7. Special Access Service+

7.1 Provision of Special Access Service

Special Access Service provides a dedicated transmission path to connect customer designated premises*, either directly or through a Telephone Company hub where bridging or multiplexing functions are performed, or through a DS3 Premises Multiplexer at a customer designated premises where multiplexing functions are performed, or to connect a customer's transmission equipment and facilities using a DS1 or DS3 Cross Connect arrangement where the customer is provided Expanded Interconnection Service (EIS) as defined in Section 17. Special Access Service may also be combined with Switched Access Services in the provision of a customer's interstate communications service (e.g., WATS, 800, 888 or WATS-type Services). Special Access Service includes all exchange access not utilizing Telephone Company central office switches.

Certain Special Access Services listed in this section of the tariff may not be currently offered in all Telephone Company locations but may be provided upon customer request, on an individual case basis, if facilities can be made available with reasonable effort. The Telephone Company will work cooperatively with the Customer to provide the service on a timely basis.

7.1.1 Circuit Types

There are five types of circuits used to provide Special Access Services:

- Voice Grade (VG)
- Program Audio (AP)
- Video Digital Transport TV-1 Analog (TV)
- Digital Data (DA)
- High Capacity (HC)

These circuits can be either analog or digital. Analog circuits are differentiated by frequency spectrum and bandwidth. Digital connections are differentiated by bit rate.

Each of the five circuits has its own characteristics. All of the circuit types are subdivided by one or more of the following:

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

* Telephone Company Centrex CO-like switches are considered to be customer premises for purposes of this tariff.

+ Pursuant to FCC 17-43, released April 28, 2017, Frontier has detariffed (1) TDM channel terminations for wire centers in competitive counties; (2) TDM transport charges; and (3) packet-based services. Terms and Conditions for detariffed services can be found in the Interstate Service Guide and Pricelist. (N)

7. Special Access Service (Cont'd)

7.1 Provision of Special Access Service (Cont'd)

7.1.1 Circuit Types (Cont'd)

The circuit descriptions set forth in this section specify the characteristics of the basic circuit and indicates whether the circuit is provided between customer designated premises, or between a customer designated premises and a Telephone Company hub where bridging or multiplexing functions are performed, or through a DS3 Premises Multiplexer where multiplexing functions are performed at a customer designated premises, or between a customer designated premises and a Telephone Company WATS Serving Office.

Customers can order a basic circuit and select from a list of available technical specifications packages (customized or predefined), channel interfaces, and optional features to design a circuit which meets the Customer's specific communications needs. For purposes of ordering circuits, each has been identified as a type of Special Access circuit. However, such identification is not intended to limit a customer's use of the circuit, nor to imply that a circuit is limited to a particular use.

The optional features and functions available with each type of basic circuit are included in the individual service description sections following. The optional features and functions information also indicates with which technical specifications packages they are available.

When a customized circuit is ordered, the Telephone Company may determine that Additional Engineering is required to meet the customer's request for service. The customer will be notified whether Additional Engineering charges apply and will be given an estimate of the hours to be billed before any further action is taken on the order. Additional engineering charges are determined as set forth in 8. 1 following.

7. Special Access Service (Cont'd)

7.1 Provision of Special Access Service (Cont'd)

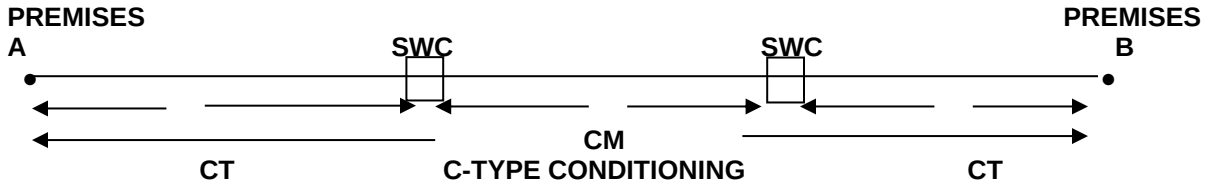
7.1.2 Service Configurations (Cont'd)

(A) Two-Point Service

A two-point service connects two customer designated premises, either on a directly connected basis or through a hub where multiplexing functions are performed, or through a DS3 Premises Multiplexer where multiplexing functions are performed at a customer designated premises. A Voice Grade Special Access Circuit may be provided as a two-point service connecting an end user premise and a Telephone Company switch when Special Access is used in conjunction with Switched Access as set forth in 6.3.2(T) for Switched Access Interface Arrangements.

All types of Special Access Service may be provided as two-point service.

The following diagram depicts an example of a two-point Voice Grade service connecting two customer designated premises located 15 miles apart. The service is provided with the optional feature of C-Type conditioning.



CT - Circuit Termination
CM - Circuit Mileage
SWC - Serving Wire Center

Applicable rate elements are:

- Circuit Termination (2 applicable)
- Circuit Mileage (fixed rate plus rate per airline mile between SWC)
- C-Type Conditioning Optional Feature

In addition, a Special Access Surcharge and charges for additional Optional Features and Functions may apply.

7. Special Access Service (Cont'd)

7.1 Provision of Special Access Service (Cont'd)

7.1.2 Service Configurations (Cont'd)

(B) Multipoint Service

Multipoint service connects three or more customer designated premises through a Telephone Company hub (i.e., bridging locations). Only certain types of Special Access Service are provided as multipoint service. These are so designated in the Service Descriptions for the appropriate circuit.

The circuit between hubs on a multipoint service is a mid-link. There is no limitation on the number of mid-links, but the use of more than three mid-links in tandem may degrade the quality of multi-point facilities.

Multipoint service utilizing a customized technical specifications package, as set forth in 7.1.3, will be provided when technically possible.

When ordering, the customer will specify the desired bridging hub(s). National Exchange Carrier Association Tariff FCC No. 4 identifies serving wire centers, hub locations and the type of bridging functions available.

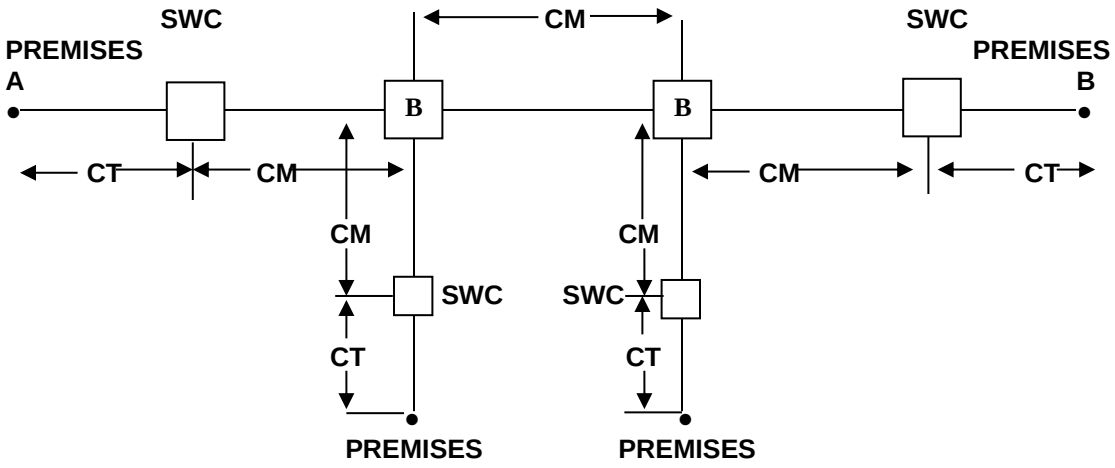
7. Special Access Service (Cont'd)

7.1 Provision of Special Access Service (Cont'd)

7.1.2 Service Configurations (Cont'd)

(B) Multipoint Service (Cont'd)

The following diagram depicts an example of a Voice Grade multipoint service connecting four customer premises via two customer specified bridging hubs.



CT - Circuit Termination
CM - Circuit Mileage
B - Bridging
SWC - Serving Wire Center

Applicable rate elements are:
- Circuit Termination (4 applicable)
- Circuit Mileage (5 sections-fixed rate plus rate per mile between SWC)
- Bridging Optional Features (6 applicable, i.e., each bridge port)

In addition, the Special Access Surcharge, Message Station Equipment Recovery Charge, and charges for other Optional Features and Functions may be applicable.

7. Special Access Service (Cont'd)

7.1 Provision of Special Access Service (Cont'd)

7.1.3 Technical Specifications Packages

Information pertaining to the technical specifications packages indicates the transmission parameters that are available with each package. This information is included in each individual service description section in 7.3 through 7.10 following, in a matrix format 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.

All services installed after the effective date of this tariff will conform to the transmission specification standards contained in this tariff or in the following Technical References for each category of service:

Voice Grade	TR-NWT-000335, Issue 3 PUB 41004, Table 4
Program Audio	GR- 337-CORE, Issue 1
Video	GR- 338-CORE, Issue 1
Digital Data	TR-NWT-000341, Issue 2 PUB 62310
High Capacity	GR-342-CORE, Issue 1 GR-54-CORE, Issue 1

The Telephone Company will maintain existing transmission specifications on services installed prior to the effective date of this tariff, except that existing services with performance specifications exceeding the standards listed in this provision will be maintained at the performance levels specified in this tariff.

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

7. Special Access Service (Cont'd)

7.1 Provision of Special Access Service (Cont'd)

7.1.4 Channel Interfaces

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, but communications can only be provided between compatible channel interfaces. Only certain channel interfaces are compatible. These are set forth in 9. following, in a combination format.

Only certain channel interface combinations are available with the predefined technical specifications packages. These are delineated in the Technical References set forth in 7.1.3 preceding. When a customized circuit is requested, all channel interface combinations available with the specified type of service are available with the customized circuit.

7.1.5 Alternate Use

Alternate Use occurs when a service is arranged by the Telephone Company 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 Telephone Company 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., Circuit Terminations, Circuit Mileage [as applicable] and Optional Features and Functions [if any].

7.1.6 Special Facilities Routing

A customer may request that the Special Access used be specially routed. The regulations, rates and charges for Special Facilities Routing are as set forth in Section 11. following.

7. Special Access Service (Cont'd)

7.1 Provision of Special Access Service (Cont'd)

7.1.7 Design Layout Report

At the customer request, the Telephone Company will provide 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. The information will be provided to the customer at no charge in the form of a Design Layout Report and will be reissued or updated whenever the described facilities are materially changed.

7.1.8 Acceptance Testing

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

(A) For Voice Grade analog services, acceptance testing will include tests for loss, 3-tone slope, DC continuity, operational signaling, C-notched noise, and C-message noise as applicable according to the order for service. Voice Grade services acceptance testing will also include a balance (improved loss) test if the customer has ordered that optional feature.

(B) For services other than Voice Grade, acceptance tests will include tests for the parameters applicable to the service as specified by the customer in the order for service.

In addition to the above tests, Additional Cooperative Acceptance Testing and Nonscheduled Testing, as described in 8.4 following, are available at the customer's request. All test results will be made available to the customer upon request.

7. Special Access Service (Cont'd)

7.1 Provision of Special Access Service (Cont'd)

7.1.9 Jurisdictional Determination

(A) Special Access circuits carrying exclusively interstate traffic will be provided in accordance with the applicable rules and regulations of this tariff.

When mixed interstate and intrastate Special Access Service is provided, the jurisdiction will be determined as follows:

(1) If the customer's estimate of the interstate traffic on the circuit involved constitutes 10% or less of the total traffic on that circuit, the circuit will be provided in accordance with the applicable rules and regulations of the appropriate intrastate tariff.

(2) If the customer's estimate of the interstate traffic on the circuit involved constitutes more than 10% of the total traffic on that circuit, the circuit will be provided in accordance with the applicable rules and regulations of this tariff.

(B) If a billing dispute arises or a regulatory commission questions the reported jurisdiction, the Telephone Company will ask the customer to provide the information the customer uses to determine the jurisdiction of the circuit. The customer shall supply the information within 30 days of the Telephone Company request. The customer shall keep records of system design and functions from which the jurisdiction of its special access circuits can be ascertained. Upon request of the Telephone Company the customer shall make the records available for inspection as reasonably necessary for purposes of verification of the reported jurisdiction.

(C) Customer certification of the jurisdiction of special access circuits is accomplished by indicating the jurisdiction of the circuit (interstate or intrastate) on the Access Service Request. Customer certification of the jurisdiction of special access circuits in place as of the effective date of these revisions shall be provided to the Telephone Company in the form of written correspondence indicating the jurisdiction of each special access circuit.

(D) Customers reporting a change in the jurisdiction of special access circuits subject to individual case basis (ICB) rates and charges set forth in this tariff will not be subject to termination liability charges unless the change results in the termination of the service.

7. Special Access Service (Cont'd)

7.1 Provision of Special Access Service (Cont'd)

7.1.10 Interzone Service

Interzone Service provides the transmission facilities for DS1 and DS3 Special Access between two service areas within a state in association with two customer designated locations within different service areas. The Circuit Mileage will be applied as set forth under 7.2.1(B).

Interzone Service is available between the following service areas, where facilities and conditions permit.

State	Location "A"	CLLI Code	Location "Z"	CLLI Code
California*	Ontario #	ONTRCAXP	Palm Springs #	PLSPCAXG
	San Bernardino #	SNBRCAXK	Palm Springs	PLSPCAXG

Telephone Company's Office

7. Special Access Service (Cont'd)

7.2 Rate Categories, Applications and Regulations

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

7.2.1 Rate Categories

The following rate categories apply to Special Access Service:

- Circuit Terminations
- Circuit Mileage
- Optional Features and Functions
- Non Recurring Charges
- Special Access Surcharge
- Special Access Cross Connect
- Term Payment Plan (TPP) - DS1

These rate categories are described in Sections 7.2.1. (A) through (G) following.

Additionally, rates and charges for Integrated Optical Service Riders may also apply to Special Access connected to Integrated Optical Service Riders as set forth in Section 23.1 following.

