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May 15, 2012

Mr. Darrell Nitschke  
Executive Secretary  
North Dakota Public Service Commission  
State Capitol  
600 East Boulevard Avenue, Twelfth Floor  
Bismarck, ND 58505-0480

Re: North Dakota Intrastate Access Coalition-North Dakota Tariff No. 1

Dear Mr. Nitschke:

John Staurulakis, Inc. (JSI) is filing an original and seven (7) copies of attached new Intrastate Access Tariff on behalf of the Issuing Carriers indicated in Attachment 1 to this transmittal letter, also referred to as the North Dakota Intrastate Access Coalition. The purpose of this filing is to reflect recently enacted FCC rules pursuant to the FCC's Report and Order and Further Notice of Rulemaking, Docket No. WC Docket No. 10-90, *et al.*, FCC 11-161 (Released November 18, 2011).<sup>1</sup> The FCC's Rules in this Order became effective on December 29, 2011. This tariff filing establishes a new Intrastate Access Tariff for all of the Issuing Carriers, and supersedes and cancels any affiliation or concurrences that may currently exist between the Issuing Carriers and any other existing Intrastate Access Tariff, effective July 1, 2012.

The following tariff pages are included in this filing:

North Dakota Intrastate Access Coalition-North Dakota Tariff No. 1

The specific tariff pages being filed are identified on the Check Sheets contained in the Table of Contents of this tariff. This tariff filing is made under authority of Chapter 49-21-01 and Chapter 49-21-04. The Issuing Carriers propose an effective date of this new Intrastate Access Tariff of July 1, 2012.

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<sup>1</sup> *In the matter of Connect America Fund, A National Broadband Plan for Our Future, Establishing Just and Reasonable Rates for Local Exchange Carriers, High Cost Universal Support, Developing an Unified Intercarrier Compensation Regime, Federal State Joint Board on Universal Service, Lifeline and Link-Up, Universal Service Reform Mobility Fund, Report and Order and Further Notice of Proposed Rulemaking, Docket Nos. WC Docket No. 10-90, et al., FCC 11-161, Released November 18, 2011 ("ICC Reform Order").*

**Mr. Darrell Nitschke**  
**Executive Secretary**  
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In the ICC Reform Order, the FCC adopted a transitional intercarrier compensation restructuring framework for both intrastate and interstate telecommunications traffic exchanged with a local exchange carrier. The FCC directed that these access tariffs will ultimately result in a bill and keep arrangement between carriers. During the first phase of the intercarrier compensation restructuring, the FCC directed that for most carriers, intrastate rates must be reduced by fifty (50%) percent of the differential between the carrier's intrastate access rates and interstate access rates by July 1, 2012, using the methodology set forth in 47 C.F. R. §§51.907, 51-909 and 51-911. This requirement affects price cap carriers, rate-of-return carriers, and certain competitive local exchange carriers (CLECs). This filing is being submitted to address this matter. The Issuing Carriers as defined in Attachment 1 are all rate-of-return carriers.

Additionally, the Issuing Carriers of North Dakota Tariff No. 1 are comprised of a number of companies that currently have varying rate design methodologies in place. Some North Dakota companies have already begun their transition from Non-Local Transport Restructuring (LTR) rate design to LTR rate design. Other North Dakota companies continue to operate under Non-LTR rate design today, but will transition to LTR rate design in the future. The rates contained in Section 17 of this tariff reflect the implementation of this objective in conformance with the ICC Reform Order.

In a Letter Order issued by the North Dakota Public Service Commission (NDPSC) on May 3, 2012, the Commission delineated a list of specific supporting information that must be provided with this tariff filing. A portion of the requested information is provided in Attachment 2 to this transmittal letter. However, a portion of this information has been determined to be confidential, and is not being included with this filing. Rather, this information is being filed with the Commission today in a separate filing of an Application for Trade Secret Protection. The minutes-of-use, cost and rate information required to be submitted with this filing is highly confidential, in that it is only maintained by each Issuing Carrier/Company and not available through any source other than the companies or their authorized agents. Furthermore, this information could have economic value to potential competitors, and in a competitive telecommunications marketplace, this type of information is highly sensitive and its public disclosure would place the Issuing Carriers at a competitive disadvantage. Accordingly, this information is being submitted to the Commission today, as Attachment 1 to the Application for Trade Secret Protection, being filed in conjunction with this Intrastate Access Tariff filing.

This tariff filing is being filed electronically, and it consists of four (1) electronic file which contains Sections 1 through 16 of the North Dakota Intrastate Access Tariff No. 1. Due to some last minute technical problems, Section 17, the Issuing Carriers' Rate Section, will not be filed today. Pursuant to an agreement reached today with Commission Staff, Section 17 and the Table of Contents for North Dakota Intrastate Access Tariff No. 1 will be filed with the Commission tomorrow, May 16, 2012.

Please respond via email with a notification indicating that this filing has been received by the Commission. Additionally, JSI will be mailing a hard copy of the tariff filing as noted

**Mr. Darrell Nitschke**  
**Executive Secretary**  
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above, to the Commission today, via overnight mail, for delivery to the Commission tomorrow, May 16, 2012. With that mailing, you will find enclosed a copy of this transmittal letter marked "File Stamp Copy" to be stamped and returned to JSI as confirmation that the hard copies of this filing have been received by the Commission as well. Please return the stamped copy of this transmittal letter in the envelope provided for this purpose.

If there are any questions regarding this filing, please feel free to contact me at (301) 459-7590 or at [kcartmell@jsitel.com](mailto:kcartmell@jsitel.com).

Sincerely,

/s/ Kenneth T. Cartmell

Kenneth T. Cartmell  
Manager-JSI Regulatory Affairs

on behalf of the North Dakota  
Intrastate Access Coalition

KTC/tms  
Attachments

cc: Patrick Fahn, North Dakota Public Service Commission (w/o Attachments)  
Mark Gruman, North Dakota Public Service Commission (w/o Attachments)  
North Dakota Intrastate Access Coalition-North Dakota Tariff No. 1-Issuing Carriers

# **Attachment 1**

**ACCESS SERVICE****ISSUING CARRIERS****NAME OF COMPANY****PREVIOUS TARIFF CANCELLED**

BEK Communications Cooperative P.O. Box 230 200 Broadway East, Steele, North Dakota 58482	Northwestern Bell Telephone Company-1986
Consolidated Communication Network, Inc. 507 South Main Ave. Dickinson, North Dakota 58601	Northwestern Bell Telephone Company-1986
Dakota Central Telecommunications 630 Original Street North Carrington, North Dakota 58421	Northwestern Bell Telephone Company-1986
Dakota Central Telecom I, Inc. 630 Original Street North Carrington, North Dakota 58421	Northwestern Bell Telephone Company-1986
Dickey Rural Telephone Cooperative P.O. Box 69 9628 Highway 281 Ellendale, North Dakota 58436	Northwestern Bell Telephone Company-1986
Dickey Rural Communications P.O. Box 69 9628 Highway 281 Ellendale, North Dakota 58436	Northwestern Bell Telephone Company-1986
Griggs County Telephone Company 905 Lenham Ave. Southeast Carrington, North Dakota 58425	The Appropriate Intrastate Access Tariff
Inter-Community Telephone Company, LLC 556 Main Street P.O. Box 8 Nome, North Dakota 58062	Northwestern Bell Telephone Company-1986
Missouri Valley Communications, Inc. 421 Main St. Williston, North Dakota 58801	The Appropriate Intrastate Access Tariff

**ACCESS SERVICE****ISSUING CARRIERS****NAME OF COMPANY****PREVIOUS TARIFF CANCELLED**

Moore and Liberty Telephone Company  
301 Dewey St.  
Enderlin, North Dakota 58027

The Appropriate Intrastate Access Tariff

Nemont Telephone Cooperative, Inc.  
61 Highway 13 S.  
Scobey, Montana 59263

The Appropriate Intrastate Access Tariff

North Dakota Telephone Company  
211 22 St. NW  
Devils Lake, North Dakota 58301

Northwestern Bell Telephone Company-1986

Northwest Communications, Cooperative  
PO Box 38  
111 Railroad Ave.  
Ray, North Dakota 58849

Northwestern Bell Telephone Company-1986

Polar Communications Mutual Aid Corporation  
110 4<sup>th</sup> Street E  
Park River, North Dakota 58270

The Appropriate Intrastate Access Tariff

Red River Rural Telephone Company  
510 Broadway  
Abercrombie, North Dakota 58001

North Dakota Intrastate Access Service Tariff-1986  
North Dakota Intrastate Access Service Tariff-2005

Reservation Telephone Cooperative  
24 N. Main St.  
Parshall, North Dakota 58770

Northwestern Bell Telephone Company-1986

Turtle Mountain Telephone Company  
P.O. Box 729  
411 7<sup>th</sup> Avenue  
Rolla, North Dakota 58367

Northwestern Bell Telephone Company-1986

United Telephone Mutual Aid Corporation  
PO Box 729  
411 7<sup>th</sup> Avenue.  
Langdon, North Dakota 58249

Northwestern Bell Telephone Company-1986

West River Telecommunications, Cooperative  
101 Main Street West  
P.O. Box 467  
Hazen, North Dakota 58545

The Appropriate Intrastate Access Tariff

**ACCESS SERVICE**

**ISSUING CARRIERS**

**NAME OF COMPANY**

Wolverton Telephone Company  
110 4<sup>th</sup> Street E  
Park River, North Dakota 58270

**PREVIOUS TARIFF CANCELLED**

The Appropriate Intrastate Access Tariff

# **Attachment 2**

**The North Dakota Public Service Commission issued a Letter Order Dated May 3, 2012, regarding the Federal Communications Commission Report and order FCC 11-161. Commission's Request for Carrier to Submit Revised Tariff to the Commission for Implementation on July 1, 2012. In this document addressed to all North Dakota Local Exchange Companies, the North Dakota Public Service Commission directed all rate of return regulated carrier to file tariff/price list revisions by May 15, 2012. All carriers must also provide specific support information, including:**

- 1. Fiscal Year 2011 intrastate demand (volume) for intrastate access services by rate element.**
- 2. All intrastate access rates in effect as of December 29, 2011.**
- 3. All interstate access rates in effect as of December 29, 2011.**
- 4. If the carrier's intrastate rate structure and the interstate rate structure are not the same, a full explanation of how the LEC will map its Fiscal Year 2011 intrastate demand for intrastate access services into its interstate rate structure to determine the interstate revenues used in the FCC mandated revenue reduction calculations. See 47 CFR §§ 51.907, 51.909, 51.911.**
- 5. A full description of the methodology the carrier will use to set reduced intrastate rates to reflect the calculated rate reductions.**
- 6. A full description of the rate structure option that the carrier will utilize as of July 1, 2012 (if the carrier in fact currently has different intrastate and interstate rate structures for carrier access charges.)**
- 7. Contact information for the person(s) who prepared the information.**

**\*Attachment 2 provides the requested information or references where this information can be found.**

The information requested in items 1, 2, and 3 below was submitted with the Application for Trade Secret Protection filed with the North Dakota Public Service Commission by the Issuing Carriers-North Dakota Intrastate Access Coalition on May 15, 2012

1. Fiscal Year 2011 intrastate demand (volume) for intrastate access services by rate element.
2. All intrastate access rates in effect as of December 29, 2011.
3. All interstate access rates in effect as of December 29, 2011.

The information requested in items 4, 5, and 6 below are addressed in the following pages of Attachment 3 entitled "Transitional Intrastate Access Service Rate Development-Supporting Rate Development Calculations for the North Dakota Intrastate Access Coalition-Intrastate Access Tariff Filing."

- 4 If the carrier's intrastate rate structure and the interstate rate structure are not the same, a full explanation of how the LEC will map its Fiscal Year 2011 intrastate demand for intrastate access services into its interstate rate structure to determine the interstate revenues used in the FCC mandated revenue reduction calculations. See 47 CFR §§ 51.907, 51.909, 51.911.
- 5 A full description of the methodology the carrier will use to set reduced intrastate rates to reflect the calculated rate reductions.
- 6 A full description of the rate structure option that the carrier will utilize as of July 1, 2012 (if the carrier in fact currently has different intrastate and interstate rate structures for carrier access charges.)

The information requested in the item 7 below is addressed below.

7. Contact information for the person(s) who prepared the information.

The information provided by all of the companies indicated as Issuing Carriers as reflected in Attachment 1 of this transmittal letter, with the exception of West River Telecommunications Cooperative, was provided by or under the supervision of Ms. Valerie Wimer, Vice President, John Staurulakis, Inc. (301-459-7590 or [vwimer@jsitel.com](mailto:vwimer@jsitel.com)) The information provided by West River Telecommunications Cooperative, was provided by or under the supervision of Ms. Marlene Bennett, Carrier Consulting Manager, Consortia Consulting Group, (605-770-6779 or [mbennett@consortiaconsulting.com](mailto:mbennett@consortiaconsulting.com))

**Transitional Intrastate Access Service Rate Development  
Supporting Rate Development Calculations for  
North Dakota Intrastate Access Coalition Intrastate Access Tariff Filing**

This document details the contents and methodology of the rate of return client-specific supporting rate development worksheets that will accompany North Dakota Intrastate Access Coalition issuing carriers' tariff filings made with the Public Utility Commission of North Dakota to comply with the Commission's Letter dated May 3, 2012 and the prescriptions of the FCC's USF / ICC Transformation Order and specifically §51.909 of the FCC's rules related to the transition of rate-of-return carrier intrastate terminating access charges.

**Demand Data:**

The FCC order CRR 51.909(b)(2) specifies that the transitional intrastate rates be calculated using the fiscal year 2011 ending September 30, 2011 demand. The demand was obtained from CABs billing summary reports of the terminating intrastate IntraLATA and InterLATA for the time period except for West River, Nemont and Missouri Valley which have reports without the LATA break down. Direct trunked transport demand is based on December 2011 CABs billing.

**Revenue Calculation:**

Terminating Interstate revenue is calculated based on the formula in 51.909(b)(2)(i). IntraLATA and InterLATA revenue were calculated separately.

Terminating Intrastate revenue is calculated based on the formula in 51.909(b)(ii). IntraLATA and InterLATA revenue is calculated separately except for West River, Nemont and Missouri Valley. Some companies have acquired exchanges which have different IntraLATA and InterLATA state access rates. The acquired exchanges and original exchanges were both calculated together in the IntraLATA and InterLATA using the respective rates for the two different exchange groups.

**Access Revenue Reduction:**

The intrastate terminating access revenue rate reduction is calculated as prescribed in 51.909(b)(iii). By taking the difference of the interstate revenue and interstate terminating revenue calculated above.

**2012 Rates Development:**

LECs have the options of retaining the current intrastate rate structure for 2012 or implementing the federal rate structure in 2012. If a LEC chose to move to the federal rate

## **North Dakota Intrastate Access Coalition-Attachment 2**

### **Page 5**

structure in 2012, the rates filed are the federal transport rates (Tandem Transport Facility, tandem Switched Termination and Tandem Switching) and the lower of the intrastate and the interstate terminating End Office Switching and Information Surcharge rate elements. A per minute of use Transitional rate is added at a rate that would result in the 50% is then calculated when using the End Office Switching minute demand for fiscal year ending September 30, 2011 demand. The IntraLATA and InterLATA terminating rates are developed separately except for West River, Nemont and Missouri Valley; therefore the transitional rate will have a different value for interLATA and IntraLATA.

If a LEC selects to stay on the current intrastate access rate structure, the individual terminating rate elements are reduced until the 50% reduction is achieved when calculating the revenue produced by the reduced rates using the fiscal year ending September 30, 2011 demand. IntraLATA and InterLATA rates are calculated separately except for West River, Nemont and Missouri Valley.

Other rates included in the tariff for originating access, non-recurring, and misc rate elements are either the existing effective state rate elements or are equal to the NECA rate for the element as listed in the May 1, 2012 tariff.

### **July 1, 2013**

July 1, 2013 terminating access rates are set at the federal rates and rate structure for Terminating Tandem Switched Transport service. The terminating End Office and Information Surcharge rates element is the lower of the interstate rate and the intrastate rate. IntraLATA and InterLATA are determined separately.

### **July 1 2014- July 1, 2017**

The terminating Tandem-Switched Transport Access Service rates are not changed between July 1, 2014 and July 1, 2017.

All Concurring carriers have decided to eliminate the terminating information surcharge by 2014.

The End Office Switching rates is set at a rate equal to the Target Composite Terminating End Office Access Rate as defined in 51.909(d)(3) for 2014, 51909(e) for 2015, and 51.909(f) for 2016 and the July 1, 2013 terminating end office switching rate.

### **July 1, 2017 – July 1, 2020**

The terminating Tandem-Switched transport Access service rates are not changed between July 1, 2016 and July 1, 2020.

The End Office Switching rates are set at the lesser of the Target Composite terminating End Office Access Rate as calculated in 51.909(g) for 2012, 51.909(h) for 2018, and 51.909(i) in 2019 and the July 1, 2013 End office Switching rates.

**July 1, 2020**

The Terminating Tandem Switched Transport Access Service rates are not changed in 2020.

The terminating End Office Access service rate is zero in July 1, 2020.

**Definitions:**

End Office Access Service means (1) the switching of access traffic at the carrier's end office switch and the delivery to or from of such traffic to the called party's premises;

(2) The routing of interexchange telecommunications traffic to or from the called party's premises, either directly or via contractual or other arrangements with an affiliated or unaffiliated entity, regardless of the specific functions provided or facilities used; or

(3) Any functional equivalent of the incumbent local exchange carrier access service provided by a non-incumbent local exchange carrier. End Office Access service rate elements for an incumbent local exchange carrier include the local switching rate elements specified in CFR 61.106, the carrier common line rate elements specified in CFR 69.154, and the intrastate rate elements for functionally equivalent access services. End Office Access Service rate elements for an incumbent local exchange carrier also included any rate elements assessed on local switching access minutes, including the information surcharge and residual rate elements. End office Access service rate elements for a non-incumbent local exchange carrier include any functionally equivalent access service.

Tandem-Switched Transport Access Service means (1) Tandem switching and common transport between the tandem switch and end office; or (2) Any functionally equivalent of the incumbent local exchange carrier access service provided by a non-incumbent local exchange carrier via other facilities. Tandem-Switched Transport rate elements for an incumbent local exchange carrier include the rate elements specified in CFR 69.111, except for the dedicated transport rate elements specified in that section, and intrastate rate elements for the functionally equivalent service. Tandem Switch Transport Access service rate elements for a non-incumbent local exchange carrier include any functionally equivalent access service.

## ACCESS SERVICE

### 1. Application of Tariff

- 1.1 This tariff contains regulations, rates and charges applicable to the provision of Carrier Common Line, Switched Access, and other miscellaneous services, hereinafter referred to collectively as service(s). These services are provided to customers by the Issuing Carriers of this tariff, hereinafter the Telephone Company. This tariff also contains Access Ordering regulations and charges that are applicable when these services are ordered or modified by the customer.
- 1.2 The provision of such services by the Telephone Company as set forth in this tariff does not constitute a joint undertaking with the customer for the furnishing of any service.
- 1.3 The provision of such services by the Telephone Company as set forth in this tariff must be determined on an Issuing Carrier basis. Not all Issuing Carriers of this tariff are technically capable of offering all of the services contained in this tariff.

## ACCESS SERVICE

### 2. General Regulations

#### 2.1 Undertaking of the Telephone Company

##### 2.1.1 Scope

- (A) The Telephone Company does not undertake to transmit messages under this tariff.
- (B) The Telephone Company shall be responsible only for the installation, operation and maintenance of the services it provides.
- (C) The Telephone Company will, for maintenance purposes, test its service only to the extent necessary to detect and/or clear troubles.
- (D) Services are provided 24 hours daily, seven days per week, except as set forth in other applicable sections of this tariff.
- (E) The Telephone Company does not warrant that its facilities and services meet standards other than those set forth in this tariff.
- (F) The Telephone Company provides only those services that are contained in this tariff that the Telephone Company is technically capable of providing.

##### 2.1.2 Limitations

###### (A) Assignment or Transfer of Services

The customer may assign or transfer the use of services provided under this tariff only where there is no interruption of use or relocation of the services. Such assignment or transfer may be made to:

- (1) another customer, whether an individual, partnership, association or corporation, provided the assignee or transferee assumes all outstanding indebtedness for such services, and the unexpired portion of the minimum period and the termination liability applicable to such services, if any; or

**ACCESS SERVICE**2. General Regulations (Cont'd)2.1 Undertaking of the Telephone Company (Cont'd)2.1.2 Limitations (Cont'd)(A) Assignment or Transfer of Services (Cont'd)

- (2) a court-appointed receiver, trustee or other person acting pursuant to law in bankruptcy, receivership, reorganization, insolvency, liquidation or other similar proceedings, provided the assignee or transferee assumes the unexpired portion of the minimum period and the termination liability applicable to such services, if any.

In all cases of assignment or transfer, the written acknowledgement of the Telephone Company is required prior to such assignment or transfer. This acknowledgement shall be made within 15 days from the receipt of notification. All regulations and conditions contained in this tariff shall apply to such assignee or transferee.

The assignment or transfer of services does not relieve or discharge the assignor or transferor from remaining jointly or severally liable with the assignee or transferee for any obligations existing at the time of the assignment or transfer.

(B) Use and Restoration of Services

The use and restoration of services shall be in accordance with Part 64, Subpart D, Appendix A, of the Federal Communications Commission's Rules and Regulations, which specifies the priority system for such activities.

(C) Sequence of Provisioning

Subject to compliance with the rules mentioned in (B) preceding, the services offered herein will be provided to customers on a first-come, first-served basis.

The first-come, first-served sequence shall be based upon the received time and date recorded, by stamp or other notation, by the Telephone Company on customer access orders. These orders must contain all the information as required for each respective service as delineated in other sections of this tariff. Customer orders shall not be deemed to have been received until such information is provided. Should questions arise which preclude order issuance due to missing information or the need for clarification, the Telephone Company will attempt to seek such missing information or clarification on a verbal basis.

**ACCESS SERVICE**2. General Regulations (Cont'd)2.1 Undertaking of the Telephone Company (Cont'd)2.1.3 Liability(A) Limits of Liability

The Telephone Company's liability, if any, for its willful misconduct is not limited by this tariff. With respect to any other claim or suit, by a customer or by any others, for damages associated with the installation, provision, termination, maintenance, repair or restoration of service, and subject to the provisions of (B) through (G) following, the Telephone Company's liability if any, shall not exceed an amount equal to the proportionate charge for the service for the period during which the service was affected. This liability for damages shall be in addition to any amounts that may otherwise be due the customer under this tariff as a Credit Allowance for a Service Interruption.

(B) Acts or Omissions

The Telephone Company shall not be liable for any act or omission of any other carrier or customer providing a portion of a service, nor shall the Telephone Company for its own act or omission hold liable any other carrier or customer providing a portion of a service.

(C) Damages to Customer Premises

The Telephone Company is not liable for damages to the customer premises resulting from the furnishing of a service, including the installation and removal of equipment and associated wiring, unless the damage is caused by the Telephone Company's negligence.

(D) Indemnification of Telephone Company(1) By the End User

The Telephone Company shall be indemnified, defended and held harmless by the end user against any claim, loss or damage arising from the end user's use of services offered under this tariff, involving:

- (A) Claims for libel, slander, invasion of privacy, or infringement of copyright arising from the end user's own communications;

**ACCESS SERVICE**

2. General Regulations (Cont'd)

2.1 Undertaking of the Telephone Company (Cont'd)

2.1.3 Liability (Cont'd)

(D) Indemnification of Telephone Company (Cont'd)

(1) By the End User (Cont'd)

- (B) Claims for patent infringement arising from the end user's acts combining or using the service furnished by the Telephone Company in connection with facilities or equipment furnished by the end users or customer; or
- (C) All other claims arising out of any act or omission of the end user in the course of using services provided pursuant to this tariff.

(2) By the Customer

The Telephone Company shall be indemnified, defended and held harmless by the customer against any claim, loss or damage arising from the customer's use of services offered under this tariff, involving:

- (A) Claims for libel, slander, invasion of privacy, or infringement of copyright arising from the customer's own communications;
- (B) Claims for patent infringement arising from the customer's acts combining or using the service furnished by the Telephone Company in connection with facilities or equipment furnished by the end user or customer; or
- (C) All other claims arising out of any act or omission of the customer in the course of using services provided pursuant to this tariff.

**ACCESS SERVICE**2. General Regulations (Cont'd)2.1 Undertaking of the Telephone Company (Cont'd)2.1.3 Liability (Cont'd)(E) Explosive Atmospheres

The Telephone Company does not guarantee or make any warranty with respect to its services when used in an explosive atmosphere. The Telephone Company shall be indemnified, defended and held harmless by the customer from any and all claims by any person relating to such customer's use of services so provided.

(F) No License Granted

No license under patents (other than the limited license to use) is granted by the Telephone Company or shall be implied or arise by estoppel, with respect to any service offered under this tariff. The Telephone Company will defend the customer against claims of patent infringement arising solely from the use by the customer of services offered under this tariff and will indemnify such customer for any damages awarded based solely on such claims.

(G) Circumstances Beyond the Telephone Company's Control

The Telephone Company's failure to provide or maintain services under this tariff shall be excused by labor difficulties, governmental orders, civil commotions, criminal actions taken against the Telephone Company, acts of God and other circumstances beyond the Telephone Company's reasonable control, subject to the Credit Allowance for a Service Interruption as set forth in Section 2.4.4 following.

2.1.4 Provision of Services

The Telephone Company will provide to the customer, upon reasonable notice, services offered in other applicable sections of this tariff at rates and charges specified therein. Services will be made available to the extent that such services are or can be made available with reasonable effort, and after provision has been made for the Telephone Company's telephone exchange services.

2.1.5 Facility Terminations

The services provided under this tariff will include any entrance cable or drop wiring and wire or intrabuilding cable to that point where provision is made for termination of the Telephone Company's outside distribution network facilities at a suitable location inside a customer-designated premises. Such wiring or cable will be installed by the Telephone Company to the Point of Termination. Moves of the Point of Termination at the customer designated premises will be as set forth in Section 6.4.4 following.

**ACCESS SERVICE**2. General Regulations (Cont'd)2.1 Undertaking of the Telephone Company (Cont'd)2.1.6 Service Maintenance

The services provided under this tariff shall be maintained by the Telephone Company. The customer or others may not rearrange, move, disconnect, remove or attempt to repair any facilities provided by the Telephone Company, other than by connection or disconnection to any interface means used, except with the written consent of the Telephone Company.

2.1.7 Changes and Substitutions

Except as provided for equipment and systems subject to FCC Part 68 Regulations at 47 C.F.R. Section 6.110(b), the Telephone Company may, where such action is reasonably required in the operation of its business, substitute, change or rearrange any facilities used in providing service under this tariff. Such actions may include, without limitation:

- change of minimum protection criteria,
- change of operating or maintenance characteristics of facilities, or
- change of operations or procedures of the Telephone Company.

**ACCESS SERVICE**2. General Regulations (Cont'd)2.1 Undertaking of the Telephone Company (Cont'd)2.1.7 Changes and Substitutions (Cont'd)

In case of any such substitution, change or rearrangement, the transmission parameters will be within the range as set forth in Section 15. following. The Telephone Company shall not be responsible if any such substitution, change or rearrangement renders any customer furnished services obsolete or requires modification or alteration thereof or otherwise affects their use or performance. If such substitution, change or rearrangement materially affects the operating characteristics of the facility, the Telephone Company will provide reasonable notification to the customer in writing. Reasonable time will be allowed for any redesign and implementation required by the change in operating characteristics. The Telephone Company will work cooperatively with the customer to determine reasonable notification procedures.

2.1.8 Refusal and Discontinuance of Service

(A) If a customer fails to comply with Section 2.1.6 preceding (Service Maintenance) or Sections 2.3.1, 2.3.4, 2.3.5, 2.3.10, 2.4.1 or 2.5, following (respectively, Damages, Availability for Testing, Balance, Jurisdictional Report and Certification Requirements, Payment of Rates, Charges or Deposits; or Connections), including any customer's failure to make payments on the date and times therein specified, the Telephone Company may, on thirty (30) calendar days written notice by Certified U.S. Mail, or overnight delivery to the person designated by that customer to receive such notices of noncompliance, take the following actions:

- refuse additional applications for service and/or refuse to complete any pending orders for service, and/or
- discontinue the provision of service to the customer.

In the case of discontinuance all applicable charges, including termination and late payment charges, shall become due.

**ACCESS SERVICE**2. General Regulations (Cont'd)2.1 Undertaking of the Telephone Company (Cont'd)2.1.8 Refusal and Discontinuance of Service (Cont'd)

- (B) In addition to and not in limitation of the provisions in (A), above, if a customer fails to comply with Section 2.4.1, following (Payment of Rates, Charges and Deposits), including any payments to be made by it on the dates and times therein specified, the Telephone Company may take the actions specified in (A), above, with regard to services provided hereunder to that customer on fifteen (15) calendar days written notice to the person designated by that customer to receive such notices of noncompliance, such notice period to start the day after the notice is sent by overnight delivery, if the customer has not complied with respect to amounts due in a subject bill or subject deposit request and either:
- (1) the Telephone Company has sent the subject bill to the customer within seven (7) business days of the bill date; or
  - (2) the Telephone Company has sent the subject bill to the customer more than thirty (30) calendar days before notice under this section is given; or
  - (3) the Telephone Company has sent the subject deposit request to the customer more than fifteen (15) business days before notice under this section is given.

In all other cases, the Telephone Company will give thirty (30) calendar days written notice pursuant to (A), above. The Telephone Company will maintain records sufficient to validate the date upon which a bill or deposit request was sent to the customer. Action specified in (A), above, will not be taken with regard to the subject bill or subject deposit request if the customer cures the noncompliance prior to the expiration of the fifteen (15) or thirty (30) days notice period, as applicable.

- (C) If notice is given by overnight delivery under (A) or (B), above, it shall be performed by a reputable overnight delivery service such as, or comparable to, the U.S. Postal Service Express Mail, United Parcel Service, or Federal Express.
- (D) The provisions in (A) and (B), above, shall not apply to charges that a customer does not pay based on the submission of a good faith dispute pursuant to Section 2.4.1(D), following (Billing Disputes).

**ACCESS SERVICE**2. General Regulations (Cont'd)2.1 Undertaking of the Telephone Company (Cont'd)2.1.8 Refusal and Discontinuance of Service (Cont'd)

- (E) If a customer fails to comply with Section 2.2.2, following (Unlawful and Abusive Use), the Telephone Company may, upon written request from a customer, or another exchange carrier, terminate service to any subscriber or customer identified as having utilized service provided under this tariff in the completion of abusive or unlawful telephone calls. Service shall be terminated by the Telephone Company as provided for in its general and/or local exchange service tariffs.

In such instances when termination occurs the Telephone Company shall be indemnified, defended and held harmless by any customer or Exchange Carrier requesting termination of service against any claim, loss or damage arising from the Telephone Company's actions in terminating such service, unless caused by the Telephone Company's negligence.

- (F) Except as provided for equipment or systems subject to the FCC Part 68 Rules in 47 C.F.R. Section 68.108, if the customer fails to comply with Section 2.2.1 following (Interference or Impairment), the Telephone Company will, where practicable, notify the customer that temporary discontinuance of the use of a service may be required; however, where prior notice is not practicable, the Telephone Company may temporarily discontinue service forthwith if such action is reasonable in the circumstances. In case of such temporary discontinuance, the customer will be notified promptly and afforded the opportunity to correct the condition which gave rise to the temporary discontinuance. During such period of temporary discontinuance, credit allowance for service interruptions as set forth in Section 2.4.4, following, is not applicable.
- (G) When access service is provided by more than one Telephone Company, the companies involved in providing the joint service may individually or collectively deny service to a customer for nonpayment. Where the Telephone Company(s) affected by the nonpayment is incapable of effecting discontinuance of service without cooperation from the other joint providers of Switched Access Service, such other Telephone Company(s) will, if technically feasible, assist in denying the joint service to the customer. Service denial for such joint service will only include calls originating or terminating within, or transiting, the operating territory of the Telephone Companies initiating the service denial for nonpayment. When more than one of the joint providers must deny service to effectuate termination for nonpayment, in cases where a conflict exists in the applicable tariff provisions, the tariff regulations of the end office Telephone Company shall apply for joint service discontinuance.

**ACCESS SERVICE**2. General Regulations (Cont'd)Undertaking of the Telephone Company (Cont'd)2.1.8 Refusal and Discontinuance of Service (Cont'd)

- (H) If the Telephone Company does not refuse additional applications for service and/or does not discontinue the provision of the services as specified for herein, and the customer's noncompliance continues, nothing contained herein shall preclude the Telephone Company's right to refuse additional applications for service and/or to discontinue the provision of the services to the non-complying customer without further notice.

2.1.9 Notification of Service-Affecting Activities

- equipment or facilities additions;
- removals or rearrangements;
- routine preventative maintenance; and
- major switching machine change-out.

Generally, such activities are not individual customer service specific, but may affect many customer services. No specific advance notification period is applicable to all service activities. The Telephone Company will work cooperatively with the customer to determine reasonable notification requirements.

2.1.10 Coordination with Respect to Network Contingencies

The Telephone Company intends to work cooperatively with the customer to develop network contingency plans in order to maintain maximum network capability following natural or man-made disasters which affect telecommunications services.

2.1.11 Provision and Ownership of Telephone Numbers

The Telephone Company reserves the reasonable right to assign, designate or change telephone numbers, any other call number designations associated with Access Services, or the Telephone Company serving central office prefixes associated with such numbers, when necessary in the conduct of its business. Should it become necessary to make a change in such number(s), the Telephone Company will furnish to the customer six (6) months' notice, by Certified U.S. Mail, of the effective date and an explanation of the reason(s) for such change(s).

**ACCESS SERVICE**2. General Regulations (Cont'd)2.2 Use2.2.1 Interference or Impairment

The characteristics and methods of operation of any circuits, facilities or equipment provided by other than the Telephone Company and associated with the facilities utilized to provide services under this tariff shall not:

- interfere with or impair service over any facilities of the Telephone Company, its affiliated companies, or its connecting and concurring carriers involved in its services;
- cause damage to their plant;
- impair the privacy of any communications carried over their facilities; or
- create hazards to the employees of any of them or the public.

2.2.2 Unlawful and Abusive Use

- (A) The service provided under this tariff shall not be used for an unlawful purpose or used in an abusive manner.

Abusive use includes:

- (1) The use of the service of the Telephone Company for a call or calls, anonymous or otherwise, in a manner reasonably expected to frighten, abuse, torment, or harass another;
- (2) The use of the service in such a manner as to interfere unreasonably with the use of the service by one or more other customers.

2.3 Obligations of the Customer2.3.1 Damages

The customer shall reimburse the Telephone Company for damages to Telephone Company facilities utilized to provide services under this tariff caused by the negligence or willful act of the customer or resulting from the customer's improper use of the Telephone Company facilities, or due to malfunction of any facilities or equipment provided by other than the Telephone Company. Nothing in the foregoing provision shall be interpreted to hold one customer liable for another customer's actions. The Telephone Company will, upon reimbursement for damages, cooperate with the customer in prosecuting a claim against the person causing such damage and the customer shall be subrogated to the right of recovery by the Telephone Company for the damages to the extent of such payment.

**ACCESS SERVICE**2. General Regulations (Cont'd)2.3 Obligations of the Customer (Cont'd)2.3.2 Ownership of Facilities and Theft

Facilities utilized by the Telephone Company to provide service under the provisions of this tariff shall remain the property of the Telephone Company. Such facilities shall be returned to the Telephone Company by the customer, whenever requested, within a reasonable period. The equipment shall be returned in as good condition as reasonable wear will permit.

2.3.3 Equipment Space and Power

The customer shall furnish or arrange to have furnished to the Telephone Company, at no charge, equipment space and electrical power required by the Telephone Company to provide services under this tariff at the points of termination of such services. The selection of AC or DC power shall be mutually agreed to by the customer and the Telephone Company. The customer shall also make necessary arrangements in order that the Telephone Company will have access to such spaces at reasonable times for installing, testing, repairing or removing Telephone Company facilities used to provide services.

2.3.4 Availability for Testing

Access to facilities used to provide services under this tariff shall be available to the Telephone Company at times mutually agreed upon in order to permit the Telephone Company to make tests and adjustments appropriate for maintaining the services in satisfactory operating condition. Such tests and adjustments shall be completed within a reasonable time. As set forth in Section 2.4.4(C)(4) following, no credit will be allowed for any interruptions involved during such tests and adjustments.

2.3.5 Balance

All signals for transmission over the facilities used to provide services under this tariff shall be delivered by the customer balanced to ground except for ground start, duplex (DX) and McCulloch-Loop (Alarm System) type signaling.

2.3.6 Design of Customer Services

Subject to the provisions of Section 2.1.7 preceding (Changes and Substitutions), the customer shall be solely responsible, at its own expense, for the overall design of its services and for any redesigning or rearrangement of its services which may be required because of changes in facilities, operations or procedures of the Telephone Company, minimum protection criteria or operating or maintenance characteristics of the facilities

**ACCESS SERVICE**2. General Regulations (Cont'd)2.3 Obligations of the Customer (Cont'd)2.3.7 References to the Telephone Company

The customer may advise end users that certain services are provided by the Telephone Company in connection with the service the customer furnishes to end users; however, the customer shall not represent that the Telephone Company jointly participates in the customer's services.

2.3.8 Claims and Demands for Damages

- (A) With respect to claims of patent infringement made by third persons, the customer shall defend, indemnify, protect and save harmless the Telephone Company from and against all claims arising out of the combining with, or use in connection with, the services provided under this tariff, any circuit, apparatus, system or method provided by the customer.
- (B) The customer shall defend, indemnify and save harmless the Telephone Company from and against any suits, claims, losses and damages, including punitive damages, attorney fees and court costs by third persons arising out of the construction, installation, operation, maintenance, or removal of the customer's circuits, facilities, or equipment connected to the Telephone Company's services provided under this tariff including, without limitation, Worker's Compensation claims, actions for infringement of copyright and/or unauthorized use of program material, libel and slander actions based on the content of communications transmitted over the customer's circuits, facilities or equipment, and proceedings to recover taxes, fines, or penalties for failure of the customer to obtain or maintain in effect any necessary certificates, permits, licenses, or other authority to acquire or operate the services provided under this tariff; provided, however, the foregoing indemnification shall not apply to suits, claims, and demands to recover damages for damage to property, death, or personal injury unless such suits, claims or demands are based on the tortious conduct of the customer, its officers, agents or employees.
- (C) The customer shall defend, indemnify and save harmless the Telephone Company from and against any suits, claims, losses or damages, including punitive damages, attorney fees and court costs by the customer or third parties arising out of any act of omission of the customer in the course of using services provided under this tariff.

