October 1, 2021

Missouri Public Service Commission
Governor Office Building
200 Madison
P.O. Box 360
Jefferson City, MO 65102-0360

Dear Secretary:

Attached for electronic filing are revisions to the Spectra Communications Group, LLC d/b/a CenturyLink, Access Service Tariff, P.S.C. MO.-No. 2. These revisions are filed, in accordance with Missouri Public Service Commission Rules and Regulations and electronically submitted with an October 1, 2021 issue date and a proposed effective date of November 1, 2021.

This filing grandfathers certain low-bandwidth Private Line Services effective November 1, 2021. Newer technologies and services are available to customers in lieu of these technologically obsolete services. New orders and moves of existing services will be allowed to the extent permitted by existing term contracts. Existing terms will not be renewed upon expiration. Customers currently under a term commitment plan may retain their low-bandwidth services on a month-to-month basis upon expiration of their current term plan.

The list of tariff sheets reflecting the proposed revisions are provided in Attachment A following.

Should you have questions or need additional information regarding this filing, please contact me.

Sincerely,

Christina L Chushuk

Christina Chushuk
Manager – Government Operations

Attachments

Pc: Office of Public Counsel (e-mail)

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Attachment A

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FACILITIES FOR INTRASTATE ACCESS

5. SPECIAL ACCESS (Cont'd)

5.1 General (Cont'd)

5.1.1 Rate Elements (Cont'd)

(F) Multiplexing Arrangements

Multiplexing provides for arrangements to convert a single higher capacity or bandwidth circuit for bulk transport to several lower capacity or bandwidth circuits. Multiplexing is only available at a Telephone Company designated Hub Wire Center arranged for multiplexing. All types of multiplexing may not be available at each Hub Wire Center. Refer to Section 5.6.6 for a description of Hub Wire Center. Descriptions for each type of multiplexing arrangements are provided in 5.5 following, and rates are set forth in 5.7 following.

(G) Special Transport Termination

(1) DS1 Service

The Special Transport Termination rate element as set forth in 5.7, applies to selected Special Access Service offerings, except for CenturyTel Lan Special Transport Service, and is in addition to the Special Transport rate element. Special Transport Termination provides the equipment and arrangements necessary to terminate the Special Transport facility at a serving wire center. One Special Transport Termination charge applies for the termination of each end of a Special Transport facility for DS1 offerings.

(2) **Fractional T1 Service (FT1)** [1] (C)

For Fractional T1 Service, Special Transport Termination must be ordered as Fractional Special Transport Termination in the same grouping (N x 56 Kbps or N x 64 Kbps where N = 2, 4, or 6) as the associated FT1 SALs.

[1] **Effective November 1, 2021 Fractional DS1 Services are grandfathered. Availability to current customers is limited to circuits in service at existing locations.** (N) (N)

FACILITIES FOR INTRASTATE ACCESS

5. SPECIAL ACCESS (Cont'd)

5.2 Description of Special Access

There are **four** generic types of Special Access offerings. They are: (C)

– **Voiceband [1]** (C)
– **Program Audio [1]** (C)
(D)
– High Capacity Digital
– **Digital Data Service [1]** (C)

Each type has its own characteristics, and are subdivided by one or more of the following:
– Transmission specifications
– Bandwidth
– Speed (i.e., bit rate)
– Spectrum

The Special Access offerings described below are comprised of a combination of the rate elements described in 5.1.1. The following descriptions indicate the most effective use for each facility. Customer use for purposes other than those indicated is limited only to the extent that such use must not harm the network. Further, the Telephone Company does not guarantee transmission performance beyond the parameters identified in the descriptions.

The transmission performance characteristics of each Special Access offering are stated in Section 7000 of the GTE Technical Interface Reference Manual. 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 in the GTE Technical Interface Reference Manual will be maintained at the performance level specified in the manual. Where transmission performance characteristics are required other than those as stated in Section 7000 of the GTE Technical Interface Reference Manual, the Telephone Company will review, and where technically feasible, will develop rates and charges for the additional costs associated with provisioning the parameters. These rates and charges will be filed on an individual case basis in Section 5.9 and will apply in addition to all other applicable rates and charges.

The customer also has the option of ordering Voiceband and digital high capacity facilities to a Telephone Company Hub for multiplexing to individual channels of a lower capacity or bandwidth. Descriptions of the types of multiplexing available at the Hubs, as well as the number of individual channels which may be derived from each type of facility, are set forth in 5.5. Additionally, the customer may specify supplemental features for the individual channels derived from the facility to further tailor the channel to meet specific communications requirements. Descriptions of the supplemental features available are set forth in 5.4. (C)

For example, a customer may order a DS3 from a CDL to a Telephone Company Hub for multiplexing to 28 DS1 channels. The DS1 channels may be further multiplexed at the same or a different Hub to Voiceband channels or may be extended to other CDLs. Optional features may be added to either the DS1 or the Voiceband channels.

[1] Effective November 1, 2021 Voice Grade, Program Audio and Digital Data Services are grandfathered. Availability to current customers is limited to circuits in service at existing locations. (N) (N)

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FACILITIES FOR INTRASTATE ACCESS

5. SPECIAL ACCESS (Cont'd)

5.2 Description of Special Access (Cont'd)

5.2.1 **Voiceband [1]** (C)

(A) Two-Wire Voiceband Facility

These facilities are unconditioned and are capable of transmitting voice or data signals within the frequency spectrum of approximately 300 Hz to 3000 Hz. These facilities are furnished on a two-point or multipoint basis and may be terminated two-wire or four-wire at the point of termination. They permit the simultaneous transmission of information in both directions over a circuit, but it is not possible to ensure independent information transmission in both directions. Supplemental features may be added, at applicable charges, to enhance the operational capabilities of these facilities.

(B) Four-Wire Voiceband Facility

These facilities are unconditioned and are capable of transmitting voice or data signals within the frequency spectrum of approximately 300 Hz to 3000 Hz. The facilities are furnished on a two-point or multipoint basis and may be terminated two-wire or four-wire at the point of termination. When terminated four-wire, they permit simultaneous independent transmission of information in both directions over a circuit. However, when terminated two-wire, simultaneous independent transmission cannot be supported. Supplemental features may be added, at applicable charges, to enhance the operational capabilities of these facilities.

[1] Effective November 1, 2021 Voice Grade Services are grandfathered. Availability to current customers is limited to circuits in service at existing locations. (N) (N)

FACILITIES FOR INTRASTATE ACCESS

5. SPECIAL ACCESS (Cont'd)

5.2 Description of Special Access (Cont'd)

5.2.2 (Reserved for Future Use)

5.2.3 **Program Audio** [1] (C)

These facilities are arranged and provided for the transmission of non-broadcast audio to be broadcast or which is to be used in connection with loudspeakers, wired music, closed circuit or recordings. Facilities to be used in conjunction with broadcast audio must be ordered from the appropriate interstate tariff. Audio facilities are furnished for transmission in one direction. Audio facilities may be provided on a two-point or multipoint basis.