The following is Verizon's Open Network Architecture (ONA) Special Access Basic Serving Arrangement which provides a cross-reference to the generic ONA product name.

Generic Name	Telephone Company Name
Dedicated Alert Transport	Alarm Signal Transport Service

The following is a list of the Telephone Company's Open Network Architecture (ONA) Special Access Basic Service Elements (BSEs) which provide a cross-reference to the generic ONA product names.

Generic Name	Telephone Company Name
Automatic Protection Switching	Automatic Loop Transfer
Bridging	Bridging
Conditioning	Conditioning
Multiplexing - Digital 2000	Multiplexing Arrangements

7. Special Access Service (Cont'd)

7.2 Rate Categories, Applications and Regulations (Cont'd)

7.2.1 Rate Categories (Cont'd)

(A) Circuit Termination

The Circuit 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 Circuit 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 (C) following. One Circuit Termination charge applies per customer designated premises at which the circuit is terminated. This charge will apply even if the customer designated premises and the serving wire center are co-located in a Telephone Company building. Connection to Telephone Company provided DS1 or DS3 Circuit Terminations within a serving wire center for customers with EIS will require a Special Access Cross Connect arrangement as described in 7.2.1(F). Circuit Termination rates for DS3 High Capacity Services vary with the number of services and/or level of capacity as set forth in Section 7.2.6 following.

Rates for End User Circuit Terminations are subject to the rules governing Competitive and Non-Competitive Counties as discussed in Section 21.4. Where Competitive and Non-Competitive Rates are present the Circuit Termination consists of two different rate elements: an End User Circuit termination that serves the customer premises and an Interexchange Carrier (IC) Point of Presence (POP) that is collocated in a Company serving wire center. The customer will be charged for both the End User Circuit Termination and the IC Circuit Termination. (N)

Circuit Mileage* (T)

The Circuit Mileage rate category provides for the end office equipment and transmission facilities between serving wire centers and/or Telephone Company hubs. In addition, when Special Access is used in conjunction with Switched Access Service as set forth in 6.3.2 preceding for Switched Access Interface Arrangements*, and the end office serving the customer's end user premises is not a WATS Serving Office, Circuit Mileage is used to extend the Special Access Circuit to a WATS Serving Office. Connection to Telephone Company provided DS1 or DS3 Circuit Mileage within a serving wire center for customers with EIS will require a Special Access Cross Connect arrangement as described in 7.2.1(F). The Circuit Mileage charge is composed of a flat monthly charge plus a rate per mile.

* Pursuant to FCC 17-43, released April 28, 2017, Frontier has detariffed TDM transport charges. (N)
Terms and Conditions for detariffed services can be found in the Interstate Service Guide and Pricelist. (N)

7. Special Access Service (Cont'd)

7.2 Rate Categories, Applications and Regulations (Cont'd)

7.2.1 Rate Categories (Cont'd)

(B) Circuit Mileage

The Circuit Mileage rate category provides for the end office equipment and transmission facilities between serving wire centers and/or Telephone Company hubs. In addition, when Special Access is used in conjunction with Switched Access Service as set forth in 6.3.2 preceding for Switched Access Interface Arrangements*, and the end office serving the customer's end user premises is not a WATS Serving Office, Circuit Mileage is used to extend the Special Access Circuit to a WATS Serving Office. Connection to Telephone Company provided DS1 or DS3 Circuit Mileage within a serving wire center for customers with EIS will require a Special Access Cross Connect arrangement as described in 7.2.1(F). The Circuit Mileage charge is composed of a flat monthly charge plus a rate per mile.

DS3 Banded Special transport (as set forth in Section 7.11.5(J) (2) following) provides flat rate transport for certain DS3 bandwidth that is provided under the National Discount Plan. The flat rate transport applies per DS3 service in accordance with Section 22.1.6 following.

* Circuit Mileage for DS1 and DS3 Special Access, when used with Switched Access, is not available for arrangements between service areas listed under 7.1.10.

7. Special Access Service (Cont'd)

7.2 Rate Categories, Applications and Regulations (Cont'd)

7.2.1 Rate Categories (Cont'd)

(B) Circuit Mileage (Cont'd)

(1) Fixed Rate

The fixed rate component of Circuit Mileage is applied only once per Circuit Mileage facility. When two or more customer designated premises are served by a common serving wire center (i.e., mileage is zero) the fixed rate component is not applied. Except when served by a common serving wire center, the Circuit Mileage-Fixed charge is applied in full whether the Telephone Company provides one or more than one circuit mileage facility terminations. The Circuit Mileage-Fixed rate does not apply when the Telephone Company provides only an intermediate portion of a circuit mileage facility and no circuit mileage facility terminations. When Special Access is used in conjunction with Switched Access* where the customer's end user premises for the Special Access facility is served by a Telephone Company WATS Serving Office, the fixed rate does not apply.

(2) Per Mile Rate

The mileage to be used to determine the monthly rate for the per mile portion of Circuit Mileage is calculated on the airline distance between the serving wire centers associated with two customer designated premises, between a serving wire center associated with a customer designated premises and a Telephone Company hub, between two Telephone Company hubs, or between a Telephone Company end office and a WATS serving office. The serving wire center associated with a customer designated premises is the serving wire center from which this customer designated premises would normally receive dial tone. The methodology for mileage calculation and serving wire center V&H coordinates are specified in National Exchange Carrier Association Tariff FCC. No. 4. Where the calculated miles include a fraction, the value is always rounded up the next full mile.

* Circuit Mileage for DS1 and DS3 Special Access, when used with Switched Access, is not available for arrangements between service areas listed under 7.1.10.

7. Special Access Service (Cont'd)

7.2 Rate Categories, Applications and Regulations (Cont'd)

7.2.1 Rate Categories (Cont'd)

(B) Circuit Mileage (Cont'd)

(2) Per Mile Rate (Cont'd)

When hubs are involved, mileage is computed and rates applied separately for each section of the Circuit Mileage, i.e., customer designated premises serving wire center 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 Telephone Company 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.

When more than one Telephone Company is involved in the provision of Special Access Service, the mileage for the per mile component of Circuit Mileage for each Telephone Company is calculated as set forth in 2.4.7 preceding.

(C) Optional Features and Functions

Optional Features and Functions may be added to a basic circuit service to improve its quality or utility to meet the customer's specific communications requirements. These optional features and functions are identifiable with specific equipment, and represent the end result in terms of performance characteristics which 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 a single rate element.

Descriptions for each of the available Optional Features and functions are set forth in Sections 7.3 through 7.11 following. Specific rate applications for multiplexing are set forth in 7.2.5 following.

Pursuant to FCC 17-43, released April 28, 2017, Frontier has detariffed special access optional features and functions. Terms and Conditions for detariffed services can be found in the Interstate Service Guide and Pricelist. (N) (N) (N)

7. Special Access Service (Cont'd)

7.2 Rate Categories, Applications and Regulations (Cont'd)

7.2.1 Rate Categories (Cont'd)

(D) Nonrecurring Charge

Nonrecurring charges are one-time charges that apply for installation of Special Access Services, installation of optional features and functions, and moves and service rearrangements.

(1) Installation of Service

Nonrecurring charges apply to each service installed. The nonrecurring charges for the installation of service are applied per Circuit Termination.

For individual noncapacity DS3 service, the nonrecurring charge for each installation will apply at the same rate per DS3 Circuit Termination. (D)

Customers subscribing to the Fractional T1 OPP arrangements, at rates set forth in 7.11.5(A), will not be assessed a nonrecurring charge. (D)

The Regulations in Section 7.2.1(D)(3) will apply to FT1 OPP customers when required for charges and other service rearrangements.

(2) Installation of Optional Features and Functions

Nonrecurring charges apply for the installation of some of the optional features and functions available with Special Access Service. The charge applies whether the feature or function is installed coincident with the initial installation of service or at any time subsequent to the installation of the service.

The optional features for which non-recurring charges apply are:

- Voice Grade Data Capability
- Voice Grade Telephoto Capability
- Program Audio Gain Conditioning
- Program Audio Stereo
- DS3 Premises Multiplexer

7. Special Access Service (Cont'd)

7.2 Rate Categories, Applications and Regulations (Cont'd)

7.2.1 Rate Categories (Cont'd)

(D) Nonrecurring Charge (Cont'd)

(3) Service Rearrangements

Service rearrangements are changes to existing (installed) services which may be administrative only in nature, or that involve actual physical change to the service. Changes to pending orders are set forth in 5.3.1 preceding.

Changes in the type of service will be treated as a discontinuance of the service and an installation of a new service.

Changes in the physical location of the point of termination are treated as moves which are described and charged for as in 7.2.1(D)(4).

Changes from a point-to-point DS3 High Capacity Service to a point-to-point DS3 High Capacity Service provided with the DS3 Premises Multiplexer optional feature, as set forth in Section 7.11.4(5) following, are treated as a discontinuance of the service and an installation of a new service.

Changes from a DS3 High Capacity Service multiplexed at a Telephone Company Hub to a point-to-point DS3 High Capacity Service provided with the DS3 Premises Multiplexer optional feature, as set forth in Section 7.11.4(5) following, are treated as a discontinuance of the service and an installation of a new service.

Changes involving the retermination of a Special Access DS1 High Capacity Service from a channel assignment on a DS3 to DS1 multiplexing arrangement at a Telephone Company Hub to a channel assignment on a DS3 Premises Multiplexer, as set forth in Section 7.11.4(5) following, are treated as a discontinuance of the service and an installation of a new service.

(a) Administrative changes will be made without charge(s) to the customer.

7. Special Access Service (Cont'd)

7.2 Rate Categories, Applications and Regulations (Cont'd)

7.2.1 Rate Categories (Cont'd)

(D) Nonrecurring Charge (Cont'd)

(3) Service Rearrangements (Cont'd)

(a) Administrative changes will be made without charge(s) to the customer.

Administrative changes are as follows:

- Change in name or ownership or transfer of responsibility from one customer to another, provided there is no interruption of use or relocation of Special Access service.
- Change of customer or customer's end user premises address when the change of address is not a result of a physical relocation of equipment,
- Change in billing data (name, address, or contact name or telephone number),
- Change of customer circuit identification,
- Change of billing account number,
- Change of customer test line number,
- Change of customer or customer's end user contact name or telephone number,
- Change of agency authorization, and
- Change in jurisdiction involving no physical changes to the service.

7. Special Access Service (Cont'd)

7.2 Rate Categories, Applications and Regulations (Cont'd)

7.2.1 Rate Categories (Cont'd)

(D) Nonrecurring Charge (Cont'd)

(3) Service Rearrangements (Cont'd)

(b) All other service rearrangements will be charged for as follows:

- If the change involves the addition of another termination to an existing two-point or multipoint service, installation charges for each location added will apply.

- If the change involves the addition of an optional feature or multiplexing arrangement, the installation charge associated with the optional feature or multiplexing arrangement will apply. When the optional feature or arrangement has no associated nonrecurring charge (or rated at $.00), one circuit termination nonrecurring charge for the type of service involved (i.e., voicegrade circuit termination, DDS circuit termination, etc.) will be applied to the order.

- If the change involves only changing the type of network interface, with no change in facility, the installation charge associated with each service receiving a network interface change will apply.

- If the change involves changing a two wire service to a four wire service or vice versa, the installation charge for each location changed will apply.

7. Special Access Service (Cont'd)

7.2 Rate Categories, Applications and Regulations (Cont'd)

7.2.1 Rate Categories (Cont'd)

(D) Nonrecurring Charge (Cont'd)

(3) Service Rearrangements (Cont'd)

(b) (Cont'd)

- If the change involves only rollovers or grooming, then no charges will apply. A rollover is the retermination of a segment of a lower capacity special access service onto a higher capacity special access service. The rollover must occur in the wire center where the higher capacity service is multiplexed with no other changes to the lower capacity service being reterminated (i.e., the segment must not require rerouting to connect to the multiplexer of the higher capacity service).

- Grooming is the retermination of a lower capacity special access service from one channel in a higher capacity special access service to another channel in the same higher capacity service or to another channel in another higher capacity special access service (i.e., change in connecting facility assignment) in the same wire center, with no other changes to the lower capacity service.

7. Special Access Service (Cont'd)

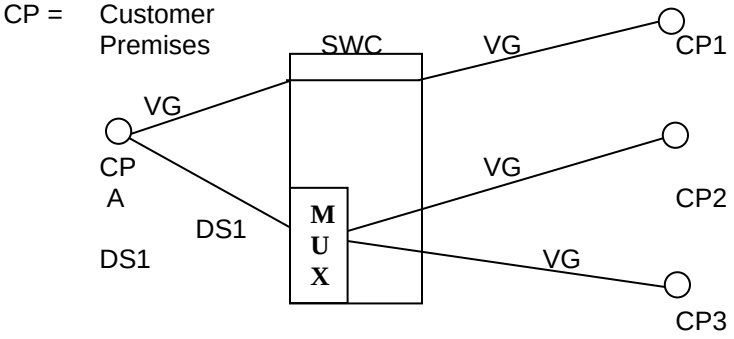
7.2 Rate Categories, Applications and Regulations (Cont'd)

7.2.1 Rate Categories (Cont'd)

(D) Nonrecurring Charge (Cont'd)

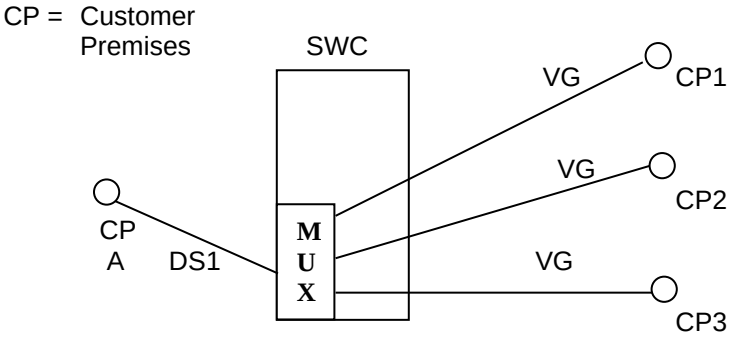
(3) Service Rearrangements (Cont'd)

Rollover – Example 1
Current Configuration



The customer requests that the voiceband circuit (VG) between customer premises A and customer premises 1 be “rolled over” to the DS1 serving customer premises A. No. NRCs apply for this request.