## ACCESS SERVICE

### 2. General Regulations (Cont'd)

#### 2.3 Obligations of the Customer (Cont'd)

##### 2.3.9 Coordination with Respect to Network Contingencies

The customer shall, in cooperation with the Telephone Company, coordinate in planning the actions to be taken to maintain maximum network capability following natural or man-made disasters which affect telecommunications services.

##### 2.3.10 Jurisdictional Report and Certification Requirements

###### (A) Jurisdictional Reports - Switched Access

For Switched Access Service, the Telephone Company cannot in all cases determine the jurisdictional nature of customer traffic and its related access minutes. In such cases the customer may be called upon to provide a projected estimate of its traffic, split between the interstate and intrastate jurisdictions. For purposes of determining the jurisdiction of Switched Access Services, the regulations set forth in (1) through (4), below, apply.

**ACCESS SERVICE**2. General Regulations (Cont'd)2.3 Obligations of the Customer (Cont'd)2.3.10 Jurisdictional Report and Certification Requirements (Cont'd)(A) Jurisdictional Reports - Switched Access (Cont'd)(1) Percentage of Interstate Use (PIU)

- (a) For purposes of developing the projected interstate percentage for Feature Group C or Feature Group D, the customer shall consider every call that originates from a calling party in one state and terminates to a called party in a different state to be interstate communications. The customer shall consider every call that terminates to a called party within the same state as the state where the calling party is located to be intrastate communications. The manner in which a call is routed through the telecommunications network does not affect the jurisdiction of a call, i.e., a call between two points within the same state is an intrastate call even if it is routed through another state.
- (b) When the Telephone Company receives sufficient call detail to permit it to determine the jurisdiction of some or all originating and terminating access minutes of use, the Telephone Company will use that call detail to render bills for those minutes of use and will not use PIU factors(s) described in subsection (2), below, to determine the jurisdiction of those minutes of use.

When the Telephone Company receives insufficient call detail to determine the jurisdiction of some or all originating and terminating access minutes of use, the Telephone Company will apply the PIU factor(s) provided by the customer or developed by the Telephone Company as set forth in subsection (2), below, only to those minutes of use for which the Telephone Company does not have sufficient call detail. Such PIU factor(s) will be used until the customer provides an update to its PIU factor(s) as set forth in subsection (2) (g) or (h), below.

For all flat rated Switched Access Services, the Telephone Company will apply the PIU factor(s) as provided by the customer or developed by the Telephone Company as set forth in subsection (2), below, each month until the customer provides an update to its PIU factor(s) as described in subsection (2) (g) or (h), below.

**ACCESS SERVICE**

2. General Regulations (Cont'd)

2.3 Obligations of the Customer (Cont'd)

2.3.10 Jurisdictional Report and Certification Requirements (Cont'd)

(C) Jurisdictional Reports - Switched Access (Cont'd)

(2) Use of PIU Factors

- (a) As specified in Section 5.2.1, following, the customer will provide a projected PIU for each Switched Access Service for each end office when placing its order. Such PIU factors are applied to all usage rated elements (including but not limited to Information Surcharge, Local Switching, and Tandem Switched Transport), where the Telephone Company does not receive sufficient call detail to determine the jurisdiction of the usage.

If the customer fails to provide a PIU factor on its order for service, the following provisions apply. For originating access minutes, when the call detail is adequate to determine the appropriate jurisdiction and when the Feature Group C or Feature Group D access minutes of use are measured, the Telephone Company will develop PIU factor(s) on a monthly basis by end office by dividing the customer's measured interstate originating access minutes (the access minutes where the calling party is in one state and the called party is in another state) by the customer's total originating access minutes. For terminating access minutes, the same data used by the Telephone Company to develop the PIU factor for originating access minutes will be used to develop the PIU factor for such terminating access minutes.

**ACCESS SERVICE**2. General Regulations (Cont'd)2.3 Obligations of the Customer (Cont'd)2.3.10 Jurisdictional Report and Certification Requirements (Cont'd)(C) Jurisdictional Reports - Switched Access (Cont'd)(2) Use of PIU Factors (Cont'd)

The Telephone Company developed PIU factor(s) described in this section will only be used for minutes of use for which the Telephone Company does not have sufficient call detail to determine the jurisdiction until such time as the customer provides updated PIU factor(s) for these services.

- (b) Separate PIUs are required for flat rated Entrance Facilities, Direct Trunked Transport Facilities, and Switched Access Services Optional Features and Functions. The PIU factor(s) for use with such flat rated elements will reflect the combination of originating and terminating traffic of all services using such facilities.

If the customer fails to provide a PIU factor on its order for service, the Telephone Company will apply the PIU factor it developed pursuant to Section(2)(a), above, against the customer's flat rated Switched Access Services to apportion those charges between the jurisdictions.

- (c) The term group shall be construed to mean single lines or trunks as well. For all groups the number of access minutes (either measured or assumed) for a group will be multiplied by the projected interstate percentage to develop the interstate access minutes. The number of access minutes for the group minus the developed interstate access minutes for the group will be developed intrastate access minutes.
- (d) When a customer orders Directory Assistance Service, the customer shall, in its order, provide the projected interstate percentage for terminating use.
- (e) When the customer has both interstate and intrastate Operator Services traffic, the percentage interstate usage determined for the customer's FGC or FGD service will be applied to the customer's Operator Services charges.

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## ACCESS SERVICE

### 2. General Regulations (Cont'd)

#### 2.3 Obligations of the Customer (Cont'd)

##### 2.3.10 Jurisdictional Report and Certification Requirements (Cont'd)

###### (C) Jurisdictional Reports - Switched Access (Cont'd)

###### (2) Use of PIU Factors (Cont'd)

- (f) For each service, the customer may only provide a PIU factor that is in a whole number format, i.e., a number from 0 to 100. When the customer provides the PIU factor, the Telephone Company will subtract the provided PIU from 100 and the difference is the percent intrastate usage. The sum of the interstate and intrastate percentages will equal 100 percent. The customer provided factors will be used by the Telephone Company as described in Section (1)(b), above, until the customer provides updated PIU factors as required in (2)(g) or (h), below.
- (g) When the customer adds or discontinues Busy Hour Minutes of Capacity (BHMC) lines or trunks to an existing Switched Access Service group, the customer shall furnish a revised projected interstate percentage for the remaining BHMC, lines or trunks in the end office group. The revised report will serve as the basis for future billing, where applicable, and will be effective on the next bill date. No prorating or back billing will be done based on such revised report.

**ACCESS SERVICE**2. General Regulations (Cont'd)2.3 Obligations of the Customer (Cont'd)2.3.10 Jurisdictional Report and Certification Requirements (Cont'd)(C) Jurisdictional Reports - Switched Access (Cont'd)(2) Use of PIU Factors (Cont'd)

- (h) Effective on the first of January, April, July and October of each year, the customer shall update its interstate and intrastate jurisdictional report. The customer shall forward to the Telephone Company, to be received no later than fifteen (15) days after the first of each such month, a revised report showing the interstate and intrastate percentage of use for the past three months ending the last day of December, March, June and September, respectively, for each service arranged for interstate use. Such revised report will serve as the basis for the next three month's billing for determining the jurisdiction for Switched Access Services in cases where the Telephone Company does not have sufficient call detail to do so and will be effective on the bill date for that service. No prorating or back billing will be done based on the revised report.

If the customer does not supply a new factor after (4) quarters, the Telephone Company can calculate their own factor based upon actual usage. If the customer does not supply the revised reports, the Telephone Company will assume the percentages to be the same as those provided in the last quarterly report. For those cases in which a quarterly report has never been received from the customer, the Telephone Company will assume the percentages to be the same as those provided in the customer's order for service or as developed by the Telephone Company as specified in Section (2)(a), above.

When a factor is provided for a new service, the PIU should be no higher than 75% until such time as the use of those services can be defined by actual usage.

**ACCESS SERVICE**

2. General Regulations (Cont'd)

2.3 Obligations of the Customer (Cont'd)

2.3.10 Jurisdictional Report and Certification Requirements (Cont'd)

(C) Jurisdictional Reports - Switched Access (Cont'd)

(3) Maintenance of Customer Records

- (a) The customer shall retain for a minimum of six (6) months call detail records that substantiate the interstate percent provided to the Telephone Company as set forth in (2), above, for Switched Access Services. Such records shall consist of (i) and (ii), below, if applicable.
  - (i) All call detail records such as work papers and/or backup documentation including paper, magnetic tapes or any other form of records for billed customer traffic, call information including call terminating address (i.e., called number), the call duration, all originating and terminating trunk groups or access lines over which the call is routed, and the point at which the call enters the customer's network and;
  - (ii) If the customer has a mechanized system in place that calculated the PIU, then a description of that system and the methodology used to calculate the PIU must be furnished and any other pertinent information (such as but not limited to flowcharts, source code, etc.) relating to such system must also be made available.

**ACCESS SERVICE**2. General Regulations (Cont'd)2.3 Obligations of the Customer (Cont'd)2.3.10 Jurisdictional Report and Certification Requirements (Cont'd)(C) Jurisdictional Reports - Switched Access (Cont'd)(4) Disputes Involving Jurisdictional Reports – Switched Access

- (a) If a billing dispute arises or if a regulatory commission questions the projected PIU factor(s) provided by the customer, the Telephone Company may, by written request, require the customer to provide the data the customer used to determine the projected PIU factor(s). This written request will be considered the initiation of the audit. The customer shall supply the data to an independent auditor or the Telephone Company within thirty (30) days of the Telephone Company request. The customer shall keep records of call detail from which the percentage of interstate and intrastate use can be ascertained as set forth in subsection (3), above, and upon request of the Telephone Company make the records available for inspection at an agreed upon location during normal business hours as reasonably necessary for purposes of verification of the percentages. The Telephone Company will audit data from one quarter unless a longer period is requested by the customer and agreed to by the Telephone Company.
- (b) If the customer does not provide the requested data to the Telephone Company or independent auditor within thirty (30) days of the notice of audit, the customer will be in violation of the Tariff and subject to the provisions specified in Section 2.1.8(A), preceding.
- (c) Audits may be conducted by: (1) the Telephone Company when the customer agrees; (2) an independent auditor under contract to the Telephone Company; (3) a mutually agreed upon independent auditor paid for equally by the customer and the Telephone Company; or (4) an independent auditor selected and paid for by the customer. If the customer selects option (4), where it pays for its own independent audit, the selected auditor must certify that the audit was performed following Commission procedures for measuring interstate traffic as established by Commission Order, and provide the Telephone Company a report with supporting documentation to verify such procedures.

**ACCESS SERVICE**2. General Regulations (Cont'd)2.3 Obligations of the Customer (Cont'd)2.3.10 Jurisdictional Report and Certification Requirements (Cont'd)(C) Jurisdictional Reports - Switched Access (Cont'd)(4) Disputes Involving Jurisdictional Reports – Switched Access  
(Cont'd)

- (d) Verification audits may be conducted no more frequently than once per year except in extreme circumstances. The Telephone Company and customer will attempt to limit the audit to a reasonable time to effectively complete the audit. The Telephone Company and customer shall respond promptly to requests generated during the audit to ensure timely completion of the audit.
- (e) When a PIU audit is conducted by the Telephone Company or an independent auditor under contract to the Telephone Company, the audit results will be furnished to the customer by Certified U.S. Mail. When a PIU audit is conducted by an independent auditor selected by the customer, the audit results will be furnished to the Telephone Company by Certified U.S. Mail. The Telephone Company will adjust the customer's PIU based upon the audit results. The PIU resulting from the audit shall be applied to the customer's usage for the quarter the audit is completed, the usage for the quarter prior to the completion of the audit, and the usage for the two (2) quarters following the completion of the audit. After that time, the customer may report revised PIU pursuant to Section (2)(g) or (h), above. If the revised PIU submitted by the customer represents a deviation of 5 percentage points or more from the audited PIU, and that deviation is not due to identifiable reasons, the provisions in Section (4)(a), above, may be applied.
- (f) Both credit and debit adjustments will be made to the customer's interstate access charges based on the audit results for the specified periods to accurately reflect the interstate usage for the customer's account consistent with Section 2.4.1, following.

**ACCESS SERVICE**2. General Regulations (Cont'd)2.3 Obligations of the Customer (Cont'd)2.3.10 Jurisdictional Report and Certification Requirements (Cont'd)(C) Jurisdictional Reports - Switched Access (Cont'd)(4) Disputes Involving Jurisdictional Reports – Switched Access  
(Cont'd)

- (g) If, as a result of an audit conducted by an independent auditor, a customer is found to have over-stated its PIU(s) by 10 percentage points or more, the Telephone Company shall require reimbursement from the customer for the cost of the audit. Such bill(s) shall be due and paid immediately with available funds within 30 days from receipt and shall carry a late payment penalty as set forth in Section 2.4.1, following, if not paid within the 30 days.

2.3.11 Determination of Interstate Charges for Mixed Interstate and Intrastate Switched Access Service

When mixed interstate and intrastate Switched Access Service is provided, all charges (i.e., nonrecurring, monthly and/or usage) including optional features charges, will be prorated between interstate and intrastate. The PIU factor(s) provided by the customer or developed by the Telephone Company as set forth in Section 2.3.10(C)(2), preceding, will serve as the basis for prorating the charges unless the Telephone Company is billing according to sufficient call details as set forth in Section 2.3.10(C)(1)(b), preceding. The percentage of an Access Service to be charged as interstate is applied in the following manner:

(A) Monthly and Nonrecurring Charges

For monthly and nonrecurring chargeable rate elements, multiply the percent interstate use times the quantity of chargeable elements times the stated tariff rate per element.

(B) Usage Sensitive Charges

For usage sensitive (i.e., access minutes and calls) chargeable rate elements, multiply the percent interstate use times actual use (i.e., measured or Telephone Company assumed average use) times the stated tariff rate.

**ACCESS SERVICE**2. General Regulations (Cont'd)2.4 Payment Arrangements and Credit Allowances2.4.1 Payment of Rates, Charges and Deposits(A) Deposits

The Telephone Company will only require a customer that has a proven history of late payments to the Telephone Company or that does not have established credit, to make a deposit as a guarantee of the payment of rates and charges. Such deposit may be required prior to establishing a service or at any time after the provision of a service to the customer. For purposes of this section, a proven history of late payments is defined as two (2) or more occasions within the preceding twelve (12) months in which payment for undisputed charges was not received within three (3) business days following the payment due date, provided the outstanding undisputed amount of each such individual unpaid bill represented at least ten (10) percent of the total charges on that individual bill. The Telephone Company will provide notice using a reputable delivery service via certified or registered mail to the person designated by the customer to receive such notice of the requirement to pay a deposit. The customer will be required to make payment of such deposit prior to the provision of service in those cases where the customer has not established credit with the Telephone Company, or otherwise within fifteen (15) business days of such notice. Such notice period will start the day after the notice is received by the designated person.

No such deposit will be required of a customer which is a successor of a company which has established credit and has no history of late payments to the Telephone Company. For new service(s) being established, such deposit will not exceed the estimated rates and charges for a two-month period. For existing services, such deposit will not exceed the actual rates and charges for a two (2) month period associated with each individual bill that met the criteria for late payments specified above. The fact that a deposit has been made in no way relieves the customer from complying with the Telephone Company's regulations as to the prompt payment of bills. At such time as the provision of the service to the customer is terminated, the amount of the deposit will be credited to the customer's account and any credit balance which may remain will be refunded.

**ACCESS SERVICE**2. General Regulations (Cont'd)2.4 Payment Arrangements and Credit Allowances (Cont'd)2.4.1 Payment of Rates, Charges and Deposits (Cont'd)(A) Deposits (Cont'd)

Such a deposit will be refunded or credited to the account when the customer has established credit or, in any event, after the customer has established a one-year prompt payment record at any time prior to the termination of the provision of the service to the customer. In case of a cash deposit, for the period the deposit is held by the Telephone Company, the customer will receive interest at the same percentage rate as that set forth in Section (C)(2)(a) or in Section (C)(2)(b) following, whichever is lower.

The rate will be compounded daily for the number of days from the date the customer deposit is received by the Telephone Company to and including the date such deposit is credited to the customer's account or the date the deposit is refunded by the Telephone Company. Should a deposit be credited to the customer's account, as indicated above, no interest will accrue on the deposit from the date such deposit is credited to the customer's account.

(B) Bill Dates

The Telephone Company shall bill on a current basis all charges incurred by and credits due to the customer under this tariff attributable to services established or discontinued during the preceding billing period. In addition, the Telephone Company shall bill in advance charges for all services to be provided during the ensuing billing period except for charges associated with service usage for the Federal Government which will be billed in arrears. The bill day (i.e., the billing date of a bill for a customer for Access Service under this tariff), the period of service each bill covers and the payment date will be as follows:

(1) Presubscription

For Presubscription Service, the Telephone Company will establish a bill day each month for each end user account or advise the customer in writing of an alternate billing schedule. Alternate billing schedules shall not be established on less than 60 days notice or initiated by the Telephone Company more than twice in any consecutive 12 month period. The bill will cover Switched Access Service charges for the ensuing billing period except for services for the Federal Government which will be billed in arrears. Any applicable PIC Change Charges, any known unbilled charges for prior periods and any known unbilled adjustments for prior periods for Presubscription Service will be applied to this bill. Such bills are due when rendered.

**ACCESS SERVICE**2. General Regulations (Cont'd)2.4 Payment Arrangements and Credit Allowances (Cont'd)2.4.1 Payment of Rates, Charges and Deposits (Cont'd)(B) Bill Dates (Cont'd)(2) Access Services Other Than End User Presubscription

For Service other than Presubscription Service, the Telephone Company will establish a bill day each month for each customer account or advise the customer in writing of an alternate billing schedule. Alternate billing schedules shall not be established on less than 60 days' notice or initiated by the Telephone Company more than twice in any consecutive 12 month period.

The bill will cover non usage sensitive service charges for the ensuing billing period for which the bill is rendered, any known unbilled non usage sensitive charges for prior periods and unbilled usage charges for the period after the last bill day through the current bill day. Any known unbilled usage charges for prior periods and any known unbilled adjustments will be applied to this bill. Payment for such bills is due immediately with available funds by the payment date, as set forth in subsection (C) following. If payment is not received by the payment date, a late payment penalty will apply as set forth in subsection (C) following.

(C) Payment Dates and Late Payment Penalties

- (1) All bills dated as set forth in Section (B) (2) preceding for service, other than Presubscription Service, provided to the customer by the Telephone Company are due 31 days (payment date) after the bill day or by the next bill date (i.e., same date in the following month as the bill date), whichever is the shortest interval, except as provided herein, and are payable in immediately available funds. If the customer does not receive a bill at least 20 days prior to the 31 day payment due date, then the bill shall be considered delayed. When the bill has been delayed, upon request of the customer the due date will be extended by the number of days the bill was delayed. Such request of the customer must be accompanied with proof of late bill receipt.

**ACCESS SERVICE**2. General Regulations (Cont'd)2.4 Payment Arrangements and Credit Allowances (Cont'd)2.4.1 Payment of Rates, Charges and Deposits (Cont'd)(C) Payment Dates and Late Payment Penalties (Cont'd)

If such payment date would cause payment to be due on a Saturday, Sunday or Legal Holiday, payment for such bills will be due from the customer as follows:

- If the payment date falls on a Sunday or on a Legal Holiday which is observed on a Monday, the payment date shall be the first non-Holiday day following such Sunday or Legal Holiday.
- If the payment date falls on a Saturday or on a Legal Holiday which is observed on Tuesday, Wednesday, Thursday or Friday, the payment date shall be the last non-Holiday day preceding such Saturday or Legal Holiday.

(2) Further, if no payment is received by the payment date or if a payment or any portion of a payment is received by the Telephone Company after the payment date as set forth in Section (1) preceding, or if a payment or any portion of a payment is received by the Telephone Company in funds which are not immediately available to the Telephone Company, then a late payment penalty shall be due to the Telephone Company. The late payment penalty shall be the payment or the portion of the payment not received by the payment date times a late factor. The late factor shall be the lesser of:

- (a) the highest interest rate (in decimal value) which may be levied by law for commercial transactions, compounded daily for the number of days from the payment date to and including the date that the customer actually makes the payment to the Telephone Company, or
- (b) 0.000292 per day, compounded daily for the number of days from the payment date to and including the date that the customer actually makes the payment to the Telephone Company.

**ACCESS SERVICE**

2. General Regulations (Cont'd)

2.4 Payment Arrangements and Credit Allowances (Cont'd)

2.4.1 Payment of Rates, Charges and Deposits (Cont'd)

(D) Billing Disputes

- (1) A good faith dispute requires the customer to provide a written claim to the Telephone Company. Instructions for submitting a dispute can be obtained by calling the billing inquiry number shown on the customer's bill, or, when available, by accessing such information on the Telephone Company's website also shown on the customer's bill. Such claim must identify in detail the basis for the dispute, and if the customer withholds the disputed amounts, it must identify the account number under which the bill has been rendered, the date of the bill, and the specific items on the bill being disputed to permit the Telephone Company to investigate the merits of the dispute.
- (2) The date of the dispute shall be the date on which the customer furnishes the Telephone Company the account information required in Section (D)(1), above.
- (3) The date of resolution is the date the Telephone Company completes its investigation, provides written notice to the customer regarding the disposition of the claim, i.e., resolved in favor of the customer or resolved in favor of the Telephone Company, and credits the customer's account, if applicable.

**ACCESS SERVICE**2. General Regulations (Cont'd)2.4 Payment Arrangements and Credit Allowances (Cont'd)2.4.1 Payment of Rates, Charges and Deposits (Cont'd)(D) Billing Disputes (Cont'd)

- (4) If a dispute is received in regards to a service the Customer shows as disconnection of service and the Customer cannot provide written confirmation that the disconnection was received by the Telephone Company, the Telephone Company will only apply credit back to the date that written confirmation is provided by the Customer.

Any billing adjustments that may arise from the resolution of a billing dispute will only be credited for a period not to exceed 6 months.

- (5) If the customer pays the bill in full by the payment due date, and later initiates a billing dispute within ninety (90) days of the payment due date, penalty interest may be applicable.
- (a) If the billing dispute is resolved in favor of the customer, the customer shall receive a credit from the Telephone Company. This credit will be an amount equal to the disputed amount resolved in the customer's favor times a penalty factor. This amount will apply from the date of the customer's payment through the date on which the customer receives the disputed amount credit from the Telephone Company. The penalty factor shall be the lesser of:
- (i) the highest interest rate (in decimal value) which may be levied by law for commercial transactions, compounded daily for the number of days from the first date to and including the last date of the period involved, or
- (ii) 0.000292 per day, compounded daily for the number of days from the first date to and including the last date of the period involved.
- (b) If the dispute is resolved in favor of the Telephone Company, neither a late payment charge nor a penalty interest charge is applicable.

**ACCESS SERVICE**2. General Regulations (Cont'd)2.4 Payment Arrangements and Credit Allowances (Cont'd)2.4.1 Payment of Rates, Charges and Deposits (Cont'd)(E) Proration of Charges

Adjustments for the quantities of services established or discontinued in any billing period beyond the minimum period set forth for services in other sections of this tariff will be prorated to the number of days based on a 30 day month. The Telephone Company will, upon request, furnish within 30 days of a request and at no charge to the customer such detailed information as may reasonably be required for verification of any bill.

(F) Rounding of Charges

When a rate as set forth in this tariff is shown to more than two decimal places, the charges will be determined using the rate shown. The resulting amount will then be rounded to the nearest penny (i.e., rounded to two decimal places).

2.4.2 Minimum Periods

The minimum period for which services are provided and for which rates and charges are applicable is one month except for those services set forth in Section 6 (Switched Access usage rated services, Entrance Facility and Direct Trunked Transport).

The minimum period for which service is provided and for which rates and charges are applicable for a Specialized Service or Arrangement provided on an individual case basis as set forth in Section 12 following, is one month unless a different minimum period is established with the individual case filing.

When a service is discontinued prior to the expiration of the minimum period, charges are applicable, whether the service is used or not, as follows:

- (A) When a service with a one month minimum period is discontinued prior to the expiration of the minimum period, a one month charge will apply at the rate level in effect at the time service is discontinued.
- (B) When a service with a minimum period greater than one month is discontinued prior to the expiration of the minimum period, the applicable charge will be the lesser of (1) the Telephone Company's total nonrecoverable costs less the net salvage value for the discontinued service or (2) the total monthly charges, at the rate level in effect at the time service is discontinued, for the remainder of the minimum period.

**ACCESS SERVICE**

2. General Regulations (Cont'd)

2.4 Payment Arrangements and Credit Allowances (Cont'd)

2.4.3 Cancellation of an Order for Service

Provisions for the cancellation of an order for service are set forth in other applicable sections of this tariff.

2.4.4 Credit Allowance for Service Interruptions

(A) General

A service is interrupted when it becomes unusable to the customer because of a failure of a facility component used to furnish service under this tariff or in the event that the protective controls applied by the Telephone Company result in the complete loss of service by the customer as set forth in Section 6.2.1 following. An interruption period starts when an inoperative service is reported to the Telephone Company, and ends when the service is operative.

(B) When a Credit Allowance Applies

In case of an interruption to any service, allowance for the period of interruption, if not due to the negligence of the customer, shall be provided.

Service interruptions for Specialized Service or Arrangements provided under Section 12 following, shall be administered in the same manner as those set forth in this Section 2.4.4 unless other regulations are specified with the individual case filing.

## ACCESS SERVICE

### 2. General Regulations (Cont'd)

#### 2.4 Payment Arrangements and Credit Allowances (Cont'd)

##### 2.4.4 Credit Allowance for Service Interruptions (Cont'd)

###### (B) When a Credit Allowance Applies (Cont'd)

Credit allowances are computed as follows:

For flat rated Switched Access Service rate elements (i.e., Entrance Facility, Direct Trunked Transport and Multiplexing) no credit shall be allowed for an interruption of less than 30 minutes. The customer shall be credited for an interruption of 30 minutes or more at the rate of 1/1440 of the monthly charges for the facility or service for each period of 30 minutes or Major Fraction thereof that the interruption continues.

The monthly charges used to determine the credit shall be determined by the Company.

**ACCESS SERVICE**2. General Regulations (Cont'd)2.4 Payment Arrangements and Credit Allowances (Cont'd)2.4.4 Credit Allowance for Service Interruptions (Cont'd)(B) When a Credit Allowance Applies (Cont'd)(1) Multiplexed Service

For multiplexed services, the monthly charge shall be the total of all the monthly rate element charges associated with that portion of the service that is inoperative. When the facility which is multiplexed or the multiplexer itself is inoperative, the monthly charge shall be the total of all the monthly rate element charges associated with the service to the hub and any individual services from the hub. For Special Access, those charges include Channel Termination, Channel Mileage, and optional features and functions. For Switched Access, those charges include Entrance Facility, Direct Trunked Transport, Multiplexing and optional features and functions such as Add/Drop Multiplexing, Customer Node and Customer Premises Port.

When the service which rides a channel of the multiplexed facility is inoperative, the monthly charge shall be the total of all the monthly rate element charges associated with that portion of the service from the hub or wire center equipped for Add/Drop Multiplexing to a customer premises, Telephone Company central office.

(2) Flat Rated Switched Access Service rate elements

For flat rated Switched Access Service rate elements, the monthly charge shall be the total of all the monthly rate element charges associated with the service (i.e., Entrance Facility, Direct Trunked Transport and Multiplexing).

**ACCESS SERVICE**2. General Regulations (Cont'd)2.4 Payment Arrangements and Credit Allowances (Cont'd)2.4.4 Credit Allowance for Service Interruptions (Cont'd)(B) When a Credit Allowance Applies (Cont'd)(3) Switched Access

For Switched Access Service, no credit shall be allowed for an interruption of less than 24 hours. The customer shall be credited for an interruption of 24 hours or more at the rate of 1/30 of any applicable monthly rate or assumed minutes of use charge for each period of 24 hours or Major Fraction thereof that the interruption continues.

(4) Credit Allowances Cannot Exceed Monthly Rate

The credit allowance(s) for an interruption or for a series of interruptions shall not exceed any monthly rate for the service interrupted in any 1 monthly billing period.

(C) When a Credit Allowance Does Not Apply

No credit allowance will be made for:

- (1) Interruptions caused by the negligence of the customer;
- (2) Interruptions of a service due to the failure of equipment or systems provided by the customer or others;
- (3) Interruptions of a service during any period in which the Telephone Company is not afforded access to the premises where the service is terminated;
- (4) Interruptions of a service when the customer has released that service to the Telephone Company for maintenance purposes, to make rearrangements, or for the implementation of an order for a change in the service during the time that was negotiated with the customer prior to the release of that service. Thereafter, a credit allowance as set forth in subsection (B) preceding applies;

**ACCESS SERVICE**2. General Regulations (Cont'd)2.4 Payment Arrangements and Credit Allowances (Cont'd)2.4.4 Credit Allowance for Service Interruptions (Cont'd)(C) When a Credit Allowance Does Not Apply (Cont'd)

- (5) Interruptions of a service which continue because of the failure of the customer to authorize replacement of any element of special construction, as set forth in NATIONAL EXCHANGE CARRIER ASSOCIATION, INC. TARIFF F.C.C. NO. 3 for SPECIAL CONSTRUCTION. The period for which no credit allowance is made begins on the seventh day after the customer receives the Telephone Company's written notification of the need for such replacement and ends on the day after receipt by the Telephone Company of the customer's written authorization for such replacement;
- (6) Periods when the customer elects not to release the service for testing and/or repair and continues to use it on an impaired basis; or
- (7) An interruption or a group of interruptions, resulting from a common cause that would result in credit in an amount less than one dollar.

(D) Use of an Alternative Service Provided by the Telephone Company

Should the customer elect to use an alternative service provided by the Telephone Company during the period that a service is interrupted, the customer must pay the tariffed rates and charges for the alternative service used.

(E) Temporary Surrender of a Service

In certain instances, the customer may be requested by the Telephone Company to surrender a service for purposes other than maintenance, testing or activity relating to a service order. If the customer consents, a credit allowance will be granted. The credit allowance will be 1/1440 of the monthly rate for each period of 30 minutes or fraction thereof that the service is surrendered. In no case will the credit allowance exceed the monthly rate for the service surrendered in any one monthly billing period.

**ACCESS SERVICE**2. General Regulations (Cont'd)2.4 Payment Arrangements and Credit Allowances (Cont'd)2.4.5 Re-establishment of Service Following Fire, Flood or Other Occurrence(A) Nonrecurring Charges Do Not Apply

Charges do not apply for the re-establishment of service following a fire, flood or other occurrence attributed to an Act of God provided that:

- (1) The service is of the same type as was provided prior to the fire, flood or other occurrence.
- (2) The service is for the same customer.
- (3) The service is at the same location on the same premises.
- (4) The re-establishment of service begins within 60 days after Telephone Company service is available. (The 60 day period may be extended a reasonable period if the renovation of the original location on the premises affected is not practical within the allotted time period).

(B) Nonrecurring Charges Apply

Nonrecurring Charges apply for establishing service at a different location on the same premises or at a different premises pending re-establishment of service at the original location.

2.4.6 Title or Ownership Rights

The payment of rates and charges by customers for the services offered under the provisions of this tariff does not assign, confer or transfer title or ownership rights to proposals or facilities developed or utilized, respectively, by the Telephone Company in the provision of such services.

2.4.7 Access Services Provided By More Than One Telephone Company

When an Access Service is provided by more than one Telephone Company, the Telephone Companies involved will mutually agree upon one of the billing methods as set forth in Section (B) (1) and (2) following based on the service being provided. The Telephone Companies will notify the customer in writing of the billing method being used. The customer will place the order for the service as set forth in Section 5.3 following dependent upon the billing method.

**ACCESS SERVICE**2. General Regulations (Cont'd)2.4 Payment Arrangements and Credit Allowances (Cont'd)2.4.7 Access Services Provided by More Than One Telephone Company (Cont'd)(A) Non Meet Point Billing

Non Meet Point Billing under a Revenue Sharing Agreement is the generally accepted billing method for Feature Group A Switched Access Service. At the agreement of the participating Telephone Companies, Meet Point Billing may apply to jointly provided Feature Group A services as set forth in (B) following.

1) Single Company Billing/Revenue Sharing

All Telephone Companies jointly providing Feature Group A service will receive an order or a copy of the order, from the customer, as specified in subsection 5.3.1(A) following. The telephone company that provides the dial tone will arrange to provide the service, determine the applicable charges and bill the customer for the entire service in accordance with its Access Services tariff as provided for under a Feature Group A Revenue Sharing Agreement

(B) Meet Point Billing

Meet Point Billing is required when an access service is provided by multiple Telephone Companies for Feature Group, C, and D Switched Access Services and Special Access.

Each Telephone Company jointly providing the access service will receive an order or a copy of the order from the customer as specified in Section 5.3.2 following and arrange to provide the service.

For usage rated access services the access minutes of use will generally be determined by the recording company. Where the recording company is not the Bill Rendering Company, the recording company will provide detailed usage records to the Bill Rendering Company to develop the access minutes.

The Bill Rendering Company in a single bill arrangement for Feature Groups C, and D Switched Access Services, is normally the end office.

The non Bill Rendering Company(s) is any Telephone Company(s) in whose territory a segment of the Local Transport or Channel Mileage is provided and/or where the customer's Point of Termination is located.

**ACCESS SERVICE**2. General Regulations (Cont'd)2.4 Payment Arrangements and Credit Allowances (Cont'd)2.4.7 Access Services Provided by More Than One Telephone Company (Cont'd)(B) Meet Point Billing (Cont'd)

There are two Meet Point Billing Options, Single Bill and Multiple Bill. These billing options are explained in (1) and (2) following. The Single Bill option is the preferred method. However, when a single bill option can not be agreed to by all telephone companies providing service, the multiple bill option is the default.

Each telephone company must provide meet point billing notification to the customer, in writing, when new service is ordered or 30 days prior to changing an existing meet point arrangement. The notification should include the following:

- The Meet Point Billing Option that will be used;
- The Telephone Company(s) that will render the bill(s);
- The Telephone Company(s) to whom payment(s) should be remitted; and
- The Telephone Company(s) that will provide the bill inquiry function.

A Telephone Company that renders a meet point bill, the Bill Rendering Company, will render the bill in accordance with the industry standards as described in the Multiple Exchange Carrier Access Billing (MECAB) Guidelines and the Multiple Exchange Carrier Ordering and Design (MECOD) Guidelines. The bill will include cross reference(s) to the other telephone Company(s) providing service and common circuit identifiers. Should a billing dispute arise, the terms and conditions of the Bill Rendering company will apply.

(1) Single Bill Option

The single bill option allows the customer to receive one bill for access services that are provided by more than one company. The single bill option provides the following two billing alternatives:

- Single Bill/Multiple Tariff; and
- Single Bill/Single Tariff.

These options are described following in subsections (a) and (b) respectively.

**ACCESS SERVICE**

2. General Regulations (Cont'd)

2.4 Payment Arrangements and Credit Allowances (Cont'd)

2.4.7 Access Services Provided by More Than One Telephone Company (Cont'd)

(B) Meet Point Billing (Cont'd)

(1) Single Bill Option (Cont'd)

(a) Single Bill/Multiple Tariff

The single bill/multiple tariff bill is prepared by the Bill Rendering Company but reflects all rates and charges for each connecting company's part of the service based on each company's access tariff.

The Bill Rendering Company will:

- determine and include all recurring and nonrecurring rates and charges for each involved Telephone Company;
- identify each involved Telephone Company's rates and charges separately on the bill;
- forward the bill to the customer and provide a copy of the bill or other substantiation of the charges to the connecting Telephone Companies; and
- advise the customer how to remit the payment, either directly to each Telephone Company involved in the provision of this meet point billed service, or, as a single payment made to the Bill Rendering Company. If payments are to be sent directly to the Bill Rendering Company, the non Bill Rendering Company(s) will provide the customer with written authorization for the payment arrangement.

## ACCESS SERVICE

### 2. General Regulations (Cont'd)

#### 2.4 Payment Arrangements and Credit Allowances (Cont'd)

##### 2.4.7 Access Services Provided by More Than One Telephone Company (Cont'd)

###### (B) Meet Point Billing (Cont'd)

###### (1) Single Bill Option (Cont'd)

###### (b) Single Bill/Single Tariff

The single bill/single tariff bill provides a meet point bill that is billed completely at the Billing Rendering Company's tariff rates and regulations.

The Bill Rendering Company will:

- determine and include on the access bill all usage data and all other recurring and nonrecurring rates and charges per its access tariff; and
- forward the bill to the customer.

The customer will remit the payment to the Bill Rendering Company.

###### (2) Multiple Bill Option

Under the Multiple Bill Option each company providing the access service will render an access bill to the customer for its portion of the service based on its access tariff rates and regulations. For switched access multiple bills the end office company is generally the Initial Billing Company (IBC). The IBC is the company that calculates the access minutes to be billed to the customer and provides this data to each connecting company providing service, i.e., the Subsequent Billing Company(s). Each company, IBC and SBC, will:

**ACCESS SERVICE**

2. General Regulations (Cont'd)

2.4 Payment Arrangements and Credit Allowances (Cont'd)

2.4.7 Access Services Provided by More Than One Telephone Company (Cont'd)

(B) Meet Point Billing (Cont'd)

(2) Multiple Bill Option (Cont'd)

- prepare its own bill;
- determine its charge(s) for Local Transport, Directory Transport, and/or Channel Mileage as set forth in subsection (3) following;
- determine and include all recurring and nonrecurring rates and charges of its access tariff;
- reflect its Billing Account Reference (BAR) and all connecting company Billing Account Cross Reference (BACR) code(s);
- forward its bill to the customer.

The customer will remit payment directly to each Bill Rendering Company.

