	38.88	38.88	
- digital data circuit pack	CHNDC	38.88	38.88	

(7) Fiber Advantage<sup>SM</sup> Diversity (T)

- Per DS1, DS3, DS3x3 or DS3x12 service	DF4/SHF	189.64	None	
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# NRBR1 and NRBRH are used in CABS, SVR is used in CRIS billing system. (T)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.5 Rates and Charges (Cont'd)

7.5.8 Digital Services (Cont'd)

(D)

(D)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.5 Rates and Charges (Cont'd)

7.5.8 Digital Services (Cont'd)

(D)

(D)

Continued



ACCESS SERVICE

7. Special Access Service (Cont'd)

7.5 Rates and Charges (Cont'd)

7.5.9 Special Access Service Surcharge\*

	<u>USOC</u>	<u>Monthly Rates</u>	
- Per Subvoice grade, voice grade or equivalent voice grade service	S25	\$23.71	
7.5.10 Record Transfer Charge		<u>Nonrecurring Charge</u>	
- Per customer premise location	NRBR7/SARTC	\$20.05	(T)

\* See 7.4.2 preceding for application of Special Access Service Surcharge.

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.5 Rates and Charges

7.5.11 SONET Ring and Access Services\*

(N)

		<u>USOC</u>	<u>Monthly Rates</u>	
(A) Mileage				
(1) Dedicated Ring				
- per interoffice mile				
155 Mbps (OC-3)	0 - 10 miles	1L5XX/1L8XX	None	(T)
	over 10 miles	1L5XX/1L8XX	\$125.16	
622 Mbps (OC-12)	0 - 10 miles	1L5XX/1L8XX	None	(T)
	over 10 miles	1L5XX/1L8XX	417.21	
2.4 Gbps (OC-48)	0 - 10 miles	1L5XX/1L8XX	None	(T)
	over 10 miles	1L5XX/1L8XX	834.42	
(2) Circuit Service				
- per interoffice mile				
155 Mbps (OC-3c)		1L5XX/1L8XX	125.16	(T)
622 Mbps (OC-12/c)		1L5XX/1L8XX	417.21	(T)
622 Mbps (STS-12)#		1L5XX/1L8XX	417.21	(T)

\* Frozen/Grandfathered SONET Ring and Access Service effective June 30, 2006, pending CPUC Resolution. See General Regulations, Schedule Cal.P.U.C. No. 175-T, Section 2.1.4, (F). (N)

# STS-12 is manufactured discontinued and grandfathered to existing customers. (T)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.5 Rates and Charges (Cont'd) (T)

7.5.11 SONET Ring and Access Services\* (Cont'd) (N)

	<u>USOC</u>	<u>Monthly Rates</u>	<u>Nonrecurring Charges</u>	
(B) Dedicated Ring Fee				
(1) Interoffice				
per CO Node to CO Node Link				
<u>3 Year Plan</u>				
155 Mbps (OC-3)	FECFX/DEDF3	\$379.28	\$142.23	(T)
22 Mbps (OC-12)	FECFX/DEDF3	426.69	142.23	
2.4 Gbps (OC-48)	FECFX/DEDF3	853.39	142.23	(T)
<u>5 Year Plan</u>				
155 Mbps (OC-3)	FECFX/DEDF5	331.87	no charge	(T)
622 Mbps (OC-12)	FECFX/DEDF5	379.28	no charge	
2.4 Gbps (OC-48)	FECFX/DEDF5	758.57	no charge	(T)
(2) Local Loop				
per CO Node to Premises Node Link (within the customer's Wire Center)				
<u>3 Year Plan</u>				
155 Mbps (OC-3)	FECFX/DEDL3	853.39	142.23	(T)
622 Mbps (OC-12)	FECFX/DEDL3	1,327.49	142.23	
2.4 Gbps (OC-48)	FECFX/DEDL3	1,801.60	142.23	(T)
<u>5 Year Plan</u>				
155 Mbps (OC-3)	FECFX/DEDL5	758.57	no charge	(T)
622 Mbps (OC-12)	FECFX/DEDL5	1,090.44	no charge	
2.4 Gbps (OC-48)	FECFX/DEDL5	1,422.32	no charge	(T)

\* Frozen/Grandfathered SONET Ring and Access Service effective June 30, 2006, (N)  
pending CPUC Resolution. See General Regulations, Schedule Cal.P.U.C.  
No. 175-T, Section 2.1.4, (F). (N)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.5 Rates and Charges (Cont'd)

7.5.11 SONET Ring and Access Services\* (Cont'd) (N)

	<u>USOC</u>	<u>Monthly Rates</u>	<u>Nonrecurring Charges</u>	
(B) <u>Dedicated Ring Fee</u> (Cont'd)				
(3) <u>Alternate Wire Center</u>				
- per CO Node to Premises Node Link (outside of customer's wire center)				
<u>3 Year Plan</u>				
155 Mbps (OC-3)	FECAX/DEDA3	\$1137.85	\$142.23	(T)
622 Mbps (OC-12)	FECAX/DEDA3	1232.67	142.23	
2.4 Gbps (OC-48)	FECAX/DEDA3	2086.06	142.23	(T)
<u>5 Year Plan</u>				
155 Mbps (OC-3)	FECAX/DEDA5	948.21	no charge	(T)
622 Mbps (OC-12)	FECAX/DEDA5	1043.03	no charge	
2.4 Gbps (OC-48)	FECAX/DEDA5	1754.19	no charge	(T)

\* Frozen/Grandfathered SONET Ring and Access Service effective June 30, 2006, (N)  
pending CPUC Resolution. See General Regulations, Schedule Cal.P.U.C.  
No. 175-T, Section 2.1.4, (F). (N)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.5 Rates and Charges (Cont'd)

7.5.11 SONET Ring and Access Services\* (Cont'd) (N)

	<u>USOC</u>	<u>Monthly Rates</u>	<u>Nonrecurring Charges</u>	
(C) Nodes: CO and Premises				
- per node				
(1) CO Node for dedicated ring				
<u>3 Year Plan</u>				
155 Mbps (OC-3)	FH5XC/NODC3	\$1,849.01	1,327.49	(T)
622 Mbps (OC-12)	FH5XC/NODC3	2,086.06	1,517.14	
2.4 Gbps (OC-48)	FH5XC/NODC3	4,741.05	2,939.45	(T)
<u>5 Year Plan</u>				
155 Mbps (OC-3)	FH5XC/NODC5	1,517.14	no charge	(T)
622 Mbps (OC-12)	FH5XC/NODC5	1,706.78	no charge	
2.4 Gbps (OC-48)	FH5XC/NODC5	4,124.71	no charge	(T)
(2) Premises Node for dedicated ring				
<u>3 Year Plan</u>				
155 Mbps (OC-3)	FP5XC/NODD3	2,560.17	1,327.49	(T)
622 Mbps (OC-12)	FP5XC/NODD3	2,844.63	1,517.14	
2.4 Gbps (OC-48)	FP5XC/NODD3	5,641.85	2,939.45	(T)
<u>5 Year Plan</u>				
155 Mbps (OC-3)	FP5XC/NODD5	1,849.01	no charge	(T)
622 Mbps (OC-12)	FP5XC/NODD5	2,086.06	no charge	
2.4 Gbps (OC-48)	FP5XC/NODD5	4,693.64	no charge	(T)

\* Frozen/Grandfathered SONET Ring and Access Service effective June 30, 2006, (N)  
pending CPUC Resolution. See General Regulations, Schedule Cal.P.U.C.  
No. 175-T, Section 2.1.4, (F). (N)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.5 Rates and Charges (Cont'd)

7.5.11 SONET Ring and Access Services\* (Cont'd) (N)

	<u>USOC</u>	<u>Monthly Rates</u>	<u>Nonrecurring Charges</u>	
(C) Nodes: CO and Premises (Cont'd)				
- per node				
(3) Customer Provided Node for dedicated ring				
<u>3 Year Plan</u>				
155 Mbps (OC-3)	FJ5XC/NODN3	\$663.75	\$1,232.67	(T)
622 Mbps (OC-12)	FJ5XC/NODN3	758.57	1,422.32	
2.4 Gbps (OC-48)	FJ5XC/NODN3	853.39	2,844.63	(T)
<u>5 Year Plan</u>				
155 Mbps (OC-3)	FJ5XC/NODN5	568.93	no charge	(T)
622 Mbps (OC-12)	FJ5XC/NODN5	663.75	no charge	
2.4 Gbps (OC-48)	FJ5XC/NODN5	758.57	no charge	(T)

\* Frozen/Grandfathered SONET Ring and Access Service effective June 30, 2006, (N)  
pending CPUC Resolution. See General Regulations, Schedule Cal.P.U.C.  
No. 175-T, Section 2.1.4, (F). (N)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.5 Rates and Charges (Cont'd)

7.5.11 SONET Ring and Access Services\* (Cont'd)

(N)

		<u>USOC</u>	<u>Monthly Rates</u>	
(C) Nodes: CO and Premises (Cont'd)				
- per node				
(4) CO Node for two point (circuit service) configuration				
<u>Month-to-Month</u>				
155 Mbps (OC-3/3c)	FC6XB/NOCCM	\$1,137.15	(T)	
622 Mbps (STS-12) <sup>#</sup>	FC6XB/NOCCM	4,266.95		
622 Mbps (OC-12/c)	FC6XB/NOCCM	4,266.95	(T)	
<u>1 Year Plan</u>				
155 Mbps (OC-3/3c)	FC6XB/NOCC1	1,043.03	(T)	
622 Mbps (STS-12) <sup>#</sup>	FC6XB/NOCC1	3,792.84		
622 Mbps (OC-12/c)	FC6XB/NOCC1	3,792.84	(T)	
<u>3 Year Plan</u>				
155 Mbps (OC-3/3c)	FC6XB/NOCC3	853.39	(T)	
622 Mbps (STS-12) <sup>#</sup>	FC6XB/NOCC3	2,844.63		
622 Mbps (OC-12/c)	FC6XB/NOCC3	2,844.63	(T)	
<u>5 Year Plan</u>				
155 Mbps (OC-3/3c)	FC6XB/NOCC5	663.75	(T)	
622 Mbps (STS-12) <sup>#</sup>	FC6XB/NOCC5	1,991.24		
622 Mbps (OC-12/c)	FC6XB/NOCC5	1,991.24	(T)	

\* Frozen/Grandfathered SONET Ring and Access Service effective June 30, 2006, pending CPUC Resolution. See General Regulations, Schedule Cal.P.U.C. No. 175-T, Section 2.1.4, (F). (N)

# STS-12 is manufactured discontinued and grandfathered to existing customers. (T)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.5 Rates and Charges (Cont'd)

7.5.11 SONET Ring and Access Services\* (Cont'd) (N)

	<u>USOC</u>	<u>Monthly Rates</u>	<u>Nonrecurring Charges</u>		
			<u>1st</u>	<u>Add'l</u>	
(D) Local Loop Access Link					
- per link (with equipment)					
<u>Month-to-Month</u>					
155 Mbps (OC-3c) DCHSX/LLALM		\$7,206.40	\$53,289.40	\$26,644.70	(T)
<u>1 Year Plan</u>					
155 Mbps (OC-3c) DCHSX/LLAL1		5,973.72	5,689.26	2,844.63	(T)
<u>3 Year Plan</u>					
155 Mbps (OC-3c) DCHSX/LLAL3		3,318.74	2,844.63	1,422.32	(T)
<u>5 Year Plan</u>					
155 Mbps (OC-3c) DCHSX/LLAL5		2,749.81	no charge	no charge	(T)

\* Frozen/Grandfathered SONET Ring and Access Service effective June 30, 2006, (N)  
pending CPUC Resolution. See General Regulations, Schedule Cal.P.U.C.  
No. 175-T, Section 2.1.4, (F). (N)

Continued



ACCESS SERVICE

7. Special Access Service (Cont'd)

7.5 Rates and Charges (Cont'd)

7.5.11 SONET Ring and Access Services\* (Cont'd) (N)

	<u>USOC</u>	<u>Monthly</u>	<u>Nonrecurring</u>	
	<u>CABS/CRIS</u>	<u>Rates</u>	<u>1st</u>	<u>Add'l</u>
(E) Premises Access				
Ports				
- per port				
<u>Month-to-Month</u>				
1.544 Mbps (DS1)	FP6AX/LSA1M	\$ 94.82	\$ 663.75	\$331.87
45 Mbps (DS3)	FP6BX/LSA3M	346.10	663.75	331.87
155.5 Mbps (OC-3c)	FP6OX/LSAOM	701.68	663.75	331.87 (T)
622 Mbps (OC-12c)	FP6TX/LSAUM	1896.42	1896.42	948.21 (T)

\* Frozen/Grandfathered SONET Ring and Access Service effective June 30, 2006, pending CPUC Resolution. See General Regulations, Schedule Cal.P.U.C. No. 175-T, Section 2.1.4, (F).

(D)  
(N)  
|  
(N)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.5 Rates and Charges (Cont'd)

7.5.11 SONET Ring and Access Services\* (Cont'd) (N)

		<u>USOC</u>	<u>Monthly</u>	<u>Nonrecurring</u>	
		<u>CABS/CRIS</u>	<u>Rates</u>	<u>Charges</u>	
				<u>1st</u>	<u>Add'l</u>
(E) Premises Access (Cont'd)					
Ports (Cont'd)					
- per port (Cont'd)					
<u>1 Year Plan</u>					
1.544 Mbps (DS1)	FP6AX/LSA11	\$	85.34	\$ 663.75	\$331.87
45 Mbps (DS3)	FP6BX/LSA31		312.91	663.75	331.87
155.5 Mbps (OC-3c)	FP6OX/LSAO1		625.82	663.75	331.87 (T)
622 Mbps (OC-12c)	FP6TX/LSAU1		1801.60	1896.42	948.21 (T)

\* Frozen/Grandfathered SONET Ring and Access Service effective June 30, 2006, pending CPUC Resolution. See General Regulations, Schedule Cal.P.U.C. No. 175-T, Section 2.1.4, (F).

(D)  
(N)  
|  
(N)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.5 Rates and Charges (Cont'd)

7.5.11 SONET Ring and Access Services\* (Cont'd)

(N)

		USOC	Monthly	Nonrecurring	
		CABS/CRIS	Rates	Charges	
				1st	Add'l
(E) Premises Access (Cont'd)					
Ports (Cont'd)					
- per port (Cont'd)					
<u>3 Year Plan</u>					
1.544 Mbps (DS1)	FP6AX/LSA13	\$ 61.63	\$331.87	\$165.94	
45 Mbps (DS3)	FP6BX/LSA33	241.79	331.87	165.94	
155.5 Mbps (OC-3c)	FP6OX/LSA03	493.07	331.87	165.94	(T)
622 Mbps (OC-12c)	FP6TX/LSAU3	1611.96	948.21	474.11	(T)
100 Mbps Ethernet (STS-1) at OC-3 Node	S9TAX/KP6A3	145.00	385.00	195.00	
100 Mbps Ethernet (STS-1) at OC-12 Node	S9TBX/KP6B3	145.00	385.00	195.00	
100 Mbps Ethernet (STS-3c) at OC-12 Node	S9TCX/KP6C3	180.00	385.00	195.00	
1 Gbps Ethernet (STS-1) at OC-12 Node	S9TDX/KP6D3	250.00	425.00	215.00	
1 Gbps Ethernet (STS-3c) at OC-12 Node	S9TEX/KP6E3	250.00	425.00	215.00	
100 Mbps Ethernet (STS-1) at OC-48 Node	S9TGX/KP7G3	145.00	385.00	195.00	
100 Mbps Ethernet (STS-3c) at OC-48 Node	S9THX/KP7H3	180.00	385.00	195.00	
1 Gbps Ethernet (STS-1) at OC-48 Node	S9TJX/KP7J3	250.00	425.00	215.00	
1 Gbps Ethernet (STS-3c) at OC-48 Node	S9TKX/KP7K3	250.00	425.00	215.00	
1 Gbps Ethernet (STS-12c) at OC-48 Node	S9TLX/KP7L3	600.00	425.00	215.00	
1 Gbps Ethernet (STS-24c) at OC-48 Node	S9TMX/KP7M3	900.00	425.00	215.00	

\* Frozen/Grandfathered SONET Ring and Access Service effective June 30, 2006, pending CPUC Resolution. See General Regulations, Schedule Cal.P.U.C. No. 175-T, Section 2.1.4, (F).

(D)

(N)

(N)

(N)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.5 Rates and Charges (Cont'd)

7.5.11 SONET Ring and Access Services\* (Cont'd)

(N)

	USOC CABS/CRIS	Monthly Rates	Nonrecurring Charges	
			1st	Add'l
(E) Premises Access (Cont'd)				
Ports (Cont'd)				
- per port (Cont'd)				
<u>5 Year Plan</u>				
1.544 Mbps (DS1)	FP6AX/LSA15	\$ 52.15	no charge	no charge
45 Mbps (DS3)	FP6BX/LSA35	208.61	no charge	no charge
155.5 Mbps (OC-3c)	FP6OX/LSA05	464.62	no charge	no charge (T)
622 Mbps (OC-12c)	FP6TX/LSAU5	1422.32	no charge	no charge (T)
100 Mbps Ethernet (STS-1) at OC-3 Node	S9TAX/KP6A5	130.00	\$385.00	\$195.00
100 Mbps Ethernet (STS-1) at OC-12 Node	S9TBX/KP6B5	130.00	385.00	195.00
100 Mbps Ethernet (STS-3c) at OC-12 Node	S9TCX/KP6C5	160.00	385.00	195.00
1 Gbps Ethernet (STS-1)) at OC-12 Node	S9TDX/KP6D5	200.00	425.00	215.00
1 Gbps Ethernet (STS-3c) at OC-12 Node	S9TEX/KP6E5	200.00	425.00	215.00
100 Mbps Ethernet (STS-1) at OC-48 Node	S9TGX/KP7G5	130.00	385.00	195.00
100 Mbps Ethernet (STS-3c) at OC-48 Node	S9THX/KP7H5	160.00	385.00	195.00
1 Gbps Ethernet (STS-1) at OC-48 Node	S9TJX/KP7J5	200.00	425.00	215.00
1 Gbps Ethernet (STS-3c) at OC-48 Node	S9TKX/KP7K5	200.00	425.00	215.00
1 Gbps Ethernet (STS-12c) at OC-48 Node	S9TLX/KP7L5	500.00	425.00	215.00
1 Gbps Ethernet (STS-24c) at OC-48 Node	S9TMX/KP7M5	850.00	425.00	215.00

\* Frozen/Grandfathered SONET Ring and Access Service effective June 30, 2006, pending CPUC Resolution. See General Regulations, Schedule Cal.P.U.C. No. 175-T, Section 2.1.4, (F).