Rollover – Example 1
New Configuration



7. Special Access Service (Cont'd)

7.2 Rate Categories, Applications and Regulations (Cont'd)

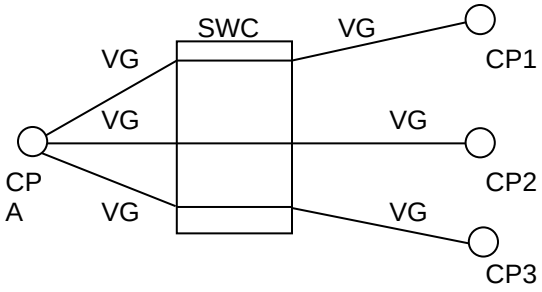
7.2.1 Rate Categories (Cont'd)

(D) Nonrecurring Charge (Cont'd)

(3) Service Rearrangements (Cont'd)

Rollover – Example 2
Current Configuration

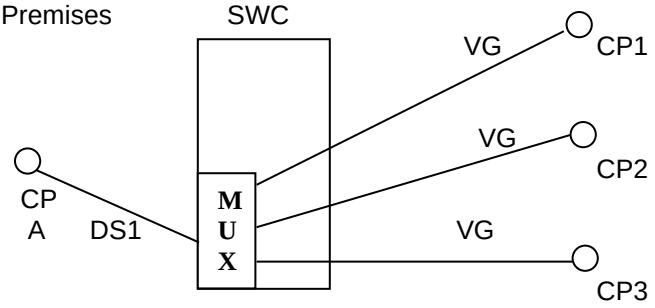
CP = Customer Premises



The customer request the installation of DS1 between the serving wire center (SWC) and customer premises A and DS1/Voice multiplexer in the SWC. The customer also request that hte voiceband circuites serving customer premises 1,2 and 3 be “rolled over” to the new DS1. All NRCs aply for the installation of the DS1 and multiplexer. No NRCs apply for the voiceband roll overs to the new high capacity circuit.

Rollover – Example 2
New Configuration

CP = Customer Premises



7. Special Access Service (Cont'd)

7.2 Rate Categories, Applications and Regulations (Cont'd)

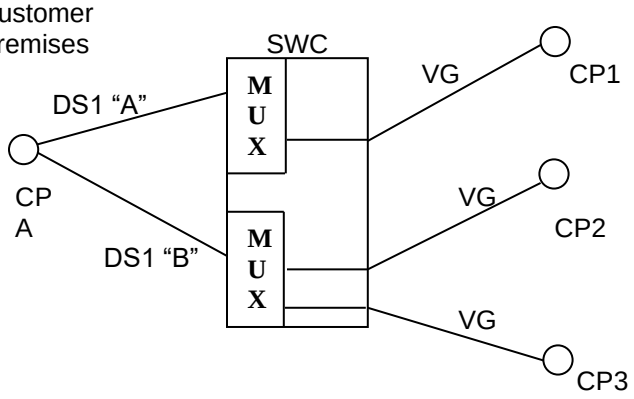
7.2.1 Rate Categories (Cont'd)

(D) Nonrecurring Charge (Cont'd)

(3) Service Rearrangements (Cont'd)

Grooming – Example 1
Current Configuration

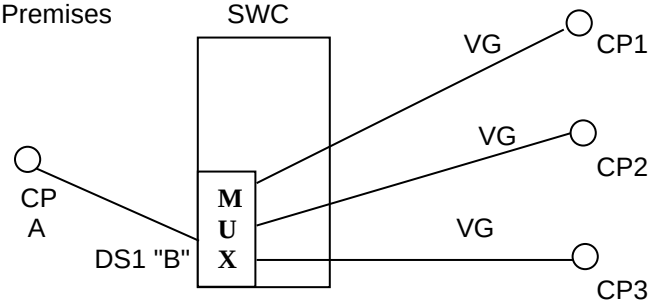
CP = Customer Premises



The customer request that the voiceband (VG) circuit serving customer premises 1 be moved from the DS1 “A” circuit to the DS1 “B” circuit. No NRCs apply for this request.

Grooming – Example 1
New Configuration

CP = Customer Premises



7. Special Access Service (Cont'd)

7.2 Rate Categories, Applications and Regulations (Cont'd)

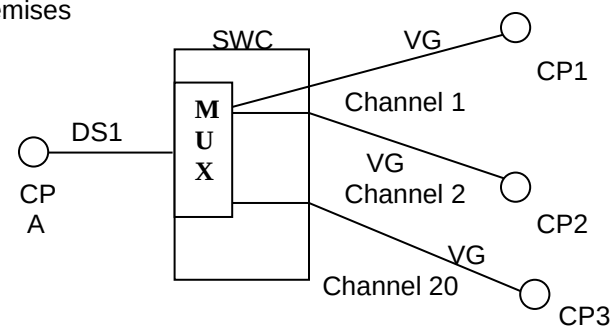
7.2.1 Rate Categories (Cont'd)

(D) Nonrecurring Charge (Cont'd)

(3) Service Rearrangements (Cont'd)

Grooming – Example 2
Current Configuration

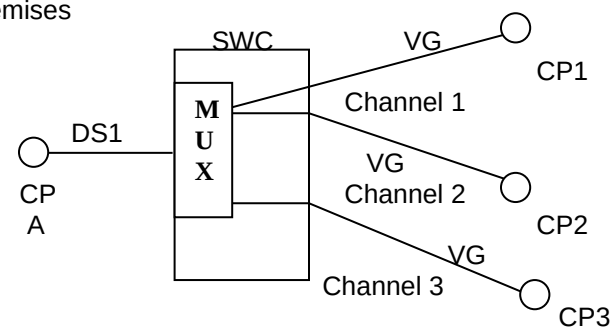
CP = Customer Premises



The customer request that the voiceband (VG) circuit serving customer premises 1 be moved from the DS1 “A” circuit to the DS1 “B” circuit. No NRCs apply for this request.

Grooming – Example 2
New Configuration

CP = Customer Premises



7. Special Access Service (Cont'd)

7.2 Rate Categories, Applications and Regulations (Cont'd)

7.2.1 Rate Categories (Cont'd)

(D) Nonrecurring Charge (Cont'd)

(3) Service Rearrangements (Cont'd)

- If the change involves reterminations other than Rollover and/or Grooming, all NRCs associated with the installation of the lower capacity service will apply.

- In cases where multiple service rearrangements or an additional termination or a move and a service rearrangement are requested on a single ASR, the total charge will never exceed the full nonrecurring charge for the basic service.

(4) Moves

A move involves a change in the physical location of the point of termination of Special Access. A move normally involves an interruption of Special Access for the period required to complete the move. No credit allowance will be granted for that period. Special construction may also be applicable at the different customer premises.

A customer may request that Special Access not be interrupted during a move. To comply with that request, it may be necessary to install a duplicate Special Access, and subsequently discontinue the existing Special Access. Charges, monthly and nonrecurring, will apply for the duplicate Special Access. A new minimum period will be established for the duplicate portion of the Special Access, depending on which end of the Special Access is moved. The customer will remain responsible for all minimum period charges associated with the corresponding portion of the disconnected Special Access.

The charge for the move depends on whether the move is within the same customer premises or to a different customer premises.

7. Special Access Service (Cont'd)

7.2 Rate Categories, Applications and Regulations (Cont'd)

7.2.1 Rate Categories (Cont'd)

(D) Nonrecurring Charge (Cont'd)

(4) Moves (Cont'd)

(A) Same CDL

When the move of a termination, as defined in Section 2.1.5, for special access is to a new point within the same customer premises (same address and/or same building), the charge for the move will be the installation charge for the portion of the service being reterminated. There will be no change in the minimum period requirements. For services subject to payment plan regulations, the same payment period will remain in force.

(B) Different Customer Premises

(1) When the move is to a different customer premises (different address and different building), except as specified below, it will be treated as a disconnect and an installation of service. The appropriate service installation charge for the service termination(s) affected will apply. A new minimum period will be established for the installed Special Access Service. The customer will remain responsible for all minimum period charges associated with the disconnected Special Access Service. For services subject to payment plan regulations, a new payment plan will be established and full assessment of the remaining liabilities will be applicable.

(2) When the move is to a different customer premises but served by the same serving wire center, the following conditions apply:

- A change ASR will be required.

- The appropriate service installation charge for the service termination(s) affected will apply.

- For Special Access services subject to payment plan regulations, if the customer of record remains the same with no lapse in service, the appropriate NRCs for changes will apply. Otherwise, the move will be treated as a disconnect and an installation of service and all appropriate NRCs and full assessment of the remaining liabilities will be applicable.

7. Special Access Service (Cont'd)

7.2 Rate Categories, Applications and Regulations (Cont'd)

7.2.1 Rate Categories (Cont'd)

(E) Surcharge for Special Access Service

(1) General

Special Access Services provided under this tariff may be subject to the monthly Special Access Surcharge.

(2) Application

The Special Access Surcharge will apply to each interstate Special Access Service that terminates on an end user's PBX or other device where, through a function of the device, the Special Access Service interconnects to the local exchange network. The Surcharge will apply irrespective of whether the interconnection function is performed in equipment located at the customer's premises or in a Centrex CO-type switch.

The monthly Special Access Surcharge applies to special access facilities on a per voice equivalent basis as shown in the following example:

Special Access Facility	Voice Grade Equivalent	Surcharge	Monthly Charge
Group	12 x	$25	= $300.00
DS1	24 x	$25	= $600.00

In the case of multipoint special access facilities, one Special Access Surcharge will apply for each termination of a special access circuit at an end user's premises.

The Telephone Company will bill the customer who orders the special access facility the Special Access Surcharge per installation unless the facility is exempt from the surcharge as set forth in (3) following.

When the customer orders DS3 Premises Multiplexer as set forth in Section 7.11.4(5) following, the Special Access Surcharge will apply to the DS1s that are derived from the multiplexer unless written certification is provided in accordance with this Section 7.2.1(E).

7. Special Access Service (Cont'd)

7.2 Rate Categories, Applications and Regulations (Cont'd)

7.2.1 Rate Categories (Cont'd)

(E) Surcharge for Special Access Service (Cont'd)

(3) Exemption

The special access facility will be exempted from the monthly surcharge upon receipt of the customer's written certification for the following Special Access Service terminations:

1) an open-end termination in a Telephone Company switch of an FX line, including CCSA and CCSA-equivalent ONALs; or
2) an analog circuit termination that is used for radio or television program transmission; or
3) a termination used for TELEX service; or
4) a termination that by the nature of its operating characteristics could not make use of Telephone Company common lines such as terminations which are restricted through hardware or software; or
5) a termination that interconnects either directly or indirectly to the local exchange network where the usage is subject to Carrier Common Line charges, such as where the special access facility accesses only FGA and no local exchange lines, or special access facility between customer points of termination, or special access facility connecting CCSA or CCSA-type equipment (inter¬-machine trunks); or a termination that the customer certifies to the Telephone Company is not connected to a PBX or other device capable of interconnecting the special access facility to a local exchange subscriber line.

Written certification for exemption must include the reason the service is exempted from the surcharge using the categories of exemption as stated above. An ASR may be used for exemption certification, provided all information as required by this section is included. The Telephone Company will bill the surcharge to all customers who have not provided valid exemption certification.

The Telephone Company will cease billing the Special Access Surcharge when certification that the Special Access facility has become exempt from the surcharge, as set forth preceding, is received. If the status of the special access facility was changed prior to the receipt of the exemption certification, the Telephone Company will credit the customer's account, not to exceed ninety days, based on the effective date of the change specified by the customer in the letter of certification.

7. Special Access Service (Cont'd)

7.2 Rate Categories, Applications and Regulations (Cont'd)

7.2.1 Rate Categories (Cont'd)

(E) Surcharge for Special Access Service (Cont'd)

(4) Rate

Surcharge for Special Access Service	Monthly Rate
- Applicable to all jurisdictions of the Issuing Carriers listed on Title Pages 2 and 2.1.	
- Per Voice Grade Equivalent	$25.00

(F) Surcharge for Special Access Service (Cont'd)

The Special Access Cross Connect charge provides the communications path between Telephone Company provided DS0 (DDS operating at 64Kbps or Fractional T1 bandwidths), DS1 or DS3 Circuit Termination or Circuit Mileage and a customer's transmission equipment and facilities where the customer is provided EIS as defined in Section 17. The Special Access Cross Connect charge may also provide the communications path between a customer's transmission equipment and facilities where the customer is provided EIS and EIS arrangements of another customer via Dedicated Transport Service as set forth in Section 19.1. The Special Access Cross Connect is available as DS0, DS1 or DS3 connections. The DS0 Cross Connect can accommodate 64Kbps DDS. The Cross Connect arrangement may be connected directly to Telephone company provided 64Kbps DDS or DS0, DS1 or DS3 services or to a Telephone Company provided 64 Kbps DDS or DS0, DS1, or DS3 multiplexing arrangement located in a Telephone Company Hub. The Cross Connect charge applies per DS0 (64Kbps), DS1, or DS3 connection.

In addition to the Special Access Cross Connect arrangements described herein, Optical Facility Terminations are available as described in Section 19.2.

Rates for DS0, DS1, and DS3 Cross Connect arrangements listed in Section 7.11.5 and rates for Optical Facility Terminations listed in Section 19.2(E) will apply in addition to the other rates and charges as specified in Section 17.