Program audio facilities are provided on either a full-time or part-time basis. The minimum periods for full-time and part-time service are set forth in Section 3.2.4. When a part-time program audio service is provided for ten or more consecutive days, it will be treated as a full-time service and rated accordingly. In no event will the charge for continuous part-time program audio exceed the amount that would have been charged in the same time period for full-time program audio facilities.

Listed below are the types of Program Audio facilities that are offered under this tariff.

(A) 200 to 3500 Hz

Facilities are generally acceptable for speech quality programming and are subject to use over limited distance due to transmission factors.

(B) 100 to 5000 Hz

Facilities are generally acceptable for music and provide good quality speech programming.

(C) 50 to 8000 Hz

Facilities for the provision of high fidelity music transmission.

(D) 50 to 15000 Hz

Facilities for the provision of high fidelity music transmission. Two such facilities may be conditioned, at applicable charges, for stereo operation.

5.2.4 **Reserved for Future Use** (C)

. (D)

[1] **Effective November 1, 2021 Program Audio Services are grandfathered. Availability to current customers is limited to circuits in service at existing locations.** (N) (N)

FACILITIES FOR INTRASTATE ACCESS

5. SPECIAL ACCESS (Cont'd)

5.2 Description of Special Access (Cont'd)

5.2.5 **Reserved for Future Use** (C)

(D)

(D)

5.2.6 **Reserved for Future Use** (C)

(D)

5.2.7 High Capacity Digital

These facilities are two-point and are furnished between CDLs or between a CDL and a Telephone Company designated Hub Wire Center where multiplexing is offered. High Capacity facilities may be used to provide Special Access Lines as set forth in 5.1.1(C)(2). A High Capacity to Voice multiplexing arrangement, as described in Section 5.5, is required at the Hub Wire Center.

(A) DS1 facilities provide for the transmission of isochronous bipolar serial data at a rate of 1.544 Mbps.

(B) DS1C facilities provide for the transmission of isochronous bipolar serial data at a rate of 3.152 Mbps.

(C) **FT1 facilities**[1] are furnished for the transmission of isochronous bipolar serial data and are available at transmission rate groupings of N x 56 Kbps or N x 64 Kbps where N equals 2, 4, or 6. FT1 channels are contiguous within the network and can be used to create a wideband circuit using customer provided equipment. When N x 64 FT1 is ordered in conjunction with DS1 service for multiplexing purposes, the DS1 must have Clear Channel Capability as described in 5.8.1. FT1 Service at a rate of N x 64 Kbps will only be provided where Clear Channel Capability is available in the network. Where Clear Channel Capability is not available, N x 56 Kbps service can be provided in lieu of N x 64 Kbps. (C)

[1] **Effective November 1, 2021 Fractional DS1 Services are grandfathered. Availability to current customers is limited to circuits in service at existing locations.** (N) (N)

FACILITIES FOR INTRASTATE ACCESS

5. SPECIAL ACCESS (Cont'd)

5.2 Description of Special Access (Cont'd)

5.2.7 High Capacity Digital (Cont'd)

(D) (Reserved for Future Use)

(E) DS3 facilities provide for the transmission of isochronous bipolar serial data at a rate of 44.736 Mbps. The Telephone Company will provide an electrical interface with the service unless otherwise specified by the customer.

(F) DS3C facilities provide for the transmission of isochronous bipolar serial data at a rate of 89.472 Mbps. The Telephone Company will provide an optical interface with this service unless the service is provided via microwave, in which case an electro-magnetic interface is provided, or unless the customer requests an electrical interface.

5.2.8 **Digital Data Service** [1] (C)

Facilities for Digital Data Service are furnished for the simultaneous two-way transmission of synchronous data and are available at transmission speeds of: 2.4 Kbps, 4.8 Kbps, 9.6 Kbps or 56 Kbps. Digital Data facilities may be provided on a two-point or multipoint basis.

5.2.9 (Reserved for Future Use)

5.2.10 (Reserved for Future Use)

[1] **Effective November 1, 2021 Digital Data Services are grandfathered. Availability to current customers is limited to circuits in service at existing locations.** (N) (N)

FACILITIES FOR INTRASTATE ACCESS

5. SPECIAL ACCESS (Cont'd)

5.3 Description of Terminating Options

Terminating Options provide a clearly delineated interface between Telephone Company and customer facilities at the point of termination at the CDL. Terminating Options facilitate the design, isolation, and testing of the Special Access. The description of each Terminating Option defines the most effective use of the Terminating Option. The technical parameters of each type of associated interface are set forth in Section 7000 of the GTE Technical Interface Reference Manual. Although a customer is not restricted from alternate applications, except where such application is harmful to the network, the Telephone Company cannot guarantee technical performance for other than the applications stated below. Terminating Options are nonchargeable.

5.3.1 **Reserved for Future Use** (C)

(D)

(D)

5.3.2 **Voice Grade** [1] (C)

(A) Two-Wire Voice Grade, Non-Data, Without Signaling

This option provides a two-wire interface to a customer and terminates an effective two-wire facility furnished for voice transmission only. Customer provided signaling must be limited to tones in the voice band. Customer provided voiceband signaling equipment must limit transmission power to 0.0 dBm peak and -13 dBm average power over a three-second period.

(B) Four-Wire Voice Grade, Non-Data, Without Signaling

This option provides a four-wire interface to the customer terminal equipment and terminates an effective four-wire facility furnished for voice transmission only. Customer provided signaling must be limited to tones in the voiceband. Customer provided voice band signaling equipment must limit transmission power to 0.0 dBm peak and -13 dBm average power over a three-second period.

[1] **Effective November 1, 2021 Voice Grade Services are grandfathered. Availability to current customers is limited to circuits in service at existing locations.** (N) (N)

FACILITIES FOR INTRASTATE ACCESS

5. SPECIAL ACCESS (Cont'd)

5.3 Description of Terminating Options (Cont'd(

5.3.2 **Voice Grade** [1](Cont'd) (C)

(C) Voice Grade Data Termination

This option provides a two-wire or four-wire transmission interface to a customer's private line data modem and terminates an effective four-wire facility furnished for voiceband data transmission.

(D) Two-Wire Voice Grade Station Connecting Facility Termination

This option provides a means to terminate an effective two-wire facility or an effective four-wire facility with a two-wire customer interface on a telephone, key system, PBX, ACD, or similar equipment. This option is normally used to terminate facilities that furnish foreign central office service, the station end of PBX off premises service, or private switched service network access lines. The option provides both the transmission and loop signaling functions normally associated with these services. The option is also used to terminate facilities arranged with automatic ringdown signaling. This option provides the loop and ringdown signaling with the facility.

(E) Four-Wire Voice Grade Station Connecting Facility Termination

A terminating option similar to (D) preceding used to terminate effective four-wire foreign central office service. The option provides a four-wire transmission interface to the customer terminal equipment and the loop signaling function normally associated with these services. This option provides the loop and ringdown signaling with the facility.