(D)  
(N)  
|  
(N)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.5 Rates and Charges (Cont'd)

7.5.11 SONET Ring and Access Services\* (Cont'd) (N)

	USOC CABS/CRIS	<u>Monthly Rates</u>	<u>Nonrecurring Charges</u>	
			<u>1st</u>	<u>Add'l</u>
(E) Premises Access (Cont'd)				
Ports (Cont'd)				
Additional Connection for 2.4Gbps (OC48):				
- per port				
<u>Month-to-Month</u>				
622 Mbps <sup>#</sup>	FP6EA/LSABM	\$2086.06	\$663.75	\$331.87 (T)

\* Frozen/Grandfathered SONET Ring and Access Service effective June 30, 2006, pending CPUC Resolution. See General Regulations, Schedule Cal.P.U.C. No. 175-T, Section 2.1.4, (F). (N)

# 622 Mbps Additional Connection interface not applicable to new customers served by new equipment for interface connections to 155 Mbps. Additional Connection still required for 1.5 Mbps capacity. Existing customers with the Additional Connection interface will retain it. (N)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.5 Rates and Charges (Cont'd)

7.5.11 SONET Ring and Access Services\* (Cont'd) (N)

	<u>USOC</u> CABS/CRIS	<u>Monthly</u> <u>Rates</u>	<u>Nonrecurring</u> <u>Charges</u>		
			<u>1st</u>	<u>Add'l</u>	
(E) Premises Access (Cont'd)					
Ports (Cont'd)					
Additional Connection for 2.4Gbps (OC48): (Cont'd)					
- per port (Cont'd)					
<u>1 Year Plan</u>					
622 Mbps#	FP6EA/LSAB1	\$1896.42	\$663.75	\$331.87	(T)

\* Frozen/Grandfathered SONET Ring and Access Service effective June 30, 2006, pending CPUC Resolution. See General Regulations, Schedule Cal.P.U.C. No. 175-T, Section 2.1.4, (F). (N)

# 622 Mbps Additional Connection interface not applicable to new customers served by new equipment for interface connections to 155 Mbps. Additional Connection still required for 1.5 Mbps capacity. Existing customers with the Additional Connection interface will retain it. (T)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.5 Rates and Charges (Cont'd)

7.5.11 SONET Ring and Access Services\* (Cont'd) (N)

	<u>USOC</u> CABS/CRIS	<u>Monthly</u> <u>Rates</u>	<u>Nonrecurring</u> <u>Charges</u>		
			<u>1st</u>	<u>Add'l</u>	
(E) Premises Access (Cont'd)					
Ports (Cont'd)					
Additional Connection for 2.4Gbps (OC48): (Cont'd)					
- per Port (Cont'd)					
<u>3 Year Plan</u>					
622 Mbps#	FP6EA/LSAB3	\$1659.37	\$331.87	\$165.94	(T)

\* Frozen/Grandfathered SONET Ring and Access Service effective June 30, 2006, pending CPUC Resolution. See General Regulations, Schedule Cal.P.U.C. No. 175-T, Section 2.1.4, (F). (N)

# 622 Mbps Additional Connection interface not applicable to new customers served by new equipment for interface connections to 155 Mbps. Additional Connection still required for 1.5 Mbps capacity. Existing customers with the Additional Connection interface will retain it. (T)

(D)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.5 Rates and Charges (Cont'd)

7.5.11 SONET Ring and Access Services\* (Cont'd) (N)

	USOC CABS/CRIS	Monthly Rates	Nonrecurring Charges	
			1st	Add'l
(E) Premises Access (Cont'd)				
Ports (Cont'd)				
Additional Connection for 2.4Gbps (OC48): (Cont'd)				
- per port (Cont'd)				
<u>5 Year Plan</u>				
622 Mbps <sup>#</sup>	FP6EA/LSAB5	\$1422.32	no charge	no charge (T)

\* Frozen/Grandfathered SONET Ring and Access Service effective June 30, 2006, pending CPUC Resolution. See General Regulations, Schedule Cal.P.U.C. No. 175-T, Section 2.1.4, (F). (N)

# 622 Mbps Additional Connection interface not applicable to new customers served by new equipment for interface connections to 155 Mbps. Additional Connection still required for 1.5 Mbps capacity. Existing customers with the Additional Connection interface will retain it. (T)

(D)

Continued



ACCESS SERVICE

7. Special Access Service (Cont'd)

7.5 Rates and Charges (Cont'd)

7.5.11 SONET Ring and Access Services\* (Cont'd) (N)

Definitions

The following definitions describe connections for  
Primary Node Links and Central Office Access Ports.

STS-1/DS1: provides for 28 DS1 (Local Loop Access  
Links-copper or Fiber Advantage) services from the  
customer's premises to the central office Digital  
Crossconnect System onto the STS-1 interface. (T)

STS-1/DS3: provides for DS3 to DS3 crossconnect of  
Local Loop Access Links or Fiber Advantage service  
from the customer's premises to the central office  
onto the STS-1 interface. (T)

STS-1 hardwired for DS3: provides for DS3 services  
from the customer premises through the central office  
bypassing all electronic crossconnect equipment  
(capacity is one DS3). (T)

OC-3/c-12: provides for 155 Mbps bandwidth services  
from the customer's premises to the central office on a  
Dedicated OC-12 Ring with an optical interface (LSAC+). (T)

OC-3/c-48: provides for 155 Mbps bandwidth services  
from the customer's premises to the central office on a  
Dedicated OC48 Ring with an optical interface  
(LSA4+). (T)

STS-12#: provides 622Mbps bandwidth service to  
interconnect two SONET rings on an electrical interface  
(LSAT+). (T)

OC-12/c: provides 622Mbps bandwidth service to  
interconnect two SONET rings on an optical interface  
(LSAT+). (T)

OC-12/c-48: provides 622 Mbps bandwidth services from  
the customer's premises to the central office on a  
Dedicated OC48 Ring with an optical interface (LSAL+). (T)

\* Frozen/Grandfathered SONET Ring and Access Service effective June 30, 2006,  
pending CPUC Resolution. See General Regulations, Schedule Cal.P.U.C.  
No. 175-T, Section 2.1.4, (F). (N)

# STS-12 is manufactured discontinued and grandfathered to existing customers. (T)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.5 Rates and Charges (Cont'd)

7.5.11 SONET Ring and Access Services\* (Cont'd)

(N)

Definitions (Cont'd)

The following definitions describe connections for Premise Access Ports.

DS1: provides 1.544 Mbps bandwidth service at the customer's premise node mapping it onto the STS-1 interface (LSA1+).

(T)

(T)

DS3: provides 45 Mbps bandwidth service at the customer's premise node mapping it into the STS-1 interface (LSA3+).

(T)

OC-3c: provides 155 Mbps bandwidth concatenated services at the customer's premise with an optical, non-protected interface (LSAO+).

(T)

|

(T)

OC-12c: provides 622 Mbps bandwidth concatenated services at the customer's premise with an optical, non-protected interface (LSAU+).

(T)

(T)

\* Frozen/Grandfathered SONET Ring and Access Service effective June 30, 2006, pending CPUC Resolution. See General Regulations, Schedule Cal.P.U.C. No. 175-T, Section 2.1.4, (F).

(N)

|

(N)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.5 Rates and Charges (Cont'd)

7.5.11 SONET Ring and Access Services\* (Cont'd) (N)

		USOC	Monthly	Nonrecurring		
		CABS/CRIS	Rates	Charges	1st	Add'l
(F) Central Office Access Ports						
- per port						
<u>Month-to-Month</u>						
51 Mbps (STS-1 hardwired)	FC6WX/LSADM	\$ 260.76	\$568.93	\$284.46	(T)	
51 Mbps (STS-1/DS3)	FC6YX/LSASM	260.76	568.93	284.46		
51 Mbps (STS-1/DS1s)	FC64X/LSAWM	948.21	568.93	284.46		
155 Mbps (OC-3/c-48)	FC6UX/LSA4M	711.16	568.93	284.46		
155 Mbps (OC-3/c-12)	FC6VX/LSACM	350.84	568.93	284.46		
622 Mbps (STS-12) <sup>®</sup>	FC6ZX/LSATM	782.27	568.93	284.46		(T)
622 Mbps (OC-12/c) <sup>#</sup>	FC6ZX/LSATM	782.27	568.93	284.46		
622 Mbps (OC-12c)	FC6TX/LSALM	1896.42	1896.42	948.21		

- \* Frozen/Grandfathered SONET Ring and Access Service effective June 30, 2006, pending CPUC Resolution. See General Regulations, Schedule Cal.P.U.C. No. 175-T, Section 2.1.4, (F). (N)
- # Same rates apply for STS-12 or OC-12/c Ring Interconnection. (T)
- @ STS-12 is manufactured discontinued and grandfathered to existing customers. (T)
- (D)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.5 Rates and Charges (Cont'd)

7.5.11 SONET Ring and Access Services\* (Cont'd) (N)

	<u>USOC</u>	<u>Monthly</u>	<u>Nonrecurring</u>		
	<u>CABS/CRIS</u>	<u>Rates</u>	<u>Charges</u>	<u>1st</u>	<u>Add'l</u>
(F) Central Office Access (Cont'd)					
Ports (Cont'd)					
- per port (Cont'd)					
<u>1 Year Plan</u>					
51 Mbps (STS-1 hardwired)	FC6WX/LSAD1	\$ 237.05	\$ 568.93	\$284.46	(T)
51 Mbps (STS-1/DS3)	FC6YX/LSAS1	237.05	568.93	284.46	
51 Mbps (STS-1/DS1s)	FC64X/LSAW1	834.42	568.93	284.46	
155 Mbps (OC-3/c-48)	FC6UX/LSA41	625.82	568.93	284.46	
155 Mbps (OC-3/c-12)	FC6VX/LSAC1	312.91	568.93	284.46	
622 Mbps (STS-12) <sup>@</sup>	FC6ZX/LSAT1	711.16	568.93	284.46	
622 Mbps (OC-12/c) <sup>#</sup>	FC6ZX/LSAT1	711.16	568.93	284.46	
622 Mbps (OC-12c)	FC6TX/LSAL1	1801.60	1896.42	948.21	

- \* Frozen/Grandfathered SONET Ring and Access Service effective June 30, 2006, pending CPUC Resolution. See General Regulations, Schedule Cal.P.U.C. No. 175-T, Section 2.1.4, (F). (N)
- # Same rates apply for STS-12 or OC-12/c Ring Interconnection. (T)
- @ STS-12 is manufactured discontinued and grandfathered to existing customers. (T)
- (D)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.5 Rates and Charges (Cont'd)

7.5.11 SONET Ring and Access Services\* (Cont'd) (N)

	<u>USOC</u>	<u>Monthly</u>	<u>Nonrecurring</u>		
	<u>CABS/CRIS</u>	<u>Rates</u>	<u>1st</u>	<u>Add'l</u>	
(F) Central Office Access (Cont'd)					
Ports (Cont'd)					
- per port (Cont'd)					
<u>3 Year Plan</u>					
51 Mbps (STS-1 hardwired)	FC6WX/LSAD3	\$ 165.94	\$284.46	\$142.23	(T)
51 Mbps (STS-1/DS3)	FC6YX/LSAS3	165.94	284.46	142.23	
51 Mbps (STS-1/DS1s)	FC64X/LSAW3	616.34	284.46	142.23	
155 Mbps (OC-3/c-48)	FC6UX/LSA43	450.40	284.46	142.23	
155 Mbps (OC-3/c-12)	FC6VX/LSAC3	222.83	284.46	142.23	
622 Mbps (STS-12) <sup>@</sup>	FC6ZX/LSAT3	497.81	284.46	142.23	
622 Mbps (OC-12/c) <sup>#</sup>	FC6ZX/LSAT3	497.81	284.46	142.23	
622 Mbps (OC-12c)	FC6TX/LSAL3	1611.96	948.21	474.11	

- \* Frozen/Grandfathered SONET Ring and Access Service effective June 30, 2006, pending CPUC Resolution. See General Regulations, Schedule Cal.P.U.C. No. 175-T, Section 2.1.4, (F). (N)
- # Same rates apply for STS-12 or OC-12/c Ring Interconnection. (T)
- @ STS-12 is manufactured discontinued and grandfathered to existing customers. (T)
- (D)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.5 Rates and Charges (Cont'd)

7.5.11 SONET Ring and Access Services\* (Cont'd)

(N)

	USOC	Monthly Rates	Nonrecurring Charges		
			1st	Add'l	
(F) Central Office Access					
Ports (Cont'd)					
- per port (Cont'd)					
<u>5 Year Plan</u>					
51 Mbps (STS-1 hardwired)	FC6WX/LSAD5	\$ 142.23	no charge		(T)
51 Mbps (STS-1/DS3)	FC6YX/LSAS5	142.23	no charge		
51 Mbps (STS-1/DS1s)	FC64X/LSAW5	521.52	no charge		
155 Mbps (OC-3/c-48)	FC6UX/LSA45	379.28	no charge		
155 Mbps (OC-3/c-12)	FC6VX/LSAC5	189.64	no charge		
622 Mbps (STS-12) <sup>@</sup>	FC6ZX/LSAT5	426.69	no charge		
622 Mbps (OC-12/c) <sup>#</sup>	FC6ZX/LSAT5	426.69	no charge		
622 Mbps (OC-12c)	FC6TX/LSAL5	1422.32	no charge		(T)

- \* Frozen/Grandfathered SONET Ring and Access Service effective June 30, 2006, pending CPUC Resolution. See General Regulations, Schedule Cal.P.U.C. No. 175-T, Section 2.1.4, (F). (N)
- # Same rates apply for STS-12 or OC-12/c Ring Interconnection. (T)
- @ STS-12 is manufactured discontinued and grandfathered to existing customers. (T)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.5 Rates and Charges (Cont'd)

7.5.11 SONET Ring and Access Services\* (Cont'd) (N)

		Monthly	Nonrecurring		
	USOC	Rates	Charges		
			1st	Add'l	
(G) Primary Node Link					
- per link					
<u>3 Year Plan</u>					
51 Mbps (STS-1 hardwired)	NBPWX/PNLB3	\$1,327.49	\$379.28	\$189.64	(T)
51 Mbps (STS-1/DS3)	NBPYX/PNLD3	1,327.49	379.28	189.64	
51 Mbps (STS-1/DS1)	NBP4X/PNLC3	1,659.37	379.28	189.64	
155 Mbps (OC-3/c-48)	NBPUX/PNLF3	2,749.81	379.28	189.64	
155 Mbps (OC-3/c-12)	NBPVX/PNLE3	1,896.42	379.28	189.64	(T)
<u>5 Year Plan</u>					
51 Mbps (STS-1 hardwired)	NBPWX/PNLB5	1,232.67	None	None	(T)
51 Mbps (STS-1/DS3)	NBPYX/PNLD5	1,232.67	None	None	
51 Mbps (STS-1/DS1)	NBP4X/PNLC5	1,564.55	None	None	
155 Mbps (OC-3/c-48)	NBPUX/PNLF5	2,654.99	None	None	
155 Mbps (OC-3/c-12)	NBPVX/PNLE5	1,801.60	None	None	(T)

\* Frozen/Grandfathered SONET Ring and Access Service effective June 30, 2006, (N)  
pending CPUC Resolution. See General Regulations, Schedule Cal.P.U.C.  
No. 175-T, Section 2.1.4, (F). (N)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.5 Rates and Charges (Cont'd)

7.5.11 SONET Ring and Access Services\* (Cont'd) (N)

	<u>USOC</u>	<u>Monthly Rates</u>	<u>Nonrecurring Charges</u>	
(H) Optional Features and Functions				
(1) Central Office Multiplexing				
<u>DS3 - DS1</u>				
Month to Month	MQ3/MQ3XM	\$426.69	\$379.28	
1 Year Plan	MQ3/MQ3X1	402.99	331.87	(T)
3 Year Plan	MQ3/MQ3X3	379.28	189.64	
5 Year Plan	MQ3/MQ3X5	355.58	no charge	

\* Frozen/Grandfathered SONET Ring and Access Service effective June 30, 2006, pending CPUC Resolution. See General Regulations, Schedule Cal.P.U.C. No. 175-T, Section 2.1.4, (F). (N)  
(N)

Continued



ACCESS SERVICE

7. Special Access Service (Cont'd)

7.5 Rates and Charges (Cont'd)

7.5.11 SONET Ring and Access Services\* (Cont'd) (N)

(H) Optional Features and Functions (Cont'd)	USOC	Nonrecurring Charges		
		1st	Add'l	
CABS/CRIS				
(2) Rollover				
- Per point of termination (same location)				
DS1	NRBRH/NRBRI/SVR®	\$208.61	\$180.16	(T)
DS3	NRBR3/SVR	208.61	180.16	
OC-3c	NRBR3/SVR	208.61	180.16	(T)
- Per point of termination (location of termination changes)				
DS1	NRBR0/SVRE1/SVRPT#	379.28	284.46	
DS3	NRBR0/SVRE1/SVRPT#	379.28	284.46	
OC-3c	NRBR0/SVRE1/SVRPT#	379.28	284.46	(T)
(3) Shared Network Arrangement				
- Processing charge per service order	NRMCL		\$30.00	