7. Special Access Service (Cont'd)

7.2 Rate Categories, Applications and Regulations (Cont'd)

7.2.1 Rate Categories (Cont'd)

(G) DS1 Term Payment Plan (TPP)# (T)

(1) Description

The DS1 Term Payment Plan (TPP) allows customers term discounts for DS1 circuit termination. A customer may select this service for either a single state or multi state level. TPP is offered for a 1, 2, 3, or 5 year service commitment period for the DS1 circuit termination. All TPP DS1 circuit terminations will be billed the same rate, depending on the length of the term selected by the customer.

During the TPP term, a customer may not concurrently subscribe its Special Access DS1 Services to a National Discount Plan as set forth in Section 22 following.

(2) Rate Changes

Decreases in the TPP monthly recurring circuit termination rates will be passed on to subscribers of the plan.

Effective November 21, 2017, new subscriptions to DS1 Term Payment Plan are no longer permitted. DS1 TPP customers subscribed as of November 16, 2017 may continue with their existing subscriptions. If at any time an existing customer terminates its DS1 TPP, the customer may not re-subscribe to the plan.

7. Special Access Service (Cont'd)

7.2 Rate Categories, Applications and Regulations (Cont'd)

7.2.1 Rate Categories (Cont'd)

(G) DS1 Term Payment Plan (TPP)# (Cont'd) (T)

(3) Commitment Levels

To initiate a TPP, on either a single state or multi state plan, the minimum commitment is as shown below.

Number of States	Minimum Number of Circuit Terminations
1	25
2	50
3	75
4	100
5 and over	125

The commitment levels will be met if the customer has the minimum number of DS1 TPP circuit terminations in service. If the customer has committed to more than the minimum number of circuit terminations required, as shown above, an allowance of minus 2% or plus 5 % will be considered as having met the commitment level. If the customer disconnects service under its DS1 TPP in order to replace it with a Replacing Service pursuant to Section 2.9 preceding, the terms and conditions for a Technology Migration as set forth in Section 2.9 preceding apply, including the calculation affecting the Annual Review as set forth in Section 2.9.1 preceding.

(4) Changes to Commitment Levels

Written notice must be submitted by the customer to change the commitment level of DS1 circuit terminations. If, as the result of increasing or decreasing the commitment level, service is changed from a TPP to a DS1 standard arrangement, or from a standard arrangement to a TPP arrangement an ASR will be required within 30 days for all services changed. Only one TPP arrangement will be allowed per customer for each term period. Penalties for decreasing the commitment level are discussed in 7.2.1(G)(8).

Service Availability is limited. Refer to # footnote on page 7-30. (N)

7. Special Access Service (Cont'd)

7.2 Rate Categories, Applications and Regulations (Cont'd)

7.2.1 Rate Categories (Cont'd)

(G) DS1 Term Payment Plan (TPP)# (Cont'd) (T)

(5) TPP Plan Enrollment

When the customer elects to enroll in a TPP they must specify, in writing, the enrollment date (which will be the anniversary date) and the commitment level. The specified enrollment date must be within 30 days of receipt. The customer must also select whether the TPP will be a single state or multi-state plan and specify the states to be included. By the specified date the customer must issue ASRs to add DS1 circuit terminations to the TPP and/or convert standard arrangement to the TPP to fall within the commitment range specified in 7.2.1(G)(3).

(6) Annual Review

Each customer's TPP will be reviewed annually to determine if the customer met its commitment of TPP DS1 circuit terminations (including any DS1 circuit terminations that were replaced by a Replacing Service using the methodology for a Technology Migration specified in Section 2.9.1 preceding). The customer will be notified in writing as to the status of the TPP. This notification will inform the customer of any TPP DS1 circuit terminations that must be converted. If the customer has increased the number of DS1 circuit terminations from the initial commitment beyond the range specified in 7.2.1(G)(3), he will have the option of increasing the commitment level for the remainder of the plan. If the customer chooses not to increase the commitment level of DS1 circuit terminations for the remaining year(s) of the plan, he must convert the increased number of DS1 circuit terminations to the standard payment plan. The DS1 circuit terminations that are converted to the standard payment plan will not be eligible for reconversion to the TPP for a ten month period. The customer may decrease the commitment level at the time of the annual review and pay the applicable penalties for the amount of DS1 circuit terminations being decreased. The customer will have 30 days from receipt of this notification to convert DS1 circuit terminations.

If the customer does not take action during the 30 day period, the commitment level will be automatically changed to the number of TPP DS1 circuit terminations in effect at the anniversary date. Penalties will apply as set forth in 7.2.1(G)(8).

Service Availability is limited. Refer to # footnote on page 7-30. (N)

7. Special Access Service (Cont'd)

7.2 Rate Categories, Applications and Regulations (Cont'd)

7.2.1 Rate Categories (Cont'd)

(G) DS1 Term Payment Plan (TPP)# (Cont'd) (T)

(7) TPP Conditions

If a DS1 service has two DS1 circuit terminations, to include this service as part of a TPP, both DS1 circuit terminations must be in the TPP.

After enrolling in the plan, the customer may add or delete DS1 circuit terminations rated at the specified term period rate at any time during the plan. For example, if the customer agrees to a 2 year TPP, they may add DS1 circuit terminations at any time at the 2 year TPP rate.

Individual states can not be added or deleted during the plan period.

A customer may subscribe to only one plan for each term period within a given state.

(8) Penalties for Failing To Meet Commitment

When the number of TPP Services at the annual review is less than the acceptable commitment range, the following penalty charges will apply, based on the difference between the commitment level less 2% and the number of TPP services in effect at the annual review. For example, if the commitment level is 100 and the customer has 90 DS1 TPP circuit terminations at time of annual review, the penalties described below will be applied to the difference of 98 (2% less than 100) and 90, which would be 8 in this example.

(a) The penalties charged during the first year of the TPP will be the full MRC for 4 months plus 10% of the MRC for the remaining number of months.

(b) The penalties charged during the subsequent years of the TPP will be 10% of the MRC for 4 months plus 10% of the MRC for the remaining number of months.

Service Availability is limited. Refer to # footnote on page 7-30. (N)

7. Special Access Service (Cont'd)

7.2 Rate Categories, Applications and Regulations (Cont'd)

7.2.1 Rate Categories (Cont'd)

(G) DS1 Term Payment Plan (TPP)# (Cont'd) (T)

(9) TPP Nonrecurring Charge

Customers subscribing to a TPP will be assessed a nonrecurring charge per circuit termination except in the following conditions:

- when converting standard arrangement circuit terminations to a TPP.

(10) Changes in Length of a TPP Period

Prior to the expiration of a TPP period, the customer may elect to convert to a new TPP period of the same or different length, subject to the following conditions:

- no credit will be given for the new payment period for payments made under the original TPP arrangement
- NRCs will not be reapplied for existing service(s)
- if the new TPP period is shorter in length than the time remaining under the existing TPP, the change to the new TPP period constitutes a disconnect of the existing TPP service and termination liability charges will apply
- the rates for the new period will be the rates currently in effect at the time of the change.

Service Availability is limited. Refer to # footnote on page 7-30. (N)

7. Special Access Service (Cont'd)

7.2 Rate Categories, Applications and Regulations (Cont'd)

7.2.1 Rate Categories (Cont'd)

(G) DS1 Term Payment Plan (TPP)# (Cont'd) (T)

(11) Renewal Options

At the expiration of a TPP period, the customer may select a new TPP period or convert to a month to month payment plan. If the customer fails to make this selection, the Telephone Company will notify the customer and continue one additional month of TPP billing. If the customer does not select a new payment plan within 30 days from the expiration date, billing will automatically convert to the DS1 month to month payment plan.

At the expiration of the TPP period, if the customer renews at the DS1 quantity in service at the end of his previous TPP, or a greater quantity, and makes no change in the selected states, then any penalties that may need to be assessed at the first anniversary of the renewal period will be assessed as set forth in 7.2.1(G)(8)(b). The rates for the renewal period will be the rates in effect at the time of the renewal.

(12) Upgrade to Higher Speed Service

The customer may upgrade service to a higher speed during a TPP period. The upgraded service will be subject to all appropriate NRCs.

If both of the following conditions exist, the commitment level will be decreased by the number of TPP DS1 circuit terminations that are upgraded to a higher speed service.

- The customer must notify the Telephone Company in writing in addition to the ASR.

- The higher speed service period must be longer in length than the time remaining under the TPP.

Service Availability is limited. Refer to # footnote on page 7-30. (N)

7. Special Access Service (Cont'd)

7.2 Rate Categories, Applications and Regulations (Cont'd)

7.2.1 Rate Categories (Cont'd)

(G) DS1 Term Payment Plan (TPP)# (Cont'd) (T)

(13) Technology Migrations

For customers who subscribe to or renew their subscription to a DS1 TPP on or after December 2, 2010, the customer may disconnect a DS1 Circuit Termination included in the DS1 TPP in order to replace such DS1 Circuit Termination with a Replacing Service pursuant to Section 2.9 preceding.

For customers who subscribed to a DS1 TPP prior to December 2, 2010, Section 7.2.1(G)(12) preceding includes replacements of DS1 Circuit Terminations with Telephone Company provided Ethernet private line service or a Telephone Company provided switched Ethernet service of a higher speed. However, the customer may, at its option, replace a DS1 Circuit Termination with a Replacing Service pursuant to Section 2.9 preceding in lieu of Section 7.2.1(G)(12) preceding.

Service Availability is limited. Refer to # footnote on page 7-30. (N)

7. Special Access Service (Cont'd)

7.2 Rate Categories, Applications and Regulations (Cont'd)

7.2.2 Minimum Periods

The minimum service period for all services except part-time and occasional Program Audio services and High Capacity DS3 services is one month. The minimum service period for part-time Program Audio Services is one day even though the service will be provided only for the duration of the event specified on the order (e.g., one-half hour, two hours, five hours, etc.). The minimum period for High Capacity DS3 Service is that period requested by the customer as set forth in Section 7.2.6 (B) following. The minimum period for Month to Month rated High Capacity DS3 Service is 12 months. (T) (T)

The minimum service periods for High Capacity DS3 Services and High Capacity DS1 Services that are included in a National Discount Plan are set forth in Section 22.1.8 following.

7.2.3. Application of Daily and Monthly Rates

(A) Daily Rates

Daily rates are recurring rates that apply to each 24 hour period or fraction thereof that a Program Audio 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.

Part-time Program Audio Service ordered on one Access Service Request and provided within a consecutive 30 day period will be charged the daily rate, not to exceed an amount equal to the monthly rate. For each subsequent day or part day, a charge equal to 1/30th of the monthly rate shall apply.

(B) 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.

7. Special Access Service (Cont'd)

7.2 Rate Categories, Applications and Regulations (Cont'd)

7.2.4 Facility Hubs and Multiplexing*

A customer has the option of ordering Voice Grade facilities or High Capacity facilities (i.e., DS1, DS2, DS3 or DS4) to a facility hub for multiplexing to individual services of a lower capacity or bandwidth (e.g., Voice, Program Audio, etc.). Additionally, the customer may specify optional features for the individual circuits derived from the facility to further tailor the circuit to meet specific communications requirements.

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 circuits

A hub is a Telephone Company designated wire center at which multiplexing functions are performed.

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 placing an Access Service Request the customer will specify the desired hub. The National Exchange Carrier Association Tariff FCC No. 4 identifies serving wire centers, hub locations and the type of multiplexing functions available.

When a DS3 High Capacity Service is multiplexed at a customer designated premises, such configuration is not a Telephone Company Hub for purposes of administering the terms and conditions of this tariff.

For DS3 High Capacity Service, multiplexing functions may also be performed at a customer designated premises using the DS3 Premises Multiplexer optional feature set forth in Section 7.11.4(5) following.

* Pursuant to FCC 17-43, released April 28, 2017, Frontier has detariffed TDM transport charges. (N)
Terms and Conditions for detariffed services can be found in the Interstate Service Guide and (N)
Pricelist. (N)

7. Special Access Service (Cont'd)

7.2 Rate Categories, Applications and Regulations (Cont'd)

7.2.4 Facility Hubs and Multiplexing (Cont'd)

Point to point services may be provided on circuits of these facilities to a hub. The transmission performance for the point to point service provided between the customer designated premises will be that of the lower capacity or bit rate.

The Telephone Company will commence billing the monthly rate for the facility to the hub on the date specified by the customer on the Access Service Request. The customer will be billed for a High Capacity or Voice Grade Circuit Termination, Circuit Mileage, Special Access Cross Connect and the multiplexer for the service at the time the facility is installed. 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. Individual service rates (by service type) will apply for a Circuit Termination and additional Circuit Mileage (as required) for each channelized service. These will be billed to the customer as each individual service is installed.

Cascading multiplexing occurs when a high capacity circuit is de-multiplexed to provide circuits with a lesser capacity and one of the lesser capacity circuits is further demultiplexed. 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, Circuit Mileage charges also apply between the hubs.

Although not requiring multiplexing, the Telephone Company will designate certain hubs for Program Audio 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 7.6.5 and 7.7.4 for a Circuit Termination, and Circuit Mileage and Optional Features and Functions as applicable. The customer may order part-time and occasional Program Audio as needed between the hub and a second customer designated premises. The rate elements required to provide the part-time or occasional service (i.e., Circuit Termination, and Circuit Mileage and Optional Features as applicable) will be billed at daily rates for the duration of the service requested.

7. Special Access Service (Cont'd)

7.2 Rate Categories, Applications and Regulations (Cont'd)

7.2.5 Shared Use Analog and Digital High Capacity Services

Shared Use refers to a rate application applicable only when the customer orders High Capacity Special Access facilities between a customer designated premises and a Telephone Company hub where the Telephone Company performs multiplexing/de-multiplexing functions and the same customer then orders the derived channels as Special and Switched Access Services. If the customer has Switched Access Service between a customer designated premises and an end office that is multiplexed at a Telephone Company hub and subsequently orders the derived channels as Special and Switched Access Service, rates and charges will apply as if the service were ordered as shared use. (T)

Shared use of Special Access Cross Connect and Expanded Interconnection service are not available.