(3) Determination of Meet Point Billed Local Transport and Channel Mileage Charges

Each Telephone Company's portion of the Local Transport and Channel mileage will be developed as follows:

- (a) Determine the appropriate Local Transport or Channel Mileage by computing the number of airline miles between the Telephone Company premises (end office, access tandem or serving wire centers for

**ACCESS SERVICE**

2. General Regulations (Cont'd)

2.4 Payment Arrangements and Credit Allowances (Cont'd)

2.4.7 Access Services Provided by More Than One Telephone Company (Cont'd)

(B) Meet Point Billing (Cont'd)

(3) Determination of Meet Point Billed Local Transport and Channel Mileage Charges (Cont'd)

- (a) (Cont'd)  
Switched Access or serving wire centers for Special Access) using the V&H method set forth respectively in Section 6.4.5 following.
- (b) Determine the billing percentage (BP), as set forth in NATIONAL EXCHANGE CARRIER ASSOCIATION, INC. TARIFF F.C.C. NO. 4, which represents the portion of the service provided by each Telephone Company.
- (c) For Feature C and D Tandem Switched Transport:
  - multiply the number of originating and terminating access minutes of use routed over the facility times the number of airline miles, as set forth in (a) preceding, times the BP for each Telephone Company, as set forth in (b) preceding, times the Tandem Switched Facility rate;
  - multiply the Tandem Switched Termination rate times the number of originating and terminating access minutes routed over the facility .
  - When a tandem office is located within the operating territory of a Telephone Company, participating in this Tariff, multiply the Tandem Switching rate times the number of originating and terminating access minutes that are switched at the tandem.

**ACCESS SERVICE**2. General Regulations (Cont'd)2.4 Payment Arrangements and Credit Allowances (Cont'd)2.4.7 Access Services Provided by More Than One Telephone Company (Cont'd)(B) Meet Point Billing (Cont'd)(3) Determination of Meet Point Billed Local Transport and Channel Mileage Charges (Cont'd)

## (c) For Feature Groups C and D Tandem Switched Transport: (Cont'd)

The Tandem Switched Termination rate is applied as set forth in Section 6.1.3(A) following. The Switched Access Nonrecurring Charges are applied as set forth in Section 6.4.1(B) following. (Note: The BP is not applied to the Switched Access Tandem Switched Termination rate or any Nonrecurring Charge.)

## (d) For Feature Groups C, and D Direct Trunked Transport:

- multiply the number of airline miles, as set forth in (a) preceding, times the BP for each Telephone Company, as set forth in (b) preceding, times the Direct Trunked Facility rate.

- The Direct Trunked Termination rate is applied as set forth in Section 6.1.3(A) following. The Switched Access Nonrecurring Charges are applied as set forth in Section 6.4.1(B) following. (Note: The BP is not applied to either the Switched Access Direct Trunked Termination rate or any Nonrecurring Charge.)

## (e) For Feature Groups C, and D.

- When the Entrance Facility and/or Multiplexing equipment is located within the operating territory of a Telephone Company participating in this Tariff, the Entrance Facility and/or Multiplexing charge will apply.

- The Billing Percentage (BP) is not applicable to the Entrance Facility and Multiplexer charges.

**ACCESS SERVICE**

2. General Regulations (Cont'd)

2.4 Payment Arrangements and Credit Allowances (Cont'd)

2.4.7 Access Services Provided by More Than One Telephone Company (Cont'd)

(B) Meet Point Billing (Cont'd)

(3) Determination of Meet Point Billed Local Transport and Channel Mileage Charges (Cont'd)

- (f) For Special Access, multiply the number of airline miles, as set forth in (a) preceding, times the BP for each Telephone Company, as set forth in (b) preceding, times the Channel Mileage Facility rate and add the Channel Mileage Termination rate.
- (g) When three or more Telephone Companies are involved in providing an Access Service, the Intermediate Telephone Company(s) will determine the appropriate charges as set forth in subsections (c) through (f) preceding. Additionally, when a segment of the Tandem Switched Facility, Direct Trunked Facility or Channel Mileage Facility is measured to the intermediate office(s), the Tandem Switched Termination, Direct Trunked Termination or Channel Mileage Termination rates are also applied at the intermediate Telephone Company(s) office(s).

**ACCESS SERVICE**

2. General Regulations (Cont'd)

2.4 Payment Arrangements and Credit Allowances (Cont'd)

2.4.7 Access Services Provided by More Than One Telephone Company (Cont'd)

(B) Meet Point Billing (Cont'd)

(3) Determination of Meet Point Billed Local Transport and Channel Mileage Charges (Cont'd)

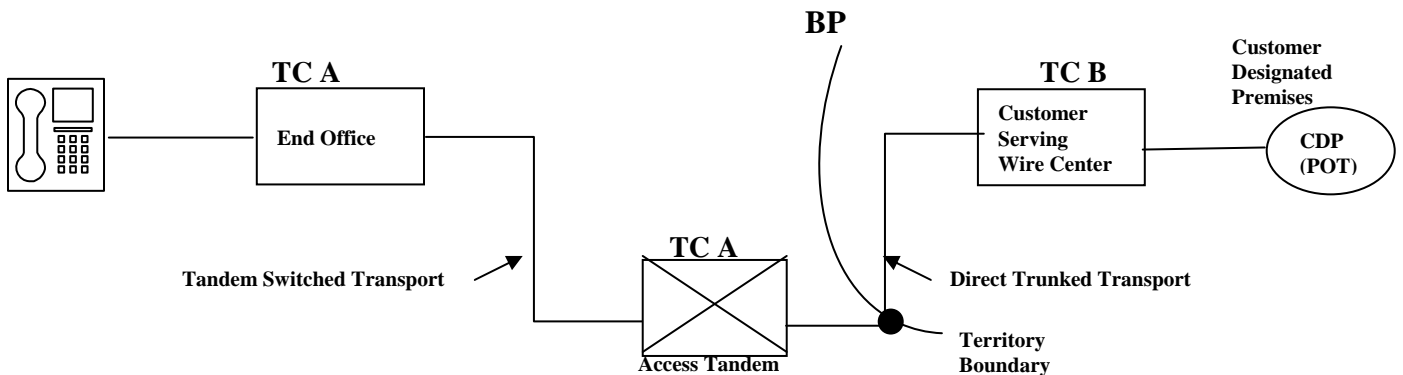
(h) Example 1 - Switched Access

Layout

- Feature Group D Switched Access is ordered to End Office.
- End Office and Access Tandem are in the operating territory of Telephone Company A (TC A).
- Customer designated premises is in the operating territory of Telephone Company B (TC B).

Telephone Company A  
(TC A)  
Operating Territory

Telephone Company B  
(TC B)  
Operating Territory



BP = Billing Percentage

**ACCESS SERVICE**

2. General Regulations (Cont'd)

2.4 Payment Arrangements and Credit Allowances (Cont'd)

2.4.7 Access Services Provided by More Than One Telephone Company (Cont'd)

(B) Meet Point Billing (Cont'd)

(3) Determination of Meet Point Billed Local Transport and Channel Mileage Charges (Cont'd)

(h) Example 1 - Switched Access (Cont'd)

The following example reflects the rate calculations for TC A. Rates for a company not participating in this tariff would appear in that company's access tariff.

- Assume:

End Office to Access Tandem:

Airline miles from TC A End Office to TC A Access Tandem = 22.1, Rounded = 23.

Access Tandem to Serving Wire Center:

Airline miles from TC A Access Tandem to TC B Serving Wire Center = 25.6, Rounded = 26.

Billing Percentage (BP)

TC A = 40%

TC B = 60%

Access Minutes (AM) = 9000

Tandem Switched Facility Rate = TSF

Tandem Switched Termination Rate = TST

Tandem Switching Rate = TS

End Office Charges = EO

Direct Trunked Facility Rate = DTF

Direct Trunked Termination Rate = DTT

**ACCESS SERVICE**

2. General Regulations (Cont'd)

2.4 Payment Arrangements and Credit Allowances (Cont'd)

2.4.7 Access Services Provided by More Than One Telephone Company (Cont'd)

(B) Meet Point Billing (Cont'd)

(3) Determination of Meet Point Billed Local Transport and Channel Mileage Charges (Cont'd)

(h) Example 1 - Switched Access (Cont'd)

Telephone Company A charges are:

Tandem Switched Facility charge  
= 9,000 min. x 23 mi. x TSF rate

Tandem Switched Termination charge  
= 2 terminations x 9,000 min. x TST rate

Tandem Switching charge  
= 9,000 x TS rate

End Office Charges  
= 9,000 min. x EO rates

Direct Trunked Facility charge  
= 26 miles x DTF rate x 40%

Direct Trunked Termination charge  
= 1 termination x DTT rate

**ACCESS SERVICE**

2. General Regulations (Cont'd)

2.4 Payment Arrangements and Credit Allowances (Cont'd)

2.4.7 Access Services Provided by More than One Telephone Company (Cont'd)

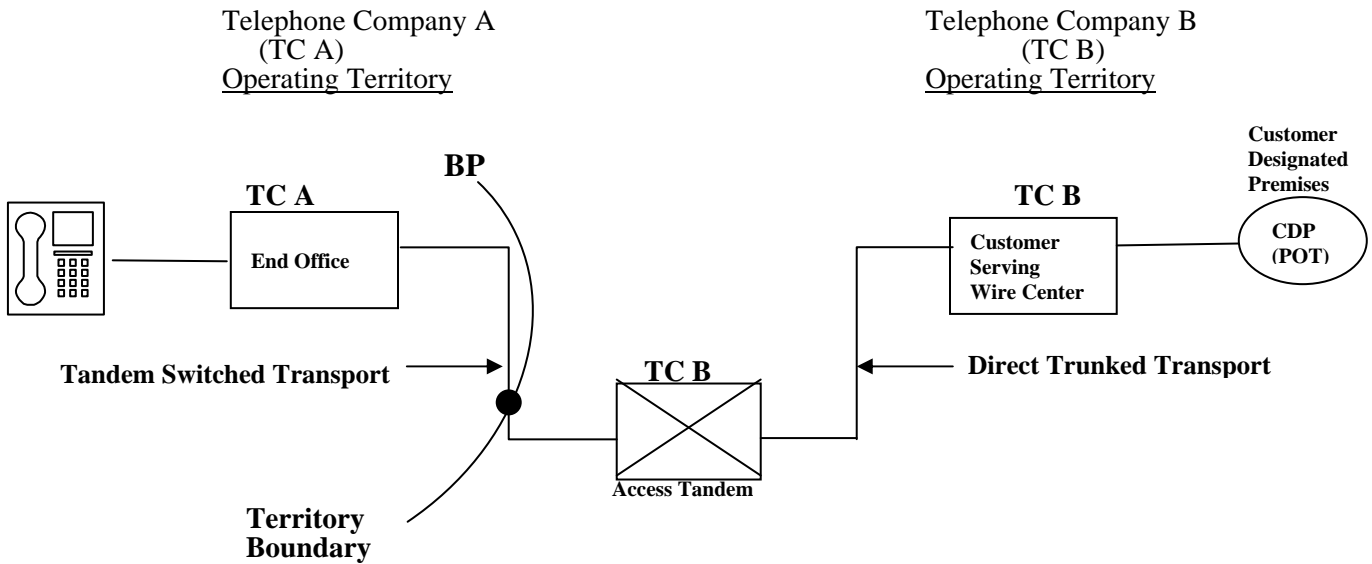
(B) Meet Point Billing (Cont'd)

(3) Determination of Meet Point Billed Local Transport and Channel Mileage Charges (Cont'd)

(i) Example 2 - Switched Access

Layout

- Feature Group D Switched Access is ordered to End Office.
- End office is in the operating territory of Telephone Company (TC-A).
- Access Tandem and Customer Designated Premises are in the Operating territory of Telephone Company (TC-B).



BP = Billing Percentage

**ACCESS SERVICE**2. General Regulations (Cont'd)2.4 Payment Arrangements and Credit Allowances (Cont'd)2.4.7 Access Services Provided by More than One Telephone Company (Cont'd)(B) Meet Point Billing (Cont'd)(3) Determination of Meet Point Billed Local Transport and Channel Mileage Charges (Cont'd)(i) Example 2 - Switched Access (Cont'd)

The following example reflects the Rate calculations for TC-A. Rates for a company not participating in this tariff would appear in that company's access tariff.

- Assume:

End Office to Access Tandem:  
Airline miles from TC A End Office  
To TC B Access Tandem = 22.1,  
Rounded = 23

Billing Percentage (BP)  
TC A = 80%  
TC B = 20%

Access Tandem to Serving Wire  
Center:  
Airline miles from TC B Access  
Tandem to TC B Serving Wire Center  
= 25.6, rounded = 26

Access Minutes = 9000

End Office Charges = EO

Tandem Switched Facility Rate = TSF

Tandem Switched Termination Rate = TST

Tandem Switching Rate = TS

Direct Trunked Facility Rate = DTF

**ACCESS SERVICE**

2. General Regulations (Cont'd)

2.4 Payment Arrangements and Credit Allowances (Cont'd)

2.4.7 Access Services Provided by More than One Telephone Company (Cont'd)

(B) Meet Point Billing (Cont'd)

(3) Determination of Meet Point Billed Local Transport and Channel Mileage Charges (Cont'd)

(i) Example 2 - Switched Access (Cont'd)

- Telephone Company A charges are:

End Office charges  
= 9,000 min. x EO rate

Tandem Switched Facility charge  
= 9,000 min. x 23 mi. x TSF rate x 80%

Tandem Switched Termination charge  
= 1 termination x 9,000 min. x TST rate

2.5 Connections

Equipment and Systems (i.e., terminal equipment, multiline terminating systems and communications systems) may be connected with Switched, Digital Subscriber Line, Special Access Services furnished by the Telephone Company where such connection is made in accordance with the provisions specified in Technical Reference Publication AS No. 1 and in 2.1 preceding.

**ACCESS SERVICE**2. General Regulations (Cont'd)2.6 Definitions

Certain terms used herein are defined as follows:

800 Series Service

800 Series Service is a generic term for access services associated with toll free numbers, which include 800, 888, 877, 866, 855, 844, 833 and 822.

800 Series Data Base Access Service

800 Series Data Base Access Service is a generic term for data base access services associated with toll free numbers, which include 800, 888, 877, 866, 855, 844, 833 and 822.

Access Code

The term "Access Code", denotes a uniform access code assigned by the Telephone Company to an individual customer in the form of 10XXX or 101XXX X and 950-XXXX.

Access Minutes

For the purpose of calculating chargeable usage, the term "Access Minutes" denotes customer usage of exchange facilities in the provision of intrastate access service. On the originating end of an intrastate call, usage is measured from the time the originating call is delivered by the Telephone Company to and acknowledged as received by the customer's facilities connected with the originating exchange. On the terminating end of an intrastate call, usage is measured from the time the call is received by the terminating exchange. Timing of usage at both originating and terminating ends of an intrastate call shall terminate when the calling or called party disconnects, whichever event is recognized first in the originating and terminating exchanges, as applicable.

Access Order

An Access Order is an order to provide the customer with Switched and Special Access and Public Packet Data Network or Access Related Service or to provide changes to existing services. A customer may order any number of services of the same type and between the same premises on a single Access Order. All details for services for a particular order must be identical except for those for multipoint service.

**ACCESS SERVICE**2. General Regulations (Cont'd)2.6 Definitions (Cont'd)Access Tandem

The term "Access Tandem" denotes a Telephone Company or centralized equal access provider switching system that provides a concentration and distribution function for originating or terminating traffic between end offices and a customer designated premises.

Aggregator

The term "Aggregator" denotes any entity that, in the ordinary course of its operations, makes telephones available to the public or to transient users of its premises, for interstate telephone calls using a provider of operator services.

Answer/Disconnect Supervision

The term "Answer/Disconnect Supervision" denotes the transmission of the switch trunk equipment supervisory signal (off-hook or on-hook) to the customer's point of termination as an indication that the called party has answered or disconnected.

Asymmetrical Digital Subscriber Line (ADSL)

The term "Asymmetrical Digital Subscriber Line (ADSL)" denotes an access technology that allows voice and high speed data to be sent simultaneously over local exchange service facilities. ADSL supports the transmission of data signals at a different speed when receiving data (downstream rate) than when sending data (upstream rate).

Asynchronous Transfer Mode (ATM)

The term "Asynchronous Transfer Mode (ATM)" denotes a high speed networking technology that utilizes fixed-length cells. ATM is connection-oriented and provides traffic routing prioritization parameters which enable different types of traffic such as voice, data and video to be carried over the same network.

## ACCESS SERVICE

### 2. General Regulations (Cont'd)

#### 2.6 Definitions (Cont'd)

##### Attenuation Distortion

The term "Attenuation Distortion" denotes the difference in loss at specified frequencies relative to the loss at 1004 Hz, unless otherwise specified.

##### Balance (100 Type) Test Line

The term "Balance (100 Type) Test Line" denotes an arrangement in an end office which provides for balance and noise testing.

##### Billing Name and Address

The term "Billing Name and Address" (BNA) means the name and address provided to a local exchange company by each of its local exchange customers to which the local exchange company directs bills for its services.

##### Bit

The term "Bit" denotes the smallest unit of information in the binary system of notation.

##### Billing Percentage

The Billing Percentage is determined as set forth in the National Exchange Carrier Association, Inc. Tariff F.C.C. No. 4, which represents the portion of the service provided by each Company

##### Business Day

The term "Business Day" denotes the times of day that a company is open for business. Generally, in the business community, these are 8:00 or 9:00 a.m. to 5:00 or 6:00 p.m., respectively, with an hour for lunch, Monday through Friday, resulting in a standard forty (40) hour work week. However, Business Day hours for the Telephone Company may vary based on company policy, union contract and location.

**ACCESS SERVICE**2. General Regulations (Cont'd)2.6 Definitions (Cont'd)Busy Hour Minutes of Capacity (BHMC)

The term "Busy Hour Minutes of Capacity (BHMC)" denotes the customer specified maximum amount of Switched Access Service and/or Directory Assistance Service access minutes the customer expects to be handled in an end office switch during any hour in an 8:00 a.m. to 11:00 p.m. period for the Feature Group and/or Directory Assistance Service ordered. This customer specified BHMC quantity is the input data the Telephone Company uses to determine the number of transmission paths for the Feature Group and/or Directory Assistance Service ordered.

Call

The term "Call" denotes a customer attempt for which complete address information (e.g., 0-, 911, or 10 digits) is provided to the serving dial tone office.

Calling Party Number (CPN)

The term "Calling Party Number" denotes the SS7 signaling parameter that identifies the subscriber line number or directory number of the calling party.

Carrier or Common Carrier

See Interexchange Carrier.

Carrier Identification Code (CIC)

The term "Carrier Identification Code (CIC)" denotes a numeric code assigned by the North American Numbering Plan (NANP) Administrator for the provisioning of Feature Group D Switched Access Services. The numeric code is unique to each carrier and is used by the Telephone Company to route switched access traffic to the Customer Designated Premises.

CCS

The term "CCS" denotes a hundred call seconds, which is a standard unit of traffic load that is equal to 100 seconds of usage or capacity of a group of servers (e.g., trunks).

Central Office

A local telephone company switching system where telephone exchange service custom station loops are terminated for purposes of interconnection to each other and to trunks.

**ACCESS SERVICE**2. General Regulations (Cont'd)2.6 Definitions (Cont'd)Central Office Maintenance Technician

The term "Central Office Maintenance Technician" denotes a Telephone Company employee who performs installation and/or repair work, including testing and trouble isolation, within the Telephone Company Central Office.

Central Office Prefix

The term "Central Office Prefix" denotes the first three digits (NXX) of the seven digit telephone number assigned to a customer's Telephone Exchange Service when dialed on a local basis.

Channel(s)

The term "Channel(s)" denotes an electrical or photonic, in the case of fiber optic-based transmission systems, communications path between two or more points of termination.

Channelize

The term "Channelize" denotes the process of multiplexing- demultiplexing wider bandwidth or higher speed channels into narrower band-width or lower speed channels.

Clear Channel Capability

The term "Clear Channel Capability" denotes the ability to transport twenty-four 64 Kbps over a DS1 Mbps High Capacity service via a B8ZS line code format.

C-Message Noise

The term "C-Message Noise" denotes the frequency weighted average noise within an idle voice channel. The frequency weighting, called C-message, is used to simulate the frequency characteristic of the 500-type telephone set and the hearing of the average subscriber.

**ACCESS SERVICE**2. General Regulations (Cont'd)2.6 Definitions (Cont'd)C-Notched Noise

The term "C-Notched Noise" denotes the C-message frequency weighted noise on a voice channel with a holding tone, which is removed at the measuring end through a notch (very narrow band) filter.

Common Line

The term "Common Line" denotes a line, trunk, pay telephone line or other facility provided under the general and/or local exchange service tariffs of the Telephone Company, terminated on a central office switch. A common line-residence is a line or trunk provided under the residence regulations of the general and/or local exchange service tariffs. A common line-business is a line provided under the business regulations of the general and/or local exchange service tariffs.

Common Channel Signaling

The term "Common Channel Signaling" (CCS) denotes a high speed packet switched communications network which is separate (out of band) from the public packet switched and message networks. Its purpose is to carry addressed signaling messages for individual trunk circuits and/or database related services between Signaling Points in the CCS network.

Communications System

The term "Communications System" denotes channels and other facilities which are capable of communications between terminal equipment provided by other than the Telephone Company.

Customers

Any individual, partnership, association, joint-stock company, trust, corporation, or governmental entity or other entity which orders to the services offered under this tariff, including Local Exchange Carrier(s), Interexchange Carrier(s) (IC's), providers of originating and terminating VoIP-PSTN traffic and End Users(s).

**ACCESS SERVICE**2. General Regulations (Cont'd)2.6 Definitions (Cont'd)Customer Designated Premises

The term "Customer Designated Premises" denotes the premises specified by the customer for the provision of Access Service.

Customer Node

The term "Customer Node" denotes Telephone Company provided equipment located at a customer designated premises that terminates a high speed optical channel.

Data Transmission (107 Type) Test Line

The term "Data Transmission (107 Type) Test Line" denotes an arrangement which provides for a connection to a signal source which provides test signals for one-way testing of data and voice transmission parameters.

Decibel

The term "Decibel" denotes a unit used to express relative difference in power, usually between acoustic or electric signals, equal to ten (10) times the common logarithm of the ratio of two signal powers.

Decibel Reference Noise C-Message Weighting

The term "Decibel Reference Noise C-Message Weighting" denotes noise power measurements with C-Message Weighting in decibels relative to a reference 1000 Hz tone of 90 dB below 1 milliwatt.

Decibel Reference Noise C-Message Referenced to 0

The term "Decibel Reference Noise C-Message Referenced to 0" denotes noise power in "Decibel Reference Noise C-Message Weighting" referred to or measured at a zero transmission level point.

## ACCESS SERVICE

### 2. General Regulations (Cont'd)

#### 2.6 Definitions (Cont'd)

##### Detail Billing

The term "Detail Billing" denotes the listing of each message and/or rate element for which charges to a customer are due on a bill prepared by the Telephone Company.

##### Direct-Trunked Transport

The term "Direct-Trunked Transport" denotes transport from the serving wire center to the end office or from the serving wire center to the access tandem on circuits dedicated to the use of a single customer.

##### Directory Assistance (Intrastate)

The term "Directory Assistance" denotes the provision of telephone numbers by a Telephone Company operator when the operator location is accessed by a customer by dialing NPA + 555-1212 or 555-1212.

##### Directory Assistance Location (Intrastate)

The term "Directory Assistance Location" denotes a Telephone Company office where telephone company equipment first receives the Directory Assistance call from the customer and selects the first operator position to respond to the Directory Assistance call.

**ACCESS SERVICE**2. General Regulations (Cont'd)2.6 Definitions (Cont'd)Directory Number (DN)

Denotes a unique NPA-NXX-XXXX assigned to a subscriber of a Local Service Provider.

Downstream

The term "Downstream" as used in the context of DSL is the transmission path from the Telephone Company's DSL Access Service Connection Point to the point of demarcation at the customer designated end user customer premises.

Echo Control

The term "Echo Control" denotes the control of reflected signals in a telephone transmission path.

Echo Path Loss

The term "Echo Path Loss" denotes the measure of reflected signal at a 4-wire point of interface without regard to the send and receive Transmission Level Point.

Echo Return Loss

The term "Echo Return Loss" denotes a frequency weighted measure of return loss over the middle of the voiceband (approximately 500 to 2500 Hz), where talker echo is most annoying.

End Office

The term "End Office" denotes a local Telephone Company switching system where Telephone Exchange Service customer station loops are terminated for purposes of interconnection to each other and to trunks. This term includes Remote Switching Modules/Systems served by a Host Central Office in a different wire center.

End User

The term "End User" means any customer of an intrastate telecommunications service that is not a carrier, except that a carrier other than a telephone company shall be deemed to be an "end user" when such carrier uses a telecommunications service for administrative purposes, and a person or entity that offers telecommunications service exclusively as a reseller shall be deemed to be an "end user" if all resale transmissions offered by such reseller originate on the premises of such reseller.

**ACCESS SERVICE**2. General Regulations (Cont'd)2.6 Definitions (Cont'd)Enhanced Service

The term "Enhanced Service", as defined in Part 64 of the F.C.C.'s Rules and Regulations, are services "...offered over common carrier transmission facilities used in interstate communications, which employ computer processing applications that act on the format, content, code, protocol or similar aspects of the subscriber's transmitted information; provide the subscriber additional, different, or restructured information; or involve subscriber interaction with stored information."

Entrance Facility

The term "Entrance Facility" denotes a Switched Access Service dedicated Local Transport facility between the customer's serving wire center and the customer designated premises.

Entry Switch

See First Point of Switching.

Envelope Delay Distortion

The term "Envelope Delay Distortion" denotes a measure of the linearity of the phase versus frequency of a channel.

Equal Level Echo Path Loss

The term "Equal Level Echo Path Loss" (ELEPL) denotes the measure of Echo Path Loss (EPL) at a 4-wire interface which is corrected by the difference between the send and receive Transmission Level Point (TLP). [ELEPL = EPL - TLP (send) + TLP (receive)].

Ethernet

Ethernet is a local area network (LAN) used for connecting computers, terminals, servers, etc. within the same building or office campus. Ethernet operates over twisted wire or coaxial cable at speeds up to ten million bits per second (10 Mbps). "Fast Ethernet" can operate at speeds up to 100 Mbps. In the LAN context, Ethernet is a physical link protocol reflecting the two lowest layers of the DNA/OS1 model. Ethernet LANs can generally connect to Asynchronous Transfer Mode (ATM) Cell Relay Service (CSR) networks at port speeds of 10 Mbps, 100 Mbps and one billion bits per second (1 Gigabit or "Gbps"). Standards for CPE connected to Telephone Company ATM-CRS ports are specified in Technical Reference IEEE Std. 802.3, Part 3, Clause 15 for 10BASE-F, Clause 26 for 100BASE-F and Clauses 34 through 38 for 1000BASE-X connections.

**ACCESS SERVICE**2. General Regulations (Cont'd)2.6 Definitions (Cont'd)Exchange

The term "Exchange" denotes a unit generally smaller than a local access and transport area, established by the Telephone Company for the administration of communications service in a specified area which usually embraces a city, town or village and its environs. It consists of one or more central offices together with the associated facilities used in furnishing communications service within that area. The exchange includes any Extended Area Service area that is an enlargement of a Telephone Company's exchange area to include nearby exchanges. One or more designated exchanges may comprise a given local access and transport area.

Exit Message

The term "Exit Message" denotes an SS7 message sent to an end office by the Telephone Company's tandem switch to mark the Carrier Connect Time when the Telephone Company's tandem switch sends an Initial Address Message to an interexchange customer.

Expected Measured Loss

The term "Expected Measured Loss" denotes a calculated loss which specifies the end-to-end 1004-Hz loss on a terminated test connection between two readily accessible manual or remote test points. It is the sum of the inserted connection loss and test access loss including any test pads.

Extended Area Service

Exchanges often include Extended Area Service areas that are an enlargement of a Telephone Company's exchange area to include nearby exchanges. One or more designated exchanges may comprise a given local access and transport area.

First Point of Switching

The term "First Point of Switching" denotes the first Telephone Company or centralized equal access provider location at which switching occurs on the terminating path of a call proceeding from the customer designated premises to the terminating end office and, at the same time, the last Telephone Company or centralized equal access provider location at which switching occurs on the originating path of a call proceeding from the originating end office to the customer designated premises.

## ACCESS SERVICE

### 2. General Regulations (Cont'd)

#### 2.6 Definitions (Cont'd)

##### Frequency Shift

The term "Frequency Shift" denotes the change in the frequency of a tone as it is transmitted over a channel.

##### Grandfathered

The term "Grandfathered" denotes Terminal Equipment, Multiline Terminating Systems and Protective Circuitry directly connected to the facilities utilized to provide services under the provisions of this tariff, and which are considered grandfathered under Part 68 of the F.C.C.'s Rules and Regulations.)

##### Host Central Office

The term "Host Central Office" denotes an electronic local Telephone Company End Office where Telephone Exchange Service customer station loops are terminated for purposes of interconnection to each other and to trunks. Additionally, this type of End Office contains the central call processing functions which service itself and its Remote Switching Modules/Systems.

##### Hub

A wire center at which bridging or multiplexing functions are performed for customers served out of any wire center.

##### Immediately Available Funds

The term "Immediately Available Funds" denotes a corporate or personal check drawn on a bank account and funds which are available for use by the receiving party on the same day on which they are received and include U.S. Federal Reserve bank wire transfers, U.S. Federal Reserve notes (paper cash), U.S. coins, U.S. Postal Money Orders and New York Certificates of Deposit.

**ACCESS SERVICE**2. General Regulations (Cont'd)2.6 Definitions (Cont'd)Impedance Balance

The term "Impedance Balance" denotes the method of expressing Echo Return Loss and Singing Return Loss at a 4-wire interface whereby the gains and/or loss of the 4-wire portion of the transmission path, including the hybrid, are not included in the specification.

Impulse Noise

The term "Impulse Noise" denotes any momentary occurrence of the noise on a channel over a specified level threshold. It is evaluated by counting the number of occurrences which exceed the threshold.

Individual Case Basis

The term "Individual Case Basis" denotes a condition in which the regulations, if applicable, rates and charges for an offering under the provisions of this tariff are developed based on the circumstances in each case.

Initial Address Message

The term "Initial Address Message" denotes an SS7 message sent in the forward direction to initiate trunk set up, reserve an outgoing trunk and process the information about that trunk along with other data relating to the routing and handling of the call to the next switch.

Inserted Connection Loss

The term "Inserted Connection Loss" denotes the 1004 Hz power difference (in dB) between the maximum power available at the originating end and the actual power reaching the terminating end through the inserted connection.

Installation and Repair Technician

The term "Installation and Repair Technician" denotes a Telephone Company employee who performs installation and/or repair work, including testing and trouble isolation, outside of the Telephone Company Central Office and generally at the customer designated premises.

Interexchange Carrier (IC) or Interexchange Common Carrier

The terms "Interexchange Carrier" (IC) or "Interexchange Common Carrier" denotes any individual, partnership, association, joint- stock company, trust, governmental entity or corporation engaged for hire in interstate or foreign communication by wire or radio, between two or more exchanges.

**ACCESS SERVICE**2. General Regulations (Cont'd)2.6 Definitions (Cont'd)Intermediate Hub

A wire center at which bridging or multiplexing functions are performed only for customers served by that wire center and wire centers that subtend the hub, as specified in NATIONAL EXCHANGE CARRIER ASSOCIATION, INC. TARIFF F.C.C. NO. 4.

Intermodulation Distortion

The term "Intermodulation Distortion" denotes a measure of the nonlinearity of a channel. It is measured using four tones, and evaluating the ratios (in dB) of the transmitted composite four-tone signal power to the second-order products of the tones (R2), and the third-order products of the tones (R3).

Internet Protocol (IP)

Internet Protocol (IP) is designed for use in interconnected systems of packet-switched compute communication networks. The internet protocol provides for transmitting blocks of data called datagrams from sources to destinations, where sources and destinations are hosts identified by fixed length addresses. The internet protocol also provides for fragmentation and reassemble of long datagrams, if necessary, for transmission through "small packet" networks. Use of IP for transmission by services provided under this tariff must comport with technical standards recognized in Request for Comments (RFC) 791, Internet Protocol, Defense Advanced Research Projects Agency (DARPA) Internet Program Protocol Specification, September 1981 or successor technical references indicated in this tariff.

Internet Protocol (IP) Signaling

The term "Internet Protocol (IP) Signaling" denotes a packet data-oriented protocol used for communicating call signaling information.

Interstate Communications

The term "Interstate Communications" denotes both interstate and foreign communications.

Intrastate Communications

The term "Intrastate Communications" denotes any communications subject to oversight by a state regulatory commission as provided by the laws of the state involved.

## ACCESS SERVICE

### 2. General Regulations (Cont'd)

#### 2.6 Definitions (Cont'd)

##### Legal Holiday

The term "Legal Holiday" denotes days other than Saturday or Sunday for which the Telephone Company is normally closed. These include New Year's Day, Independence Day, Thanksgiving Day, Christmas Day and a day when Washington's Birthday, Memorial Day or Columbus Day is legally observed and other locally observed holidays when the Telephone Company is closed.

##### Line Side Connection

The term "Line Side Connection" denotes a connection of a transmission path to the line side of a local exchange switching system.

##### Local Access and Transport Area (LATA)

The term "Local Access and Transport Area" denotes a geographic area established for the provision and administration of communications service. It encompasses one or more designated exchanges, which are grouped to serve common social, economic and other purposes.

##### Local Transport Facility

Local Transport Facility denotes the voice frequency transmission path between the end office switch and the customer's premises over Telephone Company facilities.

##### Local Transport Termination

Local Transport Termination denotes the voice frequency transmission path at the end office switch and at the customer's premises.

## ACCESS SERVICE

### 2. General Regulations (Cont'd)

#### 2.6 Definitions (Cont'd)

##### Loss Deviation

The term "Loss Deviation" denotes the variation of the actual loss from the designed value.

##### Major Fraction Thereof

The term "Major Fraction Thereof" denotes any period of time in excess of 1/2 of the stated amount of time. As an example, in considering a period of 24 hours, a major fraction thereof would be any period of time in excess of 12 hours exactly. Therefore, if a given service is interrupted for a period of thirty-six hours and fifteen minutes, the customer would be given a credit allowance for two twenty-four hour periods for a total of forty eight hours.

##### Message

The term "Message" denotes a "call" as defined preceding.

##### Multi-Frequency Signaling (MF)

An in-band signaling method in which call signaling information is transmitted between network switches using the same voiceband channel used for voice.

##### MultiMedia

Multimedia refers to data transport services that include data, text, audio, and visual content.

**ACCESS SERVICE**2. General Regulations (Cont'd)2.6 Definitions (Cont'd)Network Control Signaling

The term "Network Control Signaling" denotes the transmission of signals used in the telecommunications system which perform functions such as supervision (control, status, and charge signals), address signaling (e.g., dialing), calling and called number identifications, rate of flow, service selection error control and audible tone signals (call progress signals indicating re-order or busy conditions, alerting, coin denominations, coin collect and coin return tones) to control the operation of the telecommunications system.

Nonpublished Number

A nonpublished number is a number omitted from both the published telephone directory and directory assistance records at the request of the customer. A nonpublished number is not available through directory assistance.

Nonsynchronous Test Line

The term "Nonsynchronous Test Line" denotes an arrangement in step-by-step end offices which provides operational tests which are not as complete as those provided by the synchronous test lines, but can be made more rapidly.

North American Numbering Plan

The term "North American Numbering Plan" denotes a three-digit area code (Numbering Plan Area - NPA) and a seven-digit telephone number made up of a three-digit Central Office prefix plus a four-digit station number.

Off-hook

The term "Off-hook" denotes the active condition of Switched Access or a Telephone Exchange Service line.

On-hook

The term "On-hook" denotes the idle condition of Switched Access or a Telephone Exchange Service line.

## ACCESS SERVICE

### 2. General Regulations (Cont'd)

#### 2.6 Definitions (Cont'd)

##### Open Circuit Test Line

The term "Open Circuit Test Line" denotes an arrangement in an end office which provides an ac open circuit termination of a trunk or line by means of an inductor of several Henries.

##### Originating Direction

The use of access service for the origination of calls from an End User Premises to an IC Premises or a Customer's Premises.

##### Pay Telephone

The term "Pay Telephone" denotes a coin or coinless instrument provided in a public or semipublic place where Payphone Service Provider customers can originate telephonic communications and pay the applicable charges by (1) inserting coins into the equipment, or (2) using a credit card, or (3) third party billing the call or (4) calling collect.

## ACCESS SERVICE

### 2. General Regulations (Cont'd)

#### 2.6 Definitions (Cont'd)

##### Payphone Service Provider

The term "Payphone Service Provider" denotes any entity that provides pay telephone service, which is the provision of public, semi-public or inmate pay telephone service.

##### Phase Jitter

The term "Phase Jitter" denotes the unwanted phase variations of a signal.

##### Point of Termination

The term "Point of Termination" denotes the point of demarcation within a customer-designated premises at which the Telephone Company's responsibility for the provision of Access Service ends.

##### Premises

The term "Premises" denotes a building or buildings on continuous property (except Railroad Right-of-Way, etc.) not separated by a public highway

##### Public Switch Telephone Network (PSTN)

Public Switch Telephone Network refers to the local, long distance and international phone system which we use every day. In the United States, PSTN refers to the entire interconnected collection of local, long distance and international phone companies, which could be thousands.

##### Remote Switching Modules and/or Remote Switching Systems

Small, remotely controlled electronic end office switches which obtain all or part of their call processing capability from a Host Office. The Remote Switching Modules and/or Remote Switching Systems cannot accommodate direct trunks.

**ACCESS SERVICE**2. General Regulations (Cont'd)2.6 Definitions (Cont'd)Return Loss

The term "Return Loss" denotes a measure of the similarity between the two impedances at the junction of two transmission paths. The higher the return loss, the higher the similarity.

Registered Equipment

The term "Registered Equipment" denotes the customer's premises equipment which complies with and has been approved within the Registration Provisions of Part 68 of the F.C.C.'s Rules and Regulations.

Service Access Code

The term "Service Access Code" denotes a 3 digit code in the NPA format which is used as the first three digits of a 10 digit address and which is assigned for special network uses. Whereas NPA codes are normally used for identifying specific geographical areas, certain Service Access Codes have been allocated in the North American Numbering Plan to identify generic services or to provide access capability. Examples of Service Access Codes include the 800 and 900 codes.

Service Switching Point (SSP)

A Service Switching Point denotes an end office or tandem which, in addition to having SS7 and SP capabilities, is also equipped to query centralized data bases.