\* Frozen/Grandfathered SONET Ring and Access Service effective June 30, 2006, pending CPUC Resolution. See General Regulations, Schedule Cal.P.U.C. No. 175-T, Section 2.1.4, (F). (N)

# NRBR0 is used in CABS, SVRE1 and SVRPT are used in CRIS. (N)

@ NRBRH and NRBR1 are used in CABS, SVR is used in CRIS. (T)

Continued

ACCESS SERVICE

7. Special Access Service (cont'd)

7.5 Rates and Charges (Cont'd)

7.5.12 OC-192 Dedicated SONET Ring Service

(A) Node - per Node

	USOC <u>CRIS/CABS</u>	<u>Monthly Rate</u>
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3 Year Term Plan

Customer Premises Node

- First, 3 Year Plan	GP5++/GP5AX	\$ 22,000.00
- Additional, 3 Year Plan	GP5++/GP5AA	\$ 19,650.00

Central Office Node	GC5++/GP5AX	\$ 19,650.00
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(D)

(D)

(D)

Continued

ACCESS SERVICE

7. Special Access Service (cont'd)

7.5 Rates and Charges (Cont'd)

7.5.12 OC-192 Dedicated SONET Ring Service (Cont'd)

(A) Node - per Node (Cont'd)

	USOC <u>CRIS/CABS</u>	<u>Monthly Rate</u>
<u>5 Year Term Plan</u>		
Customer Premises Node		
- First, 5 Year Plan	GP5++/GP5AX	\$ 17,650.00
- Additional, 5 Year Plan	GP5++/GP5AA	\$ 15,700.00
Central Office Node	GC5++/GP5AX	\$ 15,700.00

(D)

(D)

(D)

(D)

Continued

ACCESS SERVICE

7. Special Access Service (cont'd)

7.5 Rates and Charges (Cont'd)

7.5.12 OC-192 Dedicated SONET Ring Service (Cont'd)

(A) Node - per Node (Cont'd)

<u>Monthly Extension</u>	<u>USOC</u> <u>CRIS/CABS</u>	<u>Monthly Rate</u>
Customer Premises Node		
- First	GP5++/GP5++	\$ 33,000.00
- Additional	GP5++/GP5++	\$ 29,475.00
Central Office Node	GC5++/GP5++	\$ 29,475.00

(D)

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(D)

(D)

Continued

ACCESS SERVICE

7. Special Access Service Cont'd)

7.5 Rates and Charges (Cont'd)

7.5.12 OC-192 Dedicated SONET Ring Service (Cont'd)

(B) Ports

(1) Per Node Type

3 year Plan

	USOC CRIS/CABS	Monthly Rate
- DS1 at OC-192 Node	S9QWX/S9QWX	\$ 50.00
- DS3 at OC-192 Node	S9QG3/S9QG3	120.00
- OC-3,OC-3c at OC-192 Node	S9NE3/S9NEX	150.00
- OC-12, OC-12c at OC-192 Node	S9NG3/S9NGX	375.00
- OC-48, OC-48c at OC-192 Node	S9NJ3/S9NJX	950.00
- 100 Mbps Ethernet (STS-1) at OC-192 Node <sup>@</sup>	S9TNX/S9TNX	145.00
- 100 Mbps Ethernet (STS-3c) at OC-192 Node <sup>@</sup>	S9TOX/S9TOX	180.00
- 1 Gbps Ethernet (STS-1) at OC-192 Node	S9TPX/S9TPX	250.00
- 1 Gbps Ethernet (STS-3c) at OC-192 Node	S9TQ3/S9TQX	250.00
- 1 Gbps Ethernet (STS-12c) at OC-192 Node	S9TR3/S9TRX	600.00
- 1 Gbps Ethernet (STS-24c) at OC-192 Node	S9TS3/S9TSX	900.00
- EC-1 Port <sup>*</sup> at OC-192 Node	S9TZX/S9TZX	120.00

(D)

(D)

\* EC-1 Port offered as Customer Premises port termination, and as a CO termination where facilities and/operating conditions permit.

(D)

@ 100 Mbps Ethernet Port offering available where facilities and/operating conditions permit.

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.5 Rates and Charges (Cont'd)

7.5.12 OC-192 Dedicated SONET Ring Service (Cont'd)

(B) Ports (Cont'd)

(1) Per Node Type (Cont'd)

	USOC CRIS/CABS	Monthly Rate
<u>3 year Plan</u> (Cont'd)		
- <u>10/100BaseT VCAT Ethernet</u> *,#,@	S5P1X/S5P1X	\$250.00
VT1.5-1v (1.6 Mbps)		
VT1.5-2v (3.2 Mbps)		
VT1.5-3v (4.8 Mbps)		
VT1.5-4v (6.4 Mbps)		
VT1.5-5v (8.0 Mbps)		
VT1.5-6v (9.6 Mbps)		
VT1.5-7v (11.2 Mbps)		
VT1.5-8v (12.4 Mbps)		
VT1.5-10v (16.0 Mbps)		
VT1.5-13v (20.8 Mbps)		
STS-1-1v (48.384 Mbps)		
STS-1-2v (96.768 Mbps)		
- <u>1000BaseSX VCAT Ethernet</u> *,@	S5P2X/S5P2X	425.00
- <u>1000BaseLX VCAT Ethernet</u> *,@	S5P3X/S5P3X	425.00
STS-1-1v (48.384 Mbps)		
STS-1-2v (96.768 Mbps)		
STS-1-3v (145.152 Mbps)		
STS-1-4v (193.536 mbps)		
STS-1-5v (241.92 Mbps)		
STS-1-6v (290.304 Mbps)		
STS-1-9v (435.456 Mbps)		
STS-1-12v (580.608 Mbps)		
STS-1-21v (1016.064 Mbps)		
STS-3c-1v (149.76 Mbps)		
STS-3c-2v (299.52 Mbps)		
STS-3c-3v (449.28 mbps)		
STS-3c-4v (599.04 Mbps)		
STS-3c-7v (1048.32 Mbps)		

\* Actual Payload capacity for selected bandwidth. Only single-mode fiber is available in the Central Office. The EoS line rates defined herein are based on the theoretical SONET payload line rates as specified in Telcordia Publication GR-253-CORE, Issue 4. These values are not representative of the true Ethernet transport capacity of the EoS circuit. (N)

# EoS port interfaces offered as 10/100BaseT are only available at the customer premises location. (N)

@ Nonrecurring charges as set forth in 7.5.12, (H) (3) are applicable.

Continued

ACCESS SERVICE

7. Special Access Service Cont'd)

7.5 Rates and Charges (Cont'd)

7.5.12 OC-192 Dedicated SONET Ring Service (Cont'd)

(B) Ports (Cont'd)

(1) Per Node Type (Cont'd)

<u>5 year Plan</u>	<u>USOC CRIS/CABS</u>	<u>Monthly Rate</u>
- DS1 at OC-192 Node	S9QWX/S9QWX	\$ 45.00
- DS3 at OC-192 Node	S9QG5/S9QGX	110.00
- OC-3, OC-3c at OC-192 Node	S9NE5/SN9EX	135.00
- OC-12, OC-12c at OC-192 Node	S9NG5/SN9GX	360.00
- OC-48, OC-48c at OC-192 Node	S9NJ5/S9NJX	900.00
- 100 Mbps Ethernet (STS-1) at OC-192 Node <sup>@</sup>	S9TNX/S9TNX	130.00
- 100 Mbps Ethernet (STS-3c) at OC-192 Node <sup>@</sup>	S9TOX/S9TOX	160.00
- 1 Gbps Ethernet (STS-1) at OC-192 Node	S9TP5/S9TP5	200.00
- 1 Gbps Ethernet (STS-3c) at OC-192 Node	S9TQ5/S9TQX	200.00
- 1 Gbps Ethernet (STS-12c) at OC-192 Node	S9TR5/S9TRX	500.00
- 1 Gbps Ethernet (STS-24c) at OC-192 Node	S9TS5/S9TSX	850.00
- EC-1 Port <sup>*</sup> at OC-192 Node	S9TZX/S9TZX	110.00

(D)

(D)

\* EC-1 Port offered as Customer Premises port termination, and as a CO termination where facilities and/or operating conditions permit.

(D)

@ 100 Mbps Ethernet Port offering available where facilities and/or operating conditions permit.

(D)

Continued

ACCESS SERVICE

7. Special Access Service Cont'd)

7.5 Rates and Charges (Cont'd)

7.5.12 OC-192 Dedicated SONET Ring Service (Cont'd)

(B) Ports (Cont'd)

(1) Per Node Type (Cont'd)

	USOC CRIS/CABS	Monthly Rate
<u>5 year Plan</u> (Cont'd)		
- <u>10/100BaseT VCAT Ethernet</u> *,#,@	S5P1X/S5P1X	\$180.00
VT1.5-1v (1.6 Mbps)		
VT1.5-2v (3.2 Mbps)		
VT1.5-3v (4.8 Mbps)		
VT1.5-4v (6.4 Mbps)		
VT1.5-5v (8.0 Mbps)		
VT1.5-6v (9.6 Mbps)		
VT1.5-7v (11.2 Mbps)		
VT1.5-8v (12.4 Mbps)		
VT1.5-10v (16.0 Mbps)		
VT1.5-13v (20.80 Mbps)		
STS-1-1v (48.384 Mbps)		
STS-1-2v (96.768 Mbps)		
- <u>1000BaseSX VCAT Ethernet</u> *,@	S5P2X/S5P2X	350.00
- <u>1000BaseLX VCAT Ethernet</u> *,@	S5P3X/S5P3X	350.00
STS-1-1v (48.384 Mbps)		
STS-1-2v (96.768 Mbps)		
STS-1-3v (145.152 Mbps)		
STS-1-4v (193.536 mbps)		
STS-1-5v (241.92 Mbps)		
STS-1-6v (290.304 Mbps)		
STS-1-9v (435.456 Mbps)		
STS-1-12v (580.608 Mbps)		
STS-1-21v (1016.064 Mbps)		
STS-3c-1v (149.76 Mbps)		
STS-3c-2v (299.52 Mbps)		
STS-3c-3v (449.28 mbps)		
STS-3c-4v (599.04 Mbps)		
STS-3c-7v (1048.32 Mbps)		

\* Actual Payload capacity for selected bandwidth. Only single-mode fiber is available in the Central Office. The EoS line rates defined herein are based on the theoretical SONET payload line rates as specified in Telcordia Publication GR-253-CORE, Issue 4. These values are not representative of the true Ethernet transport capacity of the EoS circuit.

# EoS port interfaces offered as 10/100BaseT are only available at the customer premises location.

@ Nonrecurring charges as set forth in 7.5.12, (H) (3) are applicable.

Continued



ACCESS SERVICE

7. Special Access Service Cont'd)

7.5 Rates and Charges (Cont'd)

7.5.12 OC-192 Dedicated SONET Ring Service (Cont'd)

(B) Ports (Cont'd)

(1) Per Node Type (Cont'd)

<u>Monthly Extension</u>	<u>USOC CRIS/CABS</u>	<u>Monthly Rate</u>
- DS1 at OC-192 Node	S9QWX/S9QWX	\$ 65.00
- DS3 at OC-192 Node	S9QGP/S9QGX	150.00
- OC-3, OC-3c at OC-192 Node	S9NEM/S9NEX	225.00
- OC-12, OC-12c at OC-192 Node	S9NGM/S9NGX	550.00
- OC-48, OC-48c at OC-192 Node	S9NJM/S9NJX	1,425.00
- 100 Mbps (STS-1) at OC-192 Node <sup>@</sup>	S9TNX/S9TNX	225.00
- 100 Mbps (STS-3c) at OC-192 Node <sup>@</sup>	S9TOX/S9TOX	280.00
- 1 Gbps Ethernet (STS-1) at OC-192 Node	S9TPX/S9TPX	350.00
- 1 Gbps Ethernet (STS-3c) at OC-192 Node	S9TQX/S9TQX	350.00
- 1 Gbps Ethernet (STS-12c) at OC-192 Node	S9TRX/S9TRX	875.00
- 1 Gbps Ethernet (STS-24c) at OC-192 Node	S9TSX/S9TSX	1,500.00
- EC-1 Port <sup>*</sup> at OC-192 Node	S9TZX/S9TZX	150.00

(D)

(D)

\* EC-1 Port offered as Customer Premises port termination, and as a CO termination where facilities and/or operating conditions permit.

(D)

@ 100 Mbps Ethernet Port offering available where facilities and/or operating conditions permit.

Continued

ACCESS SERVICE

7. Special Access Service Cont'd)

7.5 Rates and Charges (Cont'd)

7.5.12 OC-192 Dedicated SONET Ring Service (Cont'd)

(B) Ports (Cont'd)

	USOC CRIS/CABS	Monthly Rate	(T) (T)
<u>Monthly Extension Rate</u> (Cont'd)			
- <u>10/100BaseT VCAT Ethernet</u> *,#,@	S5P1X/S5P1X	\$350.00	(N)
VT1.5-1v (1.6 Mbps)			
VT1.5-2v (3.2 Mbps)			
VT1.5-3v (4.8 Mbps)			
VT1.5-4v (6.4 Mbps)			
VT1.5-5v (8.0 Mbps)			
VT1.5-6v (9.6 Mbps)			
VT1.5-7v (11.2 Mbps)			
VT1.5-8v (12.4 Mbps)			
VT1.5-10v (16.0 Mbps)			
VT1.5-13v (20.8 Mbps)			
STS-1-1v (48.384 Mbps)			
STS-1-2v (96.768 Mbps)			
- <u>1000BaseSX VCAT Ethernet</u> *,@	S5P2X/S5P2X	500.00	
- <u>1000BaseLX VCAT Ethernet</u> *,@	S5P3X/S5P3X	500.00	
STS-1-1v (48.384 Mbps)			
STS-1-2v (96.768 Mbps)			
STS-1-3v (145.152 Mbps)			
STS-1-4v (193.536 Mbps)			
STS-1-5v (241.92 Mbps)			
STS-1-6v (290.304 Mbps)			
STS-1-9v (435.456 Mbps)			
STS-1-12v (580.608 Mbps)			
STS-1-21v (1016.064 Mbps)			
STS-3c-1v (149.76 Mbps)			
STS-3c-2v (299.52 Mbps)			
STS-3c-3v (449.28 Mbps)			
STS-3c-4v (599.04 Mbps)			
STS-3c-7v (1048.32 Mbps)			

\* Actual Payload capacity for selected bandwidth.

# EoS port interfaces offered as 10/100BaseT are only available at the customer premises location.

@ Nonrecurring charges as set forth in 7.5.12, (H) (3) are applicable.

(N)

Continued

ACCESS SERVICE

7. Special Access Service Cont'd)

7.5 Rates and Charges (Cont'd)

7.5.12 OC-192 Dedicated SONET Ring Service (Cont'd)

	USOC CRIS/CABS	Monthly Rate	(N)
(C) <u>Add/Drop Capability</u> *@			
Per Arrangement (per node) not to exceed any configurable combination of ports beyond 192 STS-1 equivalents			
3 Year Plan	MXR++/MXRGX	\$ 5,000.00	
5 Year Plan	MXR++/MXRGX	4,000.00	
Monthly Extension	MXR++/MXRGX	7,000.00	
(D) <u>Reserved</u>			

\* Add/Drop charge is a monthly charge that commences with initial installation of node equipped with drop capacity. This charge is applied to all nodes, excluding regenerators.

@ Effective December 16, 2020, regarding Add/Drop capabilities, if the number (N) of ports falls below the minimum requirement per node, the customer must notify its Company account team/sales representative, in writing, to eliminate the charge. Upon receipt of the customer's notice and upon eligibility confirmation, the Company will remove the charge within two billing cycles. (N)

Continued

ACCESS SERVICE

7. Special Access Service Cont'd)

7.5 Rates and Charges (Cont'd)

7.5.12 OC-192 Dedicated SONET Ring Service (Cont'd)

	USOC CRIS/CABS	Monthly Rate	
(E) <u>Optical to Electrical Add/Drop Capability</u> *@			(N)
Per arrangement (per node) not to exceed any configurable combination of ports beyond 192 STS-1 equivalents			
3 Year Term	MXJG3/MXJG+	\$2,500.00	
5 Year Term	MXJG5/MXJG+	2,000.00	
Monthly Extension - per OC-3 to DS1	MXJGP/MXJG+	3,500.00	
3 Year Term	MXJDX/MXJDX	\$ 875.00	
5 Year Term	MXJDX/MXJDX	700.00	

\* The Optical to Electrical Add/Drop Capability is in addition to the Add/Drop Capability charge set forth in (C) preceding.