(F) Two-Wire Station Connecting Facility Termination for the Open End of an Off Premises PBX Extension

Terminating options are available depending on the signaling range of the PBX (or similar system) as defined in Part 68 of the FCC Rules and Regulations. Type 1 is an option requiring range extension equipment at the CDL. Type 2 is an option with no range extension equipment at the CDL. If needed, the loop signaling range equipment for Type 1 must be specifically specified, see Section 5.4.4 following for available arrangements.

(G) Dial Repeating Tie Trunk Termination

Two network terminating options are provided for terminating effective four-wire transmission facilities used to furnish dial repeating tie trunk services. These options are described in terms of the interface they provide to a PBX (or similar system).

(1) A Type I tie line termination provides the customer with a two-wire transmission interface and includes either two-wire or four-wire E&M type signaling. Transmission and signaling interface options available are described in Part 68 of the FCC Rules and Regulations. This option provides the E&M type signaling with the facility.

[1] Effective November 1, 2021 Digital Data Services are grandfathered. Availability to current customers is limited to circuits in service at existing locations. (N) (N)

FACILITIES FOR INTRASTATE ACCESS

5. SPECIAL ACCESS (Cont'd)

5.3 Description of Terminating Options (Cont'd(

(C)

5.3.2 **Voice Grade** [1] (Cont'd)

(G) Dial Repeating Tie Trunk Termination (Cont'd)

(2) A Type III tie line termination provides the customer with a four-wire transmission interface and includes either two-wire or four-wire E&M type signaling. Transmission and signaling options available are described in Part 68 of the FCC Rules and Regulations. This option provides the E&M signaling with the facility.

5.3.3 **Program Audio** [1] (C)

(A) 200 to 3500 Hz

Provides standard program audio interface levels and impedance matching to two-wire network facilities.

(B) 100 to 5000 Hz, 50 to 8000 Hz, and 50 to 15000 Hz

Provides standard program audio interface levels, circuit equalization and impedance matching to two-wire network facilities.

5.3.4 **Reserved for Future Use** (C)

(D)
|
(D)

5.3.5 **Reserved for Future Use** (C)

(D)
|
(D)

[1] **Effective November 1, 2021 Voice Grade and Digital Data Services are grandfathered. Availability to current customers is limited to circuits in service at existing locations.** (N) (N)

FACILITIES FOR INTRASTATE ACCESS

5. SPECIAL ACCESS (Cont'd)

5.3 Description of Terminating Options (Cont'd(

5.3.6 High Capacity Digital

(A) High Capacity Digital DS1

Provides a High Capacity Digital DS1 Special Access interface for use in providing simultaneous two-way transmission of isochronous bipolar serial data signals at the rate of 1.544 Mbps.

(B) High Capacity Digital DS1C

Provides a High Capacity Digital DS1C Special Access interface for use in providing simultaneous two-way transmission of isochronous bipolar serial data signals at the rate of 3.152 Mbps.

(C) **Fractional T1 Service** [1] (C)

Provides a DS1 Special Access interface for use in providing simultaneous two-way transmission of isochronous bipolar serial data signals and is limited to groupings of N x 56 Kbps or N x 64 Kbps where N equals 2, 4, or 6.

(D) (Reserved for Future Use)

(E) High Capacity Digital DS3

Provides a High Capacity Digital DS3 Special Access interface for use in providing simultaneous two-way transmission of isochronous bipolar serial data signals at the rate of 44.736 Mbps. The Telephone Company will provide an electrical interface with the service unless otherwise specified by the customer.

(F) High Capacity Digital DS3C

Provides a High Capacity Digital DS3C Special Access interface for use in providing simultaneous two-way transmission of isochronous bipolar serial data signals at the rate of 89.472 Mbps. The Telephone Company will provide an optical interface with this service unless the service is provided via microwave, in which case, an electromagnetic interface is provided, or unless the customer requests an electrical interface.

5.3.7 **Digital Data Service (DDS)** [1] (C)

Provides DDS Special Access interface for use in providing simultaneous two-way transmission of sequential bipolar data signals at transmission speeds of 2.4 Kbps, 4.8 Kbps, 9.6 Kbps or 56 Kbps over four-wire facilities.

[1] **Effective November 1, 2021 Digital Data and Fractional DS1 Services are grandfathered. Availability to current customers is limited to circuits in service at existing locations.** (N) (N)

FACILITIES FOR INTRASTATE ACCESS

5. SPECIAL ACCESS (Cont'd)

5.4 Description of Supplemental Features

Supplemental Features are items which can be added to a Special Access service to provide enhanced capabilities or improve its utility. References to specific uses or Special Access types indicate the most effective use for each Supplemental Feature. Customer use for other purposes or with other Special Access types is limited only to the extent that such use must not harm the network. Further, the Telephone Company does not guarantee functional operation of Supplemental Features for these alternate applications.

Listed below are the Supplemental Features that are offered under this tariff.

5.4.1 **Bridging** [1] (C)

Bridging is the function of connecting three or more CDLs in a multipoint arrangement. Listed below are those bridging services offered under this tariff.

(A) MultiPoint Data Bridging

This feature provides the capability to derive a multipoint data circuit from a single facility and is normally provided on Voiceband facilities provided for transmission of data signals. This function is provided on a per port basis. Polled multipoint data circuits are a typical application of this feature.

[1] **Effective November 1, 2021 Voice Grade Services are grandfathered. Availability to current customers is limited to circuits in service at existing locations.** (N) (N)

FACILITIES FOR INTRASTATE ACCESS

5. SPECIAL ACCESS (Cont'd)

5.4 Description of Supplemental Features (Cont'd)

5.4.1 **Bridging** [1](Cont'd) (C)

(B) Voice Conference Bridging

Bridging arrangement to connect multiple Voiceband facilities in order that a voice frequency input signal from any location will be reproduced at the output of all other circuit locations. This function is provided on a per port basis.

(C) Alarm Distribution Bridging

Provides polling type bridging capabilities, band splitting filters and conversion of four-wire common terminations up to a capacity of 40 two-wire terminations. This function is offered as two tariff elements. The first element provides all shelving and common equipment for a capacity of 40 two-wire terminations. The second element provides a two-wire port. One common equipment rate element will apply to accommodate up to 40 two-wire terminations. One two-wire port charge will apply to each two-wire Special Access Line terminated in the bridge.

(D) Program Audio Bridging

An arrangement to provide multiple channel outputs from a single Program Audio or Voiceband facility. This arrangement is provided and rated on a per port basis.

(E) (Reserved for Future Use)

(F) DDS Bridging

Provides for a multi-junction unit (MJU) arrangement to bridge 2.4 kbps, 4.8 kbps, 9.6 kbps, or 56 kbps DDS facilities. Different speeds cannot be mixed on the same bridge. This function is provided on a per port basis.

[1] **Effective November 1, 2021 Voice Grade, Program Audio and Digital Data Services are grandfathered. Availability to current customers is limited to circuits in service at existing locations.** (N) (N) (N)

FACILITIES FOR INTRASTATE ACCESS

5. SPECIAL ACCESS (Cont'd)

5.4 Description of Supplemental Features (Cont'd)

5.4.2 **Conditioning Arrangements – Data** [1] (C)

Data conditioning, when utilized in conjunction with effective four-wire Voiceband transmission facilities, improves the characteristics of these facilities. These improved characteristics are not represented to apply to the entire end to end facility of the customer, but only to that portion of the facility provided by the Telephone Company.