Serving Wire Center

The term "Serving Wire Center" denotes the wire center from which the customer designated premises would normally obtain dial tone from the Telephone Company.

Seven Digit Manual Test Line

The term "Seven Digit Manual Test Line" denotes an arrangement which allows the Customer to select balance, milliwatt and synchronous test lines by manually dialing a seven digit number over the associated access connection.

Shortage of Facilities or Equipment

The term "Shortage of Facilities or Equipment" denotes a condition which occurs when the Telephone Company does not have appropriate cable, switching capacity, bridging or, multiplexing equipment, etc., necessary to provide the Access Service requested by the customer.

Short Circuit Test Line

The term "Short Circuit Test Line" denotes an arrangement in an end office which provides for an ac short circuit termination of a trunk or line by means of a capacitor of at least four microfarads.

**ACCESS SERVICE**2. General Regulations (Cont'd)2.6 Definitions (Cont'd)Signal-to-C-Notched Noise Ratio

The term "Signal-to-C-Notched Noise Ratio" denotes the ratio in dB of a test signal to the corresponding C-Notched Noise.

Signaling Point (SP)

The term "Signaling Point (SP)" denotes an SS7 network interface element capable of originating and terminating SS7 trunk signaling messages.

Signaling Point of Interface (SPOI)

The term "Signaling Point of Interface (SPOI)" denotes the customer designated location where the SS7 signaling information is exchanged between the Telephone Company and the customer.

Signaling System 7 (SS7)

The term "Signaling System 7 (SS7)" denotes the layered protocol used for standardized common channel signaling in the United States and Puerto Rico.

Signal Transfer Point (STP)

The term "Signal Transfer Point (STP)" denotes a packet switch which provides access to the Telephone Company's SS7 network and performs SS7 message signal routing and screening.

Signal Transfer Point (STP) Port

The term "Signal Transfer Point (STP) Port" denotes the point of termination and interconnection to the STP.

Signaling Return Loss

The term "Signaling Return Loss" denotes the frequency weighted measure of return loss at the edges of the voice band (200 to 500 Hz and 2500 to 3200 Hz), where singing (instability) problems are most likely to occur.

Special Order

The term "Special Order" denotes an order for a Directory Assistance Service.

## ACCESS SERVICE

### 2. General Regulations (Cont'd)

#### 2.6 Definitions (Cont'd)

##### Study Area

The term "Study Area" denotes a geographic area within a state in which a Telephone Company operates. This geographic area normally does not cross state lines.

##### Subtending End Office of an Access Tandem

The term "Subtending End Office of an Access Tandem" denotes an end office that has final trunk group routing through that tandem.

##### Super Intermediate Hub

A wire center at which bridging or multiplexing functions are performed for Customers served by all wire centers in the LATA. A Super Intermediate Hub can be restricted to one or more designated NPA's within a LATA and/or to wire centers that are owned by the same telephone company as the hub.

**ACCESS SERVICE**2. General Regulations (Cont'd)2.6 Definitions (Cont'd)Tandem Switched Transport

The term "Tandem Switched Transport" denotes transport from the serving wire center to the end office, or from the tandem to the end office, that is switched at a tandem.

Terminating Direction

The term "Terminating Direction" denotes the use of Access Service for the completion of calls from a Customer's premises to an End User Premises.

Terminus Hub

A wire center at which bridging or multiplexing functions are performed only for Customers served directly by the same wire center.

Throughput

The term "Throughput" denotes the number of data bits successfully transferred in one direction per unit of time.

Toll VoIP-PSTN Traffic

The term "toll VoIP-PSTN Traffic" denotes a customer's interexchange voice traffic exchanged with the Telephone Company in Time Division Multiplexing format over PSTN facilities, which originates and/or terminates in Internet Protocol (IP) format. "Toll VoIP-PSTN Traffic" originates and/or terminates in IP format when it originates from and/or terminates to an end user customer of a service that requires IP-compatible customer premises equipment.

Transmission Measuring (105 Type) Test Line/Responder

The term "Transmission Measuring (105 Type) Test Line/Responder" denotes an arrangement in an end office which provides far-end access to a responder and permits two-way loss and noise measurements to be made on trunks from a near end office.

Transmission Path

The term "Transmission Path" denotes an electrical path capable of transmitting signals within the range of the service offering, e.g., a voice grade transmission path is capable of transmitting voice frequencies within the approximate range of 300 to 3000 Hz. A transmission path is comprised of physical or derived facilities consisting of any form or configuration of plant typically used in the telecommunications industry.

## ACCESS SERVICE

### 2. General Regulations (Cont'd)

#### 2.6 Definitions (Cont'd)

##### Trunk

The term "Trunk" denotes a communications path connecting two switching systems in a network, used in the establishment of an end-to-end connection.

##### Trunk Group

The term "Trunk Group" denotes a set of trunks which are traffic engineered as a unit for the establishment of connections between switching systems in which all of the communications paths are interchangeable.

##### Trunk Side Connection

The term "Trunk Side Connection" denotes the connection of a transmission path to the trunk side of a local exchange switching system.

##### Two-Wire to Four-Wire Conversion

The term "Two-Wire to Four-Wire Conversion" denotes an arrangement which converts a four-wire transmission path to a two-wire transmission path to allow a four-wire facility to terminate in a two-wire entity (e.g., a central office switch).

##### Upstream

The term "Upstream" as used in the context of DSL Access Service is the transmission path from the point of demarcation at the customer designated end user premises to the DSL Access Service Connection Point.

## ACCESS SERVICE

### 2. General Regulations (Cont'd)

#### 2.6 Definitions (Cont'd)

##### V and H Coordinates Method

The term "V and H Coordinates Method" denotes a method of computing airline miles between two points by utilizing an established formula which is based on the vertical and horizontal coordinates of the two points.

##### VoIP-PSTN Traffic

VoIP-PSTN Traffic is defined as traffic exchanged between the Company end user and the Customer in TDM format that originates and/or terminates in IP signaling format. VoIP- PSTN traffic includes tariff that is jurisdictionally local, intrastate IntraLATA, Intrastate InterLATA and interstate

##### Wireless Switching Center

The term "Wireless Switching Center" (WSC) denotes a Wireless Service Provider (WSP) switching system that is used to terminate wireless stations for purposes of interconnection to each other and to trunks interfacing with the public switched network.

##### Wire Center

The term "Wire Center" denotes a building in which one or more central offices, used for the provision of Telephone Exchange Services, are located.

**ACCESS SERVICE**3. Carrier Common Line Access Service

The Telephone Company will provide Carrier Common Line Access Service (Carrier Common Line Access) to customers in conjunction with Switched Access Service provided in Section 6 of this tariff or the appropriate Switched Access Service section of other Access Service tariffs.

3.1 General Description

Carrier Common Line Access provides for the use of end users' Telephone Company provided common lines by customers for access to such end users to furnish Intrastate Communications.

3.2 Limitations3.2.1 Exclusions

Neither a telephone number nor detail billing are provided with Carrier Common Line Access. Additionally, directory listings and intercept arrangements are not included in the rates and charges for Carrier Common Line Access.

3.2.2 Access Groups

All line side connections provided in the same access group will be limited to the same features and operating characteristics.

All trunk side connections provided in the same access group will be limited to the same features and operating characteristics.

**ACCESS SERVICE**3. Carrier Common Line Access Service (Cont'd)3.3 Undertaking of the Telephone Company3.3.1 Provision of Service

Where the customer is provided Switched Access Service under other sections of this or other Access Service tariffs, the Telephone Company will provide the use of Telephone Company common lines by a customer for access to end users at rates and charges as set forth in 17.1.1 following.

3.3.2 Interstate and Intrastate Use

The Switched Access Service provided by the Telephone Company includes the Switched Access Service provided for both interstate and intrastate communications. The Carrier Common Line Access rates and charges as set forth in 17.1.1 following apply to intrastate Switched Access Service access minutes in accordance with the rate regulations as set forth in Section 3.5.3 following (Percent Interstate Use - PIU).

3.4 Obligations of the Customer3.4.1 Switched Access Service Requirement

The Switched Access Service associated with Carrier Common Line Access shall be ordered by the customer under other sections of this tariff.

3.4.2 Supervision

The customer facilities at the premises of the ordering customer shall provide the necessary on-hook and off-hook supervision.

**ACCESS SERVICE**3. Carrier Common Line Access Service (Cont'd)3.5 Rate Regulations3.5.1 Billing of Charges

Carrier Common Line charges will be billed to each Switched Access Service provided under this tariff in accordance with the regulations except as set forth in Section 3.3.2 following (PIU).

3.5.2 Measuring and Recording of Call Detail

When access minutes are used to determine Carrier Common Line charges, they will be accumulated using call detail recorded by Telephone Company equipment and Feature Group C operator and automated operator services systems call detail such as pay telephone sent-paid, operator-DDD, operator-person, collect, credit-card, third number and/or other like calls recorded by the customer. The Telephone Company measuring and recording equipment, will be associated with end office or local tandem switching equipment and will record each originating and terminating access minute where answer supervision is received. The accumulated access minutes will be summed on a line by line basis, by line group or by end office, whichever type of account is used by the Telephone Company, for each customer and then rounded to the nearest minute.

3.5.3 Percent Interstate Use (PIU)

When the customer reports interstate and intrastate use of in-service Switched Access Service, Carrier Common Line charges will be billed only to intrastate Switched Access Service access minutes based on the data reported by the customer as set forth in Section 2.3.10 preceding (Jurisdictional Reports), except where the Telephone Company is billing according to actual access minutes by jurisdiction.

**ACCESS SERVICE**

4. RESERVED FOR FUTURE USE

**ACCESS SERVICE**5. Access Ordering5.1 General

This section sets forth the regulations and order related charges for services set forth in other sections of this tariff. Order related charges are in addition to other applicable charges for the services provided.

An Access Order is an order to provide the customer with Switched and Special Access and Access Related Service or to provide changes to existing services.

The regulations, rates and charges for special construction are set forth in Section 17 of this tariff and are in addition to the regulations, rates and charges specified in this section.

A customer may order any number of services of the same type and between the same premises on a single Access Order. All details for services for a particular order must be identical except for those for multipoint service.

The customer shall provide to the Telephone Company the order information required and in addition the customer must also provide:

- Customer name and premises address(es).
- Billing name and address (when different from customer name and address).
- Customer contact name(s) and telephone number(s) for the following provisioning activities: order negotiation, order confirmation, interactive design, installation and billing.

5.1.1 Service Installation

The Telephone Company will provide the Access Service in accordance with the customer's requested service date, subject to the constraints established by the Telephone Company schedule of applicable service dates.

The Telephone Company shall make available to all customers, upon request, a schedule of applicable service intervals for Switched Access. The schedule shall specify the applicable service interval for services and the quantities of services that can be provided by a requested service date. Any associated material will be provided upon request and within a reasonable period of time.

The Telephone Company will not accept orders for service dates which exceed the applicable service date by more than six months.

Access Services will be installed during Telephone Company business days. If a customer requests that installation be done outside of scheduled work hours, and the Telephone Company agrees to this request, the customer will be subject to applicable Additional Labor Charges as set forth in Section 17 following.

**ACCESS SERVICE**5. Access Ordering (Cont'd)5.1 General (Cont'd)5.1.2 Expedited Orders

When placing an Access Order, a customer may request a service date that is prior to the applicable service date. Additionally, a customer may also request an earlier service date on a pending Access Order. In this case, an Access Order modification would be required. If the Telephone Company determines that the service can be provided on the requested date and that additional labor cost or extraordinary costs are required to meet the requested service date, the customer will be notified and will be provided with an estimate of the additional charges involved. Charges will be billed at actual cost, not to exceed 10 percent over estimated charges. Such additional charges will be determined and billed to the customer as explained following.

To calculate the additional labor charges, the Telephone Company will, upon authorization from the customer to incur the additional labor charges, keep track of the additional labor hours used to meet the request of the customer and will bill the customer at the applicable Additional Labor charges as set forth in Section 17 following.

To develop, determine and bill the customer the extraordinary costs which may be involved, the Special Construction/Specialized Service Arrangements are set forth in this tariff.

When the request for expediting occurs subsequent to the issuance of the Access Order, a Service Date Change Charge as set forth in Section 17 following also applies.

**ACCESS SERVICE**5 Access Ordering (Cont'd)5.1 General (Cont'd)5.1.3 Selection of Facilities for Access Orders

When there are High Capacity facilities to a hub on order or in service for the customer's use, the customer may request a specific channel or transmission path be used to provide the Switched The Telephone Company will make a reasonable effort to accommodate the customer request.

5.2 Ordering Requirements5.2.1 Switched Access Service

When ordering Switched Access service, the customer must specify whether the service is to be provided as (1) Direct Trunked Transport to the end office, (2) Direct Trunked Transport to a tandem which connects with Tandem Switched Transport from the tandem to the end office (3) Tandem Switched Transport to the end office, (4) Local Transport, or (5) Non-LTR rate elements. When all or a portion of service is ordered as Direct Trunked Transport, the customer must specify the type and quantity of Direct Trunked Transport facility (e.g., Voice Grade or High Capacity DS1 or DS3).

The Customer must also specify the type of Entrance Facility to be used for Switched Access (e.g., Voice Grade or High Capacity). For High Capacity Entrance Facilities, the customer must specify the facility assignment and the channel assignment for each trunk.

Direct Trunked Transport is available at all tandems and at all end offices except those end offices identified in NATIONAL EXCHANGE CARRIER ASSOCIATION, INC. TARIFF F.C.C. NO. 4 as not having the capability to provide Direct Trunked Transport. Direct Trunked Transport is not available: (1) from end offices that provide equal access through a Centralized Equal Access arrangement, or (2) from end offices that lack recording or measurement capability.

Normally, Direct Trunked Transport of originating 800 calls from an end office is available only from Service Switching Point (SSP) equipped end offices. However, certain non-SSP equipped end offices can accommodate direct trunking of originating 800 calls. These end offices are also identified in NATIONAL EXCHANGE CARRIER ASSOCIATION, INC., TARIFF F.C.C. No. 4.

When the customer has both Tandem Switched Transport and Direct Trunked Transport at the same end office, the customer will be provided Alternate Traffic Routing as set forth in Section 6.4.5 following.

At the customer's request, its local transport may be connected to the Entrance Facility of another customer, providing the other customer submits a Letter of Authorization for this connection and assumes full responsibility for the cost of the Entrance Facility.

**ACCESS SERVICE**5 Access Ordering (Cont'd)5.2 Order Requirements (Cont'd)5.2.1 Switched Access Service (Cont'd)(C) Feature Group C, Feature Group D, Operator Transfer Service and SS7 Signaling

When placing an order for Feature Group C and D Switched Access Service, the customer shall provide:

- The number of BHMC from the customer designated premises to the end office or Operator Transfer Service location by Feature Group and by type of BHMC or
- The number of trunks desired between customer designated premises and an entry switch or Operator Transfer Service location;
- The number of BHMC or trunks required for or to be converted to an SS7 Signaling capability;
- Optional Features;
- Interim NXX Translation options;
- Operator Transfer Service option;
- A projected Percentage of Interstate Use (PIU) as set forth in Section 2.3.11 preceding; and
- For Feature Group D switched access service to a Wireless Switching Center (WSC) directly interconnected to a Telephone Company access tandem office, the customer shall provide information to the Telephone Company indicating the NXX code(s) to be accessed.

When BHMC information is provided it is used to determine the number of transmission paths.

The BHMC may be determined by the customer in the following manner. For each day (8 am to 11 pm, Monday through Friday, excluding national holidays), the customer shall determine the highest number of minutes of use for a single hour (e.g., 55 minutes in the 10-11 a.m. hour). The customer shall, for the same hour period (i.e., busy hour) for each of twenty consecutive business days, pick the 20 consecutive business days in a calendar year which add up to the largest number of minutes of use. Both originating and terminating minutes shall be included. The customer shall then determine the average busy hour minutes of capacity (i.e., BHMC) by dividing the largest number of minutes of use figure for the same hour period for the consecutive 20 business day period by 20. This computation shall be performed for each end office the customer wishes to serve. These determinations thus establish the forecasted BHMC for each end office.

**ACCESS SERVICE**5. Access Ordering (Cont'd)5.2 Ordering Requirements (Cont'd)5.2.1 Switched Access Service (Cont'd)(C) Feature Group C, Feature Group D, Interim NXX Translation, Operator Transfer Service and SS7 Signaling (Cont'd)

Customers may, at their option, order FGD by specifying the number of trunks desired between customer designated premises and an end office, access tandem or operator services location. When ordering by trunk quantities rather than BHMC quantities to an access tandem, the customer must also provide the Telephone Company an estimate of the amount of traffic it will generate to and/or from each end office subtending the access tandem to assist the Telephone Company in its own efforts to project further facility requirements.

(D) SS7 Optional Feature

When Feature Group C or D is ordered with the SS7 optional feature, in addition to information listed in Section 5.2.1(C) preceding, the customer shall specify a reference to existing signaling connections or reference a related SS7 signaling connection order. When ordering SS7 signaling, the customer shall provide the Signaling Transfer Point codes, location identifier codes and circuit identifier codes. In addition, the customer shall work cooperatively with the Telephone Company to determine the number of SS7 signaling connections required to handle its signaling traffic.

For 800 Data Base Access Service, as described in Section 6.1.3(D) following, the customer must order FGC or FGD to those access tandems or end offices designated as Service Switching Points (SSP) for 800 data base service or to those non-SSP equipped end offices that can accommodate direct trunking of originating 800 calls. SSP equipped end offices and access tandems and non-SSP equipped end offices that can accommodate direct trunking of originating 800 calls are designated in NATIONAL EXCHANGE CARRIER ASSOCIATION, INC. TARIFF F.C.C. NO. 4, WIRE CENTER INFORMATION. All traffic originating from end offices not equipped to provide SS7 signaling and routing or not able to accommodate direct trunking of originating 800 calls require routing via an access tandem where SSP functionality is available.

**ACCESS SERVICE**5. Access Ordering (Cont'd)5.2 Ordering Requirements (Cont'd)5.2.2 Mixed Use Facilities - Switched and Special Access

Mixed use is the provision of Switched Access Services over the same High Capacity facilities. Mixed use facilities to a hub will be ordered and provided as Switched Access Service. When placing the order for the individual service(s), the customer must specify a channel assignment for each service ordered.

If a switched service is ordered and connected to a dedicated special access facility, the Company must provide the related PON of the dedicated special access facility. If the PON of the associated facility is not received, then no credit will be applied until such time as official notice is provided associating both PONs.

5.2.3 Miscellaneous Services

Testing Service, Additional Labor, Telecommunications Service Priority and Special Facilities Routing shall be ordered with an Access Order or may subsequently be added to a pending order at any time up to and including the service date for the access service. When miscellaneous services are added to a pending order a service date change may be required. When a service date change is required, the service date change charge as set forth in Section 17 following will apply. When miscellaneous services are added to a pending order, charges for a design change as set forth in Section 17 following will apply when an engineering review is required. If both a service date change and an engineering review are required, both the Service Date Change Charge and the Design Change Charge will apply as set forth in Section 17 following.

The rates and charges for these services, as set forth in Section 17 of this tariff, will apply in addition to the ordering charges set forth in Section 17, and the rates and charges for the Access Service with which they are associated.

Additional Engineering is not an ordering option, but will be applied to an Access Order when the Telephone Company determines that Additional Engineering is necessary to accommodate a customer request. Additional Engineering will only be required as set forth in Section 13.1 following. When it is required, the customer will be so notified and will be furnished with a written statement setting forth the justification for the Additional Engineering as well as an estimate of the charges. If the customer agrees to the Additional Engineering, a firm order will be established. If the customer does not want the service or facilities after being notified that Additional Engineering of Telephone Company facilities is required, the order will be withdrawn and no charges will apply. Once a firm order has been established, the total charge to the customer for the Additional Engineering may not exceed the estimated amount by more than 10%.

**ACCESS SERVICE**5. Access Ordering (Cont'd)5.3 Access Orders For Services Provided By More Than One Telephone Company

Access Services provided by more than one Telephone Company are services where one end of the Local Transport or Channel Mileage element is in the operating territory of one Telephone Company and the other end of the element is in the operating territory of a different Telephone Company or where the Interim NXX Translation service and the end office are not provided by the same Telephone Company.

The ordering procedure for this service is dependent upon the billing arrangement, as set forth in Section 2.4.7 preceding, to be used by the Telephone Companies involved in providing the Access Service. The Telephone Company will notify the customer which of the ordering procedures will apply.

5.3.1 Non Meet Point Billing Ordering(A) Single Company Billing Ordering

The Telephone Company receiving the order from the customer will arrange to provide the service and bill the customer as set forth in Section 2.4.7(A)(1). The customer will place the order with the Telephone Company as follows:

When the first point of switching is not in the same Telephone Company's territory as the Interexchange Carrier premises, the customer must supply a copy of the order to the Telephone Company in whose territory the Interexchange Carrier premises is located and any other Telephone Company(s) involved in providing the service. When service is provided through a centralized equal access provider, the customer must supply a copy of the order to that provider.

**ACCESS SERVICE**5. Access Ordering (Cont'd)5.3 Access Orders For Services Provided By More Than One Telephone Company (Cont'd)5.3.2 Meet Point Billing Ordering

Each Telephone Company will provide its portion of the Access Service within its operating territory to an interconnection point(s) with the other Telephone Company(s). Billing Percentages will be determined by the Telephone Companies involved in providing the Access Service and listed in NATIONAL EXCHANGE CARRIER ASSOCIATION, INC. TARIFF F.C.C. NO. 4. Each Telephone Company will bill the customer for its portion of the service as set forth in Section 2.4.7. All other appropriate charges in each Telephone Company tariff are applicable.

For the service(s) ordered as set forth following, the customer must also supply a copy of the order to the Telephone Company in whose operating territory a customer designated premises is located and any other Telephone Company(s) involved in providing the service. Additionally, when service is provided through a centralized equal access provider, the customer must supply a copy of the order to that provider.

- (A) For Feature Group C and D Switched Access Services, the customer must place an order with the Telephone Company in whose territory the end office is located. Customers may, at their option, order FGD to the access tandem. When ordered to the access tandem, and the access tandem and the end office are not in the same Telephone Company operating territory, the customer must also supply a copy of the order to each additional Telephone Company subtending the access tandem.

**ACCESS SERVICE**5. Access Ordering (Cont'd)5.4 Charges Associated with Access Ordering5.4.1 Access Order Charge

The Access Order Charge is applied to all customer requests for new Special Access, Switched Access, Directory Assistance, and Asymmetric Digital Subscriber Line Access Services. In addition, the Access Order Charge is applicable to customer requests for additions, changes or rearrangements to existing Special Access, Switched Access, Directory Assistance, and Asymmetric Digital Subscriber Line Access Services with the following exceptions:

The Access Order Charge does not apply:

- When a Service Date Change Charge is applicable;
- When a Design Change Charge is applicable;
- To administrative changes as set forth in Sections 6.4.1(B)(3) following;
- When a change to a pending order does not result in the cancellation of the pending order and the issuance of a new order;
- When a Miscellaneous Service Order Charge is applicable;
- When a PIC Change Charge is applicable;
- When a Telephone Company initiated network reconfiguration requires a customer's existing access service to be reconfigured;
- When a service with an ICB rate is converted to a similar service with a non-ICB tariff rate prior to the expiration of the ICB; or
- When a Billing Name and Address Order charge is applicable.

**ACCESS SERVICE**5. Access Ordering (Cont'd)5.4 Charges Associated with Access Ordering (Cont'd)5.4.1 Access Order Charge (Cont'd)

- When a customer requests a change of trunks from tandem-switched transport to direct-trunked transport or from direct-trunked transport to tandem-switched transport or requests to rearrange switched access service between lower capacity and higher capacity facilities (e.g. voice grade to/from DS1 or DS1 to/from DS3), providing:
  - the orders to disconnect existing trunks and to connect the new trunks are placed at the same time, and
  - the number of installed trunks does not exceed the number of trunks disconnected. If the number of installed trunks exceeds the number of trunks disconnected, the Access Order Charge will apply unless the customer provides justification based upon standard engineering methods to show that the additional capacity is required to maintain the same level of service.
- When a customer requests a change of trunks from tandem-switched transport to direct-trunked transport or orders the disconnection of over provisioned trunks, providing:
  - the orders to disconnect existing trunks and to connect the new trunks are placed at the same time.

The Access Order Charge will be applied on a per order basis to each order received by the Telephone Company or copy of an order received by the Telephone Company pursuant to Section 5.3.1 preceding and Section 5.3.2 preceding, and is in addition to other applicable charges as set forth in this and other sections of this tariff.

The Access Order Charge will be applied on a per order basis for any change, rearrangement or addition to the delivery of signaling to an existing STP Port.

**ACCESS SERVICE**5. Access Ordering (Cont'd)5.4 Charges Associated with Access Ordering (Cont'd)5.4.2 Miscellaneous Service Order Charge

A Miscellaneous Service Order Charge, as set forth in Section 17 following, applies to any service, or combination of services, ordered simultaneously from Section 13 of the tariff for which a service order is not already pending (with the exception of Presubscription Section (13.4), which does not have the charge applied. The Miscellaneous Service Order Charge is an administrative charge designed to compensate for the expenses associated with service order issuance.

The charge always applies to the following services since a pending service order would not exist:

- Overtime Repair Section (13.2.2);
- Standby Repair Section (13.2.3);
- Testing and Maintenance with Other Telephone Companies other than when in conjunction with Acceptance Testing Section (13.2.4);
- Other Labor Section (13.2.5); and
- Maintenance of Service Section (13.3.2).

The Miscellaneous Service Order Charge will also apply to the following services if they are ordered subsequent to the initial installation of the associated access service, thereby necessitating the issuance of another service order:

- Telecommunications Service Priority Section (13.3.3);
- Controller Arrangement Section (13.3.4(A)); and

The charge does not apply to the following services since a pending service order would exist:

- Additional Engineering Section (13.1);
- Overtime Installation Section (13.2.1);
- Standby Acceptance Testing Section (13.2.3);
- Testing and Maintenance with Other Telephone Companies when in conjunction with Acceptance Testing Section (13.2.4);
- Additional Cooperative Acceptance Testing Section (13.3.1(A)(1) and Section 13.3.1(B)(1)

**ACCESS SERVICE**5. Access Ordering (Cont'd)5.4 Charges Associated with Access Ordering (Cont'd)5.4.3 Access Order Change Charges

Access Order changes involve service date changes and design changes. The customer may request a change of its Access Order prior to the service date. The Telephone Company will make every effort to accommodate a requested change when it is able to do so with the normal work force assigned to complete such an order within normal business hours. If the change cannot be made with the normal work force during normal business hours, the Telephone Company will notify the customer. If the customer still desires the Access Order change, the Telephone Company will schedule a new service date as set forth in Section 5.1.2 preceding. All charges for Access Order change as set forth in Section 17 will apply on a per occurrence basis.

Any increase in the number of Switched Access Service lines, trunks or busy hour minutes of capacity will be treated as a new Access Order (for the increased amount only).

**ACCESS SERVICE**5. Access Ordering (Cont'd)5.4 Charges Associated with Access Ordering (Cont'd)5.4.3 Access Order Change Charges (Cont'd)(A) Service Date Change

The customer may request a change of service date on a pending Access Order prior to the service date. A change of service date is a change of the scheduled service date by the customer to either an earlier date or a later date which does not exceed 30 calendar days from the original service date.

If the Telephone Company determines that the customer's request can be accommodated without delaying the service dates for orders of other customers, the service date will be changed and the Service Date Change Charge, as set forth in Section 17 following, will be applied to the order.

If the service date is changed to an earlier date, and the Telephone Company determines additional labor or extraordinary costs are necessary to meet the earlier service date requested by the customer, the customer will be notified by the Telephone Company that Expedited Order Charges as set forth in Section 5.1.2 preceding apply. Such charges will apply in addition to the Service Date Change Charge.

If the requested service date exceeds 30 calendar days following the original service date, and the Telephone Company determines that the customer's request can be accommodated, the Telephone Company will cancel the original order and apply the Cancellation Charges as set forth in Section 5.5.3 following. A new Access Order with a new service date will be issued. The Service Date Change Charge will not apply, however, the Access Order Charge will apply to the new order.

If the service date is changed due to a design change as set forth in subsection (B) following, the Service Date Change Charge will apply.

**ACCESS SERVICE**5. Access Ordering (Cont'd)5.4 Charges Associated with Access Ordering (Cont'd)5.4.3 Access Order Change Charges (Cont'd)(B) Design Change

The customer may request a design change to the service ordered prior to the requested service date. A design change is any change to an Access Order which requires engineering review. An engineering review is a review by Telephone Company personnel, of the service ordered and the requested changes to determine what changes in the design, if any, are necessary to meet the changes requested by the customer. Design changes include such things as the addition or deletion of optional features or functions or a change in the type of Transport Termination (Switched Access only), type of channel interface, type of Interface Group or technical specification package. Design changes do not include a change of customer designated premises, first point of switching, or a change to a Feature Group type. Changes of this nature will require the issuance of a new order and the cancellation of the original order with appropriate cancellation charges applied.

The Telephone Company will review the requested change, notify the customer whether the change is a design change, if the change can be accommodated and if a new service date is required. If the customer authorizes the Telephone Company to proceed with the design change, a Design Change Charge as set forth in Section 17 following will apply in addition to the charge for Additional Engineering as set forth in Section 17 following. If a change of service date is required, the Service Date Change Charge as set forth in Section 17 following will also apply. The Access Order Charge as specified in Section 17 following does not apply.

**ACCESS SERVICE**5. Access Ordering (Cont'd)5.5 Minimum Periods and Cancellations5.5.1 Minimum Periods

The minimum period for Switched Access High Capacity DS3 Entrance Facilities and Direct Trunked Transport is as set forth in Section 6.1.3 following.

Switched Access usage rate services (i.e., End Office Common Line, Tandem Switched Transport, and Residual Interconnection Charge) have no minimum period. The minimum period for which all other Access Service is provided and for which charges are applicable, is one month.

5.5.2 Development of Minimum Period Charges

When Access Service is disconnected after commencement of service but prior to the expiration of the minimum period, charges are applicable for the balance of the minimum period. A disconnect constitutes facilities being returned to available inventory.

The Minimum Period Charge for monthly billed services will be determined as follows:

- (A) For Switched Access Service, the charge for a month or fraction thereof is equal to the applicable recurring charges plus any nonrecurring and/or Special Construction charge(s) that may be due; and

**ACCESS SERVICE**5. Access Ordering (Cont'd)5.5 Minimum Period and Cancellations (Cont'd)5.5.3 Cancellation of an Access Order

(A) A customer may cancel an Access Order for the installation of service on any date prior to the service date. The cancellation date is the date the Telephone Company receives written or verbal notice from the customer that the order is to be cancelled. The verbal notice must be followed by written confirmation within 10 days. If a customer or a customer's end user is unable to accept Access Service within 30 calendar days after the original service date, the customer has the choice of the following options:

- The Access Order shall be cancelled and charges set forth in Section (B) following will apply; or
- Billing for the service will commence.

In such instances, the cancellation date or the billing date, depending on which option is selected by the customer, shall be the 31st day beyond the original service date of the Access Order.

(B) When a customer cancels an Access Order for the installation of service, a Cancellation Charge will apply as follows:

- (1) Installation of Switched Access facilities is considered to have started when the Telephone Company incurs any cost in connection therewith or in preparation thereof which would not otherwise have been incurred.
- (2) Where the customer cancels an Access Order prior to the start of installation of access facilities, no charges shall apply.
- (3) Where installation of access facilities has been started prior to the cancellation, the charges specified in (a) or (b) following, whichever is lower, shall apply.
  - (a) A charge equal to the costs incurred in such installation, less estimated net salvage. Such costs include the nonrecoverable cost of equipment and material ordered, provided or used, plus the nonrecoverable cost of installation and removal including the costs of engineering, labor, supervision, transportation, rights-of-way and other associated costs; or
  - (b) The minimum period charges for Switched Access, ordered by the customer, as set forth in Section 5.5.2 preceding.

## ACCESS SERVICE

### 5. Access Ordering (Cont'd)

#### 5.5 Minimum Period and Cancellations (Cont'd)

##### 5.5.3 Cancellation of an Access Order (Cont'd)

- (C) When a customer cancels an order for the discontinuance of service, no charges apply for the cancellation.
- (D) If the Telephone Company misses a service date by more than 30 days and such delay is not requested or caused by the customer (excluding those circumstances where the date is missed due to acts of God, governmental requirements, work stoppages and civil commotions), the customer may cancel the Access Order without incurring cancellation charges.

##### 5.5.4 Partial Cancellation Charge

Any decrease in the number of ordered Switched Access Service lines, trunks, busy hour minutes of capacity will be treated as a partial cancellation and charges will be determined as set forth in Section 5.5.3(B) preceding.

**ACCESS SERVICE**6. Switched Access Service6.1 General

Switched Access Service, which is available to customers for their use in furnishing their services to end users, provides a two-point communications path between a customer's designated premises and an end user's premises. It provides for the use of common terminating, switching, and trunking facilities and for the use of common subscriber plant of the Telephone Company. Switched Access Service provides for the ability to originate calls from an end user's premises to a customer designated premises, and to terminate calls from a customer designated premises to an end user's premises in the LATA where it is provided. Specific references to material describing the elements of Switched Access Service are provided in Section 6.1.3 and Section 6.5 through 6.6 following.

Rates and charges for Switched Access Service depend generally on the specific Feature Group ordered by the customer. Rates and charges for Switched Access Service are set forth in Section 17 following. The application of rates for Switched Access Service is described in Section 6.4 following. Rates and charges for services other than Switched Access Service, e.g., a customer's interLATA toll message service, may also be applicable when Switched Access Service is used in conjunction with these other services. Descriptions of such applicability are provided in Sections 6.4.5, 6.5.1(H), 6.5.3, 6.6.1(G), and 6.6.2(D) following.

The provisions in **Section XXX** describes the treatment of Toll VoIP-PSTN Traffic pursuant to the Federal Communications Commission's Part 51 Interconnection Rules and in compliance with the Federal Communications Commission's Report and Order and Further Notice of Proposed Rulemaking in CC Docket Nos. 96-45 and 01-92; GN Docket No. 09-51; WC Docket Nos. 03-109, 05-337, 07-135 and 10-90; and WT Docket No. 10-208, adopted October 27, 2011 and released November 18, 2011 (FCC 11-161). In the absence of an interconnection agreement between the Telephone Company and the customer specifying the treatment of Toll VoIP-PSTN Traffic, the Telephone Company will bill the customer the applicable switched access rates and charges according to the tariff.

Switched Access Service purchased from the provisions of this tariff may be commingled with unbundled network elements or unbundled network element combinations purchased pursuant to the Commission's Part 51 Interconnection Rules and in compliance with the Federal Communications Commission's Report and Order and Order on Remand and Further Notice of Proposed Rulemaking in CC Docket Nos. 01-338, 96-98 and 98-147, adopted February 20, 2003 and released August 21, 2003 (FCC 03-36).

**ACCESS SERVICE**6. Switched Access Service (Cont'd)6.1 General (Cont'd)6.1.1 Description and Provision of Switched Access Service Arrangements(A) Description

Switched Access Service is provided in two different Feature Group arrangements which are service categories of standard and optional features. These are differentiated by their technical characteristics, e.g., line side vs. trunk side connection at the Telephone Company first point of switching. They are also differentiated by optional feature availability and the manner in which the end user accesses them in originating calling, e.g., with or without access codes of various lengths and digits.

The provision of each Feature Group requires Local Transport facilities including an Entrance Facility where required and the appropriate End Office functions.

There are two specific transmission specifications (i.e., Types C and D) that have been identified for the provision of Feature Groups. The technical specifications for the Entrance Facility and Direct Trunked Transport are the same as those set forth in this section. The specifications provided are dependent on the Interface Group and the routing of the service, i.e., whether the service is routed directly to the end office or via an access tandem. The parameters for the transmission specifications are set forth in Section 15.1.2 following.

**ACCESS SERVICE**6. Switched Access Service (Cont'd)6.1 General (Cont'd)6.1.1 Description and Provision of Switched Access Service Arrangements (Cont'd)(A) Description (Cont'd)

Feature Groups are arranged for either originating, terminating or two-way calling, based on the customer end office switching capacity ordered. Originating calling permits the delivery of calls from Telephone Exchange Service locations to the customer designated premises. Terminating calling permits the delivery of calls from the customer designated premises to Telephone Exchange Service locations. Two-way calling permits the delivery of calls in both directions, but not simultaneously. The Telephone Company will determine the type of calling to be provided unless the customer requests that a different type of directional calling is to be provided. In such cases, the Telephone Company will work cooperatively with the customer to determine the directionality.

There are various optional features associated with Local Transport, Common Switching and Transport Termination available with the Feature Groups. In addition, the Interim NXX Translation and Operator Transfer Service optional features are available with Feature Group C and Feature Group D.

Operator Transfer Services will be provided over FGC or FGD switched access service trunks from the operator service location to the customer's premises. Where required by technical limitations, a separate FGC or FGD trunk group will be established for Operator Transfer Service. The operator service location will provide trunk answer and disconnect supervisory signaling to the customer.

Detailed descriptions of each of the available Feature Groups are set forth in Section 6.5 through 6.6 following. Each Feature Group is described in terms of its specific physical characteristics and calling capabilities, the optional features available for use with it and the standard testing capabilities.

The Common Switching and Transport Termination optional features, which are described in Section 6.6.2 following, unless specifically stated otherwise, are available at all Telephone Company end office switches.

**ACCESS SERVICE**6. Switched Access Service (Cont'd)6.1 General (Cont'd)6.1.1 Description and Provision of Switched Access Service Arrangements (Cont'd)(B) Manner of Provision

Switched Access is furnished in either quantities of lines or trunks, or in busy hour minutes of capacity (BHMCs) if applicable. FGC Access and FGD Access are furnished on a BHMC basis and on a per trunk basis as set forth in Section 5.2.

BHMCs are differentiated by type and directionality of traffic carried over a Switched Access Service arrangement. Differentiation of traffic among BHMC types is necessary for the Telephone Company to properly design Switched Access Service to meet the traffic carrying capacity requirement of the customer.