@ Effective December 16, 2020, regarding Add/Drop capabilities, if the number of ports falls below the minimum requirement per node, the customer must notify its Company account team/sales representative, in writing, to eliminate the charge. Upon receipt of the customer's notice and upon eligibility confirmation, the Company will remove the charge within two billing cycles. (N)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.5 Rates and Charges (Cont'd)

7.5.12 OC-192 Dedicated SONET Ring Service (Cont'd)

	USOC <u>CRIS/CABS</u>	<u>Monthly Rate</u>	
(F) <u>Mileage*</u>			(T)
- 3 Year Plan Per Mile between nodes	1YA++	\$ 260.00	
- 5 Year Plan Per mile between nodes*	1YA++	220.00	
- Monthly Extension Per mile between nodes*	1YA++	330.00	
(G) <u>Ring Regenerator</u>			(T)
Each (as required)			
- 3 Year Plan	RGY++	9,250.00	
- 5 Year Plan	RGY++	7,400.00	
- Monthly Extension	RGY++	13,875.00	

\* A two-node ring configuration has a two-mile minimum, one mile from the CO node to the customer premise node, and one mile from the customer premise node to the CO node. (T)  
|  
(T)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.5 Rates and Charges (Cont'd)

7.5.12 OC-192 Dedicated SONET Ring Service (Cont'd)

(H) Nonrecurring Charges

(T)

(1) Installation and Administrative Charges

	<u>CRIS/CABS</u>	<u>Nonrecurring Charge</u>	
Administrative Charge - per Order	ORCMX/ORCMX	\$60.00	
Design and Central Office Connection Charge, - per Initial Ring*	NRMCK/NRMCK	2,250.00	
(2) Shared Network Arrangement			
Processing Charges - per Service Order	NRMCL/NRMCL	30.00	
(3) Subsequent Installation, Ports, - per Port, applicable to existing OC-192 Ring service only,			
- DS1	NRBSY/NRBSY	350.00	
- DS3, EC-1	NRBSX/NRBSX	385.00	(T)
- OC3, OC-3c	NRBSW/NRBSW	400.00	(T)
- OC-12, OC-12c	NRBSZ/NRBSZ	400.00	
- OC-48, OC-48c	NRBN9/NRBN9	425.00	
- 1 Gbps Ethernet (STS-1) Port <sup>#</sup>	NRBY5/NRM65	215.00	
- 1 Gbps Ethernet (STS-3c) Port <sup>#</sup>	NRBY5/NRM66	215.00	
- 1 Gbps Ethernet (STS-12c) <sup>#</sup>	NRBY5/NRM67	215.00	
- 1 Gbps Ethernet (STS-24) <sup>#</sup>	NRBY5/NRM68	215.00	z
- 100 Mbps Ethernet (STS-1)	NRBY4/NRM63	215.00	
- 100 Mbps Ethernet (STS-3c)	NRBY4/NRM64	215.00	
- Ethernet Port			(N)
10/100BaseT VCAT	NRBY4/NRM63	215.00	
1000BaseSX VCAT	NRBY5/NRM65	215.00	
1000BaseLX VCAT	NRBY5/NRM65	215.00	(N)

\* Per Ring charge for OC192 Dedicated SONET Ring Service is applied per original Ring installed.

# Offered as Customer Premises Port only.

z Correction - Text inadvertently deleted in Advice Letter No. 30179. (N)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.5 Rates and Charges (Cont'd)

7.5.12 OC-192 Dedicated SONET Ring Service (Cont'd)

(H) Nonrecurring Charges (Cont'd)

	<u>USOC CRIS/CABS</u>	<u>Nonrecurring Charge</u>	
(4) <u>Subsequent Installation</u> - <u>per Node</u>			
- Customer Premises Node	NRBS7/NRBS7	\$ 400.00	(D)
			(D)
- Central Office Node	NRBSV/NRBSV	325.00	
(5) <u>Subsequent installation for</u> <u>Add/Drop Capability, per arrangement</u>			
	NRBS8/NRBS8	490.00	(D)
			(D)
(6) <u>Ring Regenerator, subsequent installation of</u> <u>Regenerator, each (as required)</u>			(T)
	NRBS5/NRBS5	270.00	

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.5 Rates and Charges (Cont'd)

7.5.13 GigaMAN® Service

Effective September 30, 2017, GigaMAN Service will no longer be available for purchase by new or existing customers. The Company will no longer accept orders for adds, moves, changes or new term plans for GigaMAN Service, and existing term plans may not be renewed, converted or extended. Following the expiration of a customer's existing GigaMAN term agreement, service will be provided on a month-to-month basis at the applicable monthly extension rates until the service is discontinued.

(N)

(N)

	<u>USOC</u>	<u>Monthly Rate</u>	<u>NonRecurring Charge</u>
(A) <u>Channel Termination</u>			
- 1 Year Plan	LNVX1	\$3,300.00	\$1,500.00
- 2 Year Plan	LNVX2	3,100.00	1,500.00
- 3 Year Plan	LNVX3	2,850.00	1,500.00*
- 5 Year Plan	LNVX5	2,500.00	1,500.00*
- Monthly Extension	LNVXM	3,800.00	None

(B) Channel Mileage

Mileage Bands	<u>USOC</u>	<u>Monthly Rates</u>	
		<u>Fixed</u>	<u>Per Mile</u>
- 1 Year Plan			
O	1L5X1	None	None
Over 0	1L5X1	\$250.00	\$125.00
- 2 Year Plan			
O	1L5X2	None	None
Over 0	1L5X2	\$225.00	\$115.00
- 3 Year Plan			
O	1L5X3	None	None
Over 0	1L5X3	\$200.00	\$100.00
- 5 Year Plan			
O	1L5X5	None	None
Over 0	1L5X5	\$100.00	\$75.00
- Monthly Extension			
O	1L5XX	None	None
Over 0	1L5XX	\$250.00	\$125.00

\* The Non Recurring is not applicable when the service is initially installed.  
The NRC may apply as set forth in 7.4.16 (D) preceding.

Continued



ACCESS SERVICE

7. Special Access Service (Cont'd)

7.5 Rates and Charges (Cont'd)

7.5.13 GigaMAN<sup>®</sup> Service (Cont'd)

	<u>USOC</u>	<u>Monthly Rate</u>	<u>NonRecurring Charge</u>	
(C) <u>Optional Features</u>				
(1) Channel Termination Diversity (Local Channel Diversity)				
- 1 Year Plan	CPAL1	\$750.00	None	
- 2 Year Plan	CPAL2	750.00	None	
- 3 Year Plan	CPAL3	750.00	None	
- 5 Year Plan	CPAL5	750.00	None	
- Monthly Extension	CPALP	750.00	None	
(2) Alternate Wire Center Diversity				
- 1 Year Plan	CPAA1	1,200.00	None	
- 2 Year Plan	CPAA2	1,200.00	None	
- 3 Year Plan	CPAA3	1,200.00	None	
- 5 Year Plan	CPAA5	1,200.00	None	
- Monthly Extension	CPAAP	1,200.00	None	
(3) Inter-Wire Center Diversity, per circuit				
- 1 Year Plan	CPAT1	500.00	None	(N)
- 2 Year Plan	CPAT2	500.00	None	
- 3 Year Plan	CPAT3	500.00	None	
- 5 Year Plan	CPAT5	500.00	None	
- Monthly Extension	CPATP	500.00	None	

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

(N)

7.5 Rates and Charges (Cont'd)

7.5.13 GigaMAN<sup>®</sup> Service (Cont'd)

	<u>USOC</u>	<u>Monthly Rate</u>	<u>NonRecurring Charge</u>
(C) <u>Optional Features</u>			
(4) Repeater*			
- per GigaMAN service arranged			
- 1 Year Plan	VU4X1	\$ 2,400.00	None
- 2 Year Plan	VU4X2	1,700.00	None
- 3 Year Plan	VU4X3	1,150.00	None
- 5 Year Plan	VU4X5	850.00	None
- Monthly Extension	VU4XP	2,500.00	None

\* Applies to additional Repeaters required to provision the service.  
Does not apply to the first Repeater designed with the service.

(N)

Continued

ACCESS SERVICE			
7. <u>Special Access Service</u> (Cont'd)			
7.5 <u>Rates and Charges</u> (Cont'd)			
7.5.13 <u>GigaMAN<sup>®</sup> Service</u> (Cont'd)			
	<u>USOC</u>	<u>Monthly Rate</u>	<u>NonRecurring Charge</u>
(C) <u>Optional Features</u> (Cont'd)			
(5) Equipment Only Protection			
- per GigaMAN <sup>®</sup> service arranged			
- 1 Year Plan	CPAE1	\$1,375.00	\$625.00
- 2 Year Plan	CPAE2	1,225.00	625.00
- 3 Year Plan	CPAE3	1,050.00	625.00
- 5 Year Plan	CPAE5	900.00	625.00
- Monthly Extension Rate	CPAEP	1,500.00	625.00
(6) Equipment Plus Fiber Path Protection			
(a) Equipment Plus Alternate Wire Center Path Protection - Per Terminating End			
- per GigaMAN <sup>®</sup> service arranged			
- 1 Year Plan	CPAF1	2,050.00	1,400.00
- 2 Year Plan	CPAF2	1,840.00	1,400.00
- 3 Year Plan	CPAF3	1,600.00	1,400.00
- 5 Year Plan	CPAF5	1,400.00	1,400.00
- Monthly Extension Rate	CPAFP	2,460.00	1,400.00
(b) Equipment Plus Channel Termination Path Protection - Per Terminating End			
			(N)
- per GigaMAN <sup>®</sup> service arranged			
-1 Year Plan	CPAG1	1,825.00	1,225.00
-2 Year Plan	CPAG2	1,650.00	1,225.00
-3 Year Plan	CPAG3	1,425.00	1,225.00
-5 Year Plan	CPAG5	1,225.00	1,225.00
- Monthly Extension Rate	CPAGP	2,190.00	1,225.00
Continued			

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.5 Rates and Charges (Cont'd)

7.5.13 GigaMAN<sup>®</sup> Service (Cont'd)

	<u>USOC</u>	<u>Monthly Rate</u>	<u>NonRecurring Charge</u>
(C) <u>Optional Features</u> (Cont'd)			
(7) Inter-Wire Center			
Path Protection - Per Circuit			(T) (D)
- per GigaMAN <sup>®</sup> service arranged			
- 1 Year Plan	CPAH1	\$375.00	\$625.00
- 2 Year Plan	CPAH2	200.00	625.00
- 3 Year Plan	CPAH3	150.00	625.00
- 5 Year Plan	CPAH5	100.00	625.00
- Monthly Extension Rate	CPAHP	475.00	625.00
(8) Power Protection*			
- per customer premises			
- 1 Year Plan	VBBG1	625.00	475.00
- 2 Year Plan	VBBG2	525.00	475.00
- 3 Year Plan	VBBG3	480.00	475.00
- 5 Year Plan	VBBG5	435.00	475.00
- Monthly Extension Rate	VBBGP	700.00	475.00

\* Power protection rate elements are applicable as set forth in 7.4.16(E) preceding.

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.5 Rates and Charges (Cont'd)

7.5.14 Optical Carrier Network (OCN) Point-to-Point Service

(A) OC-3/OC-3c

(1) Channel Termination/Local Distribution Channel  
- per Point of Termination

	<u>USOC</u> <u>CABS/CRIS</u>	<u>Monthly Rate</u>	
3 Year Plan	TMECS/TMECS	\$1,700.00	
5 Year Plan*	TMECS/TMECS	1,300.00	(N)
Monthly Extension	TMECS/TEMCS	2,275.00	

(2) Mileage/Interoffice  
Transport

(a) Fixed

	<u>CABS/CRIS</u>		
3 Year Plan			
0	NA	NA	
Over 0	1L5XX/1L5XS	\$975.00	
5 Year Plan*			(N)
0	NA	NA	
Over 0	1L5XX/1L5XS	\$886.00	
Monthly Extension			
0	NA	NA	
Over 0	1L5XX/1L5XS	\$1,550.00	

(b) Per Mile (Variable)

	<u>CABS/CRIS</u>		
3 Year Plan			
0	NA	NA	
Over 0	1L5XX/1L5XS	\$260.00	
5 Year Plan*			(N)
0	NA	NA	
Over 0	1L5XX/1L5XS	\$220.00	
Monthly Extension			
0	NA	NA	
Over 0	1L5XX/1L5XS	\$350.00	

\* As of November 1, 2013, Term Pricing Plan terms greater than 36 months are (N)  
no longer available for new or renewing subscribers. (N)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.5 Rates and Charges (Cont'd)

7.5.14 Optical Carrier Network (OCN) Point-to-Point Service (Cont'd)

(A) OC-3/OC-3c (Cont'd)

(3) Optional Features and Functions

	<u>USOC</u> <u>CABS/CRIS</u>	<u>Monthly</u> <u>Rate</u>	<u>Nonrecurring</u> <u>Charges</u>	
(a) OC-3 Add/Drop Multiplexing*				
- per arrangement				
3 Year Plan	MPECX/MPECX	\$1,200.00	None	
5 Year Plan#	MPECX/MPECX	950.00	None	(N)
Monthly Extension	MPECX/MPECX	1,650.00	None	
(b) Add/Drop Function				
- Per DS3	MXJBX/MXJBX	150.00	None	
- Per DS1	MXJAX/MXJAX	55.00	None	
- Per 1000BaseLX Ethernet drop	MX4LX/MX4LX	500.00	None	
(c) 1+1 Protection				
- per OC-3/OC-3c Channel Termination/ Local Distribution Channel	P8T/P8T	350.00	None	
(d) 1+1 Protection with Cable Survivability				
- Per OC-3/OC-3c Channel Termination/ Local Distribution Channel	P3S/P3S	350.00	\$ 500.00	

\* Multiplexing between two customer premises only available on speeds OC-3, OC-12 and OC-48; concatenated services cannot be multiplexed.

# As of November 1, 2013, Term Pricing Plan terms greater than 36 months are no longer available for new or renewing subscribers.

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.5 Rates and Charges (Cont'd)

7.5.14 Optical Carrier Network (OCN) Point-to-Point Service (Cont'd)

(A) OC-3/OC-3c (Cont'd)

(3) Optional Features and Functions (Cont'd)

(e) 1+1 Protection with Route Survivability

	<u>USOC</u> <u>CABS/CRIS</u>		Monthly <u>Rate</u>	Nonrecurring <u>Charges</u>	(T) (T)
Termination/Local Distribution Channel P8T/P8T		(N)	Apply P8T above plus Quarter mile rate following (P8T + S2DXY)		(T)
- Per Quarter Route Mile	S2DXY/S2DXY	(N)	\$50.00	None	(T)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.5 Rates and Charges (Cont'd)

7.5.14 Optical Carrier Network (OCN) Point-to-Point Service (Cont'd)

(A) OC-3/OC-3c (Cont'd)

(3) Optional Features and Functions (Cont'd)

	<u>USOC</u> <u>CABS/CRIS</u>	<u>Monthly</u> <u>Rate</u>	<u>Nonrecurring</u> <u>Charges</u>	
(f) Shared Network Arrangement - Processing Charge per service order				
	NRBOP/NRBOP	None	\$30.00	
(g) OCN Point-to-Point with Diversity OC-3*				
3 Year Plan	CPAPA/CPAPA	\$200.00	None	
5 Year Plan#	CPAPA/CPAPA	200.00	None	(N)
Monthly Extension	CPAPA/CPAPA	200.00	None	
(h) Ethernet Optical Collocation Cross-Connect OC-3				
Monthly	CCCA2/CCCA2	\$750.00	\$400.00	

\* When premises locations are the same for the Diverse service and the first service, and Protection with Route Survivability is not ordered, the rate element for Per Quarter Route Mile (S2DXY) applies and does not require the related Protection rate element P8T.

# As of November 1, 2013, Term Pricing Plan terms greater than 36 months are no longer available for new or renewing subscribers.

Continued



ACCESS SERVICE

7. Special Access Service (Cont'd)

7.5 Rates and Charges (Cont'd)

7.5.14 Optical Carrier Network (OCN) Point-to-Point Service (Cont'd)

(B) OC-12/OC-12c

(1) Channel Termination/Local  
Distribution Channel

- per Point of Termination

	USOC CABS/CRIS	Monthly Rate	
3 Year Plan	TMECS/TMECS	\$4,000.00	
5 Year Plan*	TMECS/TMECS	3,000.00	(N)
Monthly Extension	TMECS/TMECS	5,250.00	

(2) Mileage/Interoffice  
Transport

(a) Fixed

3 Year Plan			
0	NA	NA	
Over 0	1L5XX/1L5XS	\$2,925.00	
5 Year Plan*			(N)
0	NA	NA	
Over 0	1L5XX/1L5XS	\$2,250.00	
Monthly Extension			
0	NA	NA	
Over 0	1L5XX/1L5XS	\$4,100.00	

(b) Per Mile

3 Year Plan			
0	NA	NA	
Over 0	1L5XX/1L5XS	\$260.00	
5 Year Plan*			(N)
0	NA	NA	
Over 0	1L5XX/1L5XS	\$220.00	
Monthly Extension			
0	NA	NA	
Over 0	1L5XX/1L5XS	\$350.00	

\* As of November 1, 2013, Term Pricing Plan terms greater than 36 months are (N)  
no longer available for new or renewing subscribers. (N)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.5 Rates and Charges (Cont'd)

7.5.14 Optical Carrier Network (OCN) Point-to-Point Service (Cont'd)

(B) OC-12/OC-12c (Cont'd)

(3) Optional Features and Functions

(a) OC-12/OC-12c Add/Drop Multiplexing\*  
- per arrangement

	<u>USOC CABS/CRIS</u>	<u>Monthly Rate</u>	<u>Nonrecurring Charges</u>	
3 Year Plan	MPEDX/MPEDX	\$2,800.00	None	
5 Year Plan#	MPEDX/MPEDX	2,100.00	None	(N)
Monthly Extension	MPEDX/MPEDX	3,575.00	None	
(b) Add/Drop Function				
- per OC-3	MXJCX/MXJCX	250.00	None	
- per DS-3	MXJBX/MXJBX	150.00	None	
- Per 1000BaseLX Ethernet drop	MX4LX/MX4LX	500.00	None	
(c) 1+1 Protection				
- per OC-12/OC-12c Channel Termination/ Local Distribution Channel	P8T/P8T	400.00	None	

\* Multiplexing between two customer premises only available on speeds OC-3, OC-12 and OC-48; concatenated services cannot be multiplexed.