There are three types of data conditioning: Type C, Type C-Improved and Type DA. Type C and Type C-Improved conditioning control attenuation distortion and envelope delay distortion. Type DA controls the signal to C-notched noise ratio and intermodulation distortion. Type C and Type DA conditioning may be combined on the same circuit. Type C-Improved and Type DA conditioning may be combined on the same circuit.

Data conditioning is charged for on a per Special Access line basis. The parameters listed for each type of data conditioning apply from two or more CDLs located within the Telephone Company serving area. Conditioning parameters apply to each end of a two-point circuit. For multipoint circuits, the conditioning parameters apply from any CDL to either the point of interface at another CDL or the first Telephone Company bridging point depending on the circuit configuration. These parameters are not applicable to High Capacity or Wideband Analog points of interface, because there is no voice frequency test access point. In these instances the data conditioning parameters apply to the last telephone company voice frequency test access point before the High Capacity or Wideband Analog point of interface.

(A) Type C

Type C conditioning of Voiceband facilities provides a facility with the following transmission parameters enhanced to meet the values specified for Type C conditioning in Section 7000 of the GTE Technical Interface Reference Manual in addition to the standard parameters for Voiceband circuits.

(1) Attenuation distortion with reference to 1004 Hz.

(2) Envelope delay distortion.

(B) Type C - Improved

Type C-Improved conditioning of Voiceband facilities provides a facility with the following transmission parameters enhanced to meet the values specified for Type C conditioning in Section 7000 of the GTE Technical Interface Reference Manual in addition to the standard parameters for Voiceband circuits.

(1) Improved attenuation distortion with reference to 1004 Hz.

(2) Improved envelope delay distortion.

The customer may choose to order Improved Attenuation Distortion or Improved Envelope Delay Distortion or both configurations. The rates specified for Type C-Improved conditioning, Section 5.7.2(B), will apply regardless of the configuration specified.

[1] **Effective November 1, 2021 Voice Grade Services are grandfathered. Availability to current customers is limited to circuits in service at existing locations.** (N) (N)

FACILITIES FOR INTRASTATE ACCESS

5. SPECIAL ACCESS (Cont'd)

5.4 Description of Supplemental Features (Cont'd)

5.4.2 **Conditioning Arrangements – Data** [1](Cont'd) (C)

(C) Type DA

Type DA conditioning of Voiceband facilities provides a facility with the following transmission parameter enhanced to meet the values specified for Type DA conditioning in Section 7000 of the GTE Technical Interface Reference Manual in addition to the standard parameters for voiceband circuits.

(1) Signal to C-notched noise ratio.

(2) Nonlinear signal to second order distortion.

(3) Nonlinear signal to third order distortion.

[1] **Effective November 1, 2021 Voice Grade Services are grandfathered. Availability to current customers is limited to circuits in service at existing locations.** (N) (N)

FACILITIES FOR INTRASTATE ACCESS

5. SPECIAL ACCESS (Cont'd)

5.4 Description of Supplemental Features (Cont'd)

5.4.3 **Conditioning - Program Audio** [1] (C)

(A) Stereo Conditioning

Provides the option of two radio program facilities which are identical in all transmission characteristics. Two Program Audio facilities are required to provide this Supplemental Feature. This feature is normally used only with Program Audio 50 to 15000 Hz facilities. Stereo Conditioning is charged on a per occurrence basis.

(B) Zero Loss

Conditioning of Program Audio facilities to provide zero loss at 1000 Hz test frequency. Zero Loss is charged on a per Special Access Line basis.

5.4.4 **Signaling Arrangements** [1] (C)

Signaling arrangements, when furnished with Voiceband transmission facilities, enable the facilities to accommodate standard telecommunications signaling protocols. Signaling arrangements provide for the conversion of one signaling method to another signaling method and/or extension of a signaling method at customer and Telephone Company interfaces and enables the transmission facilities to accommodate signaling transmission. Signaling arrangements are available with Voiceband transmission facilities to enable transmission of requested signaling formats. The third and fourth protocol characters of the Network Channel Interface (NCI) and Secondary Network Channel Interface (SEC NCI) codes as indicated on the customer's order, reflect signaling activity. Typical protocol characters contained in the NCI or SEC NCI codes that designate signaling arrangements are: AB, AC, DS, DX, DY, EA, EB, EC, EX, GO, GS, LA, LB, LC, LO, LR, LS, NO, RV and SF.

The customer identified NCI and SEC NCI codes will be considered the customer's request for signaling. The Telephone Company will endeavor to provide the specific signaling protocols requested by the customer. In those cases where facilities and equipment are not available to meet the customer's specific requests, the Telephone Company will provide the customer acceptable alternate protocols. Sections 3300, 6000 and 7000 of the GTE Technical Interface Reference Manual provide detailed technical descriptions of the signaling protocols normally available with each service offering. To properly provision SF signaling, when associated signaling code, is DS (PCM), additional information of SF requirements (loop signaling type DX/E&M or ringdown) must accompany the customer's order.

Signaling arrangement charges apply whenever interfaces at the customer premises or at the customer's Telephone Company serving wire center require a signaling arrangement other than those provided with the Terminating Options in 5.3.2 preceding. Signaling Arrangements will be charged on a per SAL basis. Specifically, a signaling charge applies if the signaling protocol characters in the NCI and the SEC NCI fields are different and include one of the following codes: RV, EX, SF, DX, DY, DS, AB.

[1] **Effective November 1, 2021 Voice Grade and Program Audio Services are grandfathered. Availability to current customers is limited to circuits in service at existing locations.** (N) (N)

FACILITIES FOR INTRASTATE ACCESS

5. SPECIAL ACCESS (Cont'd)

5.4 Description of Supplemental Features (Cont'd)

5.4.4 **Signaling Arrangements** [1] (C)

For the above conditions, one additional signaling charge applies for each additional leg of multipoint circuit. When a Multiplexing Arrangement is ordered that converts a single higher capacity or bandwidth circuit into several lower Voiceband circuits, the Voiceband Signaling Arrangements are provided as part of the Multiplexing Arrangement, and no additional Signaling Arrangement charges will apply.

A signaling charge applies in addition to any other applicable signaling charge when loop range extension equipment is required. The Telephone Company will obtain customer approval for signaling range extension equipment.

Listed below are the Signaling Arrangements offered under this tariff:

(A) Loop Signaling Range Extension - An arrangement to extend the metallic resistance limitations of loop type signaling.

(B) Conversion of Loop or E&M Signaling to SF - An arrangement to convert loop or E&M signaling to the single frequency signaling format.

(C) E&M to DX Signaling Conversion - Conversion of E&M signaling to the DX signaling format.

(D) E&M to Loop Signaling Conversion - Conversion of E&M signaling format to the loop type signaling.

(E) Loop or E&M to PCM Signaling - Conversion of loop or E&M signaling to the digital (PCM) signaling format.