There are three major BHMC categories identified as: Originating, Terminating and Directory Assistance. Originating BHMCs represent access capacity within a LATA for carrying traffic from the end user to the customer; Terminating BHMCs represent access capacity within a LATA for carrying traffic from the customer to the end user; and, Directory Assistance BHMCs represent access capacity within a LATA for carrying Directory Assistance traffic from the customer to a Directory Assistance location. When ordering capacity for FGC Access or FGD Access in BHMCs, the customer must at a minimum specify such access capacity in terms of Originating BHMCs and/or Terminating BHMCs.

**ACCESS SERVICE**6. Switched Access Service (Cont'd)6.1 General (Cont'd)6.1.1 Description and Provision of Switched Access Service Arrangements (Cont'd)(B) Manner of Provision (Cont'd)

Because some customers will wish to further segregate their originating traffic into separate trunk groups, or because segregation may be required by network considerations originating BHMCs are further categorized into Domestic, 700, 800, 900, Operator, IDDD and Operator Transfer Services. Domestic BHMCs represent access capacity for carrying only domestic traffic other than 700, 800, 900, Operator and Operator Transfer Services traffic; IDDD BHMCs represent access capacity for carrying only international traffic; and, 700, 800, 900, Operator and Operator Transfer Services BHMCs represent access capacity for carrying, respectively, only 700, 800, 900, Operator or Operator Transfer Services traffic. When ordering such types of access capacity, the customer must specify Domestic, 700, 800, 900, Operator, IDDD or Operator Transfer Services BHMCs.

(C) Rules and Regulations

This tariff material anticipates Local Transport Restructuring, which has not occurred in North Dakota. The rate components Tandem Switched Facilities and Tandem Switched Termination rate elements will readily substitute for existing Local Transport Facility and Local Transport Termination and should be read thus.

(D) Intrastate-InterLATA and Intrastate-IntraLATA Rate Distinctions

IntraLATA and InterLATA state access rate listing in this tariff comply with the individual issuing carriers state access rates in effect in 2011. An issuing carrier may have several different intrastate InterLATA and intrastate IntraLATA rates for difference exchanges based on the acquisition of exchanges from other telephone companies. The basis of the 2011 rates range from Commission orders such as the Order issued in the Northwestern Bell Case, Case No. 10,4444 (1984) that was effective January 1, 1984, and conditions of purchase with stipulated and agreed upon rates

The U.S. West Communications, Inc. tariff in place at the time was the tariff filed by Northwestern Bell Telephone Company in Case No.'s 10,694 and 10, 699 (1986 Tariff).

## **ACCESS SERVICE**

### 6. Switched Access Service (Cont'd)

#### 6.1 General (Cont'd)

##### 6.1.2 Ordering Options and Conditions

Switched Access Service is ordered under the Access Order provisions set forth in Section 5.2 preceding. Also, included in that section are regulations concerning miscellaneous service order charges which may be associated with Switched Access Service ordering (e.g., Service Date Changes, Cancellations, etc.).

**ACCESS SERVICE**

6. Switched Access Service (Cont'd)

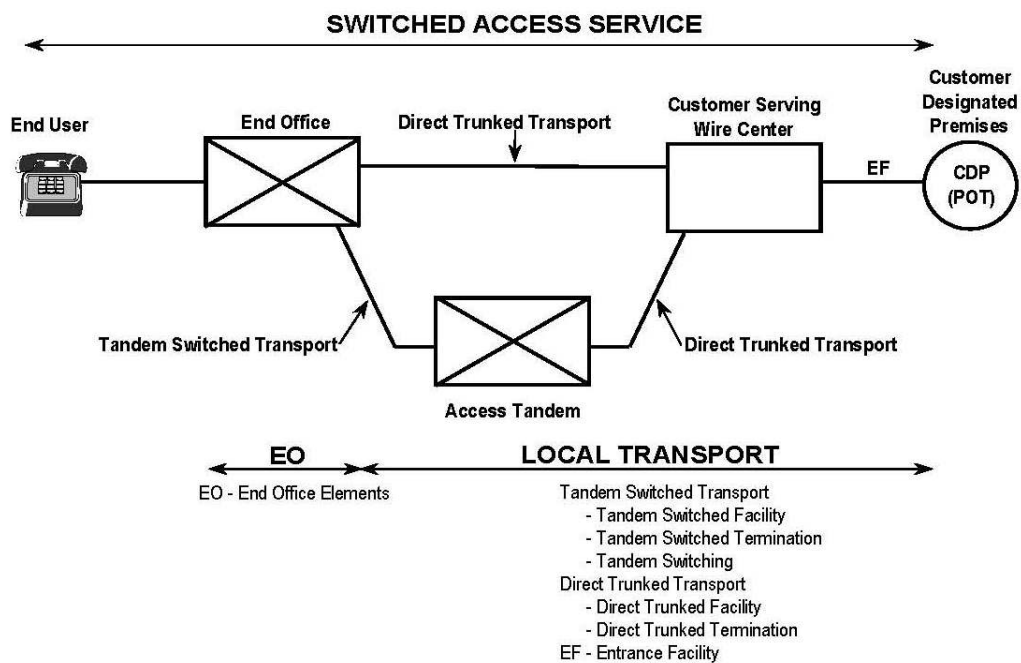
6.1 General (Cont'd)

6.1.3 Rate Categories

(A) There are four rate categories which apply to Switched Access Service:

- Local Transport (described in Section 6.1.3(A) following)
- End Office (described in Section 6.1.3(C) following)
- Chargeable Optional Features (described in Section 6.1.3(D) following)
- Common Line (described in Section 3 preceding)

The following diagram depicts a generic view of the components of Switched Access Service and the manner in which the components are combined to provide a complete Access Service.



**ACCESS SERVICE**

6. Switched Access Service (Cont'd)

6.1 General (Cont'd)

6.1.3 Rate Categories (Cont'd)

- (B) Those companies that have NOT undergone Local Transport charges will apply the following rates:

Local Transport Facility

Per Access Minute per Mile

Local Transport Termination

Per Access Minute

Line Termination

- Premium per Access Minute

Intercept

- Premium Per 100 Access Minutes

Directory Access Installation Charge

Directory Transport per call

This charge applies in lieu of premium local transport charges

**ACCESS SERVICE**6. Switched Access Service (Cont'd)6.1 General (Cont'd)6.1.3 Rate Categories (Cont'd)(A) Local Transport - LTRLocal Transport – Local Transport Restructure (“LTR”) Method

Issuing carriers for this tariff offer intrastate Switched Access Local Transport under one of two methodologies. The first methodology is based on Local Transport Restructure (“LTR”). The second methodology is based on Non-Local Transport Restructure (“Non-LTR”). The following regulations are for Local Transport provided by issuing carriers on an LTR basis. Issuing carriers offering Local Transport on an LTR basis under this section are indicated in the table at Section 17.4. The regulations for Local Transport offered by issuing carriers on a Non-LTR basis are at Section 6. Customers may not order Local Transport from an issuing carrier for this tariff on an LTR basis under this section unless there is indication in the issuing carriers’ rate design Rate Table that follows the Tariff References Section of the Table of Contents, indicating that the issuing carrier provides Local Transport under the LTR method.

The Local Transport rate category establishes the charges related to the transmission and tandem switching facilities between the customer designated premises and the end office switch(es), which may be a Remote Switching Module(s), where the customer's traffic is switched to originate or terminate the customer's communications. Mileage measurement rules are set forth in Section 6.4.5 following and in this section.

Local Transport is a two-way voice frequency transmission path composed of facilities determined by the Telephone Company. The two-way voice frequency transmission path permits the transport of calls in the originating direction (from the end user end office switch to the customer designated premises) and in the terminating direction (from the customer designated premises to the end office switch), but not simultaneously. The voice frequency transmission path may be comprised of any form or configuration of plant capable of and typically used in the telecommunications industry for the transmission of voice and associated telephone signals within the frequency bandwidth of approximately 300 to 3000 Hz. The customer must specify the choice of facilities (i.e., Voice Grade 2 or 4 wire or High Capacity DS1 or DS3) to be used in the provision of the Direct Trunked Transport or Entrance Facility.

**ACCESS SERVICE**6. Switched Access Service (Cont'd)6.1 General (Cont'd)6.1.3 Rate Categories (Cont'd)(A) Local Transport-LTR (Cont'd)

The customer must specify when ordering (1) whether the service is to be directly routed to an end office switch or through an access tandem switch, and (2) the type of Direct Trunked Transport and whether it will overflow to Tandem Switched Transport when service is directly routed to an end office, (3) the type of Entrance Facility, (4) the directionality of the service, and (5) when multiplexing is required, the hub(s) at which the multiplexing will be provided.

When service is to be routed through an access tandem switch, the facility between the serving wire center and the tandem will be provided as Tandem Switched Transport or Direct Trunked Transport..

When the customer has both Tandem Switched Transport and Direct Trunked Transport at the same end office that is not collocated with a tandem, the customer will be provided Alternate Traffic Routing as set forth in Section 6.4.5 following.

Direct Trunked Transport is available at all tandems and at all end offices except those end offices identified in NATIONAL EXCHANGE CARRIER ASSOCIATION, INC. TARIFF F.C.C. NO. 4, as not having the capability to provide Direct Trunked Transport. Direct Trunked Transport is not available: (1) from end offices that provide equal access through a centralized equal access arrangement, (2) from end offices that lack recording or measurement capability.

Normally, Direct Trunked Transport of originating 800 series type calls from an end office is available only from Service Switching Point (SSP) equipped end offices. However, certain non-SSP equipped end offices can accommodate direct trunking of originating 800 series type calls. These end offices are also identified in NATIONAL EXCHANGE CARRIER ASSOCIATION, INC., TARIFF F.C.C. No. 4.

Unless otherwise ordered by the F.C.C., where the Telephone Company elects to provide equal access through a centralized equal access arrangement, the Telephone Company will designate the serving wire center. The designated SWC will normally be that wire center which provides dial tone to the telephone company centralized Equal Access tandem office identified in NATIONAL EXCHANGE CARRIER ASSOCIATION, INC. TARIFF F.C.C. NO. 4.

**ACCESS SERVICE**6. Switched Access Service (Cont'd)6.1 General (Cont'd)6.1.3 Rate Categories (Cont'd)(A) Local Transport-LTR (Cont'd)

Local Transport is provided at the rates and charges set forth in Section 17 following. The application of these rates with respect to individual Feature Groups is as set forth in Section 6.4.1(C).

When more than one Telephone Company is involved in providing the Switched Access Service, the Local Transport rates are applied as set forth in Section 2.4.7 preceding.

The Local Transport Rate Category includes four classes of rate elements: (1) Entrance Facility, (2) Direct Trunked Transport, (3) Tandem Switched Transport, and (4) Multiplexing.

(1) Entrance Facility

The Entrance Facility recovers a portion of the costs associated with a communications path between a customer designated premises and the serving wire center of that premises. Included as part of the Entrance Facility 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 customer designated premises and the type of signaling capability, if any.

Three types of Entrance Facility are available: (1) Voice Grade 2 or 4 wire (an analog channel with an approximate bandwidth of 300 to 3000 Hz), (2) High Capacity DS1 (an isochronous serial digital channel with a rate of 1.544 Mbps) and (3) High Capacity DS3 (and isochronous serial digital channel with a rate of 44.736 Mbps). The minimum period for which a DS3 Entrance Facility is provided is twelve months.

**ACCESS SERVICE**6. Switched Access Service (Cont'd)6.1 General (Cont'd)6.1.3 Rate Categories (Cont'd)(A) Local Transport-LTR (Cont'd)(1) Entrance Facility (Cont'd)

One charge applies for each Entrance Facility that is terminated at a customer designated premises. This charge specified in Section 17 following will apply even if the customer designated premises and the serving wire center are collocated in a Telephone Company building.

A customer's Local Transport may be connected to the Entrance Facility of another customer, providing the other customer submits a letter of authorization for this connection and assumes full responsibility for the cost of the Entrance Facility.

(2) Direct Trunked Transport

The Direct Trunked Transport rate elements cover the costs of the communications path between the serving wire center associated with a customer designated premise and an end office or a serving wire center and a tandem or circuits dedicated to the use of a single customer.

Direct Trunked Transport is available to all tandems and to all end offices except those end offices identified in NATIONAL EXCHANGE CARRIER ASSOCIATION, INC. TARIFF F.C.C. NO. 4, WIRE CENTER INFORMATION as not having the capability to provide Direct Trunked Transport.

Normally, Direct Trunked Transport of originating 800 series type calls from an end office is available only from Service Switching Point (SSP) equipped end offices. However, certain non-SSP equipped end offices can accommodate direct trunking of originating 800 series type calls. These end offices are also identified in NATIONAL EXCHANGE CARRIER ASSOCIATION, INC., TARIFF F.C.C. No. 4.

**ACCESS SERVICE**6. Switched Access Service (Cont'd)6.1 General (Cont'd)6.1.3 Rate Categories (Cont'd)(A) Local Transport-LTR (Cont'd)(2) Direct Trunked Transport (Cont'd)

Three types of Direct Trunked Transport are available: (1) Voice Grade (an analog channel with an approximate bandwidth of 300 to 3000 Hz), (2) High Capacity DS1 (an isochronous serial digital channel with a rate of 1.544 Mbps), and (3) High Capacity DS3 (an isochronous serial digital channel with a rate of 44.736 Mbps). The minimum period for which a High Capacity DS3 Direct Trunked Transport is provided is twelve months.

High Capacity DS3 Direct Trunked Transport can not be terminated at end offices that are not identified as hub offices that provide DS3 to DS1 multiplexing. Additionally, DS1 Direct Trunked Transport can not be terminated at end offices that are not identified as hub offices that provide DS1 to Voice Grade multiplexing or are not electronic end offices. Offices that provide multiplexing are identified in NATIONAL EXCHANGE CARRIER ASSOCIATION, INC. TARIFF F.C.C. NO. 4, WIRE CENTER INFORMATION.

Direct Trunked Transport rates consist of a Direct Trunked Facility rate specified in Section 17 following which is applied on a per mile basis and a Direct Trunked Termination rate which is applied at each end of each measured segment of the Direct Trunked Facility (e.g., at the end office, hub, tandem, and serving wire center). When the Direct Trunked Facility mileage is zero, neither the Direct Trunked Facility rate nor the Direct Trunked Termination rate will apply.

**ACCESS SERVICE**6. Switched Access Service (Cont'd)6.1 General (Cont'd)6.1.3 Rate Categories (Cont'd)(A) Local Transport-LTR (Cont'd)(2) Direct Trunked Transport (Cont'd)

The Direct Trunked Facility rate covers the transmission facilities, including intermediate transmission circuit equipment, between the end points of the interoffice circuits.

The Direct Trunked Termination rate specified in Section 17 following covers the costs of the circuit equipment that is necessary for the termination of each end of the Direct Trunked Facility.

(3) Tandem Switched Transport

The Tandem Switched Transport rate elements recover tandem switching costs and a portion of the costs associated with the communications path between a tandem and an end office on circuits that are switched at a tandem switch, or between a host and a remote switch.

Tandem Switched Transport rates consist of a Tandem Switching rate, a Tandem Switched Facility rate, and a Tandem Switched Termination rate. The Tandem Switching rate is applicable at the Tandem, when a customer orders Direct Trunk Transport to the tandem and Tandem Switched Transport from the tandem to the end office.

In those instances where an SSP equipped end office is capable of handling 800 SAC Traffic on a direct trunked basis but incapable of handling 888 SAC traffic on a direct trunked basis, a full credit will be provided for Tandem Switched Transport Charges associated with FGC and FGD service for 888 SAC traffic delivered at the tandem.

This results in all 800 series traffic being rated as direct trunked transport regardless of whether the SSP equipped end office is capable of handling 888 SAC traffic on a direct trunked basis. Those SSP equipped end offices that cannot accommodate direct trunking of originating 888 SAC traffic are identified in NATIONAL EXCHANGE CARRIER ASSOCIATION, INC. TARIFF F.C.C. NO. 4, WIRE CENTER INFORMATION.

**ACCESS SERVICE**6. Switched Access Service (Cont'd)6.1 General (Cont'd)6.1.3 Rate Categories (Cont'd)(A) Local Transport-LTR (Cont'd)(3) Tandem Switched Transport (Cont'd)

- (a) The Tandem Switching rate recovers a portion of the costs of switching traffic through an access tandem. The Tandem Switching rate specified in Section 17 following is applied on a per access minute per tandem basis for all originating and all terminating minutes of use switched at the tandem. Tandem locations are identified in NATIONAL EXCHANGE CARRIER ASSOCIATION, INC. TARIFF F.C.C. No. 4, WIRE CENTER INFORMATION.
- (b) The Tandem Switched Facility rate recovers a portion of the costs of the transmission facilities, including intermediate transmission circuit equipment, between the end points of the interoffice circuits. The Tandem Switched Facility rate specified in Section 17 following is applied on a per access minute per mile basis for all originating and terminating minutes of use routed over the facility.
- (c) The Tandem Switched Termination rate recovers a portion of the costs of the circuit equipment that is necessary for the termination of each end of the Tandem Switched Facility. The Tandem Switched Termination rate specified in Section 17 following is applied on a per access minute basis (for all originating and terminating minutes of use routed over the facility) at each end of each measured segment of Tandem Switched Facility (e.g., at the end office, dial tone office, host office, tandem, and serving wire center associated with a customer designated premise). When the Tandem switched Facility mileage is zero, neither the Tandem Switched Facility rate nor the Tandem Switched Termination rate will apply.

**ACCESS SERVICE**6. Switched Access Service (Cont'd)6.1 General (Cont'd)6.1.3 Rate Categories (Cont'd)(A) Local Transport-LTR (Cont'd)(4) Multiplexing

DS3 to DS1 Multiplexing charges specified in Section 17 following apply when a High Capacity DS3 Entrance Facility or High Capacity DS3 Direct Trunked Facility is connected with High Capacity DS1 Direct Trunked Transport. The DS3 to DS1 multiplexer will convert a 44.736 Mbps channel to 28 DS1 channels using digital time division multiplexing. DS1 to Voice Grade Multiplexing charges apply when a High Capacity DS1 Entrance Facility or High Capacity DS1 Direct Trunked Facility is connected with Voice Grade Direct Trunked Transport. However, a DS1 to Voice Grade Multiplexing charge does not apply when a High Capacity DS1 Entrance Facility or High Capacity DS1 Direct Trunked Transport is terminated at an electronic end office and only Switched Access Service is provided over the DS1 facility (*i.e.*, Voice Grade Special Access channels are not derived). The DS1 to Voice Grade multiplexer will convert a 1.544 Mbps channel to 24 Voice Grade channels.

Multiplexing is only available at wire centers identified in NATIONAL EXCHANGE CARRIER ASSOCIATION, INC. TARIFF F.C.C NO. 4, WIRE CENTER INFORMATION.

(5) Interface Groups

Ten Interface Groups are provided for terminating the Entrance Facility at the customer's designated premises. Technical specifications concerning the available interface groups are set forth in Section 15.1 following.

**ACCESS SERVICE**

6. Switched Access Service (Cont'd)

6.1 General (Cont'd)

6.1.3 Rate Categories (Cont'd)

(A) Local Transport-LTR (Cont'd)

(6) Nonchargeable Optional Features

Where transmission facilities permit, the individual transmission path between the customer's designated premises and the first point of switching, may at the option of the customer, be provided with the following optional features as set forth and described in Section 15.1.1(E) following.

- Supervisory Signaling
- Customer Specified Entry Switch Receive Level
- Customer Specification of Local Transport Termination

When a customer subscribes to Common Channel Signaling Network Connection Service (CCSNC Service), the following optional features are made available and are described in Section 6.4.1 following.

- Signaling System 7 (SS7) Signaling
- Calling Party Number
- Carrier Selection Parameter
- Charge Number Parameter

**ACCESS SERVICE**6. Switched Access Service (Cont'd)6.1 General (Cont'd)6.1.3 Rate Categories (Cont'd)(A) Local Transport-LTR (Cont'd)(7) Chargeable Optional Features

Common Channel Signaling, Signaling System 7 (CCS/SS7) Network Connection (CCSNC) Service provides a signaling path between a customer's designated Signaling Point of Interface (SPOI) and a Telephone Company's Signaling Transfer Point (STP).

800 Series Data Base Access Service is provided to all customers in conjunction with FGC and FGD switched access service. A Basic or Vertical Feature Query charge, as set forth in Section 17 following, is assessed for each query launched to the 800 series data base. The Basic Query provides the identification of the customer to whom the call will be delivered and includes area of service routing which allows routing of 800 series type calls by telephone companies to different interexchange carriers based on the Local Access Transport Area (LATA) in which the call originates. The Vertical Feature Query provides this same customer identification function in addition to vertical features which may include: (1) call validation (ensuring that calls originate from subscribed service areas); (2) POTS translation of 800 series numbers (which is generally necessary for the routing of 800 series type calls); (3) alternate POTS translation (which allows subscribers to vary the routing of 800 series type calls based on factors such as time of day, place of origination of the call, etc.); and (4) multiple carrier routing (which allows subscribers to route to different carriers based on factors similar to those in (3) above).

(8) End Office

The End Office rate category establishes the charges related to the local end office switching and end user termination functions necessary to complete the transmission of Switched Access communications to and from the end users served by the local end office. The End Office rate category includes the Local Switching and Information Surcharge rate elements.

**ACCESS SERVICE**6. Switched Access Service (Cont'd)6.1 General (Cont'd)6.1.3 Rate Categories (Cont'd)(B) Local Transport -Non-LTRLocal Transport – Non-Local Transport Restructure (“Non-LTR”)  
Method

Issuing carriers for this tariff offer intrastate Switched Access Local Transport under one of two methodologies. The first methodology is based on Local Transport Restructure (“LTR”). The second methodology is Non-Local Transport Restructure (“Non-LTR”). The following regulations are for Local Transport provided by issuing carriers on a Non-LTR basis. Issuing carriers offering Local Transport on a Non-LTR basis under this section have so indicated on the issuing carriers’ rate design Rate Table that follows the Tariff References Section of the Table of Contents. The regulations for Local Transport offered by issuing carriers on a Non-LTR basis are at Section 6. Customers may not order Local Transport from an issuing carrier for originating or terminating traffic from this tariff on a Non-LTR basis under this section unless there is an indication on the issuing carriers’ rate design Rate Table that follows the Tariff References Section of the Table of Contents, denoting that Local Transport is being offered on a Non-LTR basis by that issuing carrier.

The Local Transport rate category establishes the charges related to the transmission and tandem switching facilities between the customer designated premises and the end office switch(es) where the customer’s traffic is switched to originate or terminate the customer’s communications. For purposes of determining Local Transport Facility measurement, distance will be measured from the wire center that normally serves the customer designated premises to the end office switch(es), which may be a Remote Switching Module(s). Exceptions to the Local Transport Facility measurement rules are set forth in Section 6.4 following and in this section.

Local Transport is a two-way voice frequency transmission path composed of facilities determined by the Telephone Company. The two-way voice frequency transmission path permits the transport of calls in the originating direction (from the end user end office switch to the customer designated premises) and in the terminating direction (from the customer designated premises to the end office switch), but not simultaneously. The voice frequency transmission of voice and associated telephone signals within the frequency bandwidth of approximately 300 to 3000 Hz.

**ACCESS SERVICE**6. Switched Access Service (Cont'd)6.1 General (Cont'd)6.1.3 Rate Categories (Cont'd)(B) Local Transport -Non-LTR (Cont'd)

The Telephone Company will work cooperatively with the customer in determining (1) whether the service is to be directly routed to an end office switch or through an access tandem switch, and (2) the directionality of the service. The Telephone Company elects to provide equal access arrangements, the Telephone Company will designate the serving wire center. The designated SWC will normally be that wire center which provides dial tone to the telephone company centralized Equal Access tandem office identified in NATIONAL EXCHANGE CARRIER ASSOCIATION, INC. TARIFF F.C.C. NO. 4. When service is provided in cooperation with a non telephone company provider of centralized Equal Access, the SWC will be that wire center which would normally provide dial tone to the telephone company point of interconnection. Those Telephone Company offices providing equal access through centralized arrangements are identified in NATIONAL EXCHANGE CARRIER ASSOCIATION, INC. TARIFF F.C.C. NO. 4.

Local Transport rates are made-up of a Local Transport Termination rate which is assessed on a per transmission path per access minute basis, and a Local Transport Facility rate assessed on a per mile per access minute basis. The Local Transport Termination rate provides for the communications frequency transmission path at the Telephone Company office and includes the Local Transport portion of Central Office Switching and Central Office Circuit equipment (e.g., signaling, transmission devices, padding, carrier channels, etc.).

The Local Transport Termination rate is applied as follows:

- for FGC and FGD, when the Local Transport Facility is measured between the end office and the Customer Designated Premise, the Local Transport Termination Rate is applied at the end office.

- for FGD when the Local Transport Facility is measured between the access tandem and the serving wire center associated with the customer designated premise, as set forth in 6.4.6(H) following, the Local Transport Termination Rate is applied at the access tandem office.

**ACCESS SERVICE**6. Switched Access Service (Cont'd)6.1 General (Cont'd)6.1.3 Rate Categories (Cont'd)(B) Local Transport -Non-LTR (Cont'd)

The Local Transport Termination rate will also apply if the IC serving wire center and the end user serving wire center are collocated. The Local Transport Termination rate will apply once to each Switched Access Service. The Local Transport Facility rate provides for the frequency transmission path and for that portion of Local Transport which extends beyond the Telephone Company end office and includes both the physical (or derived) outside plant facilities and necessary transmission equipment (repeaters, etc.) including that which may be found at intermediate offices. The Local Transport Facility rate will not apply if the customer designated premise and the end user serving wire center are collocated.

Notwithstanding the preceding paragraph, when more than one Telephone Company is involved in providing the Switched Access Service, the Local Transport rates are applied as set forth in 2.4.7 preceding.

Local Transport is provided at the rates and charges set forth in Section 17 following. The application of these rates with respect to individual Groups is as set forth in 6.4.1(C) following.

(1) Interface Groups

Ten Interface Groups are provided for terminating the Local Transport at the customer designated premises. Technical specifications concerning the available interface groups are set forth in 15.1 following.

(2) Nonchargeable Optional Features

Where transmission facilities permit, the individual transmission path between the customer's designated premises and the first point of switching may at the option of the customer be provided with the following optional features as set forth and described in 15.1.1(E) following.

- Supervisory Signaling
- Customer Specified Entry Switch Receive Level
- Customer Specification of Local Transport Termination

**ACCESS SERVICE**6. Switched Access Service (Cont'd)6.1 General (Cont'd)6.1.3 Rate Categories (Cont'd)(C) End Office(1) Local Switching

The Local Switching rate element establishes the charges related to the use of end office switching equipment, the terminations in the end office of end user lines, the terminations of calls at Telephone Company Intercept Operators or recordings, the STP costs, and the SS7 signaling function between the end office and the Signaling Transfer Point.

Local Switching does not apply to Feature Group D Switched Access Services associated with Wireless Switching Centers (WSCs) directly interconnected to a Telephone Company access tandem office.

Where end offices are appropriately equipped, international dialing may be provided as a capability associated with Local Switching which provides local dial switching for Feature Groups C and D. International dialing provides the capability of switching international calls with service prefix and address codes having more digits than are capable of being switched through a standard FGC or FGD equipped end office.

Rates for Local Switching are set forth in Section 17 following. The application of these rates with respect to individual Feature Groups is as set forth in Section 6.4.1(C).

There are four types of functions included in the Local Switching rate element: Common Switching, Transport Termination, Line Termination and Intercept. These are described in (a) through (d) following.

**ACCESS SERVICE**6. Switched Access Service (Cont'd)6.1 General (Cont'd)6.1.3 Rate Categories (Cont'd)(C) End Office (Cont'd)(1) Local Switching (Cont'd)(a) Common Switching

Common Switching provides the local end office switching functions associated with the various access (i.e., Feature Group) switching arrangements. The Common Switching arrangements provided for the various Feature Group arrangements are described in Section 6.5 through 6.6 following.

Included as part of Common Switching are various nonchargeable optional features which the customer can order to meet the customer's specific communications requirements. These optional features are described in Section 6.6.2 following.

(b) Line Termination

The Line Termination rate element provides the terminations for the End User lines terminating in the local and office. There are two types of Line Terminations, i.e., Common Line Terminations and Dedicated Access Line Service Terminations. The Dedicated Access Line Service Terminations are differentiated by line vs. trunk side terminations

**ACCESS SERVICE**6. Switched Access Service (Cont'd)6.1 General (Cont'd)6.1.3 Rate Categories (Cont'd)(C) End Office (Cont'd)(1) Local Switching (Cont'd)(b) Line Termination (Cont'd)

In addition, there are various types of originating and terminating line side terminations depending on the type of signaling associated with the Dedicated Access Lines Service. Line side terminations are available with either dial pulse or dual tone multifrequency address signaling

Line Termination rates are applied on an access minutes basis, with no difference in rates for the various types of terminations.

(d) Intercept

The Intercept function provides for the termination of a call at a Telephone Company Intercept operator or recording. The operator or recording tells a caller why a call, as dialed, could not be completed, and if possible, provides the correct number.

(2) Information Surcharge

Information Surcharge rates are assessed to a customer based on the total number of access minutes. Information Surcharge rates are as set forth in Section 17 following. The application of these rates with respect to individual Feature Groups is as set forth in Section 6.4.1(C) following.

The Information Surcharge does not apply to Feature Group D Switched Access Services associated with Wireless Switching Centers (WSCs) directly interconnected to a Telephone Company access tandem office.

**ACCESS SERVICE**6. Switched Access Service (Cont'd)6.1 General (Cont'd)6.1.3 Rate Categories (Cont'd)(D) Chargeable Optional Features

Where facilities permit, the Telephone Company will, at the option of the customer, provide the following chargeable optional features.

(1) Interim NXX Translation

The Interim NXX Translation rate element provides for customer identification of non-data base services when calls are directed by end users in the 1+SAC+NXX-XXXX (e.g., 1+900+NXX-XXXX) format. The NXX codes are assigned to specific customers in conformance with the North American Numbering Plan (NANP). NXX code assignment(s) will be made by the Bellcore NANP Coordinator. The Telephone Company will use the NXX code to identify the customer to whose point of termination the traffic is to be delivered, (i.e., at appropriately equipped electronic end offices, access tandems or through contracted arrangements with other parties.) It is then the responsibility of the customer to do any further translation the customer deems necessary to route the call. Customer assigned NXX codes which have not been ordered will be blocked.

A nonrecurring charge, as set forth in Section 17 following, is associated with this optional feature. This nonrecurring charge is assessed by the Telephone Company on a per order, per LATA or Market Area basis and is applied in lieu of the Access Order Charge specified in Section 17 following. The nonrecurring charge is assessed only by the Telephone Company that provides the final translation function. A Telephone Company is said to have provided the final Interim NXX Translation when its translation identifies the customer's traffic and this traffic is then delivered to the customer's point of termination without any further translation. The description and application of this charge with respect to Feature Group C and Feature Group D is as set forth in Section 6.4.1(B)(2) and 6.4.1(C) following.

**ACCESS SERVICE**

6. Switched Access Service (Cont'd)

6.1 General (Cont'd)

6.1.3 Rate Categories (Cont'd)

(D) Chargeable Optional Features (Cont'd)

(2) Operator Transfer Services

Operator Transfer Service may be provided with Feature Group C or Feature Group D Switched Access Service at Telephone Company designated Operator Services location. Operator Transfer Service is an originating service. The rate is assessed per 0- call transferred to a customer's operator. An 0- call is considered transferred when the Telephone Company Operator activates the switch transferring the call to the designated customer and the customer acknowledges receipt.

In addition to the Operator Transfer Service charge described above, Feature Group C or Feature Group D Switched Access rates and charges as set forth in Section 6.1.3(D) following and Carrier Common Line Charges set forth in Section 3 preceding will apply per minute of use for Operator Transfer Service.

Operator Transfer Service charges, provided for in this tariff, are applied only to those calls actually transferred by the Telephone Company to the customer's operator.

**ACCESS SERVICE**6. Switched Access Service (Cont'd)6.1 General (Cont'd)6.1.3 Rate Categories (Cont'd)(D) Chargeable Optional Features (Cont'd)(3) 800 Series Data Base Access Service

800 Series Data Base Access Service is provided to all customers in conjunction with FGC and FGD switched access service. When a 1+800+NXX-XXXX call is originated by an end user, the Telephone Company will utilize the Signaling System 7 (SS7) network to query an 800 series data base to identify the customer to whom the call will be delivered and provide vertical features based on the dialed ten digits. The call will then be routed to the identified customer over FGC or FGD switched access.

A Basic or Vertical Feature Query charge, as set forth in Section 17 following, is assessed for each query launched to the data base which identifies the customer to whom the call will be delivered. The Basic Query provides the identification of the customer to whom the call will be delivered and includes area of service routing which allows routing of 800 series type calls by telephone companies to different inter-exchange carriers based on the Local Access Transport Area (LATA) in which the call originates. The Vertical Feature Query provides the same customer identification as the basic query and vertical features which may include: (1) call validation, (ensuring that calls originate from subscribed service areas); (2) POTS translation of 800 series numbers; (3) alternate POTS translation (which allows subscribers to vary the routing of 800 series type calls based on factors such as time of day, place or origination of the call, etc.); and (4) multiple carrier routing (which allows subscribers to route to different carriers based on factors similar to those in (3).

The description and application of this charge with respect to Feature Group C or Feature Group D is as set forth in Section 6.4.1(C) following.

**ACCESS SERVICE**6. Switched Access Service (Cont'd)6.1 General (Cont'd)6.1.3 Rate Categories (Cont'd)(E) Special Rate Elements(1) Transitional Rate

The FCC Order allows Issuing Carriers to implement a transitional per minute of use rate element to implement the transition from intrastate access rates to rates equal to interstate access rates and structure. The transitional rate per minute of use rates is not greater than the difference of the 50% of the difference of calculation of the revenue of the fiscal year end 9-30-2011 demand for intrastate terminating access calculated at intrastate access rates in effect as of 12-29-2011 and the revenue using the same demand calculated at interstate rates divided by the number of end office minutes. For companies that have a transitional rate this rate will be in effect from July 1, 2012 through June 30, 2013.

(2) Intrastate Carriers Access Charge Rate

The Intrastate Carrier Access Charge Rate is a rate effecting an adjustment resulting from the North Dakota Access Charge Order dated October 8, 1985, in which average schedule telephone companies were directed to use the 1984 IntraLATA settlements as a surrogate for their Intrastate IntraLATA toll revenue requirements. This rate still applies to certain issuing carriers as reflected in their rates in Section 17.

**ACCESS SERVICE**6. Switched Access Service (Cont'd)6.1 General (Cont'd)6.1.3 Rate Categories (Cont'd)(E) Special Rate Elements (Cont'd)(3) Transport Facility-Non-Mileage Sensitive

Local Transport is provided at the rates and charges as set forth in Section 17 following. Rates are applied on access minutes basics. When Feature Groups E terminate in Telephone Company end offices that are not equipped for measurement capabilities, a Telephone Company assumed average number of access minutes will be billed to the IC in lieu of actual usage. These rates will be billed in terms of the total number of access minutes (i.e., originating and terminating).

The number of Local Transport transmission paths provided is based on the IC's order and is determined by the Telephone Company as set forth in Section 6.5.5 following.

(1) Chargeable Optional Features(a) Provision of Other Than Telephone Company Selected Traffic Routing

This option allows that IC to specify a particular traffic routing for trunk groups in lieu of Telephone Company selected routing, i.e., the IC may specify that the routing be on a direct trunk basis or via an access tandem. It is available with Feature Group C and D.

(b) IC Specification of Feature Group Directionality

This option allows the IC to specify that the operation of a trunk group will be one-way originating or terminating calling in lieu of Telephone Company selected two-way calling or, that operation will be two-way calling in lieu of Telephone Company selected one-way calling. It is available with Feature Groups C, D and E.

**ACCESS SERVICE**6. Switched Access Service (Cont'd)6.1 General (Cont'd)6.1.4 Special Facilities Routing

Any customer may request that the facilities used to provide Switched Access Service be specially routed.

6.1.5 Design Layout Report

At the request of the customer, the Telephone Company will provide to the customer the makeup of the facilities and services provided from the customer's premises to the first point of switching. This information will be provided in the form of a Design Layout Report. The Design Layout Report will be provided to the customer at no charge, and will be reissued or updated whenever these facilities are materially changed.

6.1.6 VoIP-PSTN TrafficIdentification and Rating of VoIP-PSTN Traffic

This section governs the identification of Toll VoIP-PSTN Traffic which the FCC in its Report and Order in WC Dockets Nos. 10-90, etc., F.C.C. Release No. 11-161 (November 18, 2011) (F.C.C. Order) has allowed in its to be tariffed in both federal and state access tariffs unless the parties have a negotiated agreement.<sup>1</sup> The Telephone Company recognizes that according to the FCC Order all VoIP-PSTN traffic is governed by section 251(b)(5) Framework including Toll PSTN VoIP Traffic which is included in this tariff.

For the purposes of this Tariff Toll VoIP-PSTN Traffic is defined as interexchange traffic exchanged between a Telephone Company end user and the customer in Time Division Multiplexing (TDM) format that originates and/or terminates in Internet Protocol (IP) format. Toll VoIP-PSTN traffic originated and/or terminates in IP format when it originates from and/or terminates to an end user customer of a service that requires IP-compatible customer premises equipment.

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<sup>1</sup> Although the Company has taken the position that this tariff, by its own terms, already applies to VoIP-PSTN traffic, as defined herein, the Company has included this Section in the tariff out of an abundance of caution to prevent any claim that it does not so apply, and to implement the decision by the Federal Communications Commission in its Report and Order in WC Docket Nos. 10-90, etc., FCC Release No. 11-161 (Nov. 18, 2011) ("FCC Order") that VoIP-PSTN access traffic should be exchanged at interstate access rates (unless the parties have agreed otherwise). By its terms, the FCC Order is prospective only, and does not address preexisting law with regard to the applicability of intercarrier compensation or the enhanced service providers ("ESP") exemption to VoIP-PSTN Traffic.

**ACCESS SERVICE**6. Switched Access Service (Cont'd)6.1 General (Cont'd)6.1.6 VoIP-PSTN Traffic (Cont'd)

The customer shall deliver all Toll VoIP-PSTN traffic on its facilities that deliver other voice access traffic. Toll VoIP-PSTN traffic shall not be delivered on local trunk groups.

Specifically, this section establishes the method of separating Toll VoIP-PSTN Traffic from the customer's traditional intrastate access traffic, so that Toll VoIP-PSTN Traffic can be billed in accordance with the F.C.C. Order.