# As of November 1, 2013, Term Pricing Plan terms greater than 36 months are no longer available for new or renewing subscribers. (N)  
(N)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.5 Rates and Charges (Cont'd)

7.5.14 Optical Carrier Network (OCN) Point-to-Point Service (Cont'd)

(B) OC-12/OC-12c (Cont'd)

(3) Optional Features and Functions (Cont'd)

(d) 1+1 Protection with Cable Survivability

	<u>USOC</u> <u>CABS/CRIS</u>	(N)	<u>Monthly</u> <u>Rate</u>	<u>Nonrecurring</u> <u>Charges</u>	(T)
- per OC-12/OC-12c Channel Termination/Local Distribution Channel	P3S/P3S	(N)	\$400.00	\$ 600.00	

(e) 1+1 Protection with Route  
Survivability

- per OC-12/OC-12c Channel Termination/Local Distribution Channel	P8T/P8T	(N)	Apply P8T above plus Quarter mile rate following (P8T + S2DXY)		(T)
- Per Quarter Route Mile	S2DXY/S2DXY	(N)	\$100.00	None	(T)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.5 Rates and Charges (Cont'd)

7.5.14 Optical Carrier Network (OCN) Point-to-Point Service (Cont'd)

(B) OC-12/OC-12c (Cont'd)

(3) Optional Features and Functions (Cont'd)

	<u>USOC</u> <u>CABS/CRIS</u>	<u>Monthly</u> <u>Rate</u>	<u>Nonrecurring</u> <u>Charges</u>	
(f) Shared Network Arrangement - processing Charge per service order				
	NRBOP/NRBOP	None	\$ 30.00	
(g) OCN Point-to-Point with Diversity OC-12*				
3 Year Plan	CPAPB/CPAPB	\$300.00	None	
5 Year Plan#	CPAPB/CPAPB	300.00	None	(N)
Monthly Extension	CPAPB/CPAPB	300.00	None	
(h) Ethernet Optical Collocation Cross-Connect OC-12				
Monthly	CCCA2/CCCA2	\$750.00	\$400.00	

\* When premises locations are the same for the Diverse service and the first service, and Protection with Route Survivability is not ordered, the rate element for Per Quarter Route Mile (S2DXY) applies and does not require the related Protection rate element P8T.

# As of November 1, 2013, Term Pricing Plan terms greater than 36 months are no longer available for new or renewing subscribers.

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.5 Rates and Charges (Cont'd)

7.5.14 Optical Carrier Network (OCN) Point-to-Point Service (Cont'd)

(C) OC-48/48c

(1) Channel Termination/Local Distribution Channel  
- per Point of Termination

	USOC CABS/CRIS	Monthly Rate	
3 Year Plan	TMECS/TMECS	\$ 9,800.00	
5 Year Plan*	TMECS/TMECS	7,000.00	(N)
Monthly Extension	TMECS/TMECS	12,500.00	

(2) Mileage/Interoffice  
Transport

(a) Fixed

3 Year Plan			
0	NA	NA	
Over 0	1L5XX/1L5XS	\$5,850.00	
5 Year Plan*			(N)
0	NA	NA	
Over 0	1L5XX/1L5XS	\$5,350.00	
Monthly Extension			
0	NA	NA	
Over 0	1L5XX/1L5XS	\$7,875.00	

(b) Per Mile (Variable)

3 Year Plan			
0	NA	NA	
Over 0	1L5XX/1L5XS	\$260.00	
5 Year Plan*			(N)
0	NA	NA	
Over 0	1L5XX/1L5XS	\$220.00	
Monthly Extension			
0	NA	NA	
Over 0	1L5XX/1L5XS	\$350.00	

\* As of November 1, 2013, Term Pricing Plan terms greater than 36 months are (N)  
no longer available for new or renewing subscribers. (N)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.5 Rates and Charges (Cont'd)

7.5.14 Optical Carrier Network (OCN) Point-to-Point Service (Cont'd)

(C) OC-48/OC-48c (Cont'd)

(3) Optional Features and Functions (Cont'd)

	USOC <u>CABS/CRIS</u>	Monthly <u>Rate</u>	Nonrecurring <u>Charges</u>	
(a) Add/Drop Multiplexing - Per arrangement				
3 Year Plan	MXRFX/MXRFX	\$ 4,625.00	None	
5 Year Plan*	MXRXF/MXRFX	3,700.00	None	(N)
Monthly Extension	MXRXF/MXRFX	6,375.00	None	
(b) Add/Drop Function				
- Per OC-12	MXJEX/MXJEX	625.00	None	
- Per OC-3	MXJCX/MXJCX	250.00	None	
- Per DS-3	MXJBX/MXJBX	150.00	None	
- Per 1000BaseLX Ethernet drop	MX4LX/MX4LX	500.00	None	

\* As of November 1, 2013, Term Pricing Plan terms greater than 36 months are no longer available for new or renewing subscribers. (N)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.5 Rates and Charges (Cont'd)

7.5.14 Optical Carrier Network (OCN) Point-to-Point Service (Cont'd)

(C) OC-48/OC-48c (Cont'd)

(3) Optional Features and Functions (Cont'd)

	<u>USOC</u>		<u>Monthly Nonrecurring</u>	<u>(T)</u>
	<u>CABS/CRIS</u>	(N)	<u>Rate</u>	<u>Charges</u>
				(T)
(c) 1+1 Protection				
- Per OC-48/OC-48c Channel				
Termination/Local				
Distribution Channel	P8T/P8T	(N)	\$1,200.00	None (T)
(d) 1+1 Protection with Cable				
Survivability,				
- Per OC-48/OC-48c Channel				
Termination/Local				
Distribution Channel	P3S/P3S	(N)	1,200.00	\$ 700.00 (T)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.5 Rates and Charges (Cont'd)

7.5.14 Optical Carrier Network (OCN) Point-to-Point Service (Cont'd)

(C) OC-48/OC-48c (Cont'd)

(3) Optional Features and Functions (Cont'd)

	USOC CABS/CRIS	Monthly Rate	Nonrecurring Charges	
(e) 1+1 Protection with Route Survivability				
- per OC-48/OC-48c Channel Term/Local Distribution Channel				
- per OC-12/OC-12c Channel Termination/Local Distribution Channel	P8T/P8T		Apply P8T above plus Quarter mile rate following (P8T + S2DXY)	
- Per Quarter Route Mile	S2DXY/S2DXY	\$125.00	None	
(f) Point-to-Point OC-48 Regenerator				
- each	RGY48/RGY48	\$5,500.00	None	
(g) Shared Network Arrangement				
- Processing Charge per service order	NRBOP/NRBOP	None	\$ 30.00	
(h) OCN Point-to-Point with Diversity OC-48*				
3 Year Plan	CPAPC/CPAPC	\$700.00	None	
5 Year Plan#	CPAPC/CPAPC	\$700.00	None	(N)
Monthly Extension	CPAPC/CPAPC	\$700.00	None	
(i) Ethernet Optical Collocation Cross-Connect OC-48				
Monthly	CCCA2/CCCA2	\$750.00	\$400.00	

\* When premises locations are the same for the Diverse service and the first service, and Protection with Route Survivability is not ordered, the rate element for Per Quarter Route Mile (S2DXY) applies and does not require the related Protection rate element P8T.

# As of November 1, 2013, Term Pricing Plan terms greater than 36 months are no longer available for new or renewing subscribers. (N)

Continued



ACCESS SERVICE

7. Special Access Service (Cont'd)

7.5 Rates and Charges (Cont'd)

7.5.14 Optical Carrier Network (OCN) Point-to-Point Service (Cont'd)

(D) OC-192/OC-192c

(1) Channel Termination/Local Distribution Channel  
- per Point of Termination

	USOC CABS/CRIS	Monthly Rate	
3 Year Plan	TMECS/TMECS	\$29,400.00	
5 Year Plan*	TMECS/TMECS	21,000.00	(N)
Monthly Extension	TMECS/TMECS	36,000.00	

(2) Mileage/Interoffice  
Transport

(a) Fixed

3 Year Plan			
0	NA	NA	
Over 0	1L5XX/1L5XS	\$20,000.00	
5 Year Plan*			(N)
0	NA	NA	
Over 0	1L5XX/1L5XS	\$18,500.00	
Monthly Extension			
0	NA	NA	
Over 0	1L5XX/1L5XS	\$23,625.00	

(b) Per Mile (Variable)

3 Year Plan			
0	NA	NA	
Over 0	1L5XX/1L5XS	\$360.00	
5 Year Plan*			(N)
0	NA	NA	
Over 0	1L5XX/1L5XS	\$300.00	
Monthly Extension			
0	NA	NA	
Over 0	1L5XX/1L5XS	\$450.00	

\* As of November 1, 2013, Term Pricing Plan terms greater than 36 months are (N)  
no longer available for new or renewing subscribers. (N)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.5 Rates and Charges (Cont'd)

7.5.14 Optical Carrier Network (OCN) Point-to-Point Service (Cont'd)

(D) OC-192/OC-192c (Cont'd)

(3) Optional Features and Functions (Cont'd)

	<u>USOC CABS/CRIS</u>	<u>Monthly Rate</u>	<u>Nonrecurring Charge</u>	
(a) OC-192 Add/Drop Multiplexing* - Per arrangement				(N)
3 Year Plan	MXRGX/MXRGX	\$12,000.00	None	
5 Year Plan#	MXRGX/MXRGX	9,600.00	None	
Monthly Extension	MXRGX/MXRGX	16,800.00	None	
(b) Add/Drop Function				
- Per OC-48	MXJFX/MXJFX	1,800.00	None	
- Per OC-12	MXJEX/MXJEX	625.00	None	
- Per OC-3	MXJCX/MXJCX	250.00	None	
- Per 1000BaseLX Ethernet drop	MX4LX/MX4LX	500.00	None	

\* Concatenated services cannot be multiplexed.

# As of November 1, 2013, Term Pricing Plan terms greater than 36 months are no longer available for new or renewing subscribers.

@ Effective December 16, 2020, regarding Add/Drop capabilities, if the number of ports falls below the minimum requirement per node, the customer must notify its Company account team/sales representative, in writing, to eliminate the charge. Upon receipt of the customer's notice and upon eligibility confirmation, the Company will remove the charge within two billing cycles.

(N)  
|  
(N)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.5 Rates and Charges (Cont'd)

7.5.14 Optical Carrier Network (OCN) Point-to-Point Service (Cont'd)

(D) OC-192/OC-192c (Cont'd)

(3) Optional Features and Functions (Cont'd) (T)

(c) 1+1 Protection

	<u>USOC</u> <u>CABS/CRIS</u>	<u>Monthly</u> <u>Rate</u>	<u>Nonrecurring</u> <u>Charges</u>
- Per OC-192/OC-192c Channel Termination/Local Distribution Channel	P8T/P8T	\$ 2,700.00	None
(d) 1+1 Protection with Cable Survivability,			
- Per OC-192/OC-192c Channel Termination/Local Distribution Channel	P3S/P3S	2,700.00	\$800.00
(e) 1+1 Protection with Route Survivability			
- per OC-192/OC-192c Channel Term/Local Distribution Channel	P8T/P8T	Apply P8T above plus Quarter mile rate following (P8T + S2DXY)	
- Per Quarter Route Mile	S2DXY/S2DXY	\$ 150.00	None

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.5 Rates and Charges (Cont'd)

7.5.14 Optical Carrier Network (OCN) Point-to-Point Service (Cont'd)

(D) OC-192/OC-192c (Cont'd)

(3) Optional Features and Functions (Cont'd)

	<u>USOC</u> <u>CABS/CRIS</u>	<u>Monthly</u> <u>Rate</u>	<u>Nonrecurring</u> <u>Charges</u>	
(f) Point-to-Point OC-192 Regenerator - each	RGY/RGY	\$11,000.00	None	
(g) OCN Point-to-Point with Diversity OC-192*				
3 Year Plan	CPAPD/CPAPD	1,200.00	None	
5 Year Plan#	CPAPD/CPAPD	1,200.00	None	(N)
Monthly Extension	CPAPD/CPAPD	1,200.00	None	
(h) Ethernet Optical Collocation Cross-Connect OC-192				
Monthly	CCCA2/CCCA2	\$750.00	\$400.00	

\* When premises locations are the same for the Diverse service and the first service, and Protection with Route Survivability is not ordered, the rate element for Per Quarter Route Mile (S2DXY) applies and does not require the related Protection rate element P8T.

# As of November 1, 2013, Term Pricing Plan terms greater than 36 months are no longer available for new or renewing subscribers.

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.5 Rates and Charges (Cont'd)

7.5.14 Optical Carrier Network (OCN) Point-to-Point Service (Cont'd)

(E) Nonrecurring Charges

	USOC CABS/CRIS	(N)	Nonrecurring Charge	(T) (T)
Administrative Charge				
- per order				
OC-3/OC-3c	ORCMX/ORCMX	(N)	\$ 60.00	(T)
OC-12/OC-12c	ORCMX/ORCMX		60.00	
OC-48/OC-48c	ORCMX/ORCMX		60.00	
OC-192/OC-192c	ORCMX/ORCMX	(N)	60.00	(T)
Design and Central Office Connection Charge				(T)
- per circuit				
OC-3/OC-3c	NRMCK/NRMCK	(N)	375.00	(T)
OC-12/OC-12c	NRMCK/NRMCK		375.00	
OC-48/OC-48c	NRMCK/NRMCK		500.00	
OC-192/OC-192c	NRMCK/NRMCK	(N)	2,250.00	(T)
Customer Connection Charge				(T)
- per termination				
OC-3/OC-3c	NRBBL/NRBBL	(N)	450.00	(T)
OC-12/OC-12c	NRBBL/NRBBL		450.00	
OC-48/OC-48c	NRBBL/NRBBL		600.00	
OC-192/OC-192c	NRBBL/NRBBL	(N)	600.00	(T)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.5 Rates and Charges (Cont'd)

7.5.15 OC-3, OC-12, OC-48 Dedicated SONET Ring Service

(A) Node

- Per Node

	USOC CABS/CRIS	Monthly Rate
(1) <u>OC-3</u>		
- <u>Customer Premises Node, first</u>		
36 month	FP5CX/FP5CX	\$ 1,770.00
60 month	FP5CX/FP5CX	1,415.00
Monthly Extension	FP5CX/FP5CX	2,120.00
- <u>Customer Premises Node, additional</u>		
36 month	FP5CA/FP5CA	1,000.00
60 month	FP5CA/FP5CA	800.00
Monthly Extension	FP5CA/FP5CA	1,200.00
- <u>Central Office Node</u>		
36 month	FC5CX/FC5CX	1,000.00
60 month	FC5CX/FC5CX	800.00
Monthly Extension	FC5CX/FC5CX	1,200.00

(D)

(D)

(D)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.5 Rates and Charges (Cont'd)

7.5.15 OC-3, OC-12, OC-48 Dedicated SONET Ring Service (Cont'd)

(A) Node (Cont'd)

- Per Node

	USOC CABS/CRIS	Monthly Rate
(2) <u>OC-12</u>		
- <u>Customer Premises Node, first</u>		
36 month	FP5DX/FP5DX	\$ 3,850.00
60 month	FP5DX/FP5DX	3,080.00
Monthly Extension	FP5DX/FP5DX	4,620.00
- <u>Customer Premises Node, additional</u>		
36 month	FP5DA/FP5DA	2,620.00
60 month	FP5DA/FP5DA	2,095.00
Monthly Extension	FP5DA/FP5DA	3,140.00
- <u>Central Office Node</u>		
36 month	FC5DX/FC5DX	2,620.00
60 month	FC5DX/FC5DX	2,095.00
Monthly Extension	FC5DX/FC5DX	3,140.00

(D)

(D)

(D)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.5 Rates and Charges (Cont'd)

7.5.15 OC-3, OC-12, OC-48 Dedicated SONET Ring Service (Cont'd)

(A) Node (Cont'd)

- Per Node

	USOC CABS/CRIS	Monthly Rate
(3) <u>OC-48</u>		
- <u>Customer Premises Node, first</u>		
36 month	FP5EX/FP5EX	\$ 5,890.00
60 month	FP5EX/FP5EX	4,725.00
Monthly Extension	FP5EX/FP5EX	7,070.00
- <u>Customer Premises Node, additional</u>		
36 month	FP5EA/FP5EA	5,240.00
60 month	FP5EA/FP5EA	4,190.00
Monthly Extension	FP5EA/FP5EA	6,280.00
- <u>Central Office Node</u>		
36 month	FC5EX/FC5EX	5,240.00
60 month	FC5EX/FC5EX	4,190.00
Monthly Extension	FC5EX/FC5EX	6,280.00

(D)

(D)

(D)

Continued



ACCESS SERVICE

7. Special Access Service (Cont'd)

7.5 Rates and Charges (Cont'd)

7.5.15 OC-3, OC-12, OC-48 Dedicated SONET Ring Service (Cont'd)

(A) Node (Cont'd)

(4) Flex Ring Nodes

	<u>USOC CABS/CRIS</u>	<u>Monthly Rate</u>	
(a) <u>OC-12</u>			
- <u>Central Office Node, for Second Ring on existing SONET Shelf</u>			
36 month	GC5FX/GC5FX	\$1,850.00	
60 month	GC5FX/GC5FX	1,500.00	
Monthly Extension	GC5FX/GC5FX	2,200.00	
- <u>Customer Prem Node, for Second Ring on existing SONET Shelf</u>			
36 month	GP5FX/GP5FX	2,200.00	(R)
60 month	GP5FX/GP5FX	1,800.00	
Monthly Extension	GP5FX/GP5FX	2,900.00	(R)
(b) <u>OC-48</u>			
- <u>Central Office Node, for Second Ring on existing SONET shelf</u>			
36 month	GC5GX/GC5GX	3,500.00	
60 month	GC5GX/GC5GX	2,800.00	
Monthly Extension	GC5GX/GC5GX	4,100.00	
- <u>Customer Prem Node, for Second Ring on existing SONET shelf</u>			
36 month	GP5GX/GP5GX	3,900.00	
60 month	GP5GX/GP5CX	3,000.00	
Monthly Extension	GP5GX/GP5GX	4,500.00	

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.5 Rates and Charges (Cont'd)

7.5.15 OC-3, OC-12, OC-48 Dedicated SONET Ring Service (Cont'd)

(B) OC-48 Add/Drop Capability\* (N)

	USOC CABS/CRIS	Monthly Rate
- <u>per arrangement</u>		
36 month	MPEFX/MPEFX	\$ 3,510.00
60 month	MPEFX/MPEFX	2,895.00
Monthly Extension	MPEFX/MPEFX	4,350.00

\*Effective December 16, 2020, regarding Add/Drop capabilities, if the number of ports falls below the minimum requirement per node, the customer must notify its Company account team/sales representative, in writing, to eliminate the charge. Upon receipt of the customer's notice and upon eligibility confirmation, the Company will remove the charge within two billing cycles. (N)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.5 Rates and Charges (Cont'd)

7.5.15 OC-3, OC-12, OC-48 Dedicated SONET Ring Service (Cont'd)

(C) Ports

USOC  
CABS/CRIS

Monthly  
Rate

(1) Per port, at OC-3 Node

(D)

- 1.544 Mbps (DS1) at  
OC3 Node

36 Month	SPRAX/SPRAX	\$ 50.00
60 Month	SPRAX/SPRAX	45.00
Monthly Extension	SPRAX/SPRAX	65.00

- 45 Mbps (DS3) at  
OC-3 Node

36 Month	SPRBX/SPRBX	120.00
60 Month	SPRBX/SPRBX	110.00
Monthly Extension	SRPBX/SPRBX	150.00

- 100 Mbps Ethernet (STS-1)  
at OC-3 Node

36 Month	S9TAX/S9TAX	145.00
60 Month	S9TAX/S9TAX	130.00
Monthly Extension	S9TAX/S9TAX	225.00

(D)

(D)

- EC-1 Port\*  
at OC-3 Node

36 Month	S9NSX/S4NHX	120.00
60 Month	S9NSX/S4NHX	110.00
Monthly Extension	S9NSX/S4NHX	150.00

\* EC-1 Port offered as Customer Premises termination and as a CO termination where facilities and/or operating conditions permit.