(F) Automatic Ringdown Signaling (ARD) - A signaling arrangement on a two-point Special Access which converts loop seizure at one end of the facility into ringing signal at the opposite end.

5.4.5 **Echo Control** [1] (C)

(A) Echo Suppression

An arrangement provided at the customer's request to attenuate reflected speech energy on a four-wire facility. This conditioning is generally required on circuits with long propagation delay. Echo suppression is charged on a per Special Access circuit basis. Echo suppression is an obsolete service offering and is applicable only to those circuits equipped with echo suppression prior to January 1, 1987. Any service rearrangements or order activity on the circuits equipped with echo suppression may require a change to echo canceller as described in 5.4.5(B) following.

[1] **Effective November 1, 2021 Voice Grade Services are grandfathered. Availability to current customers is limited to circuits in service at existing locations.** (N) (N)

FACILITIES FOR INTRASTATE ACCESS

5. SPECIAL ACCESS (Cont'd)

5.4 **Description of Supplemental Features** [1] (Cont'd) (C)

5.4.5 Echo Control (Cont'd)

(B) Echo Canceller

An arrangement provided at the customer's request to cancel reflected speech energy on a four-wire facility. This conditioning is generally required on circuits with long propagation delay. Echo canceller is charged on a per Special Access circuit basis.

5.4.6 Improved Return Loss

Improved Return Loss provides for increased echo return and singing return parameters of an effective two-wire channel. This optional feature is available with certain Voiceband services at a two-wire point of termination when the transmission interface is four-wire at one CDL and two-wire at the other CDL. Placement of Telephone Company equipment may be required at the customer's premises with the two-wire point of termination.

Improved Return Loss rates and charges will apply on a per Special Access Line basis at the rates specified in 5.7.2(B) following. Technical parameters and the applicable Voiceband services are specified in Section 7000 of the GTE Technical Interface Reference Manual.

5.4.7 Voiceband Facility Switching Arrangement

An arrangement to provide switching between two Voiceband Special Access Services. This arrangement may require a Voiceband control circuit to control the switching arrangement at an additional charge.

5.4.8 Automatic Protection Switch

Consists of special switching equipment placed at both ends of a duplicate DS1 facility (i.e., DS1, High Capacity Circuit) for automatic switching to the duplicate (standby) facility in the event the active facility is inoperative.

Duplicate facilities may terminate at a serving wire center, a CDL or both. The option provided under this tariff only includes the APS(s) located at a serving wire center(s). When the duplicate facility terminates at a CDL, the customer will be responsible for providing the associated APS and ensuring it is compatible with the Telephone Company provided switch if appropriate.

The duplicate facilities are not a part of this supplemental feature
.

[1] **Effective November 1, 2021 Voice Grade Services are grandfathered. Availability to current customers is limited to circuits in service at existing locations.** (N) (N)

FACILITIES FOR INTRASTATE ACCESS

5. SPECIAL ACCESS (Cont'd)

5.4 **Description of Supplemental Features** [1] (Cont'd) (C)

5.4.9 Improved Termination Option

Improved Termination provides for a fixed 600 ohm impedance, an increased range of transmission levels, and simplex reversal (when applicable) on an effective four-wire channel. This optional feature is available with most Voiceband services with a four-wire point of termination. Telephone Company equipment is required at the customer's premises where this option is ordered.

The Improved Termination option will be ordered and rates and charges, as set forth in 5.7.2(B) following, will apply on a per SAL basis. Technical parameters and the applicable Voiceband services are specified in Section 7000 of the GTE Technical Interface Reference Manual.

5.4.10 Improved Equal Level Echo Path Loss Option - ELEPL-2

This option provides improved echo control parameters for an effective two-wire channel at a four-wire point of termination. Placement of Telephone Company equipment may be required at the customer's premises with the two-wire point of termination.

The term "Equal Level Echo Path Loss" (ELEPL) represents the measure of Echo Path Loss (EPL) at a four-wire interface which is corrected by the difference between the send and receive Transmission Level Point (TLP), i.e., ELEPL = EPL - TLP (send) + TLP (receive).

Improved ELEPL rates and charges will apply on a per SAL basis at the rates set forth in 5.7.2(B) following. Technical parameters are specified in Section 7000 of the GTE Technical Interface Reference Manual.

[1] **Effective November 1, 2021 Voice Grade, Program Audio and Digital Data Services are grandfathered. Availability to current customers is limited to circuits in service at existing locations.** (N) | (N)

FACILITIES FOR INTRASTATE ACCESS

5. SPECIAL ACCESS (Cont'd)

5.5 Description of Multiplexing Arrangements (Cont'd)

Multiplexing Arrangements provide the function to convert a single higher capacity or bandwidth circuit for bulk transport to several lower capacity or bandwidth circuits. Cascading multiplexing occurs when a high capacity analog or digital channel is de-multiplexed to provide channels with a lesser capacity and one of the lesser capacity channels is further de-multiplexed. For example, a DS1C may be de-multiplexed to two DS1 facilities and then the DS1 facilities may be further de-multiplexed to 24 Voiceband channels.

When cascading multiplexing is performed in the same or different Hub Wire Center, a charge for the additional multiplexing unit will also apply. When cascading multiplexing is performed at a different Hub Wire Center, Special Transport will also apply between the involved Hub Wire Centers.

Listed below are the multiplexing arrangements offered under this tariff.

(A) Reserved (C) (D)

(B) Reserved (C) (D)

(C) Resrved (C) (D)

group band circuit to ten wideband analog supergroup band circuits.

(D) DS1 to Voice [1] (C)

An arrangement that multiplexes twenty-four voice grade circuits to a single DS1 digital circuit at a rate of 1.544 Mbps, or multiplexes a single DS1 digital circuit at a rate of 1.544 Mbps to twenty-four voice grade circuits. 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. Multiple channels may be required to provide individual Program Audio Channels.

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.

FT1 can be used in conjunction with DS1 to Voice Multiplexing in groupings of N x 56 Kbps or N x 64 Kbps where N = 2, 4, or 6, to a single DS1 digital circuit at a rate of 1.544 Mbps.

[1] Effective November 1, 2021 Voice Grade Services are grandfathered. Availability to current customers is limited to circuits in service at existing locations. (N) (N)

FACILITIES FOR INTRASTATE ACCESS

5. SPECIAL ACCESS (Cont'd)

5.5 Description of Multiplexing Arrangements (Cont'd)

(E) DS3 to DS1

An arrangement that multiplexes twenty-eight DS1 digital circuits to a single DS3 digital circuit at a rate of 44.736 Mbps, or multiplexes a single DS3 digital circuit at a rate of 44.736 Mbps to twenty-eight DS1 digital circuits.

(F) DS3C to DS1

An arrangement that multiplexes fifty-six DS1 digital circuits to a single DS3C digital circuit at a rate of 89.472 Mbps, or multiplexes a single DS3C digital circuit at a rate of 89.472 Mbps to fifty-six DS1 digital circuits.