Except as noted above, the High Capacity facility will be ordered, provided and rated as Special Access Service (i.e., Channel Termination, Channel Mileage, as appropriate, and Multiplexing Arrangement). 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. Rating as Special Access will continue until such time as the customer chooses to use a portion of the available capacity for Switched Access Service. Individual service (i.e., Switched or Special Access) nonrecurring charges will not apply to the individual channels of the shared use facility.

When Special Access Service is provided utilizing a channel of the shared use facility to a hub, High Capacity rates and charges will apply for the facility to the hub, as set forth preceding, and individual service rates and 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. The applicable rates and charges will include a Channel Termination and Channel Mileage, if applicable. Rates and charges for optional features and functions associated with the service, if any, will apply for the appropriate channel type. (T)

7. Special Access Service (Cont'd)

7.2 Rate Categories, Applications and Regulations (Cont'd)

7.2.5 Shared Use Analog and Digital High Capacity Services (Cont'd)

As each individual channel is activated for Switched Access Service, the High Capacity Special Access Channel Termination, Channel Mileage, and Multiplexing rates will be reduced accordingly (e.g., 1/24th for a DS1 service, etc.). Switched Access Service rates and charges, as set forth in Section 20 following, will apply for each channel that is used to provide a Switched Access Service. Additionally, the Switched Access Service Entrance Facility, Direct Trunked Transport, and Multiplexing charges, if applicable, will be reduced by multiplying their respective rates by the ratio of derived Switched Access Service channels to the total number of Voice Grade channels that can be derived. (T)

The customer must place an order for each individual Switched or Special Access Services utilizing the Shared Use Facilities and specify the channel assignment for each such service. (T)

7. Special Access Service (Cont'd)

7.2 Rate Categories, Applications and Regulations (Cont'd)

7.2.6 DS3 High Capacity*

(A) A DS3 (44.736Mbps) High Capacity Circuit Termination may be ordered as an Individual System. A Circuit Termination may be ordered with an electrical or optical interface. (D)

DS3 Circuit Terminations are non-distance sensitive and are provided on a protected basis.

Individual System

An Individual System is a single DS3 between a CDL and the serving wire center. The appropriate NRC is applied per Circuit Termination.

Circuit Mileage rate elements are applied per Circuit Termination when mileage between offices is required. In instances when a Circuit Termination is ordered to a second CDL in conjunction with an Individual System Circuit Termination and Circuit Mileage between offices is required Circuit Mileage rate elements are applied per circuit.

Banded Circuit Mileage rate elements are applied to certain DS3 Services that are provided under a National Discount Plan as specified in Section 22.1.6 following.

* DS3 High Capacity service may be provided between service areas shown under 7.1.10, where facilities and conditions permit.

7. Special Access Service (Cont'd)

7.2 Rate Categories, Applications and Regulations (Cont'd)

7.2.6 DS3 High Capacity (Cont'd)

(D)

(D)

7. Special Access Service (Cont'd)

7.2 Rate Categories, Applications and Regulations (Cont'd)

7.2.6 DS3 High Capacity (Cont'd)

(B) Minimum Service Periods#

DS3 service is offered under four minimum service periods, each with different rate levels. The minimum service periods are 1, 3, 5 and 7 years. The customer must specify the minimum service period at the time the service is ordered. Each DS3 Circuit Termination of a two-point DS3 service must have the same minimum service period. (D) (D)

The minimum service periods for Special Access DS3 Service and Special Access DS1 Service that are included in a National Discount Plan are set forth in Section 22.1.8 following

The customer may select a longer minimum service period at any time, without penalty or application of nonrecurring charges, to obtain the lower recurring rates associated with a longer minimum service period. When the customer selects this option, the customer will receive full credit for the amount of time the service was provided under the shorter minimum service period. For example, if a customer, who initially ordered DS3 service under a one-year minimum service period, after six months decides to select the three year minimum service period, the customer will have a remaining obligation period of 30 months. The new recurring charges will apply subsequent to the effective date of the new minimum service period.

(C) Expiration of Service Periods#

At the expiration of a service commitment period, the customer may select a new DS3 commitment period. If the customer does not select a new minimum service period within 60 days from the expiration date, billing will remain at the current service period and a new DS3 service period will begin based on the previously effective service period. All terms and conditions, including subsequent Termination Liabilities will apply to the new DS3 Period.

Effective November 19, 2021, DS3 Minimum Service Periods, as previously defined, are no longer permitted. DS3 Service Period rates in effect as of November 19, 2021 may continue the existing term but will not be eligible to extend, renew, reenroll in, convert to a new term period, or in any other way continue their existing plan beyond its current expiration. At expiration of the commitment term, service will be converted to the Month to Month Rate. If at any time an existing customer terminates its DS3 Service Period the customer may not re-subscribe to the rate.

(D)

7. Special Access Service (Cont'd)

7.2 Rate Categories, Applications and Regulations (Cont'd)

7.2.6 DS3 High Capacity (Cont'd)

(C) Expiration of Service Periods# (Cont'd)

Customers with expired service periods for the Individual System DS3s, prior to the effective date of this tariff offering will have up to 180 days to select a new commitment service period. If the customer does not select a new service period within 180 days of the effective date of this tariff, billing will remain at the current service period and a new DS3 minimum service period will begin based on the last service period. The beginning date of the new service period will be the date immediately following the expiration date of the expired service period. (D) (D)

(D) Discontinuance Without Liability - DS3 Minimum Service Period#

Rates for DS3 service may vary during the minimum service period; however, should the recurring charges for a customer's DS3 service increase, in aggregate, by more than 10% from the original recurring charges during the minimum service period, the customer may, at their option, terminate the DS3 service without penalty or liability.

The customer may cancel the minimum service period of a DS3 Service that is provided under this Section 7.2.6 in order to subscribe such DS3 Service to the NDP as set forth in Section 22 following.

The customer may cancel the minimum service period of a DS3 Service that is provided under this Section 7.2.6 in order to replace the DS3 Service with a Replacing Service pursuant to the Technology Migration regulations set forth in Section 2.9 preceding.

Service Offer is limited. See Footnote on page 7-44.

(D)

7. Special Access Service (Cont'd)

7.2 Rate Categories, Applications and Regulations (Cont'd)

7.2.6 DS3 High Capacity (Cont'd)

(E) Discontinuance With Liability - DS3 Minimum Service Period# (T)

When a DS3 service is discontinued prior to the end of the minimum service period, the customer will be liable for a percentage of the total monthly charges for the remaining portion of the minimum service period. This charge will be based on the rates in effect at the time of disconnect. The customer's total liability is dependent upon the number of months remaining within the year that the service is discontinued times the liability rate for that year plus the total monthly charges for each annual period remaining in the minimum service period times the applicable liability rate. The liability rates for each year of the minimum service period are as follows:

Year In Which Service Is Discontinued	Liability Rate
1	45%
2	30%
3	25%
4	20%
5	15%
6	10%
7	5%

For example, if a customer with a seven year minimum service period discontinues DS3 service after six months within the 4th year, the customer will be liable for 20% of the total monthly charges for six months, 15% of the total monthly charges for the 5th year, 10% of the total monthly charges for the 6th year and 5% of the total monthly charges for the 7th year.
(x) Reissued material originally filed under Transmittal No. 1118 on November 15, 2010, and scheduled to become effective November 30, 2010.

(F) Reserved for Future Use

Service Offer is limited. See Footnote on page 7-44. (N)

7. Special Access Service (Cont'd)

7.2 Rate Categories, Applications and Regulations (Cont'd)

7.2.6 DS3 High Capacity (Cont'd)

(G) Upgrades

(1) Reserved for Future Use (T)

(D)

(D)

(2) Technology Migration

A customer subscribing to DS3 High Capacity Service under a minimum service period may disconnect such DS3 High Capacity Service in order to replace it with a Replacing Service pursuant to the Technology Migration regulations set forth in Section 2.9 preceding.

(D)

(D)

7. Special Access Service (Cont'd)

7.3 Reserved for Future Use

7.4 Reserved for Future Use

7.5 Voice Grade Service

7.5.1 Basic Circuit Description

A Voice Grade Circuit is a circuit 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. Effective 2-wire and 4-wire circuits are available as an Optional Feature and Function. Voice Grade circuits are provided between customer designated premises or between a customer designated premises and a Telephone Company hub.

Voice Grade Service may be ordered in conjunction with Switched Access services as set forth in Section 6.3.2 preceding to provide access for a customer's communications service (e.g., WATS, 800, 888, or WATS-type service). When the customer orders the Switched Access Interface Arrangement, Voice Grade Circuits provide voice frequency transmission capability between an end user premises and a WATS Serving Office (WSO). All applicable Special Access rates and charges apply (including Optional Features and Functions charges). Technical Specifications and Optional Features and Functions available with this arrangement are indicated under Package VG-SI in 7.5.5 following.

7. Special Access Service (Cont'd)

7.5 Voice Grade Service (Cont'd)

7.5.2 Technical Specifications Packages

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

The technical specifications for these parameters (except for dropouts, gain hits, and phase hits) are delineated in Technical Reference TR-NWT-000335, Issue 3, and associated Addendum. The technical specifications for dropouts, phase hits, and gain hits are delineated in Technical Reference PUB 41004, Table 4.

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

7. Special Access Service (Cont'd)

7.5 Voice Grade Service (Cont'd)

7.5.3 Channel Interfaces

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

The following 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 channel interfaces are set forth in 9. following.

7.5.4 Optional Features and Functions

(1) Central Office Bridging Capability

(a) Voice Bridging (two-wire or four-wire)

(b) Data Bridging (two-wire or four-wire)

(c) Telephoto Bridging (two-wire and four-wire)

(d) Dataphone Select-A-Station Bridging with sequential arrangement ports or addressable arrangement ports

(e) Telemetry and Alarm Bridging, Split Band-Active Bridging, Passive Bridging, Summation-Active Bridging

(2) Reserved for Future Use

(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.

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.

7. Special Access Service (Cont'd)

7.5 Voice Grade Service (Cont'd)

7.5.4 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 delineated in Technical Reference TR-NWT-000335, Issue 3.

(b) Improved C-Type Conditioning

Improved C-Type Conditioning options are provided in conjunction with C-Type Conditioning at the rates set forth in Section 7.5.5 following. The C-Type Conditioning rate shall apply only once regardless if one or both of the following Improved Options are ordered.

(i) Improved Attenuation Distortion

Improved Attenuation Distortion upgrades the frequency versus loss limits of the channel. The technical specifications for Improved Attenuation Distortion are delineated in Technical Reference TR-NWT-000335, Issue 3. This option is provided in conjunction with C-Type conditioning.

(ii) Improved Envelope Delay Distortion

Improved Envelope Delay Distortion upgrades the frequency versus delay response limits of the channel. The technical specifications for Improved Envelope Delay Distortion are delineated in Technical Reference TR-NWT-000335, Issue 3. This option is provided in conjunction with C-Type conditioning.

(c) Sealing Current

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

7. Special Access Service (Cont'd)

7.5 Voice Grade Service (Cont'd)

7.5.4 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. This level must be within a specific range on effective four-wire transmission. The ranges are delineated in Technical Reference TR-NWT-000335, Issue 3.

(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. Telephone Company equipment is required at the customer's premises where this option is ordered. The Improved Return Loss parameters are delineated in Technical Reference TR-NWT-000335, Issue 3.

(b) On Effective Four-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 Telephone Company equipment may be required at the customer's premises with the two-wire POT. The Improved Return Loss parameters are delineated in Technical Reference TR-NWT-000335, Issue 3.

7. Special Access Service (Cont'd)

7.5 Voice Grade Service (Cont'd)

7.5.4 Optional Features and Functions (Cont'd)

(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.

The Signal to C-Notched Noise Ratio and intermodulation distortion parameter for Data Capability are:

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

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 of telephotographic services. The attenuation distortion and envelope delay distortion parameters for Telephoto Capability are:

Attenuation Distortion (1004Hz Reference)		Envelope Delay Distortion	
Frequency Range (Hz)	Variation (dB)	Frequency Range (Hz)	Variation (mcs)
500-3000	-0.5 to +1.5	1000-2600	110
300-3200	-1.0 to +2.5	800-2800	180

7. Special Access Service (Cont'd)

7.5 Voice Grade Service (Cont'd)

7.5.4 Optional Features and Functions (Cont'd)

(8) Signaling Capability

Signaling Capability provides for the ability to transmit signals from one customer premises to another customer premises on the same service.

(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 circuits. The arrangement can be utilized to transfer a leg of a Special Access Service to another circuit 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. A spare circuit, if required, is not included as part of the option.

(11) Four-Wire/Two-Wire Conversions

The term "Effective 2-Wire" denotes a condition which permits the simultaneous transmission in both directions over a channel, but it is not possible to insure independent information transmission in both directions. Effective 2-wire channels may be terminated with 2-wire or 4-wire interfaces.

The term "Effective 4-Wire" denotes a condition which permits the simultaneous independent transmission of information in both directions over a channel. The method of implementing effective 4-wire transmission is at the discretion of the Telephone Company (physical, time domain, frequency-domain separation or echo cancellation techniques). Effective 4-wire channels may be terminated with a 2-wire interface at the customer's premises. However, when terminated 2-wire, simultaneous independent transmission cannot be supported because the two wire interface combines the transmission paths into a single path.

When a customer requests that an effective four-wire circuit be terminated with a two-wire circuit interface at the customer designated premises, a four-wire to two-wire conversion is required. The customer will be charged the 4-wire Circuit Termination rate when an effective four-wire is specified in the customer's order. The rate for the conversion is included as part of the basic Circuit Termination rate.