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.5 Rates and Charges (Cont'd)

7.5.15 OC-3, OC-12, OC-48 Dedicated SONET Ring Service (Cont'd)

(C) Ports (Cont'd)

	USOC CABS/CRIS	Monthly Rate
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(1) Per port, at OC-3 Node (Cont'd)

(D)

- <u>10/100BaseT VCAT Ethernet</u> <sup>*,#,@</sup>		
36 Month	S5P1X/S5P1X	\$ 250.00
60 Month	S5P1X/S5P1X	180.00
Monthly Extension	S5P1X/S5P1X	350.00
VT1.5-1v (1.6 Mbps)		
VT1.5-2v (3.2 Mbps)		
VT1.5-3v (4.8 Mbps)		
VT1.5-4v (6.4 Mbps)		
VT1.5-5v (8.0 Mbps)		
VT1.5-6v (9.6 Mbps)		
VT1.5-7v (11.2 Mbps)		
VT1.5-8v (12.4 Mbps)		
VT1.5-10v (16.0 Mbps)		
VT1.5-13v (20.8 Mbps)		
STS-1-1v (48.384 Mbps)		
STS-1-2v (96.768 Mbps)		

\* Actual Payload capacity for selected bandwidth. Only single-mode fiber is available in the Central Office. The EoS line rates defined herein are based on the theoretical SONET payload line rates as specified in Telcordia Publication GR-253-CORE, Issue 4. These values are not representative of the true Ethernet transport capacity of the EoS circuit.

# EoS port interfaces offered as 10/100BaseT are only available at the customer premises location.

@ Nonrecurring charges as set forth in 7.5.15(H) (4) are applicable.

(D)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.5 Rates and Charges (Cont'd)

7.5.15 OC-3, OC-12, OC-48 Dedicated SONET Ring Service (Cont'd)

(C) Ports (Cont'd)

	USOC CABS/CRIS	Monthly Rate
(1) <u>Per port, at OC-3 Node</u> (Cont'd)		
- <u>1000BaseSX VCAT Ethernet*,@</u>		
36 Month	S5P2X/S5P2X	\$ 425.00
60 Month	S5P2X/S5P2X	350.00
Monthly Extension	S5P2X/S5P2X	500.00
- <u>1000BaseLX VCAT Ethernet*,@</u>		
36 Month	S5P3X/S5P3X	\$ 425.00
60 Month	S5P3X/S5P3X	350.00
Monthly Extension	S5P3X/S5P3X	500.00
STS-1-1v (48.384 Mbps)		
STS-1-2v (96.768 Mbps)		
STS-1-3v (145.152 Mbps)		
STS-1-4v (193.536 mbps)		
STS-1-5v (241.92 Mbps)		
STS-1-6v (290.304 Mbps)		
STS-1-9v (435.456 Mbps)		
STS-1-12v (580.608 Mbps)		
STS-1-21v (1016.064 Mbps)		
STS-3c-1v (149.76 Mbps)		
STS-3c-2v (299.52 Mbps)		
STS-3c-3v (449.28 mbps)		
STS-3c-4v (599.04 Mbps)		
STS-3c-7v (1048.32 Mbps)		

(D)

\* Actual Payload capacity for selected bandwidth. Only single-mode fiber is available in the Central Office. The EoS line rates defined herein are based on the theoretical SONET payload line rates as specified in Telcordia Publication GR-253-CORE, Issue 4. These values are not representative of the true Ethernet transport capacity of the EoS circuit.

@ Nonrecurring charges as set forth in 7.5.15(H) (4) are applicable.

(D)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.5 Rates and Charges (Cont'd)

7.5.15 OC-3, OC-12, OC-48 Dedicated SONET Ring Service (Cont'd)

(C) Ports (Cont'd)

	USOC CABS/CRIS	Monthly Rate
(2) <u>Per port, at OC-12 Node</u>		
- <u>1.544 Mbps (DS1) at OC-12 Node*<sup>#</sup></u>		
36 month	SPRGX/SPRGX	\$ 50.00
60 month	SPRGX/SPRGX	45.00
Monthly Extension	SPRGX/SPRGX	65.00
- <u>45 Mbps (DS3) at OC-12 Node</u>		
36 month	SPRCX/SPRCX	120.00
60 month	SPRCX/SPRCX	110.00
Monthly Extension	SPRCX/SPRCX	150.00
- <u>155.5 Mbps (OC-3, OC-3c) at OC-12 Node</u>		
36 month	SPREX/SPREX	150.00
60 month	SPREX/SPREX	135.00
Monthly Extension	SPREX/SPREX	190.00
- <u>100 Mbps Ethernet (STS-1) at OC-12 Node<sup>@</sup></u>		
36 month	S9TBX/S9TBX	145.00
60 month	S9TBX/S9TBX	130.00
Monthly Extension	S9TBX/S9TBX	225.00
- <u>100 Mbps Ethernet (STS-3c) at OC-12 Node<sup>@</sup></u>		
36 month	S9TCX/S9TCX	180.00
60 month	S9TCX/S9TCX	160.00
Monthly Extension	S9TCX/S9TCX	280.00

\* Optical to Electrical DS1 Add/Drop capability as described in Section 7.2.15, (A) (5) is required with an OC-3 port.

# The Optical to Electrical DS1 Add/Drop capability rate element is applicable when the 85th DS1 port is applied per OC-12 Node.

@ Where facilities and/or operating conditions permit.

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.5 Rates and Charges (Cont'd)

7.5.15 OC-3, OC-12, OC-48 Dedicated SONET Ring Service (Cont'd)

(C) Ports (Cont'd)

	USOC CABS/CRIS	Monthly Rate
(2) <u>Per port, at OC-12 Node</u> (Cont'd)		
- <u>1 Gbps Ethernet (STS-1) at OC-12 Node</u>		
36 Month	S9TDX/S9TDX	\$ 250.00
60 Month	S9TDX/S9TDX	200.00
Monthly Extension	S9TDX/S9TDX	350.00
- <u>1Gbps Ethernet (STS-3c) at OC-12 Node</u>		
36 Month	S9TEX/S9TEX	250.00
60 Month	S9TEX/S9TEX	200.00
Monthly Extension	S9TEX/S9TEX	350.00
- <u>EC-1 Port at OC-12 Node*</u>		
36 Month	S9NUX/S4NJX	120.00
60 Month	S9NUX/S4NJX	110.00
Monthly Extension	S9NUX/S4NJX	150.00

(D)

(D)

(D)

\* EC-1 Port offered as Customer Premises termination and as a CO termination where facilities and/or operating conditions permit.

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.5 Rates and Charges (Cont'd)

7.5.15 OC-3, OC-12, OC-48 Dedicated SONET Ring Service (Cont'd)

(C) Ports (Cont'd)

	USOC CABS/CRIS	Monthly Rate
(2) <u>Per port, at OC-12 Node</u> (Cont'd)		

(D)

- <u>10/100BaseT VCAT Ethernet</u> <sup>*, #, @</sup>		
36 Month	S5P1X/S5P1X	\$ 250.00
60 Month	S5P1X/S5P1X	180.00
Monthly Extension	S5P1X/S5P1	350.00
VT1.5-1v (1.6 Mbps)		
VT1.5-2v (3.2 Mbps)		
VT1.5-3v (4.8 Mbps)		
VT1.5-4v (6.4 Mbps)		
VT1.5-5v (8.0 Mbps)		
VT1.5-6v (9.6 Mbps)		
VT1.5-7v (11.2 Mbps)		
VT1.5-8v (12.4 Mbps)		
VT1.5-10v (16.0 Mbps)		
VT1.5-13v (20.8 Mbps)		
STS-1-1v (48.384 Mbps)		
STS-1-2v (96.768 Mbps)		

\* Actual Payload capacity for selected bandwidth. Only single-mode fiber is available in the Central Office. The EoS line rates defined herein are based on the theoretical SONET payload line rates as specified in Telcordia Publication GR-253-CORE, Issue 4. These values are not representative of the true Ethernet transport capacity of the EoS circuit.

# EoS port interfaces offered as 10/100BaseT are only available at the customer premises location.

@ Nonrecurring charges as set forth in 7.5.15, (H) (4) are applicable.

(D)

Continued



ACCESS SERVICE

7. Special Access Service (Cont'd)

7.5 Rates and Charges (Cont'd)

7.5.15 OC-3, OC-12, OC-48 Dedicated SONET Ring Service (Cont'd)

(C) Ports (Cont'd)

	USOC <u>CABS/CRIS</u>	<u>Monthly Rate</u>
(2) <u>Per port, at OC-12 Node</u> (Cont'd)		
- <u>1000BaseSX VCAT Ethernet*,@</u>		
36 Month	S5P2X/S5P2X	\$ 425.00
60 Month	S5P2X/S5P2X	350.00
Monthly Extension	S5P2X/S5P2X	500.00
- <u>1000BaseLX VCAT Ethernet*,@</u>		
36 Month	S5P3X/S5P3X	\$ 425.00
60 Month	S5P3X/S5P3X	350.00
Monthly Extension	S5P3X/S5P3X	500.00

STS-1-1v (48.384 Mbps)  
STS-1-2v (96.768 Mbps)  
STS-1-3v (145.152 Mbps)  
STS-1-4v (193.536 mbps)  
STS-1-5v (241.92 Mbps)  
STS-1-6v (290.304 Mbps)  
TS-1-9v (435.456 Mbps)  
STS-1-12v (580.608 Mbps)  
STS-1-21v (1016.064 Mbps)  
STS-3c-1v (149.76 Mbps)  
STS-3c-2v (299.52 Mbps)  
STS-3c-3v (449.28 mbps)  
STS-3c-4v (599.04 Mbps)  
STS-3c-7v (1048.32 Mbps)

(D)

- \* Actual Payload capacity for selected bandwidth. Only single-mode fiber is available in the Central Office. The EoS line rates defined herein are based on the theoretical SONET payload line rates as specified in Telcordia Publication GR-253-CORE, Issue 4. These values are not representative of the true Ethernet transport capacity of the EoS circuit.
- @ Nonrecurring charges as set forth in 7.5.15, (H) (4) are applicable.

(D)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.5 Rates and Charges (Cont'd)

7.5.15 OC-3, OC-12, OC-48 Dedicated SONET Ring Service (Cont'd)

(C) Ports (Cont'd)

	USOC CABS/CRIS	Monthly Rate	
(3) <u>Per port, at OC-48 Node</u>			(D)
- <u>1.544 Mbps (DS1) at OC-48 Node</u>			
36 month	SPRLX/SPRLX	\$ 50.00	
60 month	SPRLX/SPRLX	45.00	
Monthly Extension	SPRLX/SPRLX	65.00	
- <u>45 Mbps (DS3) at OC-48 Node*</u>			
36 month	SPRKX/SPRKX	120.00	
60 month	SPRKX/SPRKX	110.00	
Monthly Extension	SPRKX/SPRKX	150.00	
- <u>155.5 Mbps (OC3, OC-3c) at OC-48 Node</u>			
36 month	SPRJX/SPRJX	150.00	
60 month	SPRJX/SPRJX	135.00	
Monthly Extension	SPRJX/SPRJX	190.00	
- <u>622 Mbps (OC-12, OC-12c) at OC-48 Node</u>			
36 month	SPRHX/SPRHX	375.00	
60 month	SPRHX/SPRHX	360.00	
Monthly Extension	SPRHX/SPRHX	475.00	
- <u>100 Mbps Ethernet (STS-1) at OC-48 Node#</u>			
36 month	S9TGX/S9TGX	145.00	
60 month	S9TGX/S9TGX	130.00	
Monthly Extension	S9TGX/S9TGX	225.00	
- <u>100 Mbps Ethernet (STS-3c) at OC-48 Node#</u>			
36 month	S9THX/S9THX	180.00	
60 month	S9THX/S9THX	160.00	
Monthly Extension	S9THX/S9THX	280.00	
- <u>1 Gbps Ethernet (STS-1) at OC-48 Node</u>			
36 month	S9TJX/S9TJX	250.00	
60 month	S9TJX/S9TJX	200.00	
Monthly Extension	S9TJX/S9TJX	350.00	

\* For OC-48 SONET Rings, the Add/Drop capability rate element is applicable only once and only when the 25th DS3 port is applied per Node.  
# Where facilities and/or operating conditions permit.

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.5 Rates and Charges (Cont'd)

7.5.15 OC-3, OC-12, OC-48 Dedicated SONET Ring Service (Cont'd)

(C) Ports (Cont'd)

	USOC CABS/CRIS	Monthly Rate
(3) <u>Per port, at OC-48 Node</u> (Cont'd)		
- <u>1 Gbps Ethernet (STS-3c)</u> <u>at OC-48 Node</u>		
36 month	S9TKX/S9TKX	\$ 250.00
60 month	S9TKX/S9TKX	200.00
Monthly Extension	S9TKX/S9TKX	350.00
- <u>1 Gbps Ethernet (STS-12c)</u> <u>at OC-48 Node</u>		
36 month	S9TLX/S9TLX	600.00
60 month	S9TLX/S9TLX	500.00
Monthly Extension	S9TLX/S9TLX	875.00
- <u>1 Gbps Ethernet (STS-24c)</u> <u>at OC-48 Node</u>		
36 month	S9TMX/S9TMX	900.00
60 month	S9TMX/S9TMX	850.00
Monthly Extension	S9TMX/S9TMX	1,500.00
- <u>EC-1 Port</u> <u>at OC-48 Node*</u>		
36 Month	S9NVX/S4NKX	120.00
60 Month	S9NVX/S4NKX	110.00
Monthly Extension	S9NVX/S4NKX	150.00

(D)

(D)

(D)

\* EC-1 Port offered as Customer Premises termination and as a CO termination where facilities and/or operating conditions permit.

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.5 Rates and Charges (Cont'd)

7.5.15 OC-3, OC-12, OC-48 Dedicated SONET Ring Service (Cont'd)

(C) Ports (Cont'd)

	USOC CABS/CRIS	Monthly Rate
(3) <u>Per port, at OC-48 Node</u> (Cont'd)		
		(D)
- <u>10/100BaseT VCAT Ethernet</u> *,#,@		
36 Month	S5P1X/S5P1X	\$ 250.00
60 Month	S5P1X/S5P1X	180.00
Monthly Extension	S5P1X/S5P1X	350.00
VT1.5-1v (1.6 Mbps)		
VT1.5-2v (3.2 Mbps)		
VT1.5-3v (4.8 Mbps)		
VT1.5-4v (6.4 Mbps)		
VT1.5-5v (8.0 Mbps)		
VT1.5-6v (9.6 Mbps)		
VT1.5-7v (11.2 Mbps)		
VT1.5-8v (12.4 Mbps)		
VT1.5-10v (16.0 Mbps)		
VT1.5-13v (20.8 Mbps)		
STS-1-1v (48.384 Mbps)		
STS-1-2v (96.768 Mbps)		

\* Actual Payload capacity for selected bandwidth. Only single-mode fiber is available in the Central Office. The EoS line rates defined herein are based on the theoretical SONET payload line rates as specified in Telcordia Publication GR-253-CORE, Issue 4. These values are not representative of the true Ethernet transport capacity of the EoS circuit.

# EoS port interfaces offered as 10/100BaseT are only available at the customer premises location.

@ Nonrecurring charges as set forth in 7.5.15(H) (4) are applicable.