(G) Reserved (C) (D)

(H) **Digital Data Carrier Multiplexer** [1] (C)

An arrangement that multiplexes a single DS1 1.544 Mbps digital circuit to twenty-three DSO digital ports for connection to either a subrate data multiplexer as described in 5.5(I) following or 56 Kbps digital circuits.

(I) **Digital Data Subrate Multiplexer** [1] (C)

Used with cascading multiplexing, the Digital Data Subrate Multiplexer is an arrangement that multiplexes the following quantities of subrate digital data circuits into a single DSO digital port: 1) twenty 2.4 Kbps, 2) ten 4.8 Kbps or 3) five 9.6 Kbps. In turn, the DSO digital port is then multiplexed to a single DS1 digital circuit using the Digital Data Carrier Multiplexer described in 5.5(H) preceding.

[1] Effective November 1, 2021 Digital Data Services are grandfathered. Availability to current customers is limited to circuits in service at existing locations.

FACILITIES FOR INTRASTATE ACCESS

5. SPECIAL ACCESS (Cont'd)

5.6 Rate Regulations (Cont'd)

5.6.1 Types of Rates and Charges (Cont'd)

(D) Nonrecurring Charges (Cont'd)

(6) **Reserved** (C)

(D)

(D)

FACILITIES FOR INTRASTATE ACCESS

5. SPECIAL ACCESS (Cont'd)

5.7 Rates and Charges (Cont'd)

5.7.2 **Voiceband Facilities** [1] (C)

(A) Standard Arrangements

Special Transport (Per Airline Mile)		Special Access Line		
Monthly Rate	Daily Rate	Nonrecurring Charge	Monthly Rate	Daily Rate
$ 6.17	$210.00	$37.50	$71.66	

(B) Optional Arrangements

Multipoint Data Bridging (Per Port)		Supplemental Features Voice Conference Bridging (Per Port)	
Nonrecurring Charge	Monthly Rate	Nonrecurring Charge	Monthly Rate
$ 0.00	$ 8.00	$ 0.00	$ 8.00

Common Equipment		Supplemental Features Alarm Distribution Bridging Per Two-Wire Port	
Nonrecurring Charge	Monthly Rate	Nonrecurring Charge	Monthly Rate
$ 0.00	$30.00	$ 0.00	$ 2.00

[1] **Effective November 1, 2021 Voiceband Services are grandfathered. Availability to current customers is limited to circuits in service at existing locations.** (N) (N)

FACILITIES FOR INTRASTATE ACCESS

5. SPECIAL ACCESS (Cont'd)

5.7 Rates and Charges (Cont'd)

5.7.2 **Voiceband Facilities** [1](Cont'd) (C)

(B) Optional Arrangements (Cont'd)

Supplemental Features
Conditioning Arrangements - Data

Type C		Type DA	
Nonrecurring Charge	Monthly Rate	Nonrecurring Charge	Monthly Rate
$ 0.00	$ 11.86	$ 0.00	$ 2.00

Supplemental Features
Conditioning Arrangements - Data
Type C - Improved

Nonrecurring Charge	Monthly Rate
$ 3.00	$ 30.00

Supplemental Features
Signaling Arrangement

Loop Signaling Range Extension, per SAL		Loop or E&M to SF, per SAL	
Nonrecurring Charge	Monthly Rate	Nonrecurring Charge	Monthly Rate
$ 0.00	$ 10.00	$ 0.00	$ 16.00

Supplemental Features
Signaling Arrangement

E&M to DX, per SAL		E&M to Loop, per SAL	
Nonrecurring Charge	Monthly Rate	Nonrecurring Charge	Monthly Rate
$ 0.00	$ 14.00	$ 0.00	$ 12.00

[1] **Effective November 1, 2021 Voiceband Services are grandfathered. Availability to current customers is limited to circuits in service at existing locations.** (N) (N)

FACILITIES FOR INTRASTATE ACCESS

5. SPECIAL ACCESS (Cont'd)

5.7 Rates and Charges (Cont'd)

5.7.2 **Voiceband Facilities** [1](Cont'd) (C)

(B) Optional Arrangements (Cont'd)

Supplemental Features
Signaling Arrangement

Loop or E&M to PCM, per SAL		Automatic Ringdown, per SAL	
Nonrecurring Charge	Monthly Rate	Nonrecurring Charge	Monthly Rate
$ 0.00	$ 4.00	$ 0.00	$16.78

Supplemental Features
Echo Control

Echo Suppression, per circuit *		Echo Canceller, per circuit	
Nonrecurring Charge	Monthly Rate	Nonrecurring Charge	Monthly Rate
$ 0.00	$ 30.00	$ 0.00	$ 85.00

Supplemental Features
Voiceband Facility Switching Arrangement

Nonrecurring Charge	Monthly Rate
$ 0.00	$ 7.00

[1] **Effective November 1, 2021 Voiceband Services are grandfathered. Availability to current customers is limited to circuits in service at existing locations.** (N) (N)

FACILITIES FOR INTRASTATE ACCESS

5. SPECIAL ACCESS (Cont'd)

5.7 Rates and Charges (Cont'd)

5.7.2 **Voiceband Facilities** [1](Cont'd) (C)

(B) Optional Arrangements (Cont'd)

Supplemental Features			
Improved Return Loss, Per SAL		Improved Termination Option, Per SAL	
Nonrecurring Charge	Monthly Rate	Nonnrecurring Charge	Monthly Rate
$ 0.00	$ 3.75	$ 0.00	$ 10.00

Supplemental Features	
Improved Equal Level Echo Path Loss, Per SAL	
Nonrecurring Charge	Monthly Rate
$ 0.00	$ 3.75

[1] **Effective November 1, 2021 Voiceband Services are grandfathered. Availability to current customers is limited to circuits in service at existing locations.** (N) (N)

FACILITIES FOR INTRASTATE ACCESS

5. SPECIAL ACCESS (Cont'd)

5.7 Rates and Charges (Cont'd)

5.7.3 **Program Audio Facilities** [1](Cont'd) (C)

(A) Standard Arrangements - (200-3500 Hz)

Special Transport (Per Airline Mile)		Nonrecurring	Special Access Line	
Monthly Rate	Daily Rate	Charge	Monthly Rate	Daily Rate
$ 5.02	$ 0.50	$210.00	$ 30.00	$ 3.00

(B) Standard Arrangements - (100-5000 Hz)

Special Transport (Per Airline Mile)		Nonrecurring	Special Access Line	
Monthly Rate	Daily Rate	Charge	Monthly Rate	Daily Rate
$59.68	$ 5.97	$210.00	$ 41.00	$ 4.10

[1] **Effective November 1, 2021 Program Audio Services are grandfathered. Availability to current customers is limited to circuits in service at existing locations.** (N) (N)

FACILITIES FOR INTRASTATE ACCESS

5. SPECIAL ACCESS (Cont'd)

5.7 Rates and Charges (Cont'd)

5.7.3 **Program Audio Facilities** [1](Cont'd) (C)

(C) Standard Arrangements - (50-8000 Hz)

Special Transport (Per Airline Mile)			Special Access Line	
Monthly Rate	Daily Rate	Nonrecurring Charge	Monthly Rate	Daily Rate
$74.65	$ 7.47	$200.00	$ 42.00	$ 4.20