7. Special Access Service (Cont'd)

7.5 Voice Grade Service (Cont'd)

7.5.4 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 VG-													
	C*	1	2	3	4	5	6	7	8	9	10	11	12	SI
C-Type Conditioning	X						X	X	X	X	X	X		
Central Office Bridging Capability	X		X			X	X				X	X	X	
Central Office Multiplexing	X						X							
Customer Specified Premises Receive Level	X		X	X				X	X	X				
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	X
-For Effective Two-Wire Transmission	X		X	X				X						X
Sealing Current Conditioning	X						X							
Selective Signaling Arrangement	X		X			X	X				X	X	X	
Signaling Capability	X	X	X	X				X	X	X				#
Transfer Arrangement	X	X	X	X	X	X	X	X	X	X	X	X	X	

Signaling is provided in conjunction with Switched Access as set forth in 6.3.2(T) preceding.

7. Special Access Service (Cont'd)

7.5 Voice Grade Service (Cont'd)

7.5.5 Rates and Charges

(A) Circuit Termination—Non-Competitive End User
- Per Point of Termination

Jurisdiction	2-Wire Monthly Rates	2-Wire Nonrecurring Charges
California	$24.00	$200.00
Texas	27.90	200.00

Jurisdiction	4-Wire Monthly Rates	4-Wire Nonrecurring Charges
California	$34.85	$200.00
Texas	36.20	200.00

(D)

(D)

7. Special Access Service (Cont'd)

7.5 Voice Grade Service (Cont'd)

7.5.5 Rates and Charges (Cont'd)

(D)

(D)

7. Special Access Service (Cont'd)

7.5 Voice Grade Service (Cont'd)

7.5.5 Rates and Charges (Cont'd)

(D)

(D)

7. Special Access Service (Cont'd)

7.5 Voice Grade Service (Cont'd)

7.5.5 Rates and Charges (Cont'd)

(D)

(D)

7. Special Access Service (Cont'd)

7.5 Voice Grade Service (Cont'd)

7.5.5 Rates and Charges (Cont'd)

(D)

(D)

7. Special Access Service (Cont'd)

7.6 Program Audio Service #

7.6.1 Basic Circuit Description

A Program Audio circuit is a circuit measured in Hz for the transmission of a complex signal voltage. The actual bandwidth is a function of the channel interface selected by the customer. The nominal frequency bandwidths are from 50 to 15000 Hz, from 200 to 3500 Hz, from 100 to 5000 Hz or from 50 to 8000 Hz. Only one-way transmission is provided. Program Audio circuits are provided between customer designated premises or between a customer designated premises and a Telephone Company hub.

7.6.2 Technical Specifications Packages

	Package AP-				
Parameter	C*	1	2	3	4
Actual Measured Loss	X	X	X	X	X
Amplitude Tracking	X				
Crosstalk	X	X	X	X	X
Distortion Tracking	X				
Gain/Frequency Distortion	X	X	X	X	X
Group Delay	X				
Noise	X	X	X	X	X
Phase Tracking	X				
Short-Term Gain Stability	X				
Short-Term Loss	X				
Total Distortion	X	X	X	X	X

The technical specifications are delineated in Technical Reference GR-337-CORE, Issue 1.

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

\# Effective January 22, 2014, orders for new Program Audio Service are no longer permitted. The Telephone Company will continue to provide Program Audio Service pursuant to this Section 7.6 on existing Program Audio Service in service as of January 22, 2014, or orders for Program Audio Service placed with the Telephone Company prior to January 22, 2014 (collectively, Existing Program Audio Service), subject to the following condition:

The Telephone Company will continue to provide Existing Program Audio Service until the earlier of the date that customer replaces the Existing Program Audio Service with a comparable Telephone Company-provided service, or the date that customer discontinues service, or the date that Telephone Company discontinues service. Moves, additions, and changes are not permitted.

7. Special Access Service (Cont'd)

7.6 Program Audio Service # (Cont'd)

7.6.3 Channel Interfaces

The following channel interfaces (CIs) define the bandwidths that are available for a Program Audio circuit:

CI	Bandwidth
PG-1	Nominal frequency from 50 to 15000 Hz
PG-3	Nominal frequency from 200 to 3500 Hz
PG-5	Nominal frequency from 100 to 5000 Hz
PG-8	Nominal frequency from 50 to 8000 Hz

Compatible channel interfaces are set forth in 9 following.

7.6.4 Optional Features and Functions

(1) Central Office Bridging Capability

Distribution Amplifier

(2) Gain Conditioning

Control of 1004 Hz AML at initiation of service to OdB + 0.5 dB.

(3) Stereo

Provision of a pair of gain/phase equalized channels for stereo applications. (Additional AP channel must be ordered separately).

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

	Available with Technical Specifications Package AP-				
	C	1	2	3	4
Central Office Bridging Capability	X	X	X	X	X
Gain Conditioning	X	X	X	X	X
Stereo	X	X			

Service availability limited. Refer to # footnote on Page 7-61.

7. Special Access Service (Cont'd)

7.6 Program Audio Service # (Cont'd)

7.6.5 Rates and Charges

(A) Circuit Termination
- Per Point of Termination- Non-Competitive End User (T)

200-3500 Hz

Jurisdiction	Monthly Rates	Dailly Rates	Nonrecurring Charges
California	$37.94	$3.79	$200.00
Texas	53.52	5.35	200.00

100-5000 Hz

Jurisdiction	Monthly Rates	Dailly Rates	Nonrecurring Charges
California	$37.94	$3.79	$200.00
Texas	53.52	5.35	200.00

50-8000 Hz

Jurisdiction	Monthly Rates	Dailly Rates	Nonrecurring Charges
California	$37.94	$3.79	$200.00
Texas	53.52	5.35	200.00

50-15000 Hz

Jurisdiction	Monthly Rates	Dailly Rates	Nonrecurring Charges
California	$37.94	$3.79	$200.00
Texas	53.52	5.35	200.00

Service availability limited. Refer to # footnote on Page 7-61.

7. Special Access Service (Cont'd)

7.6 Program Audio Service # (Cont'd)

7.6.5 Rates and Charges (Cont'd)

(D)

(D)

Service availability limited. Refer to # footnote on Page 7-61.

7. Special Access Service (Cont'd)

7.6 Program Audio Service # (Cont'd)

7.6.5 Rates and Charges (Cont'd)

(D)

(D)

Service availability limited. Refer to # footnote on Page 7-61.

7. Special Access Service (Cont'd)

7.6 Program Audio Service # (Cont'd)

7.6.5 Rates and Charges (Cont'd)

(D)

(D)

Service availability limited. Refer to # footnote on Page 7-61.

7. Special Access Service (Cont'd)

7.7 TV-1 Analog Service

7.7.1 Basic Circuit Description

A TV-1 Analog circuit is a circuit with one-way transmission capability for a standard 525 line/60 field monochrome, or National Television Systems Committee color video signal and one or two associated 5 or 15 kHz audio signal(s). The bandwidth for a video circuit is either 30 Hz to 4.5 MHz or 30 Hz to 6.6 MHz. The associated audio signal(s) may be either duplexed or provided as one or two separate circuits. The provision and the bandwidth of the associated audio signal(s) is a function of the channel interface selected by the customer. TV-1 Analog circuits are provided between customer designated premises or between a customer designated premises and a Telephone Company hub.

7.7.2 Technical Specifications Packages

	Package TV-		
Parameter	C*	1	2
Amplitude vs. Frequency Response	X		
Chrominance/Luminance Inequalities			
Gain	X	X	X
Delay	X	X	X
Chrominance/Luminance Intermodulation	X		
Chrominance Nonlinear Gain	X		
Chrominance Nonlinear Phase	X		
Crosstalk	X		X
Differential Gain	X	X	X
Differential Phase	X	X	X
Dynamic Gain (picture and sync signal)	X		
Field-Time Distortion	X	X	X
Gain/Frequency Distortion	X	X	X
Gain Stability	X	X	X
Insertion Gain	X	X	X
Line-Time Distortion	X	X	X
Long-Time Distortion	X	X	X

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

7. Special Access Service (Cont'd)

7.7 TV-1 Analog Service (Cont'd)

7.7.2 Technical Specifications Packages (Cont'd)

Parameter	Package TV-C*	1	2
Luminance Nonlinearity	X		
Luminance Signal/CCIR Weighted Noise	X	X	X
Short-Time Distortion			
2 T Pulse	X	X	X
T - Bar Ringing	X	X	X
Signal/15 kHz Flat Weighted Noise	X	X	X
Signal/Low Frequency Noise	X		
Stereo Gain Difference	X	X	
Stereo Phase Difference	X	X	
Total Harmonic Distortion	X	X	X
Transient Sync Signal Non-Linearity	X		
Video/Audio Delay Difference	X		

The technical specifications are delineated in Technical Reference GR-338-CORE, Issue 1, and associated Addendum.

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

7. Special Access Service (Cont'd)

7.7 TV-1 Analog Service (Cont'd)

7.7.3 Channel Interfaces

The following channel interfaces (CIs) define the bandwidth and the provision of the audio signal(s) associated with a TV-1 Analog circuit:

CI	Audio Bandwidth	Provision Audio Channels
02TV7.15	15kHz	1 or 2 Channels, separate
04TV6.15	15kHz	1 or 2 Channels, separate
04TV6.15A	15kHz	1, 2, 3, or 4 Channels, separate
04TV6.20A	20kHz	1, 2, 3, or 4 Channels, separate
04TV7.15	15kHz	1 or 2Channels, separate
04TV7.15A	15kHz	1, 2, 3 or 4 Channels, separate
04TV7.20A	20kHz	1, 2, 3, or 4 Channels, separate
06TV6.15	15kHz	1 or 2 Channels, separate
06TV6.15A	15kHz	1, 2, 3 or 4 Channels, separate
06TV6.20A	20kHz	1, 2, 3, or 4 Channels, separate
06TV7.15	5kHz	1 or 2 Channels, separate
08TV6.15A	15kHz	1, 2, 3 or 4 Channels, separate
10TV6.15A	15kHz	1, 2, 3 or 4 Channels, separate
10TV6.20A	20kHz	1, 2, 3, or 4 Channels, separate

Compatible channel interfaces are set forth in 9. following.

7. Special Access Service (Cont'd)

7.7 TV-1 Analog Service (Cont'd)

7.7.4 Rate Application

(A) General

TV1-Analog service is available under a month-to-month arrangement or on a term commitment plan of 1, 2, 3 or 5 years. The month-to-month offering requires a minimum service period of three months.

Where appropriate facilities are not available, Special Construction charges may apply as set forth in Section 5.1.12 preceding to provide such facilities required to meet the customer's request.

(1) TV1-Analog Dedicated Video Line

The TV1-Analog Dedicated Video Line (DVL) rate element provides for a non-switched TV1-Analog line connection between the customer dedicated location and its serving wire center for the purpose of point-to-point video transmission without connecting to a Telephone Company video switch.

(2) TV1-Analog Transport

The TV1-Analog Transport rate element provides for the interoffice transmission facilities for service arrangements where the customer designated locations are not served by the same wire center. Where a service is provided by more than one company, transport will be measured to the meet point as set forth under Section 5.2. Transport rates are applied per airline mile.

(3) TV1-Analog Optional Features

One or two audio channels are provided with each TV1-Analog arrangement. Auxiliary audio channels 4TV5, 6TV5 and TV15 are provided as part of TV1-Analog service at no additional charge.

7. Special Access Service (Cont'd)

7.7 TV-1 Analog Service (Cont'd)

7.7.4 Rate Application (Cont'd)

(B) Term Commitment Plan (TCP)# (T)

(1) General

TV1-Analog service is available on a Term Commitment Plan (TCP) of 1, 2, 3 or 5 year plan rates as set forth under 7.7.5 following.

(a) The customer must designate on the ASR the commitment term selected.

(b) Inside moves in accordance with 7.2.1(D)(4)(A) will not incur termination liability charges.

(c) Outside moves in accordance with 7.2.1(D)(4)(B) will allow the customer to retain the same TCP period. Any other move will be treated as a disconnect of the service and termination liability charges will apply.

(2) Change in Term Length

Prior to the completion of the selected TCP term, the customer may elect to convert to a new TCP of the same or different term length subject to the following:

(a) No term credit is applied for payments made under the original plan.

(b) If the new term selected is shorter than the time remaining under the existing TCP, the change to the new TCP constitutes a disconnect of the existing TCP and termination liability charges will apply.

Effective November 21, 2017, new subscriptions to Term Commitment Plan are no longer permitted. TCP customers subscribed as of November 16, 2017 may continue with their existing subscriptions. If at any time an existing customer terminates its TCP, the customer may not re-subscribe to the plan.

7. Special Access Service (Cont'd)

7.7 TV-1 Analog Service (Cont'd)

7.7.4 Rate Application (Cont'd)

(B) Term Commitment Plan (TCP)# (Cont'd) (T)

(3) Renewal Options

(a) At the expiration of a TCP period, the Telephone Company will automatically renew the service at the same TCP period unless the customer chooses to convert to month-to-month, to convert to a different TCP, or to discontinue service.

(b) Conversion to a different TCP period will require the customer to submit a change order ASR. Conversion to a different TCP period will be allowed without application of any nonrecurring or ordering charges.

(c) Conversion to month-to-month rates will be treated as a disconnect of service and establishment of new service. If no other changes are ordered, no NRCs will apply.

(4) Notification of Discontinuance

An ASR for discontinuance of a TCP arrangement must be received by the Telephone Company at least thirty (30) days prior to actual disconnect of service. Monthly rates will apply for a period of thirty (30) days from the date the Telephone Company receives disconnect notification or until the requested disconnect date, whichever period is longer.

Service Availability is limited. Refer to # footnote on page 7-71. (N)

7. Special Access Service (Cont'd)

7.7 TV-1 Analog Service (Cont'd)

7.7.4 Rate Application (Cont'd)

(B) Term Commitment Plan (TCP)# (Cont'd) (T)

(5) Termination Liability

When a TCP is discontinued prior to the end of the commitment period, termination liability charges, as set forth following, will apply based on the remainder of the TCP period in effect at the time of disconnect.

(a) One-Year TCP - 50% of any remaining portion of the first year's monthly rates.