Toll VoIP-PSTN Traffic identified in accordance with this tariff section will be billed at rates equal to the Telephone Company's applicable tariffed interstate switched access rates as set forth in the National Exchange Carrier Association, Inc. Tariff F.C.C. No. 5 on February 1, 2012. If the F.C.C. Order is stayed or overturned, Toll VoIP-PSTN Traffic that is jurisdictionally intrastate will be billed at rates under this tariff. The addition of this Section 2.1 is to comply with the F.C.C. Order.

**Calculation and Application of Percent-VoIP- Usage Factors**

- A. The Telephone Company will determine the number of intrastate Toll VoIP-PSTN Traffic minutes of use (MOU) to which interstate rates will be applied under B, preceding, by applying an originating Percent Toll VoIP-PSTN Usage (PVU) factor to the total intrastate access MOU originated by a Telephone Company end user and delivered to the customer and by applying a terminating PVU factor to the total intrastate access MOU terminated by a customer to the Telephone Company's end user.
- B. The customer will calculate and furnish to the Telephone Company an originating PVU factor representing the whole number percentage of the customer's total originating intrastate access MOU that the customer exchanges with the Telephone Company in the state that is received from the Telephone Company and that is terminated in IP format and that would be billed by the Telephone Company as intrastate access MOU at rates equal to interstate rates.

**ACCESS SERVICE**

6. Switched Access Service (Cont'd)

6.1 General (Cont'd)

6.1.6 VoIP-PSTN Traffic (Cont'd)

- C. The customer will calculate and furnish to the Telephone Company a terminating PVU factor representing the whole number percentage of the customer's total terminating intrastate access MOU that the customer exchanges with the Telephone Company in the state that is sent to Telephone Company and which originated in IP format and that would be billed by the Telephone Company as intrastate access MOU at rates equal to interstate.
- D. The customer shall not modify their reported PIU factor to account for Toll VoIP-PSTN Traffic.
- E. Both the customer provided originating PVU and the terminating PVU shall be based on information such as the number of the customer's retail Toll VoIP subscriptions in the state (e.g. as reported on F.C.C. Form 477), traffic studies, actual call detail or other relevant and verifiable information which will be provided to the Telephone Company upon request.
- F. The customer shall retain the call detail, work papers, and information used to develop the PVU factors for a minimum of one year.
- G. If the Customer does not furnish the Telephone Company with a PVU factor according to this section, the Telephone Company will utilize a PVU equal to zero. At the time of this tariff filing, Telephone Company has a PVU of zero.

**ACCESS SERVICE**6. Switched Access Service (Cont'd)6.1 General (Cont'd)6.1.7 PVU Factor

The customer may update the PVU factors quarterly using the method set forth in 1.c, preceding. If the customer chooses to submit such updates, it shall forward to the Telephone Company, no later than 15 days after the first day of January, April, July and/or October of each year, revised PVU factors based on data for the prior three months, ending the last day of December, March, June and September, respectively. The revised PVU factors will serve as the basis for future billing and will be effective on the bill date of each such month and shall serve as the basis for subsequent monthly billing until superseded by new PVU factors. No prorating or back billing will be done based on the updated PVU factors.

6.1.8 PVU Factor Verification

- A. Not more than twice in any year, the Telephone Company may request from the customer an overview of the process used to determine the PVU factors, the call detail records, description of the method for determining how the end user originates and terminated call in IP format, and other information used to determine the customer's PVU factors furnished to the Telephone Company in order to validate the PVU factors supplied. The customer shall comply, and shall reasonably supply the requested data and information within 15 days of the Telephone Company's request.
- B. The Telephone Company may dispute the Customer's PVU factor based upon:
- A review of the requested data and information provided by the customer,
  - The Telephone Company's reasonable review of other market information, F.C.C. reports on VoIP lines, such as F.C.C. Form 477 or state level results based on the F.C.C. Local Competition Report or other relevant data.
  - A change in the reported PVU factor by more than five percentage points from the preceding quarter.

**ACCESS SERVICE**6. Switched Access Service (Cont'd)6.1 General (Cont'd)6.1.9 PVU Factor Verification (Cont'd)

- C. If after review of the data and information, the customer and the Telephone Company established revised PVU factors, the Telephone Company will begin using those revised PVU factors with the next bill period.
- D. If the dispute is unresolved, the Telephone Company may initiate an audit. The Telephone Company shall limit audits of the customer's PVU factor to no more than twice per year. The customer may request that the audit be conducted by an independent auditor. In such cases the associated auditing expenses will be paid by the customer.
- In the event that the customer fails to provide adequate records to enable the Telephone Company or an independent auditor to conduct an audit verifying the customer's PVU factors, the Telephone Company will bill the usage for all contested periods using the most recent undisputed accepted PVU factors reported by the customer. These PVU factors will remain in effect until the audit can be completed.
  - During the audit, the most recent undisputed PVU factors from the previous reporting period will be used by the Telephone Company.
  - The Telephone Company will adjust the customer's PVU factors based on the results of the audit and implement the revised PVU in the next billing period or quarterly report date, whichever is first. The revised PVU factors will apply for the next two quarters before new factors can be submitted by the customer.
  - If the audit supports the customer's PVU factors, the usage for the contested periods will be adjusted to reflect the customer's audited PVU factors.

**ACCESS SERVICE**6. Switched Access Service (Cont'd)6.1 General (Cont'd)6.1.9 PVU Factor Verification (Cont'd)

- E. The customer will calculate and furnish to the Telephone Company an originating PVU factor representing the whole number percentage of the customer's total originating intrastate access MOU that the customer exchanges with the Telephone Company in the state that is sent to Telephone Company and which terminated in IP format and that would be billed by the Telephone Company as intrastate access MOU charged at rates equal to interstate rates.
- F. The customer will calculate and furnish to the Telephone Company a terminating PVU factor representing the whole number percentage of the customer's total terminating intrastate access MOU that the customer exchanges with the Telephone Company in the state that is sent to Telephone Company and which originated in IP format and that would be billed by the Telephone Company as intrastate access MOU charged at rates equal to interstate rates.

6.1.10 Rate Regulation-VoIP-PSTN Traffic

Toll VoIP-PSTN Traffic identified in accordance with this tariff will be billed at rates equal to the Telephone Company's applicable tariffed interstate switched access rates as specified in NECA's Tariff #5 Section 17.2 and 17.5.1 as of February 1, 2012, which is on file with the North Dakota Public Service Commission.

**ACCESS SERVICE**6. Switched Access Service (Cont'd)6.2 Undertaking of the Telephone Company

In addition to the obligations of the Telephone Company set forth in Section 2 preceding, the Telephone Company has certain other obligations concerning only the provision of Switched Access Service. These obligations are as follows:

6.2.1 Network Management

The Telephone Company will administer its network to insure the provision of acceptable service levels to all telecommunications users of the Telephone Company's network services. Generally, service levels are considered acceptable only when both end users and customers are able to establish connections with little or no delay encountered within the Telephone Company network. The Telephone Company maintains the right to apply protective controls, i.e., those actions, such as call gapping, which selectively cancel the completion of traffic, over any traffic carried over its network, including that associated with a customer's Switched Access Service. Generally, such protective measures would only be taken as a result of occurrences such as failure or overload of Telephone Company or customer facilities, natural disasters, mass calling or national security demands. In the event that the protective controls applied by the Telephone Company result in the complete loss of service by the customer, the customer will be granted a Credit Allowance for Service Interruption as set forth in Section 2.4.4(B)(3) preceding.

**ACCESS SERVICE**6. Switched Access Service (Cont'd)6.2 Undertaking of the Telephone Company (Cont'd)6.2.2 Transmission Specifications

Each Switched Access Service transmission path is provided with standard transmission specifications. There are three different standard specifications (Types A, B and C). The standard for a particular transmission path is dependent on the Feature Group, the Interface Group and whether the service is directly routed or via an access tandem. The available transmission specifications are set forth in Section 15.1.2 following. Data Transmission Parameters are also provided with each Switched Access Service transmission path. The Telephone Company will, upon notification by the customer that the data parameters set forth in Section 15.1.3 following are not being met, conduct tests independently or in cooperation with the customer, and take any necessary action to insure that the data parameters are met.

The Telephone Company will maintain existing transmission specifications on functioning service configurations installed prior to May 25, 1984, except that service configurations having performance specifications exceeding the standards set forth in Section 15.1.2 following will be maintained at the performance levels specified.

The transmission specifications concerning Switched Access Service are limits which, when exceeded, may require the immediate corrective action of the Telephone Company. The transmission specifications are set forth in Section 15.1.2 following. Acceptance limits are set forth in Technical Reference TR-NWT-000334. This Technical Reference also provides the basis for determining Switched Access Service maintenance limits.

Feature Group C and Feature Group D trunks equipped for Operator Transfer Service are subject to Feature Group C and Feature Group D transmission specifications, respectively, unless otherwise specified.

**ACCESS SERVICE**6. Switched Access Service (Cont'd)6.2 Undertaking of the Telephone Company (Cont'd)6.2.3 Provision of Service Performance Data

Subject to availability, end-to-end service performance data available to the Telephone Company through its own service evaluation routines, may also be made available to the customer based on previously arranged intervals and format. These data provide information on overall end-to-end call completion and non-completion performance, e.g., customer equipment blockage, failure results and transmission performance. These data do not include service performance data which are provided under other tariff sections, e.g., testing service results. If data are to be provided in other than paper format, the charges for such exchange will be determined on an individual case basis.

6.2.4 Testing(A) Acceptance Testing

At no additional charge the Telephone Company will, at the customer's request, cooperatively test at the time of installation, the following parameters: loss, C-notched noise, C-message noise, 3-tone slope, d.c. continuity and operational signaling. When the Local Transport is provided with Interface Groups 2 through 10, and the Transport Termination is two-wire (i.e., there is a four-wire to two-wire conversion in Local Transport), balance parameters (equal level echo path loss) may also be tested.

(B) Routine Testing

At no additional charge, the Telephone Company will, at the customer's request, test after installation on an automatic or manual basis, 1004 Hz loss, C- message noise and Balance (Improved Return loss).

In the case of automatic testing, the customer shall provide remote office test lines and 105 test lines with associated responders or their functional equivalent.

The frequency of these tests will be that which is mutually agreed upon by the customer and the Telephone Company, but shall consist of not less than quarterly 1004 Hz Loss and C-message noise tests and an annual Balance test. Trunk test failures requiring customer participation for trouble resolution will be provided to the customer on an as-occurs basis.

Additional tests may be ordered as set forth in Section 13.3.1 following. Charges for these additional tests are set forth in Section 17 following.

**ACCESS SERVICE**6. Switched Access Service (Cont'd)6.2 Undertaking of the Telephone Company (Cont'd)6.2.5 Determination of Number of Transmission Paths

For Feature Groups C and D, when ordered on a per trunk basis the customer specifies the type of transport facilities and the number of channels in the order for service.

For Tandem Switched Transport, the Telephone Company will determine the number of Switched Access Service transmission paths to be provided for the Switched Access Feature Group C and D busy hour minutes of capacity ordered. The number of transmission paths will be developed using the total busy hour minutes of capacity by type (as described in Section 6.1.1(B) preceding) for the end offices for each Feature Group ordered from a customer's designated premises. The total busy hour minutes of capacity by type (e.g., originating, terminating, IDDD, Operator) for the end office will be converted to transmission paths using standard Telephone Company traffic engineering methods. The number of transmission paths provided shall be the number required based on (1) the use of access tandem switches and end office switches, (2) the use of the end office switches only, or (3) the use of the tandem switches only.

6.2.6 Trunk Group Measurement Reports

Subject to availability, the Telephone Company will make available trunk group data in the form of usage in CCS, peg count and overflow, to the customer based on previously agreed to intervals.

6.3 Obligations of the Customer

In addition to the obligations of the customer set forth in Section 2 preceding, the customer has certain specific obligations pertaining to the use of Switched Access Service. These obligations are as follows:

6.3.1 Report Requirements

Customers are responsible for providing the following reports to the Telephone Company, when applicable.

(A) Jurisdictional Reports

When a customer orders Switched Access Service for intrastate use, the customer is responsible for providing reports as set forth in Section 2.3.10 preceding. Charges will be apportioned in accordance with those reports.

(B) Code Screening Reports

When a customer orders service class routing, trunk access limitation or call gapping arrangements, it must report the number of trunks and/or the appropriate codes to be instituted in each end office or access tandem switch, for each of the arrangements ordered.

**ACCESS SERVICE**6. Switched Access Service (Cont'd)6.3 Obligations of the Customer (Cont'd)6.3.2 Trunk Group Measurement Reports

With the agreement of the customer, trunk group data in the form of usage in CCS, peg count and overflow for its end of all access trunk groups, where technologically feasible, will be made available to the Telephone Company. These data will be used to monitor trunk group utilization and service performance and will be based on previously arranged intervals and format.

6.3.3 Supervisory Signaling

The customer's facilities shall provide the necessary on-hook, off-hook, answer and disconnect supervision.

6.3.4 Short Duration Mass Calling Requirements

When a customer offers service for which a substantial call volume is expected during a short period of time (e.g., 900 service media stimulated events), the customer must notify the Telephone Company at least 48 hours in advance of each peak period. Notification should include the nature, time, duration, and frequency of the event, an estimated call volume, and the telephone number(s) to be used.

On the basis of the information provided, the telephone Company may invoke network management controls, (e.g., call gapping and code blocking) to reduce the probability of excessive network congestion. The Telephone Company will work cooperatively with the customer to determine the appropriate level of such control.

6.3.5 Call Signaling

Depending on the signaling system used by the customer in its network, the customer's facilities shall transmit the following call signaling information to the Telephone Company on traffic the customer's end users originate which is handed off for termination on the Telephone Company's network.

(A) Signaling System 7 (SS7) Signaling

When the customer uses SS7 signaling, it will transmit the Calling Party Number (CPN) or, if different from the CPN, the Charge Number (CN) information in the SS7 signaling stream.

(B) Multi-Frequency (MF) Signaling

When the customer uses MF signaling, it will transmit the number of the calling party or, if different from the number of the calling party, the Charge Number (CN) information in the MF Automatic Number Identification (ANI) field.

**ACCESS SERVICE**6. Switched Access Service (Cont'd)6.4 Rate Regulations

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

6.4.1 Description and Application of Rates and Charges

There are two types of rates and charges that apply to Switched Access Service; recurring (usage and flat rates) and nonrecurring charges. These rates and charges are applied differently to the various rate elements as set forth in (C) following.

(A) Recurring Rates

- (1) Usage Rates for Switched Access Service are rates that apply on a per access minute or a per call basis. Access minute charges and per call charges are accumulated over a monthly period.
- (2) Flat Rates for Switched Access Service are rates that apply on a per month per rate element basis.

(B) Nonrecurring Charges

Nonrecurring charges are one-time charges that apply for a specific work activity (i.e., installation or change to an existing service). The types of nonrecurring charges that apply for Switched Access Service are: installation of service, Interim NXX Translation optional feature and service rearrangements. These charges, with the exception of the Interim NXX Translation optional feature, are in addition to the Access Order Charge as specified in Section 17 following.

**ACCESS SERVICE**6. Switched Access Service (Cont'd)6.4 Rate Regulations (Cont'd)6.4.1 Description and Application of Rates and Charges (Cont'd)(B) Nonrecurring Charges (Cont'd)(1) Installation of Service

A Local Transport nonrecurring installation charge, as set forth in Section 17 following, will be applied at the serving wire center for each Entrance Facility installed. Additionally, a nonrecurring trunk activation charge as set forth in Section 17 following, will be applied at each end office when ordered to the end office on a per order per end office basis or at the tandem when ordered to the tandem for each group of 24 Direct Trunked Transport trunks or fraction thereof that is activated (i.e., designated by the customer to be used to carry switched access).

A maximum of 24 trunks can be activated on a DS1 facility and a maximum of 672 trunks can be activated on a DS3 facility.

For example, if a customer orders a DS1 Entrance Facility and requests activation of 18 of the available circuits, the customer will be charged one Local Transport High Capacity DS1 Installation nonrecurring charge at the serving wire center and one Direct Trunked Transport Activated nonrecurring charge at the end office. If at a later date the customer requests the activation of three more circuits, the customer will then be charged an additional Direct Trunked Transport Activated nonrecurring charge. These charges are in addition to the Access Order charge as specified in Section 17.

**ACCESS SERVICE**6. Switched Access Service (Cont'd)6.4 Rate Regulations (Cont'd)6.4.1 Description and Application of Rates and Charges (Cont'd)(B) Nonrecurring Charges (Cont'd)(2) Interim NXX Translation Optional Feature

This nonrecurring charge applies to the initial order for the installation of the Interim NXX Translation optional feature with Feature Group C or Feature Group D Switched Access Service and for each subsequent order received to add or change NXX translation codes. This charge, if applicable, applies whether this optional feature is installed coincident with or at any time subsequent to the installation of Switched Access Services. This charge is applied by the Telephone Company per order, per LATA or Market Area. When it is necessary for multiple telephone companies to provide the translation function, the nonrecurring charge is assessed only by the Telephone Company that provides the final translation function which identifies the customer's traffic and this traffic is then delivered to the customer's point of termination without any further translation.

(3) Service Rearrangements

All changes to existing services will be treated as a discontinuance of the existing service and an installation of a new service. The nonrecurring charge described in (1) preceding will apply for this work activity. Moves that change the physical location of the point of termination are described and charged for as set forth in Section 6.4.4 following.

**ACCESS SERVICE**6. Switched Access Service (Cont'd)6.4 Rate Regulations (Cont'd)6.4.1 Description and Application of Rates and Charges (Cont'd)(B) Nonrecurring Charges (Cont'd)(3) Service Rearrangements (Cont'd)

Administrative changes will be made without charge(s) to the customer. Administrative changes are as follows:

- Change of customer name;
- 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 agency authorization;
- 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; and
- Change of jurisdiction.

Other changes made without charge to the customer are as follows:

- Changes and additions to existing Switched Access Services which are necessary due to Telephone Company initiated network reconfigurations, and required to provide the same grade of service to the customer that existed prior to the reconfiguration. Charges will apply to those changes and additions which are in excess of those required to provide the same grade of service and/or capacity. Grade of service will be as determined by industry standard engineering tables; and
- When a customer requests a change of trunks from tandem-switched transport to direct-trunked transport or from direct-trunked transport to tandem-switched transport or requests to rearrange switched access services between lower capacity and higher capacity facilities (e.g. voice grade to/from DS1 or DS1 to/from DS3), the non recurring charges set forth in (1) preceding do not apply, and;
- the orders to disconnect existing trunks and to connect the new trunks are placed at the same time, and the number of installed trunks does not exceed the number of trunks disconnected. If the number of installed trunks exceeds the number of trunks connected, all non-recurring charges will apply to the excess trunks unless the customer provides justification based upon standard engineering methods to show that the additional capacity is required to maintain the same level of service.

**ACCESS SERVICE**

6. Switched Access Service (Cont'd)

6.4 Rate Regulations (Cont'd)

6.4.1 Description and Application of Rates and Charges (Cont'd)

(B) Nonrecurring Charges (Cont'd)

(3) Service Rearrangements (Cont'd)

When a customer requests a change of trunks from tandem-switched transport to direct-trunked transport or orders the disconnection of over-provisioned trunks, providing:

Changes to the point in time when the off-hook supervisory signal is provided in the originating call sequence i.e., when the off-hook supervisory signal is changed from being provided by the customer's equipment before the called party answers to being forwarded by the customer's equipment when the called party answers or vice versa, are subject to the Access Order Charge as set forth in Section 17 following.

For additions, changes or modifications to an optional feature which has a separate nonrecurring charge, that nonrecurring charge will apply.

For additions, changes, or modifications to optional features that do not have their own separate nonrecurring charges, an Access Order Charge as set forth in Section 17 following will apply. When an optional feature is not required on each transmission path, but rather for an entire transmission path group, an end office or an access tandem switch, only one such charge will apply (*i.e.*, it will not apply per transmission path).

## ACCESS SERVICE

6. Switched Access Service (Cont'd)

6.4 Rate Regulations (Cont'd)

6.4.1 Description and Application of Rates and Charges (Cont'd)

(C) Application of Rates

In those instances where an SSP equipped end office is capable of handling 800 SAC traffic on a direct trunked basis, and the customer has direct trunked transport facilities in place at the end office, but the end office is incapable of handling 888 SAC traffic on a direct trunked basis, a full credit will be provided for Tandem Switched Transport Charges associated with FGC and FGD service for 888 SAC traffic delivered at the tandem.

This results in all 800 series traffic being rated as direct trunked transport regardless of whether the SSP equipped end office is capable of handling 888 SAC traffic on a direct trunked basis.

The credit will expire when 888 SAC SSP functionality is implemented in the end office.

**ACCESS SERVICE**6. Switched Access Service (Cont'd)6.4 Rate Regulations (Cont'd)6.4.1 Description and Application of Rates and Charges (Cont'd)(C) Application of Rates (Cont'd)(1) Common Channel Signaling/Signaling System 7 (CCS/SS7) Network Connection Service

The CCS/SS7 Network Connection is comprised of a Signaling Mileage Facility charge, a Signaling Mileage Termination charge, a Signaling Entrance Facility charge, and a Signaling Transfer Point (STP) Port charge.

The Signaling Mileage Facility charge is assessed on a per facility per mile basis. The Signaling Mileage Termination charge is assessed on a per termination basis (i.e., at each end of the Signaling Mileage Facility). When the Signaling Mileage Facility mileage measurement is zero, Signaling Mileage Termination charges do not apply.

The Signaling Entrance Facility charge is assessed on a per facility basis for the connection between the customer's designated premises (Signaling Point of Interface) and the serving wire center of that premises.

The STP Port charge is assessed on a per port basis for each termination of a Signaling Mileage Facility at an STP.

## (2) 800 Series Data Base Access Service

A Basic Query or Vertical Feature Query charge applies for each query that is launched to an 800 series data base and identifies the customer to whom the call will be delivered. Query charges, as set forth in Section 17, will only be applied by those companies whose wire centers are identified as assessing query charges in the NATIONAL EXCHANGE CARRIER ASSOCIATION, INC. TARIFF F.C.C. NO. 4.

**ACCESS SERVICE**6. Switched Access Service (Cont'd)6.4 Rate Regulations (Cont'd)6.4.1 Description and Application of Rates and Charges (Cont'd)(C) Application of Rates (Cont'd)(2) 800 Series Data Base Access Service (Cont'd)

When Feature Group C or Feature Group D switched access service is used for the provision of 800 Series Data Base Access Service and the total minutes of use and/or count of queries can be determined for each customer at a tandem or SSP but can not be determined by individual end office, an allocation method will be utilized to determine minutes of use and/or queries by end office and customer. For each end office a ratio will be developed and applied against the total minutes of use and/or count of queries for a given customer as determined by the tandem or SSP. These ratios will be developed by dividing the unidentified originating 800 series type minutes of use at an end office by the total unidentified originating minutes of use in all end offices subtending the tandem or SSP. For example, assume:

- Three end offices (EO-1, EO-2, and EO-3) subtend a tandem

EO-1 measures 2,000 min. of 800 series type use  
 EO-2 measures 3,000 min. of 800 series type use  
 EO-3 measures 5,000 min. of 800 series type use  
 10,000 TOTAL

- The tandem delivers 800 series type usage to two customers:

IC-A has 4,000 minutes of use  
 IC-B has 6,000 minutes of use

- The allocation ratio for EO-1 is 20%

2,000/10,000

- The minutes of use to be billed by EO-1 are

800 to IC-A (20% X 4,000)  
1,200 to IC-B (20% X 6,000)  
 2,000 Total

**ACCESS SERVICE**6. Switched Access Service (Cont'd)6.4 Rate Regulations (Cont'd)6.4.1 Description and Application of Rates and Charges (Cont'd)(C) Application of Rates (Cont'd)(3) Shared Transport

Shared Transport refers to a rate application that is applicable only when the customer orders High Capacity Direct Trunked Transport between a serving wire center and a Telephone Company hub where the Telephone Company performs multiplexing/de-multiplexing functions and the same customer then orders the derived channels as Direct Trunked Transport and Tandem Switched Transport. When the same customer also orders Special Access Service to be provided over this same high capacity facility.

Except as noted above, the switched Access Service will be ordered, provided and rated as Direct Trunked Transport (i.e., Direct Trunked Facility and Direct Trunked Termination). As each derived channel is activated for Tandem switched Transport, the High Capacity Direct Trunked Transport and Multiplexing rates will be reduced accordingly (e.g., 1/24th for a High Capacity DS1 service, 1/672nd for a High Capacity DS3 service, etc.). Tandem Switched Transport rates and charges, as set forth in Section 17 following, will apply for each channel that is used to provide the Tandem Switched Transport.

**ACCESS SERVICE**

6. Switched Access Service (Cont'd)

6.4 Rate Regulations (Cont'd)

6.4.1 Description and Application of Rates and Charges (Cont'd)

(C) Application of Rates (Cont'd)

(3) Shared Transport (Cont'd)

The following example, while not all inclusive, illustrates the application of the Shared Transport provisions cited above. The sample calculations explained below depict the application of charges as they apply to the shared facilities only. All other rate elements that would apply to this example (e.g., Residual Interconnection, Carrier Common Line, End Office, Voice Grade Direct Trunked Transport from EO-B to the Tandem, Voice Grade Channel Mileage from EO-C to the Tandem, etc.) are billed as described elsewhere in this tariff.

Assume:

The customer orders:

-3 tandem routed Switched Access trunks to End Office-A (EO-A)

-4 direct routed Switched Access trunks to End Office-B (EO-B)

-12 Voice Grade Special Access channels to End Office-C (EO-C)

-1 DS1 facility between its POT and the Tandem/Multiplexer

-Usage at EO-A is 10,000 Minutes of Use (MOU)

**ACCESS SERVICE**

6. Switched Access Service (Cont'd)

6.4 Rate Regulations (Cont'd)

6.4.1 Description and Application of Rates and Charges (Cont'd)

(C) Application of Rates (Cont'd)

(3) Shared Transport (Cont'd)

Calculation of Charges POT to Serving Wire Center

Since this facility carries both Switched and Special Access Services, the Mixed Use provisions the following must be applied. This service is initially ordered and rated as a Special Access DS1 High Capacity Channel Termination (DS1-CT). This Special Access Charge is then reduced for each activated Switched Access Service. High Capacity DS1 Entrance Facility (DS1-EF) charges apply for the portion of this service that is activated for Switched Access Service.

DS1-CT charge=DS1-CT rate x (capacity of a DS1 minus the number of activated Switched Access Services)/(capacity of a DS1)

$$= \text{DS1-CT rate} \times (24 - 7)/(24)$$

$$= \text{DS1-CT rate} \times (17/24)$$

DS1-EF charge=DS1-EF rate x (number of activated Switched Access Services)/(capacity of a DS1)

$$= \text{DS1-EF rate} \times (7/24)$$

**ACCESS SERVICE**6. Switched Access Service (Cont'd)6.4 Rate Regulations (Cont'd)6.4.1 Description and Application of Rates and Charges (Cont'd)(C) Application of Rates (Cont'd)(3) Shared Transport (Cont'd)Calculation of Charges Facility from Serving Wire Center to Tandem and Multiplexer

Since the interoffice facility and the multiplexer both carry Switched and Special Access Services, it must first be apportioned between these two categories by applying the Mixed Use provisions. Using the same ratios calculated above, the Special Access DS1 High Capacity Channel Mileage Facility (DS1-CMF), Channel Mileage Termination (DS1-CMT), and Multiplexer (Spcl.-MUX) charges are:

DS1-CMF=DS1-CMF rate x airline miles between Tandem/Multiplexer and Serving Wire Center x (17/24)

DS1-CMT=DS1-CMT rate x 2 terminations x (17/24)

Spcl.-MUX=DS1 to Voice Grade multiplexer rate x (17/24)

After applying the Mixed Use provisions to determine the Switched Access portion of these facilities, the Switched Access Facilities must then be apportioned between direct routed and tandem routed. This is accomplished by subtracting the portion of channels used for tandem routing from the portion of Switched Access channels. The remaining portion of channels are considered direct routed.

**ACCESS SERVICE**6. Switched Access Service (Cont'd)6.4 Rate Regulations (Cont'd)6.4.1 Description and Application of Rates and Charges (Cont'd)(C) Application of Rates (Cont'd)(3) Shared Transport (Cont'd)Calculation of Charges Facility from Serving Wire Center to Tandem and Multiplexer

The Direct Trunked Facility (DS1-DTF), Direct Trunked Termination (DS1-DTT) and Switched Access Multiplexer (Sw-MUX) charges are:

DS1-DTF = DS1-DTF rate x airline miles between Tandem/Multiplexer and Serving Wire Center x ((number of activated Switched Access Services/capacity of a DS1) minus (number of channels activated for Tandem Switched Transport/capacity of a DS1))  
 = DS1-DTF rate x miles x ((7/24) - (3/24))  
 = DS1-DTF rate x miles x (4/24)

DS1-DTT = DS1-DTT rate x 2 terminations x same ratio of (4/24)

Sw.-MUX = DS1 to Voice Grade multiplexer rate x same ratio of (4/24)

Tandem Routing Charges (EO-A to Serving Wire Center)

No adjustments are used to calculate the Tandem Switched Facility (TSF), Tandem Switched Termination (TST), or Tandem Switching charges. They are calculated as follows:

TSF = TSF rate x airline miles between EO-A and the serving wire center x 10,000 MOU

TST = TST rate x 2 termination x 10,000 MOU

TS = TS rate x 10,000 MOU

**ACCESS SERVICE**6. Switched Access Service (Cont'd)6.4 Rate Regulations (Cont'd)6.4.2 Minimum Monthly Charge

Switched Access Service is subject to a minimum monthly charge. The minimum charge applies for the total capacity provided. The minimum monthly charge is calculated as follows.

For usage rated Local Transport, Local Switching and Information Surcharge rate elements, the minimum monthly charge is the sum of the recurring charges set forth in Section 17 following for either the actual measured usage or the assumed usage prorated to the number of days or major fraction of days based on a 30 day month.

For flat rated Local Transport rate elements, the minimum monthly charge is the sum of the recurring charges set forth in Section 17 following prorated to the number of days or major fraction of days on a 30 day month.

6.4.3 Change of Switched Access Service Arrangements

Changes from one type of Feature Group to another will be treated as a discontinuance of one type of service and a start of another. Nonrecurring charges will apply. Non-recurring charges for other associated service requests, (e.g., a simultaneous change from multi-frequencies, address signaling to SS7 signaling) will apply. Minimum period obligations will not change, *i.e.*, the time elapsed in the existing minimum period obligation will be credited to the minimum period obligations for FGD service

For all changes from one type of Feature Group to another, new minimum period obligations will be established.

## ACCESS SERVICE

### 6. Switched Access Service (Cont'd)

#### 6.4 Rate Regulations (Cont'd)

##### 6.4.4 Moves

A move involves a change in the physical location of one of the following:

- The point of termination at the customer designated premises
- The customer designated premises

The charges for the move are dependent on whether the move is to a new location within the same building or to a different building.

#### (A) Moves Within the Same Building

When the move is to a new location within the same building, the charge for the move will be an amount equal to one half of the installation nonrecurring charge for the capacity affected. This charge is in addition to the Access Order Charge as specified in Section 17 following. There will be no change in the minimum period requirements.

#### (B) Moves to a Different Building

Moves to a different building will be treated as a discontinuance and start of service and all associated nonrecurring charges will apply. New minimum period requirements will be established for the new service. The customer will also remain responsible for satisfying all outstanding minimum period charges for the discontinued service.

**ACCESS SERVICE**

6. Switched Access Service (Cont'd)

6.4 Rate Regulations (Cont'd)

6.4.5 Mileage Measurement

The mileage to be used to determine the monthly rate for Local Transport is calculated on the airline distance. When Direct Trunked Transport is ordered between the serving wire center and the end office, mileage is normally measured in one segment from the serving wire center to the end office. When Direct Trunked Transport is ordered between a serving wire center and a tandem and Tandem Switch Transport is ordered between the tandem and the end office, mileage is calculated separately for each segment. Exceptions to these methods are as set forth in (B) through (I) following. For SS7 signaling, the mileage to be used to determine the monthly rate for the Signaling Mileage Facility is calculated on the airline distance between the serving wire center associated with the customer's designated premises (Signaling Point of Interface) and the Telephone Company wire center providing the STP Port.

Where applicable, the V&H coordinates method is used to determine mileage. This method is set forth in the NATIONAL EXCHANGE CARRIER ASSOCIATION, INC. TARIFF F.C.C. NO. 4 for Wire Center Information (V&H coordinates).

Mileage rates are as set forth in Section 17 following. To determine the rate to be billed, first compute the airline mileage using the V&H coordinates method. If the calculation results in a fraction of a mile, always round up to the next whole mile before determining the mileage and applying the rates. Then multiply the mileage by the appropriate rate.

After determining the mileage, find the band into which the computed mileage falls (if applicable) and apply the charge shown in Section 17.2.2 for that band. If the calculation results in a fraction of a mile, always round up to the next mile before determining the mile band and applying the charge. Rates bands are determined based on call miles, and the following rate bands apply (when indicated) to the Issuing Carriers:

Rate Band 1	0 to 1 mile
Rate Band 2	Over 1 mile to 8 miles
Rate Band 3	Over 8 miles to 16 miles
Rate Band 4	Over 16 miles to 25 miles
Rate Band 5	Over 25 miles to 50 miles
Rate Band 6	Over 50 miles to 100 miles
Rate Band 7	Over 100 miles

**ACCESS SERVICE**6. Switched Access Service (Cont'd)6.4 Rate Regulations (Cont'd)6.4.5 Mileage Measurement (Cont'd)(B) Feature Groups C and D - Alternate Traffic Routing

When the Alternate Traffic Routing optional feature is provided with Feature Groups C and D, the Local Transport access minutes will be apportioned between the two trunk groups used to provide this feature. Such apportionment will be made using: (1) actual minutes of use if available, (2) standard Telephone Company traffic engineering methodology and will be based on the last trunk CCS desired for the high usage group following (Alternate Traffic Routing), and the total busy hour minutes of capacity ordered to the end office, when the feature is provided at an end office switch, or (3) an apportionment mutually agreed to by the Telephone Company and the customer. This apportionment will serve as the basis for Local Transport calculation.

(C) Feature Group C - Multiple CDPs

When terminating Feature Group C Switched Access Service is provided from multiple customer designated premises to an end office not equipped with measurement capabilities, the total Local Transport access minutes for that end office will be apportioned among the trunk groups accessing the end office on the basis of the individual busy hour minutes of capacity ordered for each of those trunk groups. This apportionment will serve as the basis for Local Transport mileage calculation.

**ACCESS SERVICE**6. Switched Access Service (Cont'd)6.4 Rate Regulations (Cont'd)6.4.5 Mileage Measurement (Cont'd)(D) Feature Group D - WSCs Directly Interconnected to Access Tandems

The Local Transport mileage for Feature Groups D switched access service provided to Wireless Switching Centers (WSCs) directly interconnected to a Telephone Company access tandem office will be determined on an airline basis, using the V&H coordinate method. The mileage will be measured between the customer's serving wire center and the Telephone Company access tandem office to which the WSC is interconnected.

(E) Feature Groups C and D - Remote Offices LTR

The Local Transport mileage for Feature Groups C, and D Switched Access Service provided to a Remote Office will be measured in multiple segments. When the facility is directly trunked to the Host Office, Direct Trunked Facility mileage will be measured between the customer's serving wire center and the Host Office, and Tandem Switched Facility mileage will be measured between the Host Office and the Remote Office. The Tandem Switching charge will not apply.

When the facility is directly trunked to a tandem, Direct Trunked Facility will be measured from the serving wire center to the tandem, Tandem Switched Facility will be measured from the tandem to the host, and another segment of Tandem Switched Facility will be measured from the host to the remote. A Tandem Switching charge would be applicable at the tandem.

**ACCESS SERVICE**6. Switched Access Service (Cont'd)6.4 Rate Regulations (Cont'd)6.4.5 Mileage Measurement (Cont'd)(G) Feature Groups C, and D - Remote Offices (Cont'd)

When service to the remote is ordered as only Tandem Switched Facility, mileage will be separately measured between the serving wire center and the host and between the host and the end office. The Tandem Switching charge would be applicable at the tandem.

(H) Use of Telephone Company Hub

When multiplexing is performed at Telephone Company Hubs, mileage is computed and rates applied separately for each segment of the Local Transport Direct Trunked Facility (*i.e.*, customer serving wire center to Hub, Hub to Hub, and/or Hub to end office).

6.5 Description and Provision of Feature Group C (FGC)6.5.1 Description

- (A) FGC Access provides trunk side access to Telephone Company end office switches for the customer's use in originating and terminating communications. Originating and terminating FGC Access is available to providers of MTS. Originating FGC Access is available to all customers when used to provide the Interim NXX Translation optional feature. Terminating FGC access is available to all customers other than providers of MTS when such access is used in conjunction with the provision of the Interim NXX Translation optional feature, but only for purposes of testing.

**ACCESS SERVICE**6. Switched Access Service (Cont'd)6.5 Description and Provision of Feature Group C (FGC) (Cont'd)6.5.1 Description (Cont'd)

- (B) Feature Group C switching is provided at all end office switches unless Feature Group D end office switching is provided in the same office. When FGD switching is available, FGC switching will not be provided. FGC is provided at Telephone Company end office switches on a direct trunk basis or via Telephone Company designated access tandem switches. Feature Group C switching is furnished to providers of MTS. Additionally, originating Feature Group C switching is available to all customers when used to provide the Interim NXX Translation optional feature. Terminating Feature Group C switching is available to all customers who are not MTS providers only when such terminating access is for purposes of testing Feature Group C facilities provided in conjunction with the Interim NXX Translation optional feature.
- (C) FGC is provided as trunk side switching through the use of end office or access tandem switch trunk equipment. The switch trunk equipment is provided with answer and disconnect supervisory signaling. Wink start start-pulsing signals are provided in all offices where available. In those offices where wink start start-pulsing signals are not available, delay dial start-pulsing signals will be provided, unless immediate dial pulse signaling is provided, in which case no start-pulsing signals are provided.
- (D) FGC is provided with multifrequency address signaling except in certain electromechanical end office switches where multifrequency signaling is not available. In such switches, the address signaling will be dial pulse or immediate dial pulse signaling, whichever is available. Up to 12 digits of the called party number dialed by the customer's end user using dual tone multifrequency or dial pulse address signals will be provided by Telephone Company equipment to the customer's premises where the Switched Access Service terminates. Such called party number signals will be subject to the ordinary transmission capabilities of the Local Transport provided.
- (E) No access code is required for FGC switching. The telephone number dialed by the customer's end user shall be a seven or ten digit number for calls in the North American Numbering Plan (NANP). For international calls outside the NANP, a seven to twelve digit number may be dialed. The form of the numbers dialed by the customer's end user is NXX-XXXX, 0 or 1 + NXX-XXXX, NPA + NXX-XXXX, 0 or 1 + NPA + NXX-XXXX, and, when the end office is equipped for International Direct Distance Dialing (IDDD), 01 + CC + NN or 011 + CC + NN.