(D) Standard Arrangements - (50-15000 Hz)

Special Transport (Per Airline Mile)			Special Access Line	
Monthly Rate	Daily Rate	Nonrecurring Charge	Monthly Rate	Daily Rate
$89.61	$ 8.96	$200.00	$ 60.42	$ 6.04

[1] **Effective November 1, 2021 Program Audio Services are grandfathered. Availability to current customers is limited to circuits in service at existing locations.** (N) (N)

FACILITIES FOR INTRASTATE ACCESS

5. SPECIAL ACCESS (Cont'd)

5.7 Rates and Charges (Cont'd)

5.7.3 **Program Audio Facilities** [1](Cont'd) (C)

(E) Optional Arrangements - (50-15000 Hz Facilities only)

Supplemental Features
Conditioning - Program Audio
Stereo Conditioning, per occurrence

Nonrecurring Charge	Monthly Rate	Daily Rate
$ 0.00	$ 1.31	$ 0.13

(F) Optional Arrangements - (All Bandwidths)

Supplemental Features
Program Audio Bridging (Per Port)

Nonrecurring Charge	Monthly Rate	Daily Rate
$ 0.00	$ 19.15	$ 1.92

[1] **Effective November 1, 2021 Program Audio Services are grandfathered. Availability to current customers is limited to circuits in service at existing locations.** (N) (N)

FACILITIES FOR INTRASTATE ACCESS

5. SPECIAL ACCESS (Cont'd)

5.7 Rates and Charges (Cont'd)

5.7.3 **Program Audio Facilities** [1](Cont'd) (C)

(F) Optional Arrangements - (All Bandwidths) (Cont'd)

Supplemental Features
Conditioning Program Audio - Zero Loss, Per SAL

Nonrecurring Charge	Monthly Rate	Daily Rate
$ 0.00	$15.72	$ 1.57

5.7.4. (Reserved for Future Use)

[1] Effective November 1, 2021 Program Audio Services are grandfathered. Availability to current customers is limited to circuits in service at existing locations. (N) (N)

FACILITIES FOR INTRASTATE ACCESS

5. SPECIAL ACCESS (Cont'd)

5.7 Rates and Charges (Cont'd)

5.7.5 **Digital Data Service Facilities** [1] (C)
(2.4, 4.8, 9.6, 56 Kbps)

(A) Standard Arrangements

Special Transport All Speeds (Per Airline Mile) Monthly Rate	Special Access Line All Speeds Nonrecurring Charge	Special Access Line 2.4, 4.8 and 9.6 Kbps Monthly Rate	Special Access Line 56 Kbps Monthly Rate
$13.04	$262.50	$84.00	$94.50

[1] **Effective November 1, 2021 Digital Data Services are grandfathered. Availability to current customers is limited to circuits in service at existing locations.** (N) (N)

FACILITIES FOR INTRASTATE ACCESS

5. SPECIAL ACCESS (Cont'd)

5.7 Rates and Charges (Cont'd)

5.7.5 **Digital Data Service Facilities** [1](Cont'd) (C)
(2.4, 4.8, 9.6, 56 Kbps)

(B) Optional Arrangements

Supplemental Features DDS Bridging (Per Port)	
Nonrecurring Charge	Monthly Rate
$ 0.00	$11.00

[1] **Effective November 1, 2021 Digital Data Services are grandfathered. Availability to current customers is limited to circuits in service at existing locations.** (N) (N)

FACILITIES FOR INTRASTATE ACCESS

5. SPECIAL ACCESS (Cont'd)

5.7 Rates and Charges (Cont'd)

5.7.6 **Multiplexing Arrangements** [1] (C)

DS1 to Voice*

Nonrecurring Charge	Monthly Rate
$800.00	$194.25

Digital Data Carrier Multiplexer

Nonrecurring Charge	Monthly Rate
$1,500.00	$550.00

Digital Data Subrate Multiplexer

One 64 Kbps to Twenty 2.4 Kbps		One 64 Kbps to Ten 4.8 Kbps	
Nonrecurring Charge	Monthly Rate	Nonrecurring Charge	Monthly Rate
$800.00	$160.00	$800.00	$120.00

Digital Data Subrate Multiplexer

One 64 Kbps Port to Five 9.6 Kbps	
Nonrecurring Charge	Monthly Rate
$800.00	$100.00

[1] **Effective November 1, 2021 Voice Grade, Digital Data and Fractional DS1 Services are grandfathered. Availability to current customers is limited to circuits in service at existing locations.** (N) (N) (N)

* All other Multiplexing Arrangements are provided on an Individual Case Basis as described in 5.6.5(B).

FACILITIES FOR INTRASTATE ACCESS

5. SPECIAL ACCESS (Cont'd)

5.7 Rates and Charges (Cont'd)

5.7.7 High Capacity Digital DS1 (1.544 Mbps) Facilities (Cont'd)

(B) Optional Arrangements

Supplemental Features
Automatic Protection Switching

Nonrecurring Charge	Monthly Rate
$700.00	$100.00

CenturyTel Lan Special Transport
Monthly Rate

$ 75.00

5.7.8 (Reserved for Future Use)

5.7.9 High Capacity Digital FT1 Facilities

(A) Standard Arrangements

(1) **2 X 56 Kbps or 2 X 64 Kbps** [1] (C)

Special Access Line

Nonrecurring Charge	Monthly Rate	Special Transport	Special Transport Termination
$450.00	$140.07	$6.94	$22.05

(2) **4 X 56 Kbps or 4 X 64 Kbps** [1] (C)

Special Access Line

Nonrecurring Charge	Monthly Rate	Special Transport	Special Transport Termination
$450.00	$149.33	$8.09	$33.07

[1] **Effective November 1, 2021 Fractional DS1 Services are grandfathered. Availability to current customers is limited to circuits in service at existing locations.** (N) (N)

FACILITIES FOR INTRASTATE ACCESS

5. SPECIAL ACCESS (Cont'd)

5.7 Rates and Charges (Cont'd)

5.7.9 High Capacity Digital FT1 Facilities (Cont'd)

(A) Standard Arrangements (Cont'd)

(3) **6 X 56 Kbps or 6 X 64 Kbps** [1] (C)

Special Access Line

Nonrecurring Charge	Monthly Rate	Special Transport	Special Transport Termination
$450.00	$157.43	$9.26	$44.10

(B) **(Reserved for Future Use)**

[1] **Effective November 1, 2021 Fractional DS1 Services are grandfathered. Availability to current customers is limited to circuits in service at existing locations.** (N) (N)

FACILITIES FOR INTRASTATE ACCESS

SECTION 11 - TABLE OF CONTENTS

FACILITIES FOR INTRASTATE ACCESS

11. SPECIAL FEDERAL GOVERNMENT FIA (Cont'd)

11.5 Safeguarding of FIA

11.5.1 (Reserved for Future Use)

11.5.2 FIA Availability

In order to insure communications during periods of emergency, the Telephone Company will (within the limits of good management) make available the necessary facilities to restore FIA in the event of damage or to provide temporary emergency FIA.