(b) Two-Year TCP - 50% of any remaining portion of the first year's monthly rates. In addition, for any remaining portion of the second year, the customer will be liable for 10% of the total monthly rates in that time period.

(c) Three-Year TCP - 50% of any remaining portion of the first year's monthly rates. In addition, for any remaining portion of the second and third years, the customer will be liable for 10% of the total monthly rates in that time period.

(d) Five-Year TCP - 50% of any remaining portion of the first year's monthly rates. In addition, for any remaining portion of the second through fifth years, the customer will be liable for 20% of the total monthly rates in that time period.

(6) Termination Without Liability

During a TCP period, should the currently effective rates for a customer's TV-1 Analog service increase, the customer may, at their option, terminate the TCP arrangement without minimum period charges or termination liability charges.

Service Availability is limited. Refer to # footnote on page 7-71. (N)

7. Special Access Service (Cont'd)

7.7 TV-1 Analog Service (Cont'd)

7.7.5 Rates and Charges

(A) TV-1 Analog Dedicated Video Line
- Per Point of Termination- Non-Competitive End User (T)

Jurisdiction	Month-to-Month Nonrecurring Charge	Month-to-Month Monthly Rate	One Year Nonrecurring Charge	One Year Monthly Rate
California	$1,000.00	$535.00	$500.00	$511.00
Texas	1,000.00	535.00	500.00	511.00

Jurisdiction	Two Year Nonrecurring Charge	Two Year Monthly Rate	Three Year Nonrecurring Charge	Three Year Monthly Rate
California	$0.00	$500.00	$0.00	$495.00
Texas	0.00	500.00	0.00	495.00

Jurisdiction	Five Year Nonrecurring Charge	Five Year Monthly Rate
California	$0.00	$490.00
Texas	0.00	490.00

Service Availability is limited. Refer to # footnote on page 7-71.

7. Special Access Service (Cont'd)

7.7 TV-1 Analog Service (Cont'd)

7.7.5 Rates and Charges (Cont'd)

(D)

(D)

7.8 Reserved for Future Use

7.9 Reserved for Future Use

Service Availability is limited. Refer to # footnote on page 7-71.

7. Special Access Service (Cont'd)

7.10 Digital Data Service

7.10.1 Basic Circuit Description

A Digital Data circuit is a circuit for duplex four-wire transmission of synchronous serial data at the rate of 2.4, 4.8, 9.6, 19.2, 56, or 64 Kbps. The actual bit rate is a function of the channel interface selected by the customer. The circuit provides a synchronous service with timing provided by the Telephone Company through the Telephone Company's facilities to the customer in the received bit stream. Digital Data circuits are only available via Telephone Company designated hubs and are provided between customer designated premises or between a customer designated premises and a Telephone Company hub.

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

7.10.2 Technical Specifications Packages

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

The Telephone Company will provide a circuit capable of meeting a monthly average performance equal to or greater than 99.875% error-free seconds while the circuit is in service, if it is measured through a CSU equivalent which is designed, manufactured, and maintained to conform with the specifications contained in Technical Reference PUB 62310.

Voltages which are compatible with Digital Data Service are delineated in Technical Reference TR-NWT-000341, Issue 2.

7. Special Access Service (Cont'd)

7.10 Digital Data Service (Cont'd)

7.10.3 Channel Interfaces

The following channel interfaces (CIs) define the bit rates that are available for a Digital Data circuit.

CI	Bit Rate
DU-24	2.4 Kbps
DU-48	4.8 Kbps
DU-96	9.6 Kbps
DU-19	19.2 Kbps
DU-565	56 Kbps
DU-64	64 Kbps

Compatible channel interfaces are set forth in 9. following.

7.10.4 Optional Features and Functions

(1) Central Office Bridging Capability

(2) Transfer Arrangement

An arrangement that affords the customer an additional measure of protection and/or flexibility in the use of their access circuit(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 circuit that terminates in either the same or a different customer designated premises. This arrangement is only available at a Telephone Company designated hub. A key activated or dial-up control service is required to operate the transfer arrangement. A spare circuit, if required, is not included as a part of the option.

7. Special Access Service (Cont'd)

7.10 Digital Data Service (Cont'd)

7.10.5 Rates and Charges

(A) Circuit Termination—Non-Competitive End User
- Per Point of Termination

Jurisdiction	2.4, 4.8, & 9.6 Kbps Monthly Rate	2.4, 4.8, & 9.6 Kbps Nonrecurring Charge	19.2 Kbps Monthly Rate	19.2 Kbps Nonrecurring Charge
California	$67.25	$250.00	$67.25	$250.00
Texas	82.34	250.00	82.34	250.00

Jurisdiction	56.0 Kbps Monthly Rate	56.0 Kbps Nonrecurring Charge	64 Kbps Monthly Rate	64 Kbps Nonrecurring Charge
California	$ 88.17	$250.00	$ 88.17	$250.00
Texas	102.36	250.00	102.36	250.00

(D)

(D)

7. Special Access Service (Cont'd)

7.10 Digital Data Service (Cont'd)

7.10.5 Rates and Charges (D)

(D)

7. Special Access Service (Cont'd)

7.11 High Capacity Service**

7.11.1 Basic Circuit Description

A High Capacity circuit is a circuit for the transmission of nominal 64.0 kbps* or 1.544, 3.152, 6.312, 44.736, or 274.176 Mbps isochronous serial data. The actual bit rate is a function of the channel interface selected by the customer. High Capacity circuits are provided between customer designated premises or between a customer designated premises and a Telephone Company hub. High Capacity DS1 and DS3 services may also be connected to customer transmission equipment and facilities where the customer is provided EIS as defined in Section 17. High Capacity circuits may also be connected to an in-service Telephone Company provided integrated optical service, provided that such connections are technically and operationally feasible, as determined by the Telephone Company.

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

7.11.2 Technical Specifications Packages

	Package HC					
Parameter	0	1	1C	2	3	4
Error-Free Seconds		X				

A circuit with technical specifications package HC1 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 Reference GR-54-CORE, Issue 1.

* Available only as a circuit of a 1.544 Mbps facility to a Telephone Company Digital Data hub or as a cross connect of two 2.4, 4.8, 9.6, 56.0 or 64.0 kbps circuits of two 1.544 Mbps facilities to a Digital Data hub(s). The customer must provide system and channel assignment data.

** DS1 and DS3 Special Access Service may be provided between service areas shown under 7.1.10, where facilities and conditions permit.

7. Special Access Service (Cont'd)

7.11 High Capacity Service (Cont'd)

7.11.3 Channel Interfaces

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

CI	Bit Rate
DS-15*	1.544 Mbps (DS1)
DS-27	274.176 Mbps (DS4)
DS-31	3.152 Mbps (DSIC)
DS-44	44.736 Mbps (DS3)
DS-63	6.312 Mbps (DS2)

Compatible channel interfaces are set forth in 9.3.5 following.

7.11.4 Optional Features and Functions

(1) Automatic Loop Transfer

The Automatic Loop Transfer provides protection on a 1xN basis against failure of the facilities between a customer designated premises and the wire center serving that premises. Protection is furnished through the use of a switching arrangement that automatically switches to a spare circuit line when a working line fails. The spare circuit is not included as a part of the option. This option requires compatible equipment at both the serving wire center and the customer premises. The customer is responsible for providing the equipment at its premises. Equipment at the customer premises will be provided under tariff only if it existed in the Telephone Company inventory as of November 18, 1983.

(2) Transfer Arrangement

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

* A 64.0 kbps circuit is available as a circuit(s) of a 1.544 Mbps facility to a Telephone Company hub.

7. Special Access Service (Cont'd)

7.11 High Capacity Service (Cont'd)

7.11.4 Optional Features and Functions (Cont'd)

(3) Central Office Multiplexing

(a) DS4 to DS1

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

(b) DS3 to DS1

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

(c) DS2 to DS1

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

(d) Reserved for Future Use

(e) DS1 to Voice

An arrangement that converts a 1.544 Mbps circuit to 24 circuits for use with Voice Grade Services.

If this DS1 terminates in a DDS hub, a channel(s) of the DS1 can be used to provide DDS; however, DDS service stops at the DS1 interface.

Up to 16 channels of this DS1 can be used for Direct Digital Service (DDS-like service) with the assurance that circuit performance parameters will be met. If more than 16 channels are used for DDS-like service, the performance parameters for the DS1 and all circuits riding the DS1 will not be guaranteed.

(f) DS1 to DS0

An arrangement that converts a 1.544 Mbps circuit to twenty three (23) 64.0 Kbps circuits utilizing digital time division multiplexing.

7. Special Access Service (Cont'd)

7.11 High Capacity Service (Cont'd)

7.11.4 Optional Features and Functions (Cont'd)

(3) Central Office Multiplexing (Cont'd)

(g) DS0 to Subrate

An arrangement that converts a 64.0 kbps circuit to subspeeds of up to twenty 2.4 kbps, ten 4.8 kbps, or five 9.6 kbps circuits using digital time division multiplexing.

(4) Clear Channel Capability (CCC)

CCC provides a Bipolar with Eight Zero Substitution (B8ZS) encoding technique that allows a customer to transport 1.536 Mbps information rate signals over a 1.544 Mbps High Capacity Channel with no restraint on the quantity or sequence of one (mark) and zero (space) bits. This arrangement allows customers to derive 64 kbps clear channels. This service is provided only on 1.544 Mbps High Capacity Channels between two customer designated premises and is subject to availability of facilities. This arrangement requires the customer-provided multiplexing equipment to be compatible with the B8ZS line code as specified in Technical Reference GR-54-CORE, Issue 1, and Technical Reference GR- 342-CORE, Issue 1.

(5) DS3 Premises Multiplexer

(a) At the option of the customer, a DS3 High Capacity Service may be ordered with a DS3 to DS1 multiplexer located at a customer designated premises (DS3 Premises Multiplexer). The DS3 Premises Multiplexer will be provided by the Telephone Company and will be located within the Telephone Company's communications facilities (i.e., within the Telephone Company's network) and on the Telephone Company's side of the Point of Termination as defined in Section 2.6 preceding. The DS3 Premises Multiplexer allows up to twenty-eight (28) DS1 circuits to be derived from the DS3 High Capacity facility. The DS1 circuits derived from the DS3 Premises Multiplexer must terminate at that premises and will extend beyond the DS3 Premises Multiplexer to a Point of Termination (as defined in Section 2.6 preceding). The DS3 Premises Multiplexer is not available with DS3 High Capacity Service provided with an optical interface. The Telephone Company will commence billing for the DS3 High Capacity Service and DS3 Premises Multiplexer on the Service Date for the multiplexed DS3 facility. Individual DS1 circuits derived from the multiplexed DS3 High Capacity facility may only be ordered and installed subsequent to the installation of the facility to the DS3 Premises Multiplexer.

7. Special Access Service (Cont'd)

7.11 High Capacity Service (Cont'd)

7.11.4 Optional Features and Functions (Cont'd)

(5) DS3 Premises Multiplexer (Cont'd)

(b) When a DS3 High Capacity Service is multiplexed at a customer designed premises, such configuration is not a Telephone Company Hub for purposes of administering the terms and conditions of this tariff.

(c) The DS3 Premises Multiplexer optional feature may not be used on a DS3 High Capacity Service that is derived from a higher capacity service at the same customer designated premises (e.g., a DS3 High Capacity Service that is derived at that premises from an OC12 level service or node).

(d) The rates and charges for the DS3 Premises Multiplexer optional feature as set forth in Section 7.11.5(L)(1) following apply in addition to the applicable DS3 circuit termination rates and charges at that same customer designated premises. DS1 circuit termination rates and charges do not apply at the customer designated premises where such DS1 channels are derived from a DS3 Premises Multiplexer.

(e) The DS3 Premises Multiplexer optional feature cannot be located at an Expanded Interconnection Service arrangement as set forth in Section 17 following.

7. Special Access Service (Cont'd)

7.11 High Capacity Service (Cont'd)

7.11.4 Optional Features and Functions (Cont'd)

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

Parameter	Available with Technical Specifications Package HC-0	1	1C	2	3	4
Automatic LoopTransfer		X				
Central Office Multiplexing:						
DS4 to DS1						X
DS3 to DS1					X	
DS2 to DS1				X		
DS1 to Voice		X				
DS1 to DS0		X				
DS0 to Subrate*	X					
Transfer Arrangement		X				
Clear Channel Capability		X				
DS3 Premises Multiplexer				X		

* Available only on a circuit of a 1.544 Mbps facility to a Telephone Company hub.

7. Special Access Service (Cont'd)

7.11 High Capacity Service (Cont'd)

7.11.5 Rates and Charges (Cont'd)

(A) Circuit Termination
- Per Point of Termination

Jurisdiction	1.544Mbps Monthly Rate	Nonrecurring Charge	
California – Non- Competitive	$307.75	$450.00	(R)
Texas – Non- Competitive	$281.69	$450.00	(R)

(B) Circuit Termination - High Capacity DS1 Term Payment Plan#
- Per Point of Termination

Jurisdiction	Nonrecurring Charge	One Year Monthly Rate
California – Non -Competitive	$450.00	$186.04
Texas – Non -Competitive	$450.00	$186.04

Jurisdiction	Two Year Monthly Rate	Three Year Monthly Rate	Five Year Monthly Rate
California – Non-Competitive	$181.01	$175.98	$177.03
Texas – Non- Competitive	$181.01	$175.98	$170.95

(C) Reserved for Future Use

(D) Reserved for Future Use

Service Availability is limited. Refer to # footnote on page 7-30.