(D)  
Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.5 Rates and Charges (Cont'd)

7.5.15 OC-3, OC-12, OC-48 Dedicated SONET Ring Service (Cont'd)

(C) Ports (Cont'd)

	USOC CABS/CRIS	Monthly Rate
(3) <u>Per port, at OC-48 Node</u> (Cont'd)		
- <u>1000BaseSX VCAT Ethernet*,@</u>		
36 Month	S5P2X/S5P2X	\$425.00
60 Month	S5P2X/S5P2X	350.00
Monthly Extension	S5P2X/S5P2X	500.00
- <u>1000BaseLX VCAT Ethernet*,@</u>		
36 Month	S5P3X/S5P3X	\$425.00
60 Month	S5P3X/S5P3X	350.00
Monthly Extension	S5P3X/S5P3X	500.00
STS 1-1v (48.384 Mbps)		
STS 1-2v (96.768 Mbps)		
STS 1-3v (145.152 Mbps)		
STS-1-4v (193.536 mbps)		
STS-1-5v (241.92 Mbps)		
STS-1-6v (290.304 Mbps)		
STS-1-9v (435.456 Mbps)		
STS-1-12v (580.608 Mbps)		
STS-1-21v (1016.064 Mbps)		
STS-3c-1v (149.76 Mbps)		
STS-3c-2v (299.52 Mbps)		
STS-3c-3v (449.28 mbps)		
STS-3c-4v (599.04 Mbps)		
STS-3c-7v (1048.32 Mbps)		

(D)

\* Actual Payload capacity for selected bandwidth. Only single-mode fiber is available in the Central Office. The EoS line rates defined herein are based on the theoretical SONET payload line rates as specified in Telcordia Publication GR-253-CORE, Issue 4. These values are not representative of the true Ethernet transport capacity of the EoS circuit.

@ Nonrecurring charges as set forth in 7.5.15(H) (4) are applicable.

(D)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.5 Rates and Charges (Cont'd)

7.5.15 OC-3, OC-12, OC-48 Dedicated SONET Ring Service (Cont'd)

(C) Ports (Cont'd)

USOC  
CABS/CRIS

Monthly  
Rate

(D)

(D)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.5 Rates and Charges (Cont'd)

7.5.15 OC-3, OC-12, OC-48 Dedicated SONET Ring Service (Cont'd)

(C) Ports (Cont'd)

USOC  
CABS/CRIS

Monthly  
Rate

(D)

(D)

(D) Transmux

- DS3 Port with Transmux,  
per port on OC-3, OC-12

36 Month

S4NGX/S4NGX

\$ 450.00

60 Month

S4NGX/S4NGX

350.00

Monthly Extension

S4NGX/S4NGX

575.00

(D)

(D)

- DS3 Port with Transmux,  
per port on OC-48

36 Month

S4NGX/S4NGX

\$ 550.00

60 Month

S4NGX/S4NGX

450.00

Monthly Extension

S4NGX/S4NGX

575.00

(D)

(D)

(E) Optical to Electrical Add/Drop Capability

- per OC-3 to DS1 Add/Drop, once per arrangement<sup>#, @</sup>

(T)

36 month

MXJDX/MXJDX

875.00

60 month

MXJDX/MXJDX

700.00

Monthly Extension

MXJDX/MXJDX

1,050.00

(D)

(D)

(D)

# The Optical-to-Electrical DS1 Add/Drop capability rate element is applicable when the 85th DS1 port is applied per OC-12 Node.

@ Optical to Electrical DS1 Add/Drop capability as described in Section 7.2.15, (A) (6) is required with an OC-3 Port.

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.5 Rates and Charges (Cont'd)

7.5.15 OC-3, OC-12, OC-48 Dedicated SONET Ring Service (Cont'd)

(F) Mileage

	USOC CABS/CRIS	Monthly Rate		(L)
		Fixed	Per Mile	
<u>Mileage Bands</u>				
<u>OC- 3</u>				
36 Month Term				
0 Miles	1YAZX/1YAZ3	None	None	
Over 0 Miles	1YAZX/1YAZ3	None	\$260.00	
60 Month Term				
0 Miles	1YAZX/1YAZ5	None	None	
Over 0 Miles	1YAZX/1YAZ5	None	\$220.00	(T)
Monthly Extension Rate				
0 Miles	1YAZX/1YAZM	None	None	
Over 0 Miles	1YAZX/1YAZM	None	\$330.00	(T)
<u>OC- 12</u>				
36 Month Term				
0 Miles	1YAZX/1YAZ3	None	None	
Over 0 Miles	1YAZX/1YAZ3	None	\$260.00	(T)
60 Month Term				
0 Miles	1YAZX/1YAZ5	None	None	
Over 0 Miles	1YAZX/1YAZ5	None	\$220.00	(T)
Monthly Extension Rate				
0 Miles	1YAZX/1YAZM	None	None	
Over 0 Miles	1YAZX/1YAZM	None	\$330.00	(T)
<u>OC- 48</u>				
36 Month Term				
0 Miles	1YAZX/1YAZ3	None	None	
Over 0 Miles	1YAZX/1YAZ3	None	\$260.00	(T)
60 Month Term				
0 Miles	1YAZX/1YAZ5	None	None	
Over 0 Miles	1YAZX/1YAZ5	None	\$220.00	(T)
Monthly Extension Rate				
0 Miles	1YAZX/1YAZM	None	None	
Over 0 Miles	1YAZX/1YAZM	None	\$330.00	(T) (L)

(L) Material formerly located on Sheet 338-Z-21.

(N)

Continued



ACCESS SERVICE

7. Special Access Service (Cont'd)

7.5 Rates and Charges (Cont'd)

7.5.15 OC-3, OC-12, OC-48 Dedicated SONET Ring Service (Cont'd)

(G) Regenerator

(T) (L)

	USOC CABS/CRIS	Monthly Rate
- OC-3		
36 month	RGY/RGYS3	\$ 1,000.00
60 month	RGY/RGYS5	800.00
Monthly Extension	RGY/RGYSM	1,200.00
- OC-12		
36 month	RGY/RGYS3	2,620.00
60 month	RGY/RGYS5	2,095.00
Monthly Extension	RGY/RGYSM	3,140.00
- OC-48		
36 month	RGY/RGYS3	3,275.00
60 month	RGY/RGYS5	2,620.00
Monthly Extension	RGY/RGYSM	3,930.00

(L)

Nonrecurring  
Charge

(D) (L) x

(D)

(H) Non-Recurring Charges

(T)

(1) Administrative Charge, per order

OC-3 Dedicated Ring	ORCMX/ORCMX	\$ 50.00
OC-12 Dedicated Ring	ORCMX/ORCMX	50.00
OC-48 Dedicated Ring	ORCMX/ORCMX	50.00

(2) Design and Central Office  
Connection Charge, per circuit\*

OC-3 Dedicated Ring	NRMCK/NRBCL	600.00
OC-12 Dedicated Ring	NRMCK/NRBCL	600.00
OC-48 Dedicated Ring	NRMCK/NRBCL	600.00

(T)

(L) x

\* Per circuit is applied once per the total original Ring design.

(L) x

(L) Material formerly located on Sheet 338-Z-22.

(N)

(L)x Material formerly located on Sheet 338-Z-23.

|

Material omitted now located on Sheet 338-Z-27.

(N)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.5 Rates and Charges (Cont'd)

7.5.15 OC-3, OC-12, OC-48 Dedicated SONET Ring Service (Cont'd)

	USOC <u>CABS/CRIS</u>	<u>Nonrecurring Charges</u>	
(H) <u>Non-Recurring Charges</u>			
(3) <u>Node</u>			
- <u>OC-3</u>			
Customer Premises Node, Subsequent Installation	NRBS7/NRBS7	\$ 400.00	(D)
Central Office Node, Subsequent Installation	NRBSV/NRBSV	325.00	(D)   (D)
- <u>OC-12</u>			
Customer Premises Node, Subsequent Installation	NRBS7/NRBS7	400.00	(D)
Central Office Node Subsequent Installation,	NRBSV/NRBSV	325.00	(D)   (D)
- <u>OC-48</u>			
Customer Premises Node, Subsequent Installation	NRBS7/NRBS7	400.00	(D)
Central Office Node, Subsequent Installation	NRBSV/NRBSV	325.00	(D)   (D)
			(D) (D)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.5 Rates and Charges (Cont'd)

7.5.15 OC-3, OC-12, OC-48 Dedicated SONET Ring Service (Cont'd)

	USOC <u>CABS/CRIS</u>	<u>Nonrecurring Charges</u>	
(H) <u>Non-Recurring Charges</u> (Cont'd)			
(4) <u>Ports*</u>			
<u>Per port, at OC-3 Node</u>			
- 1.544 Mbps (DS1) at OC-3 Node, per subsequent installation	NRBSY/NRBSY	\$ 350.00	
- 45 Mbps (DS3/DS3 with Transmux) at OC-3 Node, per subsequent installation	NRBSX/NRBSX	385.00	
- 100 Mbps Ethernet (STS-1) at OC-3 Node, per subsequent installation	NRM63/NRBY4	215.00	(D)
- EC-1 port at OC-3 Node, per subsequent installation <sup>#</sup>	NRBSX/NRBSX	385.00	(T)

\* Applicable to 36 Month, 60 Month and Monthly Extension Term Plans.

# EC-1 Port offered as Customer Premises termination and as a CO termination where facilities and/or operating conditions permit. (D) (T)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.5 Rates and Charges (Cont'd)

7.5.15 OC-3, OC-12, OC-48 Dedicated SONET Ring Service (Cont'd)

	USOC <u>CABS/CRIS</u>	<u>Nonrecurring Charges</u>	
(H) <u>Non-Recurring Charges</u> (Cont'd)			
(4) <u>Ports*</u> (Cont'd)			
<u>Per port, at OC-12 Node</u>			
- 1.544 Mbps (DS1) at OC-12 Node, per subsequent installation	NRBSY/NRBSY	\$350.00	
- 45 Mbps (DS3/DS3 w/Transmux) at OC-12 Node, per subsequent installation	NRBSX/NRBSX	385.00	
- 155.5 Mbps (OC-3, OC-3c) at OC-12 Node, per subsequent installation	NRBSW/NRBSW	400.00	
- 100 Mbps Ethernet (STS-1) at OC-12 Node, per subsequent installation	NRM63/NRBY4	215.00	(D)
- 100 Mbps Ethernet (STS-3c) at OC-12 Node, per subsequent installation	NRM64/NRBY4	215.00	(D)
- 1 Gbps Ethernet (STS-1) at OC-12 Node, per subsequent installation	NRM65/NRBY5	215.00	(D)
- 1 Gbps Ethernet (STS-3c) at OC-12 Node, per subsequent installation	NRM66/NRBY5	215.00	(D)
- EC-1 port at OC-12 Node, per subsequent installation#	NRBSX/NRBSX	385.00	(T)

\* Applicable to 36 Month, 60 Month and Monthly Extension Term Plans.

# EC-1 Port offered as Customer Premises termination and as a CO termination where facilities and/or operating conditions permit. (D) (T)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.5 Rates and Charges (Cont'd)

7.5.15 OC-3, OC-12, OC-48 Dedicated SONET Ring Service (Cont'd)

	USOC CABS/CRIS	Nonrecurring Charges	
(H) <u>Non-Recurring Charges (Cont'd)</u>			
(4) <u>Ports* (Cont'd)</u>			
<u>Per port, at OC-48 Node</u>			
- 1.544 Mbps (DS1) at OC-48 Node, per subsequent installation	NRBSY/NRBSY	\$350.00	
- 45 Mbps (DS3) at OC-48 Node, per subsequent installation	NRBSX/NRBSX	385.00	
- 45 Mbps (DS3) Transmux at OC-48 Node, per subsequent installation	NRBSX/NRBSX	385.00	
- 155.5 Mbps (OC3, OC-3c) at OC-48 Node, per subsequent installation	NRBSW/NRBSW	400.00	
- 622 Mbps (OC-12, OC-12c) at OC-48 Node, per subsequent installation	NRBSZ/NRBSZ	400.00	
- 100 Mbps Ethernet (STS-1) at OC-48 Node, per subsequent installation	NRM63/NRBY4	215.00	(D)
- 100 Mbps Ethernet (STS-3c) at OC-48 Node, per subsequent installation	NRM64/NRBY4	215.00	(D)
- 1 Gbps Ethernet (STS-1) at OC-48 Node, per subsequent installation	NRM65/NRBY5	215.00	(D)
- 1 Gbps Ethernet (STS-3c) at OC-48 Node, per subsequent installation	NRM66/NRBY5	215.00	(D)
- 1 Gbps Ethernet (STS-12c) at OC-48 Node, per subsequent installation	NRM67/NRBY5	215.00	(D)
- 1 Gbps Ethernet (STS-24c) at OC-48 Node, per subsequent installation	NRM68/NRBY5	215.00	(D)
- EC-1 port at OC-48 Node, per subsequent installation <sup>#</sup>	NRBSX/NRBSX	385.00	(T)

\* Applicable to 36 Month, 60 Month and Monthly Extension Term Plans.

# EC-1 Port offered as Customer Premises termination and as a CO termination where facilities and/or operating conditions permit.

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.5 Rates and Charges (Cont'd)

7.5.15 OC-3, OC-12, OC-48 Dedicated SONET Ring Service (Cont'd)

	USOC CABS/CRIS	Nonrecurring Charges
(H) <u>Non-Recurring Charges</u> (Cont'd)		
(4) <u>Ports*</u> (Cont'd)		
- per subsequent installation		
10/100BaseT VCAT Ethernet Port	NRM63/NRBY4	\$215.00
1000BaseSX VCAT Ethernet Port	NRM65/NRBY5	215.00
1000BaseLX VCAT Ethernet Port	NRM65/NRBY5	215.00
(5) <u>Optical to Electrical Add/Drop Capability<sup>#</sup></u>		
- per OC-3 to DS1 Add/Drop	NRBS6/NRBS6	490.00
		(D)
- per subsequent installation, per DS1 off OC-12, OC-48	NRBS8/NRBS6	490.00
(6) <u>OC-48 Add/Drop Capability<sup>@</sup></u>		
- per subsequent installation, per arrangement	NRBS8/NRBS8	490.00
		(D)
		(D)
(7) <u>Regenerator</u>		
- OC-3, OC-12, OC-48 for Subsequent Installation	NRBS5/NRBS5	270.00
(8) <u>Shared Network Arrangement</u>		
Processing Charge, per Service Order	NRMCL/NRBOP	30.00

\* Applicable to 36 Month, 60 Month and Monthly Extension Term Plans.

# The Optical to Electrical Add/Drop Capability is in addition to the Add/Drop Capability charge set forth in (g) following.

@ Add/Drop charge applies only with the initial installation of node equipped with drop capacity. This charge is applies to all nodes, excluding regenerators.

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.5 Rates and Charges (Cont'd)

7.5.15 OC-3, OC-12, OC-48 Dedicated SONET Ring Service (Cont'd)

USOC <u>CABS/CRIS</u>	Nonrecurring <u>Charges</u>
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(H) Non-Recurring Charges (Cont'd)

(D)

(D)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.6 Individual Case Filings

Rates and charges for Special Access provided on an Individual Case Basis are filed following:

Case No.

93-01 State of California  
(ICB No. 92N-12-01)

To provide one DS3 facility between the State of California State Carrier Interface Point (CSCIP) at 1115 P Street, Sacramento and the U.S. Sprint POP at 1530 C Street, Sacramento. Hand-off is DS3 electrical at both ends.

	<u>Installation Charge</u>	<u>Monthly Rate</u>	<u>USOC</u>
DS3 Channel Termination	\$10200.00	None	TWTDQ

The length of the service period will be 3 years.

Case No.

93-02 State of California  
(ICB No. 92N-12-01)

To provide one DS3 facility between the State of California State Carrier Interface Point (CSCIP) at 525 Golden Gate Ave., San Francisco and the U.S. Sprint POP at 185 Berry Street, San Francisco. Hand-off is DS3 electrical at both ends.

	<u>Installation Charge</u>	<u>Monthly Rate</u>	<u>USOC</u>
DS3 Channel Termination	\$ 9975.00	None	TWTDR
DS3 Channel Mileage	<u>13400.00</u>	None	1LOAK
Total System	\$23375.00	None	

The length of the service period will be 3 years.

(N)

(N)

Continued



ACCESS SERVICE

7. Special Access Service (Cont'd)

(D)

(D)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

(D)

(D)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.6 Individual Case Filings (Cont'd)

Rates and charges for Special Access provided on an Individual Case Basis are filed following:

Case No.

88-1 MCI  
(ICB 8108-001)

(N)

To provide one DS3 service (44.736 Mbps) between MCI Telecommunications Corporation's Point of Presence (POP) at 700 South Flower, Los Angeles, and the Point of Interface to General Telephone providing DS3 services for Whittier served from Pacific Bell's ALHBCA01 Central Office.

	<u>Monthly Rate</u>	<u>Nonrecurring Charge</u>	<u>USOC</u>
Channel Termination	\$ 578.00	\$ 250.00	TWTAV
Special Transport	1926.00	0.00	1LOAD
Total System	\$ 2504.00	\$ 250.00	

A termination charge will be equal to \$150,490.00 to be reduced by the total dollar amount of the payments made by the customer for this service at the time of termination. The length of the service period shall be five years.

(N)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.6 Individual Case Filings (Cont'd)

Rates and charges for Special Access provided on an Individual Case Basis are filed following: (Cont'd)

Case No.

(N)

88-2 MCI  
(ICB 8104-002)

To provide one DS3 service (44.736 Mbps) between MCI Telecommunications Corporation's Point of Presence (POP) at 925 "L" Street, Sacramento, and the Pacific Bell Central Office in Sacramento (SCRMCA01). This service to connect to the State of California Lottery communications system provided by Pacific Bell in SCRMCA01 under 96A contract agreement.