In order to meet the requirements of agencies or branches of the Federal Government, the Telephone Company may utilize Government-owned facilities, when necessary, to provide FIA.

11.6 Federal Government Regulations

FIA provided to the Federal Government will be billed in arrears, as required by Federal procurement or disbursement regulations, or as established by law. ICs providing service to the Federal Government are not entitled to the benefits of those laws or regulations providing for billing the Federal Government in arrears.

11.7 (Reserved for Future Use)

11.8 FIA Offerings to the Federal Government

The following FIA are provided only for agencies or branches of the Federal Government. Access Services provided to the Federal Government but not specified in the following will be provided in accordance with the regulations and at the rates contained in other sections of this tariff.

11.8.1 Type and Description

(A) **Voiceband Special Access** [1] (C)

(1) Voice Grade Secure Communications Type I

Approximate bandwidth of 10-50000 Hz. Furnished for two-point secure communications on two-wire or four-wire metallic facilities between two or more customer designated locations and an end user's premises. Special Access is conditioned as follows:

T-3 Conditioning - The absolute loss (referenced to one milliwatt) with respect to frequency shall not exceed:

15 dB at 10 Hz
13 dB at 100 Hz
12 dB at 1000 Hz
20 dB at 10000 Hz
30 dB at 50000 Hz

[1] **Effective November 1, 2021 Voiceband Services are grandfathered. Availability to current customers is limited to circuits in service at existing locations.** (N) (N)

FACILITIES FOR INTRASTATE ACCESS

11. SPECIAL FEDERAL GOVERNMENT FIA (Cont'd)

11.8 FIA Offerings to the Federal Government (Cont'd)

11.8.1 Type and Description (Cont'd)

(A) **Voiceband Special Access** [1](Cont'd) (C)

(1) Voice Grade Secure Communications Type I (Cont'd)

Additional conditioning (available in one or two directions on four-wire facilities only) to provide the following characteristics:

The absolute loss (referenced to one milliwatt) with respect to frequency shall not exceed:
0 dB at 1000 Hz
+ 1 dB between 1000 Hz and 40000 Hz
+ 2 dB between 10 Hz and 50000 Hz (+ means more loss)

The net loss of the conditioned Special Access (with or without additional conditioning) shall not vary by more than 4 dB at 1000 Hz from the levels specified above. Voice frequency signaling or supervisory tones can be transmitted.

(2) Voice Grade Secure Communications Type II

Approximate bandwidth 10-50000 Hz. Furnished on four-wire metallic facilities for duplex operation for two-point secure communication between a customer designated location and an end user's premises. Special Access is conditioned as follows:

G-1 Conditioning - The absolute loss with respect to frequency and the net loss variation shall be the same as Voice Grade Secure Communications Type I Special Access without additional conditioning. Voice frequency signaling or supervisory tones can be transmitted.

(3) Voice Grade Secure Communications Type III

Approximate bandwidth 10-50000 Hz. Furnished on four-wire metallic facilities for duplex operation for two-point secure communication between a customer designated location and an end user's premises. Special Access is conditioned as follows:

G-2 Conditioning - The absolute loss with respect to frequency and the net loss variation from the customer designated location to the end user's premises shall be the same as Voice Grade Secure Communications Type I Special Access without additional conditioning; and from the end user's premises to the customer designated location shall be the same as Voice Grade Secure Communications Type I Special Access with additional conditioning. Voice frequency signaling or supervisory tones can be transmitted.

[1] Effective November 1, 2021 Voiceband Services are grandfathered. Availability to current customers is limited to circuits in service at existing locations. (N) (N)

FACILITIES FOR INTRASTATE ACCESS

11. SPECIAL FEDERAL GOVERNMENT FIA (Cont'd)

11.8 FIA Offerings to the Federal Government (Cont'd)

11.8.1 Type and Description (Cont'd)

(A) **Voiceband Special Access** [1] **(**Cont'd) (C)

(4) Voice Grade Secure Communications Type IV

Approximate bandwidth 10-50000 Hz. Furnished on four-wire metallic facilities for duplex operations for two-point secure communications between two customer designated locations. Special Access is conditioned as follows:

G-3 Conditioning - The absolute loss with respect to frequency and the net loss variation shall be the same in both directions of transmission as Voice Grade Secure Communications Type I Special Access with additional conditioning. Voice frequency signaling or supervisory tones can be transmitted.

(B) **Special Wideband Digital Special Access** [1] (C)

Special Access arrangements for secured communications to accommodate the transmission of binary digital baseband signals in a random polar format.

(1) Wideband Secure Communications Type I

For transmission at the rate of 18,750 bits per second.

(2) Wideband Secure Communications Type II

For transmission at the rate of 50,000 bits per second.

(3) Wideband Secure Communications Type III

To accommodate the transmission of restored polar two-level facsimile signals with a minimum signal element width of 20 microseconds at a rate of 50,000 bits per second.

To accommodate the transmission of binary digital baseband signals in a random polar format at the rate of 50,000 bits per second.

11.8.2 Mileage Application

Mileage for rate application is the airline distance measured between the two related Special Access terminating points (i.e., customer designated location and end user premises).

[1] **Effective November 1, 2021 Voiceband amd Wideband Digital Services are grandfathered. Availability to current customers is limited to circuits in service at existing locations.** (N) (N)

FACILITIES FOR INTRASTATE ACCESS

11. SPECIAL FEDERAL GOVERNMENT FIA (Cont'd)

11.8 FIA Offerings to the Federal Government (Cont'd)

11.8.3 Rates and Charges

Notification will be made to the FCC that Special Federal Government FIA will be provided in accordance with Special Permission No. 83-867.

(A) **Voiceband Special Access** [1] (C)

The provision of T-3 and G conditioned Special Access contemplates station and tandem switching operations using customer provided equipment, as well as Special Access. Separate narrowband or voice grade Special Access, where required by the customer provided equipment or switching operation, are furnished in accordance with the applicable sections of this tariff.

Voice Grade Secure Communications	Monthly Rates	Nonrecurring Charges	Termination Charges
Type I, each T-3 Conditioning	ICB rates and charges apply		
Additional Conditioning, per Special Access termination	ICB rates and charges apply		
Type II, each G-1 Conditioning	ICB rates and charges apply		
Type III, each G-2 Conditioning	ICB rates and charges apply		
Additional Conditioning, per Special Access termination	ICB rates and charges apply		
Type IV, each G-3 Conditioning	ICB rates and charges apply		
Additional Conditioning, per Special Access termination	ICB rates and charges apply		

(C)

(B) **Special Wideband Digital Special Access** [1]

Wideband Secure Communications	Monthly Rates	Nonrecurring Charges	Termination Charges
Type I, each	ICB rates and charges apply		
Type II, each	ICB rates and charges apply		
Type III, each	ICB rates and charges apply		

[1] **Effective November 1, 2021 Voiceband amd Wideband Digital Services are grandfathered. Availability to current customers is limited to circuits in service at existing locations.** (N) (N)