**ACCESS SERVICE**6. Switched Access Service (Cont'd)6.5 Description and Provision of Feature Group C (FGC) (Cont'd)6.5.1 Description (Cont'd)

- (F) FGC switching, when used in the terminating direction, may be used to access valid NXXs in the LATA, time or weather announcement services of the Telephone Company, community information services of an information provider, and other customer's services (by dialing the appropriate codes) when the services can be reached using valid NXX codes. When directly routed to an end office, only those valid NXX codes served by that office may be accessed. When routed through an access tandem, only those valid NXX codes served by offices subtending the access tandem may be accessed. Where measurement capabilities exist, the customer will also be billed additional non-access charges for calls to certain community information services, for which rates are applicable under Telephone Company exchange service tariffs, e.g., 976 (DIAL IT) Network Services. Additionally, non-access charges will also be billed for calls from a FGC trunk to another customer's service in accordance with that customer's applicable service rates when the Telephone Company performs the billing function for that customer. Calls in the terminating direction will not be completed to 950-XXXX access codes, local operator assistance (0- and 0+), Directory Assistance (411 and 555-1212), service codes 611 and 911 and 101XXXX access codes. Calls will be completed to Directory Assistance (NPA-555-1212 or 555-1212) when FGC switching is combined with Directory Assistance switching. FGC may not be switched, in the terminating direction, to Switched Access Service Feature Groups B, C or D.
- (G) The Telephone Company will establish a trunk group or groups for the customer at end office switches or access tandem switches where FGC switching is provided. When required by technical limitations, a separate trunk group will be established for each type of FGC switching arrangement provided. Different types of FGC or other switching arrangements may be combined in a single trunk group at the option of the Telephone Company.
- (H) Unless prohibited by technical limitations the providers of MTS may, at their option, combine Interim NXX Translation traffic in the same trunk group arrangement with their non-Interim NXX Translation traffic. When required by technical considerations, or when provided to a customer other than the provider of MTS, or at the request of the customer (i.e., provider of MTS), a separate trunk group will be established for Interim NXX Translation traffic.

**ACCESS SERVICE**6. Switched Access Service (Cont'd)6.5 Description and Provision of Feature Group C (FGC) (Cont'd)6.5.1 Description (Cont'd)

- (I) Operator Transfer Service may be provided with FGC Switched Access Service at Telephone Company designated Operator Services locations.

The Telephone Company will provide Operator Transfer Service for calls originating from telephone numbers associated with exchange service lines in end offices subtending the Operator Services location. Operator Transfer Service is provided as set forth in Section 6.1.3(D) preceding.

- (J) FGC switching is provided with multifrequency address signaling or out of band SS7 signaling where technically feasible. With multifrequency address signaling and SS7 signaling, up to 12 digits of the called party number dialed by the customer's end user using dual tone multifrequency or dial pulse address signals will be provided by Telephone Company equipment to the customer's premises where the Switched Access Service terminates. Such address signals will be subject to the ordinary transmission capabilities of the Local Transport provided.

**ACCESS SERVICE**6. Switched Access Service (Cont'd)6.5 Description and Provision of Feature Group C (FGC) (Cont'd)6.5.2 Optional Features

Following are descriptions of the various nonchargeable and chargeable optional features that are available in lieu of, or in addition to, the standard features provided with Feature Group C. Nonchargeable optional features are provided as Common Switching, Transport Termination and Local Transport options as set forth in (A) through (C) following. Chargeable optional features are set forth in (D) following.

(A) Common Switching Options

- (1) Automatic Number Identification (ANI)
- (2) Signaling Options
  - (a) Delay Dial Start-Pulsing Signaling
  - (b) Immediate Dial Pulse Address Signaling
  - (c) Dial Pulse Address Signaling
- (3) Service Class Routing
- (4) Alternate Traffic Routing
- (5) Trunk Access Limitation
- (6) Digital Switched 56 Service

**ACCESS SERVICE**6. Switched Access Service (Cont'd)6.5 Description and Provision of Feature Group C (FGC) (Cont'd)6.5.2 Optional Features (Cont'd)(B) Local Transport Options(1) Supervisory Signaling

The Supervisory Signaling optional feature, due to its technical nature, is set forth in Section 15.1.1 following.

(2) Signaling System 7 (SS7)

The SS7 optional feature allows the customer to receive signals for out of band call set up and is available with Feature Group C. This option requires the establishment of a signaling connection between the customer's designated premises/SPOI and a Signaling Transfer Point (STP).

SS7 is provided in both the originating and terminating direction on FGC and each signaling connection is provisioned for two way SS7 signaling information.

The SS7 optional feature is only available where designated in NATIONAL EXCHANGE CARRIER ASSOCIATION, INC. TARIFF F.C.C. NO. 4 to providers of MTS for all traffic and to all other customers for originating calls to 800 numbers.

(3) Multifrequency Address Signaling(4) Calling Party Number (CPN)(5) Charge Number Parameter (CNP)

**ACCESS SERVICE**6. Switched Access Service (Cont'd)6.5 Description and Provision of Feature Group C (FGC) (Cont'd)6.5.2 Optional Features (Cont'd)(C) Chargeable Optional Features(1) Interim NXX Translation

The Interim NXX Translation Optional Feature is set forth in Section 6.1.3(D) preceding.

## (2) The Operator Transfer Service Optional Feature is provided as set forth in Section 6.1.3(D) preceding.

(3) Common Channel Signaling/Signaling System 7 (CCS/SS7) Network Connection Service (CCSNC)

The CCSNC Optional Feature is provided as set forth in Section 6.4.1(C) following.

6.5.3 Design and Traffic Routing

For Feature Group C, the Telephone Company shall design and determine the routing of Switched Access Service. Additionally, for Tandem Switched Transport, the Telephone Company will design and determine the routing from the first point of switching to the end office. The Telephone Company shall also decide if capacity is to be provided by originating only, terminating only, or two-way trunk groups. Finally, the Telephone Company will decide whether trunk side access will be provided through the use of two-wire or four-wire trunk terminating equipment.

Selection of facilities and equipment and traffic routing of the service are based on standard engineering methods, available facilities and equipment, and actual traffic patterns.

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**ACCESS SERVICE**6. Switched Access Service (Cont'd)6.5 Description and Provision of Feature Group C (FGC) (Cont'd)6.5.4 Measuring Access Minutes

Customer traffic to end offices will be measured (i.e., recorded) by the Telephone Company at end office switches or access tandem switches. Originating and terminating calls will be measured or imputed by the Telephone Company to determine the basis for computing chargeable access minutes. In the event the customer message detail is not available because the Telephone Company lost or damaged tapes or incurred recording system outages, the Telephone Company will estimate the volume of lost customer access minutes of use based on previously known values.

For terminating calls over FGC when measurement capability exists, the measured minutes are the chargeable access minutes. For originating calls over FGC, chargeable originating access minutes are derived from recorded minutes in the following manner:

Step 1: Obtain recorded originating minutes and messages from the appropriate recording data.

Step 2: Obtain the total attempts by dividing the originating measured messages by the completion ratio. Completion ratios (CR) are obtained separately for the major call categories such as DDD, operator, 800, 900, directory assistance and international from a sample study which analyzes the ultimate completion status of the total attempts which receive acknowledgement from the customer. That is, Measured Messages divided by Completion Ratio equals Total Attempts.

**ACCESS SERVICE**6. Switched Access Service (Cont'd)6.5 Description and Provision of Feature Group C (FGC) (Cont'd)6.5.4 Measuring Access Minutes (Cont'd)

Step 3: Obtain the total non-conversation time additive (NCTA) by multiplying the total attempts (obtained in Step 2) by the NCTA per attempt ratio. The NCTA per attempt ratio is obtained from the sample study identified in Step 2 by measuring the non-conversation time associated with both completed and incompletd attempts. The total NCTA is the time on a completed attempt from customer acknowledgement of receipt of call to called party answer (set up and ringing) plus the time on an incompletd attempt from customer acknowledgement of call until the access tandem or end office receives a disconnect signal (ring - no answer, busy or network blockage). That is, Total Attempts times Non-Conversation Time per Attempt Ratio equals Total NCTA.

Step 4: Obtain total chargeable originating access minutes by adding the total NCTA (obtained in Step 3) to the recorded originating measured minutes (obtained in Step 1). That is, Measured Minutes plus NCTA equals Chargeable Originating Access Minutes.

Following is an example which illustrates how the chargeable originating access minutes are derived from the measured originating minutes using this formula.

Where:

Measured Minutes (M. Min.)	= 7,000
Measured Messages (M. Mes.)	= 1,000
Completion Ratio (CR)	= .75
NCTA per Attempt	= .4

$$(1) \quad \text{Total Attempts} = \frac{1,000(\text{M. Mes.})}{.75 (\text{CR})} = 1,333.3$$

$$(2) \quad \text{Total NCTA} = .4 (\text{NCTA per Attempt}) \times 1,333.33 = 533.33$$

$$(3) \quad \text{Total Chargeable Originating Access Minutes} = 7,000 (\text{M. Min}) + 533.33 (\text{NCTA}) = 7,533.33$$

FGC access minutes or fractions thereof, the exact value of the fraction being a function of the switch technology where the measurement is made, are accumulated over the billing period for each end office, and are then rounded up to the nearest access minute for each end office.

**ACCESS SERVICE**6. Switched Access Service (Cont'd)6.5 Description and Provision of Feature Group C (FGC) (Cont'd)6.5.4 Measuring Access Minutes (Cont'd)Originating Usage

For originating calls over FGC, provided with Multi-Frequency Signaling, usage measurement begins when the originating FGC first point of switching receives answer supervision from the customer's point of termination, indicating the called party has answered.

For originating calls over FGC provided with Signaling System 7 (SS7) Signaling when the FGC end office is not routed through an access tandem for connection to the customer, usage measurement begins when the SS7 Initial Address Message is sent from the Service Switching Point (SSP) to the Signal Transfer Point (STP).

For originating calls over FGC provided with Signaling System 7 (SS7) Signaling when the FGC end office is routed through a tandem for connection to the customer, usage measurement begins when the FGC end office receives the SS7 Exit Message from the tandem.

The measurement of originating call usage over FGC provided with Multi-Frequency Signaling ends when the originating FGC first point of switching receives disconnect supervision from either the originating end user's end office, indicating the originating end user has disconnected, or the customer's point of termination, whichever is recognized first by the first point of switching.

The measurement of originating call usage over FGC provided with SS7 Signaling ends when the originating FGC end office receives an SS7 Release Message indicating either the originating or terminating end user has disconnected.

Terminating Usage

For terminating calls over FGC the chargeable access minutes are either measured or derived. For terminating calls over FGC where measurement capability does not exist, terminating FGC usage is derived from originating usage, excluding usage from calls to closed end services or Directory Assistance Services.

**ACCESS SERVICE**6. Switched Access Service (Cont'd)6.5 Description and Provision of Feature Group C (FGC) (Cont'd)6.5.4 Measuring Access Minutes (Cont'd)Terminating Usage (Cont'd)

For terminating calls over FGC provided with Multi-Frequency Signaling, where measurement capability exists, the measurement of chargeable access minutes begins when the terminating FGC first point of switching receives answer supervision from the terminating end user's end office, indicating the terminating end user has answered. This measurement ends when the terminating FGC first point of switching receives an on-hook supervisory signal from the terminating end user's end office, indicating the terminating end user has disconnected, or the customer's point of termination, whichever is recognized first by the first point of switching.

For terminating calls over FGC with SS7 signaling, usage measurement begins when the terminating recording switch receives answer supervision from the terminating end user. The Telephone Company switch receives answer supervision and sends the indication to the customer in the form of an answer message. The measurement of terminating FGC call usage ends when the entry switch receives or sends a Release Message, whichever occurs first.

6.5.5 Design Blocking Probability

The Telephone Company will design the facilities used in the provision of Switched Access Service FGC to meet the blocking probability criteria as set forth in (A) and (B) following.

- (A) For Feature Group C, the design blocking objective will be no greater than one percent (.01) between the point of termination at the customer's designated premises and the first point of switching when traffic is directly routed without an alternate route. Standard traffic engineering methods will be used by the Telephone Company to determine the number of transmission paths required to achieve this level of blocking.
- (B) The Telephone Company will perform routine measurement functions to assure that an adequate number of transmission paths are in service. The Telephone Company will recommend that additional capacity (i.e., busy hour minutes of capacity) be ordered by the customer when additional paths are required to reduce the measured blocking to the designed blocking level. For the capacity ordered, the design blocking objective is assumed to have been met if the routine measurements show that the measured blocking does not exceed the threshold listed in the following tables.

**ACCESS SERVICE**

6. Switched Access Service (Cont'd)

6.5 Description and Provision of Feature Group C (FGC) (Cont'd)

6.5.5 Design Blocking Probability (Cont'd)

(B) (Cont'd)

- (1) For transmission paths carrying only first routed traffic direct between an end office and customer's designated premises without an alternate route, and for paths carrying only overflow traffic, the measured blocking thresholds are as follows:

Number of Transmission Paths Per Trunk Group	Measured Blocking Thresholds in the Time Consistent Busy Hour for the Number of Measurements Taken Between 8:00 a.m. and 11:00 p.m. Per Trunk Group			
	15-20 Measurements	11-14 Measurements	7-10 Measurements	3-6 Measurements
2	7%	8%	9%	14%
3	5%	6%	7%	9%
4	5%	6%	7%	8%
5-6	4%	5%	6%	7%
7 or more	3%	3.5%	4%	6%

- (2) For transmission paths carrying first routed traffic between an end office and customer's premises via an access tandem, the measured blocking thresholds are as follows:

Number of Transmission Paths Per Trunk Group	Measured Blocking Thresholds in the Time Consistent Busy Hour for the Number of Measurements Taken Between 8:00 a.m. and 11:00 p.m. Per Trunk Group			
	15-20 Measurements	11-14 Measurements	7-10 Measurements	3-6 Measurements
2	4.5%	5.5%	6.0%	9.5%
3	3.5%	4.0%	4.5%	6.0%
4	3.5%	4.0%	4.5%	5.5%
5-6	2.5%	3.5%	4.0%	4.5%
7 or more	2.0%	2.5%	3.0%	4.0%

**ACCESS SERVICE**6. Switched Access Service (Cont'd)6.5 Description and Provision of Feature Group C (FGC) (Cont'd)6.5.6 Testing Capabilities

FGC is provided, in the terminating direction where equipment is available, with seven digit access to balance (100 type) test line, milliwatt (102 type) test line, nonsynchronous or synchronous test line, automatic transmission measuring (105 type) test line, data transmission (107 type) test line, loop around test line, short circuit test line and open circuit test line. In addition to the tests described in Section 6.2.4 preceding which are included with the installation of service (Acceptance Testing) and as ongoing routine testing, Additional Cooperative Acceptance Testing, Additional Automatic Testing and Additional Manual Testing are available as set forth in Section 13.3.1 following.

**ACCESS SERVICE**6. Switched Access Service (Cont'd)6.6 Description and Provision of Feature Group D (FGD)6.6.1 Description

- (A) FGD Access, which is available to all customers, provides trunk side access to Telephone Company end office switches.
- (B) FGD is provided at Telephone Company designated end office switches whether routed directly or via Telephone Company designated electronic access tandem switches. The Telephone Company will designate the first point(s) of switching for FGD services where the Telephone Company elects to provide equal access through a centralized equal access arrangement. Those Telephone Company offices providing equal access through centralized arrangements are identified in NATIONAL EXCHANGE CARRIER ASSOCIATION, INC. TARIFF F.C.C. NO. 4.
- (C) FGD is provided as trunk side switching through the use of end office or access tandem switch trunk equipment. The switch trunk equipment is provided with wink start start-pulsing signals and answer and disconnect supervisory signaling.
- (D) FGD switching is provided with multifrequency address signaling or out of band SS7 signaling. With multifrequency address signaling and SS7 signaling, up to 12 digits of the called party number dialed by the customer's end user using dual tone multifrequency or dial pulse address signals will be provided by Telephone Company equipment to the customer's premises where the Switched Access Service terminates. Such address signals will be subject to the ordinary transmission capabilities of the Local Transport provided.

**ACCESS SERVICE**6. Switched Access Service (Cont'd)6.6 Description and Provision of Feature Group D (FGD) (Cont'd)6.6.1 Description (Cont'd)

- (E) FGD switching, when used in the terminating direction, may be used to access valid NXXs in the LATA, time or weather announcement services of the Telephone Company, community information services of an information service provider, and other customers' services (by dialing the appropriate codes) when such services can be reached using valid NXX codes. When directly routed to an end office, only those valid NXX codes served by that office may be accessed. When routed through an access tandem, only those valid NXX codes served by end offices subtending the access tandem may be accessed. The customer will also be billed additional non-access charges for calls to certain community information services, for which rates are applicable under Telephone Company exchange service tariffs, e.g., 976 (DIAL-IT) Network Service. Additionally, non-access charges will also be billed for calls from a FGD trunk to another customer's service in accordance with that customer's applicable service rates when the Telephone Company performs the billing function for that customer. Calls in the terminating direction will not be completed to 950-XXXX access codes, local operator assistance (0- and 0+), Directory Assistance (411 and 555-1212), service codes 611 and 911 and 101XXXX access codes. Calls will be completed to Directory Assistance (NPA-555-1212 or 555-1212) when FGD switching is combined with Directory Assistance switching. FGD may not be switched, in the terminating direction, to Switched Access Service Feature Groups B, C or D.
- (F) The Telephone Company will establish a trunk group or groups for the customer at end office switches or access tandem switches where FGD switching is provided. When required by technical limitations, a separate trunk group will be established for each type of FGD switching arrangement provided. Different types of FGD or other switching arrangements may be combined in a single trunk group at the option of the Telephone Company.

**ACCESS SERVICE**6. Switched Access Service (Cont'd)6.6 Description and Provision of Feature Group D (FGD) (Cont'd)6.6.1 Description (Cont'd)

- (G) The access code for FGD switching is a uniform access code of the form 101XXXX. A uniform access code(s) will be the assigned number of all FGD access provided to the customer by the Telephone Company. No access code is required for calls to a customer over FGD Switched Access Service if the end user's telephone exchange service is arranged for presubscription to that customer, as set forth in Section 13.4 following.

Where no access code is required, the number dialed by the customer's end user shall be a seven or ten digit number for calls in the North American Numbering Plan (NANP). For international calls outside the NANP, a seven to twelve digit number may be dialed. The form of the numbers dialed by the customer's end user is NXX-XXXX, 0 or 1 + NXX-XXXX, NPA + NXX-XXXX, 0 or 1 + NPA + NXX-XXXX, and, when the end office is equipped for International Direct Distance Dialing (IDDD), 01 + CC + NN or 011 + CC + NN.

When the 101XXXX access code is used, FGD switching also provides for dialing the digit 0 for access to the customer's operator, 911 for access to the Telephone Company's emergency reporting service, or the end-of-dialing digit (#) for cut-through access to the customer designated premises.

- (H) FGD switching will be arranged to accept calls from telephone exchange service locations without the need for dialing the 101XXXX uniform access code. Each telephone exchange service line may be marked with a code to identify which 101XXXX code its calls will be directed to for interLATA service.
- (I) Unless prohibited by technical limitations, the customer's Interim NXX Translation traffic may, at the option of the customer, be combined in the same trunk group arrangement with the customer's non- Interim NXX Translation traffic. When required by technical limitations, or at the request of the customer, a separate trunk group will be established for Interim NXX Translation traffic.

**ACCESS SERVICE**6. Switched Access Service (Cont'd)6.6 Description and Provision of Feature Group D (FGD) (Cont'd)6.6.1 Description (Cont'd)

- (J) For FGD switched access service to a Wireless Switching Center (WSC) directly interconnected to a Telephone Company access tandem office, the customer will be billed only the Local Transport premium rate element for the FGD usage. The mileage used to determine the monthly rate for the local transport rate element is as set forth in Section 6.4.5 preceding.
- (K) Operator Transfer Service (forwarding of 0- calls) may be provided with FGD Switched Access Service at Telephone Company designated Operator Services locations.

The Telephone Company will provide Operator Transfer Service for calls originating from telephone numbers associated with exchange service lines in end offices subtending the Operator Services location. Operator Transfer Service is provided as set forth in Section 6.1.3(D) preceding.

**ACCESS SERVICE**6. Switched Access Service (Cont'd)6.6 Description and Provision of Feature Group D (FGD) (Cont'd)6.6.2 Optional Features

Following are the various nonchargeable and chargeable optional features that are available in lieu of, or in addition to, the standard features provided with Feature Group D. Nonchargeable Optional Features are provided as Common Switching, Transport Termination and Local Transport options as set forth in (A) through (C) following. Chargeable optional features are set forth in (D) following.

(A) Common Switching Options

- (1) Automatic Number Identification (ANI)
- (2) Service Class Routing
- (3) Alternate Traffic Routing
- (4) Trunk Access Limitation
- (5) Call Gapping Arrangement
- (6) International Carrier Option
- (7) Digital Switched 56 Service

**ACCESS SERVICE**6. Switched Access Service (Cont'd)6.6 Description and Provision of Feature Group D (FGD) (Cont'd)6.6.2 Optional Features (Cont'd)(B) Local Transport Options(1) Supervisory Signaling

The Supervisory Signaling optional feature, due to its technical nature, is set forth in Section 15.1.1 following.

(2) Signaling System 7 (SS7)

The SS7 optional feature allows the customer to send and receive signals for out of band call set up and is available with Feature Group D. This option requires the establishment of a signaling connection between the customer's designated premises/ Signaling Point of Interface and a Telephone Company's Signaling Transfer Point (STP).

SS7 is provided in both the originating and terminating direction on FGD and each signaling connection is provisioned for two-way SS7 signaling information.

(3) Multifrequency Address Signaling(4) Calling Party Number (CPN) Parameter(5) Charge Number Parameter (CNP)(6) Carrier Selection Parameter (CSP)(C) Chargeable Optional Features(1) Interim NXX Translation

The Interim NXX Translation Optional Feature is set forth in Section 6.1.3(D) preceding.

(2) Operator Transfer Service

The Operator Transfer Service Optional Feature is provided as set forth in Section 6.1.3(D) preceding.

(3) Common Channel Signaling/Signaling System 7 (CCS/SS7) Network Connection Service (CCSNC)

The CCSNC Optional Feature is provided as set forth in Section 6.4.1(C) preceding.

**ACCESS SERVICE**6. Switched Access Service (Cont'd)6.6 Description and Provision of Feature Group D (FGD) (Cont'd)6.6.3 Design and Traffic Routing

For Feature Group D, the Telephone Company shall design and determine the routing of Tandem Switched Access Service, including the selection of the first point of switching and the selection of facilities from the interface to any switching point and to the end offices where busy hour minutes of capacity are ordered. The Telephone Company shall also decide if capacity is to be provided by originating only, terminating only, or two-way trunk groups. Finally, the Telephone Company will decide whether trunk side access will be provided through the use of two-wire or four-wire trunk terminating equipment.

For Feature Group D Direct Trunked Transport service, the Telephone Company will determine the routing of Switched Access Service from the point of interface to the first point of switching or, if the customer specified one or more hub locations for multiplexing, from the point of interface to the hub location, from one hub location to another hub location, and/or from a hub location to the first point of switching.

Selection of facilities and equipment and traffic routing of the service is based on standard engineering methods, available facilities and equipment, and actual traffic patterns. The Telephone Company will designate the first point(s) of switching and routing to be used where equal access is provided through a centralized equal access arrangement.

6.6.4 Measuring Access Minutes

Customer traffic to end offices will be recorded at end office switches or access tandem switches. Originating and terminating calls will be measured or derived to determine the basis for computing chargeable access minutes. In the event the customer message detail is not available because the Telephone Company lost or damaged tapes or incurred recording system outages, the Telephone Company will estimate the volume of lost customer access minutes of use based on previously known values.

FGD access minutes or fractions thereof, the exact value of the fraction being a function of the switch technology where the measurement is made, are accumulated over the billing period for each end office, and are then rounded up to the nearest access minute for each end office.

**ACCESS SERVICE**6. Switched Access Service (Cont'd)6.6 Description and Provision of Feature Group D (FGD) (Cont'd)6.6.4 Measuring Access Minutes (Cont'd)Originating Usage

For originating calls over FGD the measured minutes are the chargeable access minutes.

For originating calls over FGD, provided with Multi-Frequency Signaling, usage measurement begins when the originating FGD first point of switching receives the first wink supervisory signal forwarded from the customer's point of termination.

For originating calls over FGD provided with Signaling System 7 (SS7) Signaling when the FGD end office is not routed through an access tandem for connection to the customer, usage measurement begins when the SS7 Initial Address Message is sent from the Service Switching Point (SSP) to the Service Transfer Point (STP).

For originating calls over FGD provided with Signaling System 7 (SS7) Signaling when the FGD end office is routed through a tandem for connection to the customer, usage measurement begins when the FGD end office receives the SS7 Exit Message from the tandem.

The measurement of originating call usage over FGD provided with Multi-Frequency Signaling ends when the originating FGD first point of switching receives disconnect supervision from either the originating end user's end office, indicating the originating end user has disconnected, or the customer's point of termination, whichever is recognized first by the first point of switching.

The measurement of originating call usage over FGD provided with SS7 Signaling ends when the originating FGD end office receives an SS7 Release Message indicating either the originating or terminating end user has disconnected.

**ACCESS SERVICE**6. Switched Access Service (Cont'd)6.6 Description and Provision of Feature Group D (FGD) (Cont'd)6.6.4 Measuring Access Minutes (Cont'd)Terminating Usage

For terminating calls over FGD the chargeable access minutes are either measured or derived.

For terminating calls over FGD provided with Multi-Frequency Signaling, where measurement capability exists, the measurement of chargeable access minutes begins when the terminating FGD first point of switching receives answer supervision from the terminating end user's end office, indicating the terminating end user has answered. This measurement ends when the terminating FGD first point of switching receives disconnect supervision from either the terminating end user's end office, indicating the terminating end user has disconnected, or the customer's point of termination, whichever is recognized first by the first point of switching.

For terminating calls over FGD, where measurement capability does not exist, terminating FGD usage is derived from originating usage, excluding usage from calls to closed end services or Directory Assistance Services.

For terminating calls over FGD with SS7 signaling, usage measurement begins when the terminating recording switch receives answer supervision from the terminating end user. The Telephone Company switch receives answer supervision and sends the indication to the customer in the form of an answer message. The measurement of terminating FGD call usage ends when the entry switch receives or sends a release message, whichever occurs first.

**ACCESS SERVICE**6. Switched Access Service (Cont'd)6.6 Description and Provision of Feature Group D (FGD) (Cont'd)6.6.5 Design Blocking Probability

The Telephone Company will design the facilities used in the provision of Switched Access Service FGD to meet the blocking probability criteria as set forth in (A) and (B) following.

- (A) For Feature Group D, the design blocking objective will be no greater than one percent (.01) between the point of termination at the customer's designated premises and the end office switch, whether the traffic is directly routed without an alternate route or routed via an access tandem. Standard traffic engineering methods as set forth in reference document Telecommunications Transmission Engineering - Volume 3 - Networks and Services (Chapters 6-7) will be used by the Telephone Company to determine the number of transmission paths required to achieve this level of blocking.
- (B) The Telephone Company will perform routine measurement functions to assure that an adequate number of transmission paths are in service. The Telephone Company will recommend that additional capacity (i.e., busy hour minutes of capacity or trunks) be ordered by the customer when additional paths are required to reduce the measured blocking to the designed blocking level. For the capacity ordered, the design blocking objective is assumed to have been met if the routine measurements show that the measured blocking does not exceed the threshold listed in the following tables.

**ACCESS SERVICE**

6. Switched Access Service (Cont'd)

6.6 Description and Provision of Feature Group D (FGD) (Cont'd)

6.6.5 Design Blocking Probability (Cont'd)

(B) (Cont'd)

- (1) For transmission paths carrying only first routed traffic direct between an end office and customer's designated premises without an alternate route, and for paths carrying only overflow traffic, the measured blocking thresholds are as follows:

Number of Transmission Paths Per Trunk Group	Measured Blocking Thresholds in the Time Consistent Busy Hour for the Number of Measurements Taken Between 8:00 a.m. and 11:00 p.m. Per Trunk Group			
	15-20 Measurements	11-14 Measurements	7-10 Measurements	3-6 Measurements
2	7%	8.0%	9%	14.0%
3	5%	6.0%	7%	9.0%
4	5%	6.0%	7%	8.0%
5-6	4%	5.0%	6%	7.0%
7 or more	3%	3.5%	4%	6.0%

- (2) For transmission paths carrying first routed traffic between an end office and customer's premises via an access tandem, the measured blocking thresholds are as follows:

Number of Transmission Paths Per Trunk Group	Measured Blocking Thresholds in the Time Consistent Busy Hour for the Number of Measurements Taken Between 8:00 a.m. and 11:00 p.m. Per Trunk Group			
	15-20 Measurements	11-14 Measurements	7-10 Measurements	3-6 Measurements
2	4.5%	5.5%	6.0%	9.5%
3	3.5%	4.0%	4.5%	6.0%
4	3.5%	4.0%	4.5%	5.5%
5-6	2.5%	3.5%	4.0%	4.5%
7 or more	2.0%	2.5%	3.0%	4.0%

**ACCESS SERVICE**

6. Switched Access Service (Cont'd)

6.6 Description and Provision of Feature Group D (FGD) (Cont'd)

6.6.6 Network Blocking Charge

The customer will be notified by the Telephone Company to increase its capacity (busy hour minutes of capacity or quantities of trunks) when excessive trunk group blocking occurs on groups carrying Feature Group D traffic and the measured access minutes for that hour exceed the capacity purchased. Excessive trunk group blocking occurs when the blocking thresholds stated below are exceeded. They are predicated on time consistent, hourly measurements over a 30 day period excluding Saturdays, Sundays and national holidays. If the order for additional capacity has not been received by the Telephone Company within 15 days of the notification, the Telephone Company will bill the customer, at the rate set forth in Section 17 following, for each overflow in excess of the blocking threshold when (1) the average "30 day period" overflow exceeds the threshold level for any particular hour and (2) the "30 day period" measured average originating or two-way usage for the same clock hour exceeds the capacity purchased.

Blocking Thresholds

<u>Trunks in Service</u>	<u>1%</u>	<u>1/2%</u>
1-2	7.0%	4.5%
3-4	5.0%	3.5%
5-6	4.0%	2.5%
7 or greater	3.0%	2.0%

The 1% blocking threshold is for transmission paths carrying traffic direct (without an alternate route) between an end office and a customer's premises. The 1/2% blocking threshold is for transmission paths carrying first routed traffic between an end office and a customer's premises via an access tandem.

6.6.7 Testing Capabilities

FGD is provided, in the terminating direction where equipment is available, with seven digit access to balance (100 type) test line, milliwatt (102 type) test line, nonsynchronous or synchronous test line, automatic transmission measuring (105 type) test line, data transmission (107 type) test line, loop around test line, short circuit test line and open circuit test line. In addition to the tests described in 6.2.4 preceding, which are included with the installation of service (Acceptance Testing) and as ongoing routine testing, Additional Cooperative Acceptance Testing, Additional Automatic Testing and Additional Manual Testing, are available as set forth in Section 13.3.1 following.

When SS7 Signaling is ordered, network compatibility and other testing will be performed cooperatively by the Telephone Company and the customer as specified in Technical References TR-TSV 000905.

**ACCESS SERVICE**

7. Reserved for Future use

**ACCESS SERVICE**

8. Reserved for Future use

**ACCESS SERVICE**

9. Reserved for Future use

**ACCESS SERVICE**

10. Reserved for Future use

**ACCESS SERVICE**

11. Reserved for Future use

## ACCESS SERVICE

### 12. Specialized Service or Arrangements

#### 12.1 General

Specialized Service or Arrangements may be provided by the Telephone Company, at the request of a customer, on an individual case basis if such service or arrangements meet the following criteria:

- The requested service or arrangements are not offered under other sections of this tariff.
- The facilities utilized to provide the requested service or arrangements are of a type normally used by the Telephone Company in furnishing its other services.
- The requested service or arrangements are provided within a LATA.
- The requested service or arrangements are compatible with other Telephone Company services, facilities, and its engineering and maintenance practices.
- This offering is subject to the availability of the necessary Telephone Company personnel and capital resources.

Rates and charges and additional regulations if applicable, for Specialized Service or Arrangements are provided on an individual case basis and are as set forth in Section 17.

**ACCESS SERVICE**13. Additional Engineering, Additional Labor and Miscellaneous Services

Section 13.1 addresses Additional Engineering. Section 13.2 addresses Additional Labor (which is comprised of Overtime Installation, Overtime Repair, Standby, Testing and Maintenance with Other Telephone Companies, and Other Labor). Section 13.3 addresses Miscellaneous Services (which are comprised of Testing Services, Maintenance of Service and Telecommunications Service Restoration Priority). Section 13.4 addresses Presubscription.

In this section, normally scheduled working hours are an employee's scheduled work period in any given calendar day (e.g., 8:00 a.m. to 5:00 p.m.) for the application of rates based on working hours.

A Miscellaneous Service Order charge as described in Section 5.4.2 preceding may be applicable to services ordered from this section.

13.1 Additional Engineering

Additional Engineering, including engineering reviews will be undertaken only after the Telephone Company has notified the customer that additional engineering charges apply as set forth in Section 17 following, and the customer agrees to such charges.

Additional Engineering will be provided by the Telephone Company at the request of the customer only when:

- (A) A customer requests additional technical information after the Telephone Company has already provided the technical information.
- (B) A customer requested Design Change requires the expenditure of Additional Engineering time. Such additional engineering time is incurred by the Telephone Company for the engineering review. The charge for additional engineering time relating to the engineering review, which is undertaken to determine if a design change is indeed required, will apply whether or not the customer authorizes the Telephone Company to proceed with the Design Change. In this case the Design Change charge, as set forth in Section 17 following, does not apply unless the customer authorizes the Telephone Company to proceed with the Design Change.

**ACCESS SERVICE**13. Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd)13.2 Additional Labor

Additional Labor is that labor requested by the customer on a given service and agreed to by the Telephone Company as set forth in Sections 13.2.1 through 13.2.5 following. The Telephone Company will notify the customer that additional labor charges as set forth in Section 17 following will apply before any Additional Labor is undertaken. A call-out of a Telephone Company employee at a time not consecutive with the employee's scheduled work period is subject to a minimum charge of four hours. When provisioning or restoring Telecommunications Service Priority services, the Telephone Company will, when possible, notify the customer of the applicability of these Additional Labor charges.

13.2.1 Overtime Installation

Overtime installation is that Telephone Company installation effort outside of normally scheduled working hours.

13.2.2 Overtime Repair

Overtime repair is that Telephone Company effort performed outside of normally scheduled working hours.

13.2.3 Standby

Standby includes all time in excess of one-half (1/2) hour during which Telephone Company personnel standby to make installation acceptance tests or cooperative tests with a customer to verify facility repair on a given service.

13.2.4 Testing and Maintenance with Other Telephone Companies

Additional testing, maintenance or repair of facilities which connect other telephone companies is that which is in addition to the normal effort required to test, maintain or repair facilities provided solely by the Telephone Company.

13.2.5 Other Labor

Other labor is that additional labor not included in Sections 13.2.1 through 13.2.4 preceding and labor incurred to accommodate a specific customer request that involves only labor which is not covered by any other section of this tariff.

**ACCESS SERVICE**13. Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd)13.3 Miscellaneous Services13.3.1 Testing Services

Testing Services offered under this section of the tariff are optional and subject to rates and charges as set forth in Section 17. A call-out of a Telephone Company employee at a time not consecutive with the employee's scheduled work period is subject to a minimum charge of four hours. Other testing services, as described in Section 6.2.4 preceding, are provided by the Telephone Company in association with Access Services and are furnished at no additional charge.

Testing services are normally provided by Telephone Company personnel at Telephone Company locations; however, provisions are made in subsection (B)(2) following for a customer to request Telephone Company personnel to perform Testing Services at the customer designated premises.

The offering of Testing Services under this section of the tariff is made subject to the availability of the necessary qualified personnel and test equipment at the various test locations mentioned in subsections (A) and (B) following.

(A) Switched Access Service

Testing Services for Switched Access are comprised of (a) tests which are performed during the installation of a Switched Access Service, (i.e., Acceptance Tests), (b) tests which are performed after customer acceptance of such access services and which are without charge (i.e., routine testing) and (c) additional tests which are performed during or after customer acceptance of such access services and for which additional charges apply, (i.e., Additional Cooperative Acceptance Tests and in-service tests).

Routine tests are those tests performed by the Telephone Company on a regular basis, as set forth in Section 6.2.4 preceding which are required to maintain Switched Access Service. Additional in-service tests may be done on an automatic basis (no Telephone Company or customer technicians involved), on a manual basis (Telephone Company technician(s) involved at Telephone Company office(s) and Telephone Company or customer technician(s) involved at the customer designated premises).

**ACCESS SERVICE**13. Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd)13.3 Miscellaneous Services (Cont'd)13.3.1 Testing Services (Cont'd)(A) Switched Access Service (Cont'd)

Testing services are ordered to the Dial Tone Office for FGA, to the access tandem and to the end office for FGs C and D. Testing Services for Directory Assistance Service not routed through an access tandem is ordered to a Directory Assistance Location for each NPA.

(1) Additional Cooperative Acceptance Testing

Additional Cooperative Acceptance Testing of Switched Access Service involves the Telephone Company provision of a technician at its office(s) and the customer provision of a technician at its premises, with suitable test equipment to perform the required tests.