	<u>Monthly Rate</u>	<u>Nonrecurring Charge</u>	<u>USOC</u>
Channel Termination	\$ 697.00	\$ 250.00	TWTAW
Special Transport	0.00	0.00	1LOAE
Total System	\$ 697.00	\$ 250.00	

A termination charge will be equal to \$42,070.00 to be reduced by the total dollar amount of the payments made by the customer for this service at the time of termination. The length of the service period shall be five years.

(N)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.6 Individual Case Filings (Cont'd)

(N)

Rates and charges for Special Access provided on an Individual Case Basis are filed following: (Cont'd)

Case No.

91-1 State of California  
(ICB No. 90N-07-06.B)

To provide one DS3 between 31 E. Channel Street, Stockton and SKINCA01. Handoff at the customer premises will be DS3 electrical and 28 DS1's at SKINCA01.

	<u>Installation Charge</u>	<u>Monthly Rate</u>	<u>Basic** Termination Charge</u>	<u>USOC</u>
Channel Termination	\$26750.00	\$1475.00	\$0.00	TWTA1
<u>Multiplexing</u>	<u>0.00</u>	<u>1375.00</u>	<u>14600.00</u>	MXBAW
Total System	\$26750.00	\$2850.00	\$14600.00	

The length of the service period shall be 3 years.

\*\* Basic Termination Charge - To be reduced 1/36th with each monthly payment. (N)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.6 Individual Case Filings (Cont'd)

(N)

Rates and charges for Special Access provided on an Individual Case Basis are filed following: (Cont'd)

Case No.

91-2 State of California  
(ICB No. 90N-10-01)

To provide one DS3 from the MCI POP located at 242 N. Sutter Street, Stockton to the SKINCA01 Central Office. Handoff at the MCI POP is DS3 electrical and 28 DS1's at SKINCA01

	<u>Installation Charge</u>	<u>Monthly Rate</u>	<u>Basic** Termination Charge</u>	<u>USOC</u>
Channel Termination	\$36550.00	\$2000.00	\$0.00	TWTA2
<u>Multiplexing</u>	<u>0.00</u>	<u>1375.00</u>	<u>14600.00</u>	MXBAX
Total System	\$36550.00	\$3375.00	\$14600.00	

The length of the service period shall be 3 years.

\*\* Basic Termination Charge - To be reduced 1/36th with each monthly payment.

(N)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.6 Individual Case Filings (Cont'd)

Rates and charges for Special Access provided on an Individual Case  
Basis are filed following: (Cont'd)

(D)

(D)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.6 Individual Case Filings (Cont'd)

Rates and charges for Special Access provided on an Individual Case  
Basis are filed following: (Cont'd)

(D)

(D)

Continued



ACCESS SERVICE

7. Special Access Service (Cont'd)

7.6 Individual Case Filings (Cont'd)

Rates and charges for Special Access provided on an Individual Case  
Basis are filed following: (Cont'd)

(D)

(D)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.6 Individual Case Filings

Rates and Charges for Special Access provided on an Individual Case Basis are filed following: (Cont'd)

Case No.

(N)

91-9 State of California  
(ICB No. 90N-10-12)

To provide one DS3 between 525 Golden Gate, San Francisco and So. Pacific POP at 60 Federal Street, San Francisco. Hand-off is DS3 electrical at both ends. DS3 portion from 525 Golden Gate to SNFCCA04 is priced and being paid for under the Calnet 96A contract.

	<u>Monthly Rate</u>	<u>USOC</u>
Channel Termination	\$1200.00	TWTA6
Channel Mileage	1100.00	1LOAG
Total System	\$2300.00	

The length of the service period shall be 3 years.

(N)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.6 Individual Case Filings

Rates and Charges for Special Access provided on an Individual Case Basis are filed following: (Cont'd)

Case No.

(N)

91-10 State of California  
(ICB No. 90N-10-13)

To provide one DS3 between 525 Golden Gate, San Francisco and the WILTEL POP at 274 Brannan St., San Francisco. Hand-off is DS3 electrical at both ends. DS3 portion from 525 Golden Gate to SNFCCA04 is priced and being paid for under the Calnet 96A contract.

	<u>Monthly Rate</u>	<u>USOC</u>
Channel Termination	\$1200.00	TWTA7
Channel Mileage	1100.00	1LOAH
Total System	\$2300.00	

The length of the service period shall be 3 years.

(N)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.6 Individual Case Filings

Rates and Charges for Special Access provided on an Individual Case Basis are filed following: (Cont'd)

Case No.

(N)

91-11 State of California  
(ICB No. 90N-10-14)

To provide one DS3 between 1115 P Street, Sacramento and So. Pacific POP at 770 L Street, Sacramento. Hand-off is DS3 electrical at both ends. DS3 portion from 1115 P Street to SCRMCA01 is priced and being paid for under the Calnet 96A contract.

	<u>Monthly Rate</u>	<u>USOC</u>
Channel Termination	\$1200.00	TWTA8

The length of the service period shall be 3 years.

(N)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.6 Individual Case Filings (Cont'd)

Rates and charges for Special Access provided on an Individual Case Basis are filed following: (Cont'd)

Case No.

(N)

91-6 State of California  
(ICB No. 90N-10-09)

To provide one DS3 between 107 S. Broadway, Los Angeles and the MCI POP at 624 S. Grand, Los Angeles. Hand-off is DS3 electrical at both ends. DS3 portion from 107 S. Broadway to LSANCA03 is priced and being paid for under the Calnet 96A contract.

	<u>Installation Charge</u>	<u>Monthly Rate</u>	<u>USOC</u>
Channel Termination	None	\$1200.00	TWTA3

The length of the service period shall be 3 years.

(N)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.6 Individual Case Filings (Cont'd)

Rates and charges for Special Access provided on an Individual Case Basis are filed following: (Cont'd)

Case No.

(N)

91-7 State of California  
(ICB No. 90N-10-10)

To provide one DS3 between 1350 Front St., San Diego and the MCI POP at 8925 Complex Dr., San Diego. Hand-off is DS3 electrical at both ends. DS3 portion from 1350 Front St. to SNDGCA01 is priced and being paid for under the Calnet 96A contract.

	<u>Installation Charge</u>	<u>Monthly Rate</u>	<u>USOC</u>
Channel Termination	None	\$1200.00	TWTA4
Channel Mileage	None	\$1700.00	1LOAJ
Total System	None	\$2900.00	

The length of the service period shall be 3 years.

(N)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.6 Individual Case Filings (Cont'd)

Rates and charges for Special Access provided on an Individual Case Basis are filed following: (Cont'd)

Case No.

(N)

91-8 State of California  
(ICB No. 90N-10-11)

To provide one DS3 between 107 S. Broadway, Los Angeles and the WILTEL POP at 624 S. Grand, Los Angeles. Hand-off is DS3 electrical at both ends. DS3 portion from 107 S. Broadway to LSANCA03 is priced and being paid for under the Calnet 96A contract.

	<u>Installation Charge</u>	<u>Monthly Rate</u>	<u>USOC</u>
Channel Termination	None	\$1200.00	TWTA5

The length of the service period shall be 3 years.

(N)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.6 Individual Case Filings (Cont'd)

Rates and charges for Special Access provided on an Individual Case Basis are filed following: (Cont'd)

Case No.

(N)

91-12 State of California  
(ICB No. 90N-11-02)

To provide one DS3 between 107 S. Broadway, Los Angeles and the MCI POP at 624 S. Grand, Los Angeles. Hand-off is DS3 electrical at both ends. DS3 portion from 107 S. Broadway to LSANCA03 is priced and being paid for under the Calnet 96A contract.

	<u>Installation Charge</u>	<u>Monthly Rate</u>	<u>USOC</u>
Channel Termination	None	\$1200.00	TWTA9

The length of the service period shall be 3 years.

(N)

Continued



ACCESS SERVICE

7. Special Access Service (Cont'd)

7.6 Individual Case Filings (Cont'd)

Rates and charges for Special Access provided on an Individual Case Basis are filed following: (Cont'd)

Case No.

(N)

92-01 State of California  
(ICB No. 92N-07-10)

To provide one DS3 facility between the State of California State Carrier Interface Point (CSCIP) at 107 S. Broadway, Los Angeles and the MCI POP at 624 S. Grand, Los Angeles. Hand-off is DS3 electrical at both ends.

	<u>Installation Charge</u>	<u>Monthly Rate</u>	<u>USOC</u>
DS3 Facility	\$32,225.00	NONE	TWTD0

The length of the service period will be 3 years.

(N)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.6 Individual Case Filings (Cont'd)

Rates and charges for Special Access provided on an Individual Case Basis are filed following: (Cont'd)

Case No.

(N)

92-02 Visa International Service Association  
(ICB No. 92N-07-11)

To provide one DS3 facility between the Utility's Central Office SNMTCA11 and the customer's premises at 3000 Clearview Avenue, San Mateo. The Utility will multiplex the DS3 service to 28 DS1s at the Central Office. Handoff at the customer's premises will be The optical. customer will be responsible for providing a fiber optic terminal and multiplexer at their premises.

	<u>Termination Charge</u>	<u>Monthly Rate</u>	<u>USOC</u>
Channel Termination	\$26,850.00	\$1,850.00	TWTDP
Multiplexing	<u>8,800.00</u>	<u>550.00</u>	MXBAZ
DS3 Facility	\$35,650.00	\$2,400.00	

The length of the service period will be 5 years. The above Termination Charge will be reduced by the total amount of the payments made by the applicant for the service at the time of discontinuance. (N)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

Material omitted now in different form on Sheets 274 through 275.

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ACCESS SERVICE

7. Special Access Service (Cont'd)

Material omitted now in different form on Sheets 274 through 275.

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ACCESS SERVICE

7. Special Access Service (Cont'd)

Material omitted now in different form on Sheets 274 through 275.

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ACCESS SERVICE

7. Special Access Service (Cont'd)

Material omitted now in different form on Sheets 274 through 275.

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ACCESS SERVICE

7. Special Access Service (Cont'd)

Material omitted now in different form on Sheets 274 through 275.

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ACCESS SERVICE

7. Special Access Service (Cont'd)

Material omitted now in different form on Sheets 274 through 276.

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ACCESS SERVICE

7. Special Access Service (Cont'd)

Material omitted now in different form on Sheets 276, 277 and 278.

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ACCESS SERVICE

7. Special Access Service (Cont'd)

Material omitted now in different form on Sheets 276, 277 and 278.

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ACCESS SERVICE

7. Special Access Service (Cont'd)

Material omitted now in different form on Sheets 276, 277 and 278.

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ACCESS SERVICE

7. Special Access Service (Cont'd)

Material omitted now in different form on Sheets 276, 277 and 278.

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ACCESS SERVICE

7. Special Access Service (Cont'd)

Material omitted now in different form on Sheets 276, 277 and 278.

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ACCESS SERVICE

7. Special Access Service (Cont'd)

Material omitted now in different form on Sheets 276, 277 and 278.

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ACCESS SERVICE

7. Special Access Service (Cont'd)

Material omitted now in different form on Sheets 276, 277 and 278.

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ACCESS SERVICE

7. Special Access Service (Cont'd)

Material omitted now in different form on Sheets 276, 277 and 278.

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ACCESS SERVICE

7. Special Access Service (Cont'd)

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ACCESS SERVICE

7. Special Access Service (Cont'd)

Material omitted now in different form on Sheets 276, 277 and 278.

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ACCESS SERVICE

7. Special Access Service (Cont'd)

Material omitted now in different form on Sheets 279 through 283.

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ACCESS SERVICE

7. Special Access Service (Cont'd)

Material omitted now in different form on Sheets 279 through 283.

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ACCESS SERVICE

7. Special Access Service (Cont'd)

Material omitted now in different form on Sheets 279 through 283.

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ACCESS SERVICE

7. Special Access Service (Cont'd)

Material omitted now in different form on Sheets 279 through 283

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ACCESS SERVICE

7. Special Access Service (Cont'd)

Material omitted now in different form on Sheets 279 through 283.

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ACCESS SERVICE

7. Special Access Service (Cont'd)

Material omitted now in different form on Sheet 391.

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ACCESS SERVICE

7. Special Access Service (Cont'd)

Material omitted now in different form on Sheet 291.

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ACCESS SERVICE

7. Special Access Service (Cont'd)

Material omitted now in different form on Sheet 284.

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ACCESS SERVICE

7. Special Access Service (Cont'd)

(D)

(D)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

(D)

(D)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

(D)

(D)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

(D)

(D)

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

(D)

(D)

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ACCESS SERVICE

7. Special Access Service (Cont'd)

Material omitted now in different form on Sheets 292 and 293.

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ACCESS SERVICE

7. Special Access Service (Cont'd)

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ACCESS SERVICE

7. Special Access Service (Cont'd)

Material omitted now in different form on Sheets 295 and 296.

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ACCESS SERVICE

7. Special Access Service (Cont'd)

Material omitted now in different form on Sheets 295, 296 and 297.

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ACCESS SERVICE

7. Special Access Service (Cont'd)

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ACCESS SERVICE

7. Special Access Service (Cont'd)

Material omitted now on Sheet 299.

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ACCESS SERVICE

7. Special Access Service (Cont'd)

Material omitted in different form on Sheets 301 and 302.

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ACCESS SERVICE

7. Special Access Service (Cont'd)

(D)

(D)

Material omitted now on Sheet 302.

Continued

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.4 Rate Regulations (Cont'd)

(D)

(D)

Material omitted now in different form on Sheet 304.

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ACCESS SERVICE

7. Special Access Service (Cont'd)

Material omitted now in different form on Sheets 305, 306 and 307.

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ACCESS SERVICE

7. Special Access Service (Cont'd)

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ACCESS SERVICE

7. Special Access Service (Cont'd)

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ACCESS SERVICE

7. Special Access Service (Cont'd)

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ACCESS SERVICE

7. Special Access Service (Cont'd)

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ACCESS SERVICE

7. Special Access Service (Cont'd)

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ACCESS SERVICE

7. Special Access Service (Cont'd)

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ACCESS SERVICE

7. Special Access Service (Cont'd)

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ACCESS SERVICE

7. Special Access Service (Cont'd)

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ACCESS SERVICE

7. Special Access Service (Cont'd)

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ACCESS SERVICE

7. Special Access Service (Cont'd)

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ACCESS SERVICE

7. Special Access Service (Cont'd)

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ACCESS SERVICE

7. Special Access Service (Cont'd)

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ACCESS SERVICE

7. Special Access Service (Cont'd)

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ACCESS SERVICE

7. Special Access Service (Cont'd)

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ACCESS SERVICE

7. Special Access Service (Cont'd)

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ACCESS SERVICE

7. Special Access Service (Cont'd)

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ACCESS SERVICE

7. Special Access Service (Cont'd)

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ACCESS SERVICE

7. Special Access Service (Cont'd)

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ACCESS SERVICE

7. Special Access Service (Cont'd)

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ACCESS SERVICE

7. Special Access Service (Cont'd)

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ACCESS SERVICE

7. Special Access Service (Cont'd)

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ACCESS SERVICE

7. Special Access Service (Cont'd)

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ACCESS SERVICE

7. Special Access Service (Cont'd)

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ACCESS SERVICE

7. Special Access Service (Cont'd)

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ACCESS SERVICE

7. Special Access Service (Cont'd)

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ACCESS SERVICE

7. Special Access Service (Cont'd)

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ACCESS SERVICE

7. Special Access Service (Cont'd)

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ACCESS SERVICE

7. Special Access Service (Cont'd)

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ACCESS SERVICE

7. Special Access Service (Cont'd)

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ACCESS SERVICE

7. Special Access Service (Cont'd)

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ACCESS SERVICE

7. Special Access Service (Cont'd)

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ACCESS SERVICE

7. Special Access Service (Cont'd)

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ACCESS SERVICE

7. Special Access Service (Cont'd)

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ACCESS SERVICE

7. Special Access Service (Cont'd)

Material omitted now in different form on Sheets 309 through 338.

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ACCESS SERVICE

7. Special Access Service (Cont'd)

Material omitted now in different form on Sheets 309 through 338.

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ACCESS SERVICE

7. Special Access Service (Cont'd)

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ACCESS SERVICE

7. Special Access Service (Cont'd)

Material omitted now in different form on Sheets 309 through 338.

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7. Special Access Service (Cont'd)

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ACCESS SERVICE

7. Special Access Service (Cont'd)

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ACCESS SERVICE

7. Special Access Service (Cont'd)

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7. Special Access Service (Cont'd)

Material omitted now in different form on Sheets 309 through 338.

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ACCESS SERVICE

7. Special Access Service (Cont'd)

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ACCESS SERVICE

7. Special Access Service (Cont'd)

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7. Special Access Service (Cont'd)

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7. Special Access Service (Cont'd)

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7. Special Access Service (Cont'd)

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7. Special Access Service (Cont'd)

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ACCESS SERVICE

7. Special Access Service (Cont'd)

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7. Special Access Service (Cont'd)

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7. Special Access Service (Cont'd)

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7. Special Access Service (Cont'd)

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7. Special Access Service (Cont'd)

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ACCESS SERVICE

7. Special Access Service (Cont'd)

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ACCESS SERVICE

7. Special Access Service (Cont'd)

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ACCESS SERVICE

7. Special Access Service (Cont'd)

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ACCESS SERVICE

7. Special Access Service (Cont'd)

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ACCESS SERVICE

7. Special Access Service (Cont'd)

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ACCESS SERVICE

7. Special Access Service (Cont'd)

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ACCESS SERVICE

7. Special Access Service (Cont'd)

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ACCESS SERVICE

7. Special Access Service (Cont'd)

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ACCESS SERVICE

7. Special Access Service (Cont'd)

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ACCESS SERVICE

7. Special Access Service (Cont'd)

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ACCESS SERVICE

7. Special Access Service (Cont'd)

Material omitted now on Sheet 339.

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ACCESS SERVICE

7. Special Access Service (Cont'd)

Material omitted now on Sheet 339-A.

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ACCESS SERVICE

7. Special Access Service (Cont'd)

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