7. Special Access Service (Cont'd)

7.11 High Capacity Service (Cont'd)

7.11.5 Rates and Charges (Cont'd)

(E) Circuit Termination - High Capacity DS3
- Per Point of Termination

(1) Individual DS3 - Noncapacity System

Jurisdiction	Nonrecurring Charge	Month to Month Rate	One Year# Monthly Rate	
California – Non-Competitive	$1,000.00	$4,286.00	$4,286.00	(T)
Texas – Non -Competitive	1,000.00	3,859.00	3,859.00	(T)

Jurisdiction	Three Year# Monthly Rate	Five Year# Monthly Rate	Seven Year# Monthly Rate	
California – Non - Competitive	$2,790.00	$2,300.00	$2,281.00	(T)
Texas – Non - Competitive	1,840.00	1,835.00	1,830.00	

Service Offer is limited. See Footnote on page 7-44. (N)

7. Special Access Service (Cont'd)

7.11 High Capacity Service (Cont'd)

7.11.5 Rates and Charges (Cont'd)

(E) Circuit Termination - High Capacity DS3 (Cont'd)
- Per Point of Termination

(D)

(D)

7. Special Access Service (Cont'd)

7.11 High Capacity Service (Cont'd)

7.11.5 Rates and Charges (Cont'd)

(E) Circuit Termination - High Capacity DS3 (Cont'd)
- Per Point of Termination

(D)

(D)

7. Special Access Service (Cont'd)

7.11 High Capacity Service (Cont'd)

7.11.5 Rates and Charges (Cont'd)

(F) Circuit Termination - Frequency bandwidths other than 1.544 Mbps (DS1) and 44.736 Mbps (DS3)
- Per Point of Termination

Frequency bandwidths other than 1.544 Mbps:

Monthly Rates and Nonrecurring Charges for the Circuit Termination rate element of High Capacity Service for all jurisdictions of the Issuing Carriers listed on the Title Pages will be determined on an Individual Case Basis and filed in Section 7.12 following.

Available frequency bandwidths are as follows:

Frequency
Bandwidths

64 Kbps
3.152 Mbps
6.312 Mbps
274.176 Mbps

7. Special Access Service (Cont'd)

7.11 High Capacity Service (Cont'd)

7.11.5 Rates and Charges (Cont'd)

(G) Reserved (T)
(D)
(D)

(H) Reserved for Future Use

(I) Reserved for Future Use

7. Special Access Service (Cont'd)

7.11 High Capacity Service (Cont'd)

7.11.5 Rates and Charges (Cont'd)

(J) Reserved (T)

(D)

(D)

7. Special Access Service (Cont'd)

7.11 High Capacity Service (Cont'd)

7.11.5 Rates and Charges (Cont'd)

(K) Reserved (T)

(D)

(D)

7. Special Access Service (Cont'd)

7.11 High Capacity Service (Cont'd)

7.11.5 Rates and Charges (Cont'd)

(L) Optional Features and Functions

Rates and charges for the Optional Features and Functions of High Capacity Service listed in this section apply to all jurisdictions of the Issuing Carriers listed on the Title Pages.

	Monthly Rates	Nonrecurring Charges	
(1) Reserved			(T)
			(D)
			(D)

7. Special Access Service (Cont'd)

7.11 High Capacity Service (Cont'd)

7.11.5 Rates and Charges (Cont'd)

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

(1) Reserved (T)

(D)

(D)

(D)

7. Special Access Service (Cont'd)

7.11 High Capacity Service (Cont'd)

7.11.5 Rates and Charges (Cont'd) (D)

(D)

7. Special Access Service (Cont'd)

7.11 High Capacity Service (Cont'd)

7.11.5 Rates and Charges (Cont'd)

(M) Special Access Cross Connect

Per DS0, DS1 or DS3 Connection

State	DS0 Monthly Rate	DS1 Monthly Rate	DS3 Monthly Rate
California	$3.05	$8.69	$75.63
Texas	1.59	3.63	24.77

7. Special Access Service (Cont'd)

7.12 Reserved* (T)

(D)

(D)

* Terms and Conditions for Individual Case Filings can now be found in the Interstate Service Guide and Pricelist No. 13. (N) (N)

7. Special Access Service (Cont'd)

7.12 Reserved* (T)

(D)

(D)

* Terms and Conditions for Individual Case Filings can now be found in the Interstate Service Guide and Pricelist No. 13. (N) (N)

7. Special Access Service (Cont'd)

7.12 Reserved* (T)

(D)

(D)

* Terms and Conditions for Individual Case Filings can now be found in the Interstate Service Guide and Pricelist No. 13. (N) (N)

7. Special Access Service (Cont'd)

7.12 Reserved* (T)

(D)

(D)

* Terms and Conditions for Individual Case Filings can now be found in the Interstate Service Guide and Pricelist No. 13. (N) (N)

7. Special Access Service (Cont'd)

7.13 High Voltage Protection

7.13.1 Description

High Voltage Protection is used at customer locations that may require special equipment to isolate or neutralize Ground Potential Rise (GPR) and/or induced voltage caused by faults in the electric power system. GPR is a voltage difference between two or more ground electrodes caused by earth return currents. GPR on cable facilities can occur, for example, when current from lightning surges flow to ground, but GPR often is associated with voltage generated as the power system fault currents flow to ground. Maximum GPR is developed by the percentage of line-to-ground fault current entering earth through electrode impedance.

This feature will provide high voltage isolation for Special Access telecommunications, while enabling the normal transmission between the Telephone Company wire center and the equipment at the customer's location during GPR environment due to electrical power faults.

7.13.2 Provisioning

The Telephone Company shall determine the proper levels of protection required on its network to isolate or neutralize electrical hazard, based on the information provided by the customer. The customer shall provide the Telephone Company, in writing, the technical data necessary for the Telephone Company to determine the high voltage protection requirements, at the time of application for the initial service, additions to, or changes in the existing service. In addition, the customer shall notify the Telephone Company before making changes in the electric supply that will increase the GPR at the location.

The technical data for the customer's location shall include, but not be limited to, the following:

- ground grid area in square feet
- ground gird impedance in ohms
- X/R ratios at worst case fault location
- GPR in volts MS

7. Special Access Service (Cont'd)

7.13 High Voltage Protection (Cont'd)

7.13.2 Provisioning (Cont'd)

Based on the customer's technical data provided to the Telephone Company, the Telephone Company will provide the necessary high voltage protection equipment at the Telephone Company's demarcation point on the customer's premises and at the remote drainage location. The placement of the equipment by the Telephone Company shall in no way release the customer of its responsibility for damage, loss or claims caused by electrical hazards resulting from the customer's electric power system. The Telephone Company's liability for damage, loss or claims is set forth under 2.3.1.

The customer may elect to furnish the equipment at its premises to isolate or neutralize the electrical hazard subject to the approval of the Telephone Company; however, such approval by the Telephone Company shall not relieve the customer of its responsibility to install or maintain adequate high voltage equipment. The high voltage protection equipment at the customer's location will be exclusively owned either by the Telephone Company or by the customer.

When the customer provides the high voltage equipment at its premise, the Telephone Company will provide the necessary high voltage equipment at the wire center and remote drainage location. The Telephone Company will be responsible up to and including the network interface for the termination of Special Access Services regardless of ownership of the high voltage protection equipment.

The Telephone Company will inspect and verify adequacy of the high voltage protection equipment when service is established and at such future times as deemed necessary due to additions, deletions, rearrangements, routine maintenance or for the purpose of verifying the adequacy of the high voltage protection equipment.

7. Special Access Service (Cont'd)

7.13 High Voltage Protection (Cont'd)

7.13.3 Claims and Demands for Damage

In addition to the provisions in Section 2.3.8, the customer shall defend, indemnify and save harmless the Telephone Company from any and all loss, claims, demands, suits or other action or any liability whatsoever, whether suffered, made, instituted or asserted by the customer or by any other party or person, for any personal injury to or death of any person or persons, or for any loss, damage or destruction of any property whether owned by the customer or others, caused or claimed to have been caused directly or indirectly by the installation, operation, failure to operate, maintenance, removal, presence, condition, location or use of such equipment and services associated with high voltage protection equipment furnished by the Telephone Company or with customer equipment when combined or connected with facilities of the Telephone Company.

Services provided by the Telephone Company shall not cause the Telephone Company to become responsible for damage, loss or claims caused by electrical hazards resulting from a customer's electric power system.

7.13.4 Network Outage

Interruptions or outages of services provided to customers may occur for reasons, such as facility damage due to storm loading, vehicle accident, lightning strike, or other acts of God. Circuit failures caused by such events cannot be prevented by services provided in accordance with this service (however, interruptions and service outages due to fault-produced ground potential rise and induction can be minimized). The Telephone Company expressly states that provision of the high voltage equipment cannot prevent such service outages as may normally occur due to the proceeding circumstances. It is the responsibility of the customer to provide sufficient protection to prevent damage caused by such events.

Interruptions or outages due to the effects (GPR and/or induction) of faults in the customer's power generating, transmission and/or distribution system are minimized through the installation and maintenance of high voltage protection equipment which is designed to operate in a fault-produced electrical environment.

7. Special Access Service (Cont'd)

7.13 High Voltage Protection (Cont'd)

7.13.5 Compliance Statement

If the Telephone Company has provided service where high voltage protection is necessary, by the customer or the customer-provided equipment is nonfunctional or inadequate or the customer fails, upon written notice, to establish or reestablish the required high voltage protection equipment or apply for and obtain such protection from the Telephone Company, or keep the Telephone Company informed of changed high voltage requirements, then the Telephone Company will disconnect service 120 days after giving the notice required, as set forth under Section 2.1.8(A).

7.13.6 Rate Regulations

(A) Minimum Period

The minimum period for High Voltage Protection is one month.

(B) Rate Elements

(1) Initial Common Equipment

A nonrecurring charge and a monthly rate apply for the Initial Common (basic) Equipment used for the physical connection to the network interface. The Initial Common Equipment can accommodate up to eight Special Access facility terminations at a customer's location.

(2) High Voltage Terminating Equipment

High Voltage Terminating Equipment is required for each Special Access facility termination. A nonrecurring charge and a monthly rate for the High Voltage Terminating Equipment apply in addition to the rates and charges for the Special Access facility as well as the associated Special Access Service regulations.

7. Special Access Service (Cont'd)

7.13 High Voltage Protection (Cont'd)

7.13.7 Rates and Charges

Jurisdiction	Initial Common Equipment Nonrecurring Charge	Initial Common Equipment Monthly Rate	Terminating Equipment, Per Circuit Terminated Nonrecurring Charge	Terminating Equipment, Per Circuit Terminated Monthly Rate
California	$500.00	$108.22	$50.00	$28.81
Texas	500.00	108.22	50.00	28.81

7.14 Reserved for Future Use

7. Special Access Service (Cont'd)

7.15 Bonded Digital Link Service

7.15.1 Description

Bonded Digital Link Service provides connecting channels for the transmission of voice or data between an end user's local exchange service terminating at a digital cross connect facility and special access service provided by the Telephone Company within the same wire center or at another wire center within the same LATA.

Bonded Digital Link Service is comprised of Intra-office channels (channels within a single wire center) or Inter-office channels (channels between two wire centers) connecting the wire centers of the locations involved. The minimum transmission rate for the service is 64 kbps in a DSO channel. The Telephone Company will provide for the transmission of DS0 channels within a DS1 signal of the customer's (the end user) associated local exchange service from the digital cross connect facility in the customer's serving wire center to a 64 kbps channel of a customer's DS1 to Digital central office multiplexing arrangement within the same wire center or in a different wire center. The total number of DS0s on a Bonded Digital Link Service channel may not exceed the total capacity of the DS1 or equivalent service to which it is connected.

At the customer's option, the Telephone Company will bond contiguous DS0 channels in order to provide higher data rates. The following data rates are available:

- 64 kbps; 1 DS0 equivalent channel
- 128 kbps; 2 DSO equivalent channel
- 256 kbps; 4 bonded equivalent DS0s
- 384kbps; 6 bonded equivalent DS0s
- 512 kbps; 8 bonded equivalent DS0s
- 768 kbps; 12 bonded equivalent DS0s

For the transmission of the Bonded Digital Link channels, the Telephone Company assumes responsibility for the routing of the customer's DS0 and bonded DS0 circuits over the Telephone Company's interoffice network in order to maximize network efficiencies and to optimize economic efficiencies.

7. Special Access Service (Cont'd)

7.15 Bonded Digital Link Service (Cont'd)

7.15.2 Terms and Conditions

(1) Bonded Digital Link Service is available within or between wire centers where suitable digital cross-connect technology exists to perform DS1 to DS0 multiplexing functions. Those locations (wire centers) are set forth in NATIONAL EXCHANGE CARRIER ASSOCIATION, INC. TARIFF FCC NO. 4.

(2) The service may only be used for connection from a wire center with a digital hubbing arrangement to a DS1 special access service capable of assignment to compatible DS0 channels. The customer or its authorized representatives must designate the DS0 channels on the special access service connected to this service. Data rates above 64 kbps require contiguous DS0 channel assignments. Connection to services other than special access service is prohibited.

(3) Bonded Digital Link Service is provided with a one-year minimum service period. If service is disconnected prior to satisfying the minimum service period (i.e., within the first twelve months), minimum period charges apply. The minimum one-year period and minimum period charges do not apply if the rates have increased during the one-year period. The minimum period charge is equal to 100 % of the monthly rate from the date of disconnection through the balance of the first twelve months of service.

(4) This service is used for connectivity within or between wire centers. The rates and charges for Bonded Digital Link Service apply as a flat rate per DS0 equivalent channel.

(5) Credit for an interruption of Bonded Digital Link Service is subject to the basic credit allowance set forth for Special Access services as set forth in Section 2.7.1.1 preceding.

(6) Bonded Digital Link Service is provided according to service date intervals as set forth in Section 5.1.7 preceding.

(7) The rates and charges for Bonded Digital Link Service apply per DS0 equivalent channel (64 kbps). The customer is assessed either an Intra-office or an Inter-office Channel Charge for each DS0.

7. Special Access Service (Cont'd)

7.15 Bonded Digital Link Service (Cont'd)

7.15.3 Rates and Charges

	Monthly Rates
Intra-office Channel - Per DS0	
Texas	$3.00
Inter-office Channel - Per DS0	
Texas	$7.00