Additional Cooperative Acceptance Tests may, for example, consist of the following tests:

- o Impulse Noise
- o Phase Jitter
- o Signal to C-Notched Noise Ratio
- o Intermodulation (Nonlinear) Distortion
- o Frequency Shift (Offset)
- o Envelope Delay Distortion
- o Dial Pulse Percent Break

(2) Additional Automatic Testing

Additional Automatic Testing (AAT) of Switched Access Services (Feature Groups C and D), is a service where the customer provides remote office test lines and 105 test lines with associated responders or their functional equivalent. The customer may order, at additional charges, gain-slope and C-notched noise testing and may order the routine tests (1004 Hz loss, C-Message Noise and Balance) on an as-needed or more than routine schedule.

The Telephone Company will provide an AAT report that lists the test results for each trunk tested. Trunk test failures requiring customer participation for trouble resolution will be provided to the customer on an as occurs basis.

**ACCESS SERVICE**13. Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd)13.3 Miscellaneous Services (Cont'd)13.3.1 Testing Services (Cont'd)(A) Switched Access Service (Cont'd)(2) Additional Automatic Testing (Cont'd)

The Additional Tests, (i.e., gain slope, C- notched noise, 1004 Hz loss, C-message noise and balance) may be ordered by the customer at additional charges, 60 days prior to the start of the customer prescribed schedule. The rates for Additional Automatic Tests are as set forth in Section 17.

(3) Additional Manual Testing

Additional Manual Testing (AMT) of Switched Access Services (Feature Groups C, and D and Directory Access Service not routed through an access tandem), is a service where the Telephone Company provides a technician at its office(s) and the Telephone Company or customer provides a technician at the customer designated premises, with suitable test equipment to perform the required tests. Such additional tests will normally consist of gain-slope and C-notched noise testing. However, the Telephone Company will conduct any additional tests which the IC may request.

The Telephone Company will provide an AMT report listing the test results for each trunk tested. Trunk test failures requiring customer participation for trouble resolution will be provided to the customer on a per occurrence basis.

The Additional Manual Tests may be ordered by the customer at additional charges, 60 days prior to the start of the testing schedule as mutually agreed to by the customer and the Telephone Company.

The rates for Additional Manual Testing are as set forth in Section 17 following.

**ACCESS SERVICE**

13. Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd)

13.3 Miscellaneous Services (Cont'd)

13.3.1 Testing Services (Cont'd)

(A) Switched Access Service (Cont'd)

(4) Obligations of the Customer

- (A) The customer shall provide the Remote Office Test Line priming data to the Telephone Company, as appropriate, to support routine testing as set forth in Section 6.2.4(B) preceding or AAT as set forth in Section 13.3.1(A)(2) preceding.
- (B) The customer shall make the facilities to be tested available to the Telephone Company at times mutually agreed upon.

**ACCESS SERVICE**13. Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd)13.3 Miscellaneous Services (Cont'd)13.3.2 Maintenance of Service

- (A) When a customer reports a trouble to the Telephone Company for clearance and no trouble is found in the Telephone Company's facilities, the customer shall be responsible for payment of a Maintenance of Service charge as set forth in Section 17 following for the period of time from when Telephone Company personnel are dispatched, at the request of the customer, to the customer designated premises to when the work is completed. Failure of Telephone Company personnel to find trouble in Telephone Company facilities will result in no charge if the trouble is actually in those facilities, but not discovered at the time.
- (B) The customer shall be responsible for payment of a Maintenance of Service charge when the Telephone Company dispatches personnel to the customer designated premises, and the trouble is in equipment or communications systems provided by other than the Telephone Company or in detariffed CPE provided by the Telephone Company.

In either (A) or (B) preceding, no credit allowance will be applicable for the interruption involved if the Maintenance of Service Charge applies.

13.3.3 Telecommunications Service Priority - TSP

- (A) Priority installation and/or restoration of National Security Emergency Preparedness (NSEP) telecommunications services shall be provided in accordance with Part 64.401, Appendix A, of the Federal Communications Commission's (FCC's) Rules and Regulations.

In addition, TSP System service shall be provided in accordance with the guidelines set forth in "Telecommunications Service Priority (TSP) System for National Security Emergency Preparedness (NSEP) Service Vendor Handbook" (NCSH 3-1-2) dated July 9, 1990, and "Telecommunications Service Priority System for National Security Emergency Preparedness Service User Manual" (NCSM 3-1-1) .

**ACCESS SERVICE**13. Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd)13.3 Miscellaneous Services (Cont'd)13.3.3 Telecommunications Service Priority - TSP (Cont'd)

The TSP System is a service, developed to meet the requirements of the Federal Government, as specified in the Service Vendor's Handbook and Service User's Manual which provides the regulatory, administrative and operational framework for the priority installation and/or restoration of NSEP telecommunications services. These include Switched Services. The TSP System applies only to NSEP telecommunications services, and requires and authorizes priority action by the Telephone Company providing such services.

For Switched Access Service, the TSP System's applicability is limited to those services which the Telephone Company can discreetly identify for priority provisioning and/or restoration.

- (B) A Miscellaneous Service Order Charge as set forth in Section 17 will apply to Telecommunications Service Priority requests that are ordered subsequent to the initial installation of the associated access service.

In addition, Additional Labor rates as set forth in Section 17 may be applicable when provisioning or restoring Switched Services with Telecommunications Service Priority.

When the customer requests an audit or a reconciliation of the Telephone Company's Telecommunications Service Priority records, a Miscellaneous Service Order Charge as set and Additional Labor rates as set forth in Section 17 are applicable.

**ACCESS SERVICE**13. Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd)13.3 Miscellaneous Services (Cont'd)13.3.4 Miscellaneous Equipment(A) Controller Arrangement

This arrangement enables the customer to control up to 48 transfer functions at a Telephone Company central office via a remote keyboard terminal capable of either 300 or 1200 bps operation. Included as part of the Controller Arrangement is a dial-up data station located at the Telephone Company Central Office to provide access to the Controller Arrangement. This dial-up data station consists of a 212A DATAPHONE data set and an appropriate Telephone Company provided channel.

The Controller Arrangement must be located in the same Telephone Company central office as the transfer functions which it controls.

Charges for the Controller Arrangement are set forth in Section 17 following.

13.4 Presubscription13.4.1 General

## (A) End users may select one of the following options at no charge:

- indicate a primary IC for all of its lines,
- indicate a different IC for each of its lines.

Only one IC may be selected for each line or lines terminating in the same hunt group.

End users may designate that they do not want to presubscribe to any IC. The end user must arrange this designation by directly notifying the Telephone Company's business office. This choice will require the end user to dial an access code (10XXX or 101XXXX) for all interLATA calls.

After the end user's initial selection of a predesignated IC or the designation that they do not want to presubscribe to any IC, for any change in selection after conversion to Equal Access in the serving end office, a nonrecurring charge as set forth in Section 17 applies.

**ACCESS SERVICE**

13. Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd)

13.4 Presubscription (Cont'd)

13.4.1 General (Cont'd)

(B) New end users who are served by end offices equipped with Feature Group D will be asked to presubscribe to an IC at the time they place an order with the Telephone Company for Telephone Exchange Service. They may select either of the following options. There will be no charge for this initial selection.

- designate a primary IC for all of its lines,
- designate a different IC for each of its lines.

Only one IC may be selected for each individual line, or lines terminating in the same hunt group. Subsequent to the installation of Telephone Exchange Service and after the end user's initial selection of a predesignated IC, for any change in selection, a nonrecurring charge, as set forth in Section 17 applies.

**ACCESS SERVICE**13. Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd)13.4 Presubscription (Cont'd)13.4.1 General (Cont'd)

- (C) If the new end user fails to designate an IC as its predesignated IC prior to the date of installation of Telephone Exchange Service, the Telephone Company will (1) allocate the end user to an IC based upon current IC presubscription ratios, (2) require the end user to dial an access code (10XXX or 101XXXX) for all interLATA calls, or (3) block the end user from interLATA calling. The end user will be notified which option will be applied if they fail to presubscribe to an IC. An allocated or blocked end user may designate another, or initial, IC as its predesignated IC one time at no charge, if it is requested within six months after the installation of Telephone Exchange Service.

For any change in selection after 6 months from the installation of Telephone Exchange Service, a nonrecurring charge, as set forth in Section 17 applies.

- (D) If an IC elects to change or discontinue use of a Carrier Identification Code (CIC) for any reasons other than those set forth in (H) above, the IC will identify to the Telephone Company any affected end users and advise the Telephone Company of the new CIC to be assigned to these end users. If the CIC change involves a change of carrier for any end users, the IC will notify the affected end users of the change. The telephone company will change the predesignated carrier code of each end user identified by the IC to the new CIC and bill the IC the nonrecurring charge for each end user line or trunk that is changed.

**ACCESS SERVICE**13. Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd)13.4 Presubscription (Cont'd)13.4.1 General (Cont'd)

- (E) As specified above, a nonrecurring charge will apply for subsequent changes to the end user's selection of a predesignated IC (PIC), including the establishment or removal of a no PIC selection. The nonrecurring charge to process a PIC change request is bifurcated into four (4) separate nonrecurring charges and applies as follows:
- (1) A nonrecurring charge, as set forth in Section 17, applies when the PIC change request is submitted to the Telephone Company through manual methods.
  - (2) A nonrecurring charge, as set forth in Section 17, applies when the PIC change request is submitted to the Telephone Company through electronic methods.
  - (3) A nonrecurring charge, as set forth in Section 17, applies to the PIC change when a request submitted to the Telephone Company through manual methods requests a simultaneous change to both the interLATA PIC and intraLATA PIC selections.
  - (4) A nonrecurring charge, as set forth in Section 17, applies to the PIC change when a request submitted to the Telephone Company through electronic methods requests a simultaneous change to both the interLATA PIC and intraLATA PIC selections.

As used above, manual methods are (i) all personal interaction between an end user, or a person acting on behalf of the end user, and a Telephone Company employee and (ii) any facsimile or written submissions from an end user, or a person acting on behalf of the end user, to a Telephone Company service center. Electronic methods shall include all other methods. If a PIC change request utilizing an electronic method results in manual processing, the electronic nonrecurring charge shall apply upon completion of the request.

**ACCESS SERVICE**13. Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd)13.5 Unauthorized Predesignated Interexchange Carrier (PIC) Change

For purposes of this section, a subscriber is defined as:

- the party identified in the account records of the Telephone Company as responsible for payment of the telephone bill, or
- any adult person authorized by such party to change telecommunications services or to charge services to the account, or
- any person contractually or otherwise lawfully authorized to represent such party.

If an IC requests a PIC change on behalf of a subscriber and the subscriber subsequently denies requesting the change; the Telephone Company will:

- Notify both carriers involved in the unauthorized change allegation made by the subscriber. This notification must include the identity of both carriers.
- Direct the subscriber to the appropriate state regulatory agency or the Federal Communications Commission to file a complaint.
- Inform the subscriber that if he or she has not already paid charges to the unauthorized carrier, he or she is not required to pay for any charges incurred for the first 30 days after the unauthorized change.

13.6 Billing Name and Address13.6.1 General Description

- (A) Billing Name and Address (BNA) Service is the provision by the Telephone Company to an intrastate service provider who is a customer of the Telephone Company of the complete billing name, street address, city or town, state and zip code for a telephone number assigned by the Telephone Company. An intrastate telecommunications service provider is defined as an intrastate interexchange carrier, an operator service provider, an enhanced service provider or any other provider of intrastate telecommunications services.
- (B) BNA Service is provided only for the purposes of allowing customers to bill their end users for telephone services provided by the customer, order entry and customer service information, fraud prevention, identification of end users who have moved to a new address, any purpose associated with equal access requirements, and information associated with Local Exchange Carrier (LEC) calling card calls, collect calls and third party calls. BNA information may not be resold or used for any other purpose including, but not limited to, marketing or merchandising activities.

**ACCESS SERVICE**13. Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd)13.6 Billing Name and Address13.6.1 General Description

- (C) BNA information associated with listed/published telephone numbers will be provided. Requests for BNA information associated with non-published and unlisted telephone numbers will be provided, unless the subscriber to a non-published or unlisted telephone number has affirmatively requested that its BNA not be disclosed.
- (D) Billing Name and Address (BNA) Service is the provision by the Telephone Company to an intrastate service provider who is a customer of the Telephone Company of the complete billing name, street address, city or town, state and zip code for a telephone number assigned by the Telephone Company. An intrastate telecommunications service provider is defined as an intrastate interexchange carrier, an operator service provider, an enhanced service provider or any other provider of intrastate telecommunications services.
- (E) BNA Service is provided only for the purposes of allowing customers to bill their end users for telephone services provided by the customer, order entry and customer service information, fraud prevention, identification of end users who have moved to a new address, any purpose associated with equal access requirements, and information associated with Local Exchange Carrier (LEC) calling card calls, collect calls and third party calls. BNA information may not be resold or used for any other purpose including, but not limited to, marketing or merchandising activities.
- (F) BNA information associated with listed/published telephone numbers will be provided. Requests for BNA information associated with non-published and unlisted telephone numbers will be provided, unless the subscriber to a non-published or unlisted telephone number has affirmatively requested that its BNA not be disclosed.

**ACCESS SERVICE**13. Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd)13.6 Billing Name and Address13.6.2 Undertaking of the Telephone Company

- (A) A standard format for the receipt of BNA requests and the provision of BNA information will be established by the Telephone Company.
- (B) Standard response to BNA requests will be by First Class Mail. Standard format will be on paper.
- (C) Where facilities are available, BNA will be provided in digitally encoded formats on digital data storage devices. Telephone Companies providing BNA in digitally encoded formats will make available one or more of the following digital data storage devices for transmission of the BNA data: magnetic tapes, compact discs (CDs), 3.5 inch floppy discs and/or Internet transmitted file. Individual Telephone Company availability of optional digital formats and transmission media are available from the company
- (D) Where facilities are available, the customer may request an optional specialized output format required to meet a specific customer need.
- (E) The Telephone Company will make every effort to provide accurate and complete BNA data. The Telephone Company makes no warranties, expressed or implied, as to the accuracy or completeness of this information.
- (F) The Telephone Company will not disclose BNA information to parties other than intrastate telecommunications service providers as defined in Section 13.6.1(A), preceding, and their authorized billing agents. An authorized billing agent means a third party hired by a telecommunications service provider to perform billing and collection services for the telecommunications service provider. BNA disclosure is limited to those purposes as defined in Section 13.6.1(B), preceding.
- (G) The Telephone Company reserves the right to request from an intrastate service provider who has placed an order for BNA service, the source data upon which the intrastate service provider has based the order. This request is made to ensure that the BNA information is to be used only for purposes as described in Section 13.6.1(B), preceding. The Telephone Company will not process the order until such time as the intrastate service provider supplies the requested data .

**ACCESS SERVICE**13. Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd)13.6 Billing Name and Address Service (Cont'd)13.6.3 Obligations of the Customer

- (A) The customer shall order BNA Service on a separate BNA Order. The order must identify both the customer's authorized representative and the address to which the information is to be sent.
- (B) The customer shall treat all BNA information as confidential. The customer shall insure that BNA information is used only for the purposes as described in Section 13.6.1(B), preceding.
- (C) The customer shall not publicize or represent to others that the Telephone Company jointly participates with the customer in the development of the customer's end user records it assembles through the use of BNA Service.
- (D) Upon requests, the customer will provide to the Telephone Company the source data upon which the customer has based an order from BNA service. The Telephone Company will not process the order until such time as the customer provides the requested data.

13.6.4 Rate Regulations

- (A) For each order for BNA information received by the Telephone Company, a BNA Order Charge applies. In addition, a charge applies for each customer specific record provided. The BNA Order Charge and the Per Record Charge are specified in Section 17 following.
- (B) Where available, the customer may order the response in a digitally encoded format on a digital data storage device. For each type of digital data storage device that is available from a Telephone Company, an Optional Charge is specified in the respective Telephone Company's Section 17 BNA rate section. The Optional Charge for the digital data device is in addition to the BNA Order Charge and the BNA Record Charge.
- (C) Where available, the customer may order an output format other than a standard paper format or digital data device listed in Section 17 in order to meet a customer's specific requirement. This option is subject to an hourly programming charge as specified in Section 17 following and is in addition to the BNA Order Charge and the BNA Record Charge.

**ACCESS SERVICE**13. Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd)13.7 Blocking Service13.7.1 International Blocking Service

The Telephone Company will provide International Blocking Service to customers who obtain local exchange service from the Telephone Company under its general or local exchange tariffs. This service is only provided at appropriately equipped Telephone Company end offices. Those offices providing International Blocking Service are identified in NATIONAL EXCHANGE CARRIER ASSOCIATION, INC. TARIFF F.C.C. NO. 4.

On each line or trunk for which International Blocking Service is ordered, the Telephone Company will block all direct dialed international calls that use the call sequence of 011+ or 10XXX-011+ or 101XXX-011+. When capable, the Telephone Company will route the blocked calls to a recorded message.

A Miscellaneous Service Order Charge as set forth in Section 17 will apply to orders adding or removing International Blocking Service that are placed subsequent to the initial installation of the associated exchange line(s) or trunk(s). This charge does not apply when blocking is removed from an exchange line or trunk at the same time that it is disconnected.

13.7.2 900 Blocking Service

The Telephone Company will provide 900 Blocking Service to customers who obtain local exchange service from the Telephone Company under its general This service is only provided at appropriately equipped end offices. Those offices providing 900 Blocking Service are identified in NATIONAL EXCHANGE CARRIER ASSOCIATION, INC. TARIFF F.C.C. NO. 4.

On each line or trunk for which 900 Blocking Service is ordered, the Telephone Company will block all direct dialed calls placed to a 900 number. When capable, the Telephone Company will route the blocked calls to a recorded message.

**ACCESS SERVICE**

13. Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd)

13.7 Blocking Service (Cont'd)

13.7.2 900 Blocking Service (Cont'd)

A Blocking Service charge as set forth in 17.4.4(K) following is applicable when ordered by the end user customer with the following exception:

- Blocking access to 900 Service is offered to all subscribers at no charge at the time telephone service is established at a new number and for 60 days thereafter.

The Blocking Service charge is applied for each line, trunk to which 900 Blocking Service is added or removed. Requests by subscribers to remove 900 Blocking Service must be in writing. This charge does not apply when blocking is removed from an exchange line at the same time that it is disconnected .

**ACCESS SERVICE**

14. Reserved for Future use

**ACCESS SERVICE****15. Access Service Interfaces and Transmission Specifications**

Section 15.1 contains Switched Access Service Options (which are comprised of Interface Groups, Supervisory Signaling, Entry Switch Receive Level and Local Transport Termination) and Transmission Specifications.

**15.1 Switched Access Service**

Ten Interface Groups are provided for terminating the Local Transport Entrance Facility at the customer's designated premises. Each Interface Group provides a specified premises interface (e.g., two-wire, four-wire, DS1, etc.). Where transmission facilities permit, and at the option of the customer, the Entrance Facility may be provided with optional features as set forth in Section 15.1.1 following.

As a result of the customer's access order and the type of Telephone Company transport facilities serving the customer designated premises, the need for signaling conversions or two-wire to four-wire conversions, or the need to terminate digital or high frequency facilities in channel bank equipment may require that Telephone Company equipment be placed at the customer designated premises. For example, if a voice frequency interface is ordered by the customer and the Telephone Company facilities serving the customer designated premises are digital, then Telephone Company channel bank equipment must be placed at the customer designated premises in order to provide the voice frequency interface ordered by the customer.

**15.1.1 Local Transport Interface Groups**

Interface Groups are combinations of technical parameters which describe the Telephone Company handoff at the point of termination at the customer designated premises. The technical specifications concerning the available interface groups are set forth in subsections (A) through (D) following.

Interface Group 1 is provided with Type C Transmission Specifications, as set forth in Section 15.1.2(C) following, and Interface Groups 2 through 10 are provided with Type A or B Transmission Specifications, as set forth respectively in Section 15.1.2 (E) following, depending on the Feature Group and whether the Access Service is routed directly or through an access tandem. All Interface Groups are provided with Data Transmission Parameters.

Only certain premises interfaces are available at the customer designated premises. The premises interfaces associated with the Interface Groups may vary among Feature Groups.

**(A) Interface Group 1**

Interface Group 1, except as set forth in the following, provides two-wire voice frequency transmission at the point of termination at the customer designated premises. The interface is capable of transmission of voice and associated telephone signals within the frequency bandwidth of approximately 300 to 3000 Hz.

**ACCESS SERVICE**15. Access Service Interfaces and Transmission Specifications (Cont'd)15.1 Switched Access Service (Cont'd)15.1.1 Local Transport Interface Groups (Cont'd)(A) Interface Group 1 (Cont'd)

The interface is provided with loop supervisory signaling. When the interface is associated with FGc or FGD, such signaling except for two-way calling which is E&M signaling, will be reverse battery signaling.

(B) Interface Group 2

Interface Group 2 provides four-wire voice frequency transmission at the point of termination at the customer designated premises. The interface is capable of transmission of voice and associated telephone signals within the frequency bandwidth of approximately 300 to 3000 Hz.

The transmission path between the point of termination at the customer designated premises and the customer's serving wire center may be comprised of any form or configuration of plant capable of and typically used in the telecommunications industry for the transmission of voice and associated telephone signals within the frequency bandwidth of approximately 300 to 3000 Hz.

**ACCESS SERVICE**

15. Access Service Interfaces and Transmission Specifications (Cont'd)

15.1 Switched Access Service (Cont'd)

15.1.1 Local Transport Interface Groups (Cont'd)

(B) Interface Group 2 (Cont'd)

The interface is provided with loop supervisory signaling. When the interface is associated with FGC or FGD, such signaling, except for two-way calling which is E&M signaling, will be reverse battery signaling.

(C) Interface Groups 3 through 5

Interface Groups 3 through 5 provide analog transmission at the point of termination at the customer designated premises. The various interfaces are capable of transmitting electrical signals at the frequencies illustrated following, with the capability to channelize voice frequency transmission paths. Certain frequencies within the bandwidth of the Interface Groups are reserved for Telephone Company use, e.g., pilot and carrier group alarm tones. Before the first point of switching, the Telephone Company will provide multiplex equipment to derive the transmission paths of frequency bandwidth of approximately 300 to 3000 Hz.

The interfaces are provided with individual transmission path SF supervisory signaling.

<u>Interface Group Identification No.</u>	<u>Transmission Frequency Bandwidth</u>	<u>Analog Hierarchy Level</u>	<u>Maximum No. Of Channelized Voice Freq. Trans. Paths</u>
12	3 60-108kHz	Group	
60	4 312-552 kHz	Supergroup	
	5 564-3084 kHz	Mastergroup	600

**ACCESS SERVICE**15. Access Service Interfaces and Transmission Specifications (Cont'd)15.1 Switched Access Service (Cont'd)15.1.1 Local Transport Interface Groups (Cont'd)(D) Interface Groups 6 through 10

Interface Groups 6 through 10 provide digital transmission at the point of termination at the customer designated premises. The various interfaces are capable of transmitting electrical signals at the nominal bit rates illustrated following, with the capability to channelize voice frequency transmission paths. Before the first point of switching, when analog switching utilizing analog terminations is provided, the Telephone Company will provide multiplex and channel bank equipment to derive transmission paths of a frequency bandwidth of approximately 300 to 3000 Hz. When digital switching or analog switching with digital carrier terminations is provided, the Telephone Company will provide a DS1 signal(s) in D3/D4 format .

The interfaces are provided with individual transmission path bit stream supervisory signaling.

<u>Interface Group Identification No.</u>	<u>Nominal Bit Rate (Mbps)</u>	<u>Digital Hierarchy Level</u>	<u>Max. No. of Channelized Voice Freq. Trans. Paths</u>
6	1.544	DS1	24
7	3.152	DS1C	48
8	6.312	DS2	96
9	44.736	DS3	672
10	274.176	DS4	4032

**ACCESS SERVICE**15. Access Service Interfaces and Transmission Specifications (Cont'd)15.1 Switched Access Service (Cont'd)15.1.1 Local Transport Interface Groups (Cont'd)(E) Local Transport Optional Features

Where transmission facilities permit, the Telephone Company will, at the option of the customer, provide the following features in association with Local Transport. An Access Order Charge as specified in 17.3.1

- Customer Specified Entry Switch Receive Level

Customer Specified Entry Switch Receive Level allows the customer to specify the receive transmission level at the first point of switching. The range of transmission levels which may be specified is described in Technical Reference TR-NPL-000334.

- Customer Specification of Local Transport Termination

Customer Specification of Local Transport Termination allows the customer to specify, for routed directly to an end office or access tandem, a four-wire termination of the Local Transport at the first point of switching in lieu of a Telephone Company selected two-wire termination. This option is available only when the arrangement is provided with Type B Transmission Specifications.

- Supervisory Signaling

Supervisory Signaling allows the customer to order an optional supervisory signaling arrangement for each transmission path provided where the transmission parameters permit, and where signaling conversion is required by the customer to meet its signaling capability.

**ACCESS SERVICE**15. Access Service Interfaces and Transmission Specifications (Cont'd)15.1 Switched Access Service (Cont'd)15.1.1 Local Transport Interface Groups (Cont'd)(E) Local Transport Optional Features (Cont'd)

The Interface Groups, as described in (A) through (D) preceding, represent industry standard arrangements. Where transmission parameters permit, the customer may select the following optional signaling arrangements in place of the signaling arrangements standardly associated with the Interface Groups.

- For Interface Groups 1 and 2 associated with FGC or FGD  
DX Supervisory Signaling,  
E&M Type I Supervisory Signaling,  
E&M Type II Supervisory Signaling, or  
E&M Type III Supervisory Signaling
- For Interface Group 2 associated with FGC or FGD and in addition to the preceding  
SF Supervisory Signaling, or  
Tandem Supervisory Signaling
- For Interface Groups 3 through 5  
Optional Supervisory Signaling Not Available
- For Interface Groups 6 through 10

These Interface Groups may, at the option of the customer, be provided with individual transmission path SF supervisory signaling where such signaling is available in Telephone Company central offices. Generally such signaling is available only where the first point of switching provides an analog (i.e., non-digital) interface to the transport termination.

**ACCESS SERVICE**15. Access Service Interfaces and Transmission Specifications (Cont'd)15.1 Switched Access Service (Cont'd)15.1.2 Standard Transmission Specifications

Descriptions of the transmission specifications available with each Feature Group as a function of the Interface Group selected by the customer are set forth in (A) and (B) following. Descriptions of each of these Standard Transmission Specifications and the two Data Transmission Parameters mentioned are set forth respectively in (C) through (E).

(A) Feature Group C

FGC is provided with either Type B or Type C Transmission Specifications as follows:

- When routed directly to the end office either Type B or Type C is provided.
- When routed to an access tandem only Type B is provided.
- Type B or Type C is provided on the transmission path from the access tandem to the end office.

Type C Transmission Specifications are provided with Interface Group 1 when routed directly to an end office. Type B is provided with Interface Groups 2 through 10, whether routed directly to an end office or to an access tandem.

Type DB Data Transmission Parameters are provided with FGC for the transmission path between the customer designated premises and the end office when directly routed to the end office, and between the customer designated premises and the access tandem and between the access tandem and the end office when routed via an access tandem.

**ACCESS SERVICE**15. Access Service Interfaces and Transmission Specifications (Cont'd)15.1 Switched Access Service (Cont'd)15.1.2 Standard Transmission Specifications (Cont'd)(B) Feature Group D

FGD is provided with either Type A, Type B or Type C Transmission Specifications as follows:

- When routed to the end office either Type B or C is provided.
- When routed to an access tandem only Type A is provided.
- Type A is provided on the transmission path from the access tandem to the end office.

Type C Transmission Specifications are provided with Interface Group 1. Type A and Type B Transmission Specifications are provided with Interface Groups 2 through 10.

Type DB Data Transmission Parameters are provided with FGD for the transmission path between the customer designated premises and the end office when directly routed to the end office. Type DA Data Transmission Parameters are provided for the transmission path between the customer designated premises and the access tandem and between the access tandem and the end office when routed via an access tandem.

(C) Type A Transmission Specifications

Type A Transmission Specifications is provided with the following parameters:

(1) Loss Deviation

The maximum Loss Deviation of the 1004 Hz loss relative to the Expected Measured Loss (EML) is  $\pm 2.0$  dB

**ACCESS SERVICE**

15. Access Service Interfaces and Transmission Specifications (Cont'd)

15.1 Switched Access Service (Cont'd)

15.1.2 Standard Transmission Specifications (Cont'd)

(C) Type A Transmission Specifications (Cont'd)

(2) Attenuation Distortion

The maximum Attenuation Distortion in the 404 to 2804 Hz frequency band relative to the loss at 1004 Hz is -1.0 dB to +3.0 dB.

(3) C-Message Noise

The maximum C-Message Noise for the transmission path at the route miles listed is less than or equal to:

<u>Route Miles</u>	<u>C-Message Noise</u>
less than 50	32 dBrnCO
51 to 100	34 dBrnCO
101 to 200	37 dBrnCO
201 to 400	40 dBrnCO
401 to 1000	42 dBrnCO

(4) C-Notch Noise

The maximum C-Notch Noise, utilizing a -16 dBmO holding tone, is less than or equal to 45 dBrnCO.

(5) Echo Control

Echo Control, identified as Equal Level Echo Path Loss, and expressed as Echo Return Loss and Singing Return Loss, is dependent on the routing, i.e., whether the service is routed directly from the customer's point of termination (POT) to the end office or via an access tandem. It is equal to or greater than the following:

	<u>Echo Return Loss</u>	<u>Singing Return Loss</u>
POT to Access Tandem	21 dB	14 dB
POT to End Office		
- Direct	N/A	N/A
- Via Access Tandem	16 dB	11 dB

**ACCESS SERVICE**

15. Access Service Interfaces and Transmission Specifications (Cont'd)

15.1 Switched Access Service (Cont'd)

15.1.2 Standard Transmission Specifications (Cont'd)

(C) Type A Transmission Specifications (Cont'd)

(6) Standard Return Loss

Standard Return Loss expressed as Echo Return Loss and Singing Return Loss on two-wire ports of a four-wire point of termination shall be equal to or greater than:

<u>Echo Return Loss</u>	<u>Singing Return Loss</u>
5 dB	2.5 dB

(D) Type B Transmission Specifications

Type B Transmission Specifications are provided with the following parameters:

(1) Loss Deviation

The maximum Loss Deviation of the 1004 Hz loss relative to the Expected Measured Loss (EML) is ± 2.5 dB.

(2) Attenuation Distortion

The maximum Attenuation Distortion in the 404 to 2804 Hz frequency band relative to loss at 1004 Hz is -2.0 dB to +4.0 dB.

(3) C-Message Noise

The maximum C-Message Noise for the transmission path at the route miles listed is less than or equal to:

<u>Route Miles</u>	<u>C-Message Noise*</u>	
	<u>Type B1</u>	<u>Type B2</u>
less than 50	32 dBrnCO	35 dBrnCO
51 to 100	33 dBrnCO	37 dBrnCO
101 to 200	35 dBrnCO	40 dBrnCO
201 to 400	37 dBrnCO	43 dBrnCO
401 to 1000	39 dBrnCO	45 dBrnCO

(4) C-Notch Noise

The maximum C-Notch Noise, utilizing a -16 dBm0 holding tone is less than or equal to 47 dBrnCO.

\* For Feature Groups C and D only Type B2 will be provided. For Feature Groups A and B, Type B1 or B2 will be provided as set forth in Technical Reference TR-NPL-000334.

**ACCESS SERVICE**

15. Access Service Interfaces and Transmission Specifications (Cont'd)

15.1 Switched Access Service (Cont'd)

15.1.2 Standard Transmission Specifications (Cont'd)

(D) Type B Transmission Specifications (Cont'd)

(5) Echo Control

Echo Control, identified as Impedance Balance for FGA and FGB and Equal Level Echo Path Loss for FGC and FGD, and expressed as Echo Return Loss (ERL) and Singing Return Loss (SRL), is dependent on the routing, i.e., whether the service is routed directly from the customer's point of termination (POT) to the end office or via an access tandem. The ERL and SRL also differ by Feature Group, type of termination, and type of transmission path. They are greater than or equal to the following:

	<u>Echo Return Loss</u>	<u>Singing Return Loss</u>
POT to Access Tandem		
- Terminated in		
4-Wire trunk	21 dB	14 dB
- Terminated in		
2-Wire trunk	16 dB	11 dB
POT to End Office		
- Direct	16 dB	11 dB
- Via Access Tandem		
. For FGB access	8 dB	4 dB
. For FGC access (Effective 4-Wire trans- mission path at end office)	16 dB	11 dB
. For FGC access (Effective 2-Wire trans- mission path at end office)	13 dB	6 dB

**ACCESS SERVICE**

15. Access Service Interfaces and Transmission Specifications (Cont'd)

15.1 Switched Access Service (Cont'd)

15.1.2 Standard Transmission Specifications (Cont'd)

(D) Type B Transmission Specifications (Cont'd)

(6) Standard Return Loss

Standard Return Loss, expressed as Echo Return Loss and Singing Return Loss, on two-wire ports of a four-wire point of termination shall be equal to or greater than:

<u>Echo Return Loss</u>	<u>Singing Return Loss</u>
5 dB	2.5 dB

(E) Type C Transmission Specifications

Type C Transmission Specifications are provided with the following parameters:

(1) Loss Deviation

The maximum Loss Deviation of the 1004 Hz loss relative to the Expected Measured Loss (EML) is  $\pm 3.0$  dB.

(2) Attenuation Distortion

The maximum Attenuation Distortion in the 404 to 2804 Hz frequency band relative to loss at 1004 Hz is -2.0 dB to +5.5 dB.

(3) C-Message Noise

The maximum C-Message Noise for the transmission path at the route miles listed is less than or equal to:

<u>Route Miles</u>	<u>C-Message Noise*</u>	
	<u>Type C1</u>	<u>Type C2</u>
less than 50	32 dBrnCO	38 dBrnCO
51 to 100	33 dBrnCO	39 dBrnCO
101 to 200	35 dBrnCO	41 dBrnCO
201 to 400	37 dBrnCO	43 dBrnCO
401 to 1000	39 dBrnCO	45 dBrnCO

(4) C-Notch Noise

The maximum C-Notch Noise, utilizing a -16 dBm0 holding tone is less than or equal to 47 dBrnCO.

\*For Feature Groups C and D only Type C2 will be provided. For Feature Groups A and B, Type C1 or C2 will be provided as set forth in Technical Reference TR-NPL-000334.

**ACCESS SERVICE**

15. Access Service Interfaces and Transmission Specifications (Cont'd)

15.1 Switched Access Service (Cont'd)

15.1.2 Standard Transmission Specifications (Cont'd)

(E) Type C Transmission Specifications (Cont'd)

(5) Echo Control

Echo Control, identified as Return Loss and expressed as Echo Return Loss and Singing Return Loss is dependent on the routing, i.e., whether the service is routed directly from the customer's point of termination (POT) to the end office or via an access tandem. It is equal to or greater than the following:

	<u>Echo Return Loss</u>	<u>Singing Return Loss</u>
POT to Access Tandem	13 dB	6 dB
POT to End Office		
- Direct	13 dB	6 dB
- Via Access Tandem	8 dB	4 dB
	(for FGB only)	

15.1.3 Data Transmission Parameters

Two types of Data Transmission Parameters, i.e., Type DA and Type DB, are provided for the Feature Group arrangements. Type DB is provided with Feature Groups A, B and C and also with Feature Group D when Feature Group D is directly routed to the end office. Type DA is only provided with Feature Group D and only when routed via an access tandem. Following are descriptions of each.

(A) Data Transmission Parameters Type DA

(1) Signal to C-Notched Noise Ratio

The Signal to C-Notched Noise Ratio is equal to or greater than 33 dB.

**ACCESS SERVICE**

15. Access Service Interfaces and Transmission Specifications (Cont'd)

15.1 Switched Access Service (Cont'd)

15.1.3 Data Transmission Parameters (Cont'd)

(A) Data Transmission Parameters Type DA (Cont'd)

(2) Envelope Delay Distortion

The maximum Envelope Delay Distortion for the frequency bands and route miles specified is:

604 to 2804 Hz

less than 50 route miles	500 microseconds
equal to or greater than 50 route miles	900 microseconds

1004 to 2404 Hz

less than 50 route miles	200 microseconds
equal to or greater than 50 route miles	400 microseconds

(3) Impulse Noise Counts

The Impulse Noise Counts exceeding a 65 dBmCO threshold in 15 minutes is no more than 15 counts.

(4) Intermodulation Distortion

The Second Order (R2) and Third Order (R3) Intermodulation Distortion products are equal to or greater than:

Second Order (R2)	33 dB
Third Order (R3)	37 dB

**ACCESS SERVICE**

15. Access Service Interfaces and Transmission Specifications (Cont'd)

15.1 Switched Access Service (Cont'd)

15.1.3 Data Transmission Parameters (Cont'd)

(A) Data Transmission Parameters Type DA (Cont'd)

(5) Phase Jitter

The Phase Jitter over the 4-300 Hz frequency band is less than or equal to 5 peak-to-peak.

(6) Frequency Shift

The maximum Frequency Shift does not exceed -2 to +2 Hz.

(B) Data Transmission Parameters Type DB

(1) Signal to C-Notched Noise Ratio

The Signal to C-Notched Noise Ratio is equal to or greater than 30 dB.

(2) Envelope Delay Distortion

The maximum Envelope Delay Distortion for the frequency bands and route miles specified is:

604 to 2804 Hz

less than 50 route miles	800 microseconds
equal to or greater than 50 route miles	1000 microseconds

1004 to 2404 Hz

less than 50 route miles	320 microseconds
equal to or greater than 50 route miles	500 microseconds

**ACCESS SERVICE**

15. Access Service Interfaces and Transmission Specifications (Cont'd)

15.1 Switched Access Service (Cont'd)

15.1.3 Data Transmission Parameters (Cont'd)

(B) Data Transmission Parameters Type DB (Cont'd)

(3) Impulse Noise Counts

The Impulse Noise Counts exceeding a 67 dBmCO threshold in 15 minutes is no more than 15 counts.

(4) Intermodulation Distortion

The Second Order (R2) and Third Order (R3) Intermodulation Distortion products are equal to or greater than:

Second Order (R2)	31 dB
Third Order (R3)	34 dB

(5) Phase Jitter

The Phase Jitter over the 4-300 Hz frequency band is less than or equal to 7°

(6) Frequency Shift

The maximum Frequency Shift does not exceed -2 to +2 Hz.

**ACCESS SERVICE**

16. Reserved for Future use

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