
ACCESS SERVICE

Regulations, Rates and Charges applying to the provision of Access Service for Connection to interstate communications facilities for Interstate Customers within the operating territories of the Issuing Carriers listed on Title Pages 2 through 5

Access Services are provided by means of wire, fiber optics, radio or any other suitable technology or a combination thereof.

LEGAL NOTICE

The FRONTIER Interstate Service Guide and Pricelist (Guide) applies to the FRONTIER "Detariffed Services" (as defined below) and other telecommunications services that are set forth in this Guide.

Detariffed Services, as described in this document, are interstate special access services for which tariffs were withdrawn pursuant to FCC Report and Order, FCC 17-43, released April 28, 2017.

Beginning upon the effectiveness of the withdrawal of Detariffed Service tariffs, Detariffed Services will be subject to and provided pursuant to the rates, terms and conditions of this Guide, unless a separately executed service agreement between you and Frontier provides otherwise.

Prospective customers wishing to purchase services at the rates, terms and conditions in the Guide may do so by initiating orders through the same processes used to order services from FRONTIER's interstate access tariffs.

Service that is ordered without a separately executed service agreement between you and FRONTIER that applies to that order, will also be subject to the FRONTIER Interstate Access Service Agreement at: <https://wholesale.frontier.com/docs/wholesaledocs/frontier-interstate-access-service-agreement.pdf>.

The services described in the Guide may be available through negotiated agreements, which may include rates, terms or conditions more favorable to you than those in the Guide. Prospective customers wishing to purchase Guide services at rates, terms or conditions different from those described in the Guide and the applicable FRONTIER Interstate Access Service Agreement may contact their FRONTIER service representative or go to the FRONTIER website at <https://wholesale.frontier.com/wholesale/access-services/interstate-service-guide>.

FRONTIER reserves the right to change the rates, terms and conditions in the Guide from time to time. Notification of Guide changes will be made available at the FRONTIER website.

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ACCESS SERVICE

ISSUING CARRIERS

| | |
|---|------------|
| Citizens Telecommunications Company of the White Mountains, Inc. d/b/a Frontier Communications of the White Mountains in the State of Arizona Vice President Government and Regulatory Affairs FRONTIER COMMUNICATIONS PARENT, INC 1919 MCKINNEY AVE DALLAS, TX 75201 | (T) (T) |
| Citizens Utilities Rural Company, Inc. d/b/a Frontier Citizens Utilities Rural in the State of Arizona Vice President Government and Regulatory Affairs FRONTIER COMMUNICATIONS PARENT, INC 1919 MCKINNEY AVE DALLAS, TX 75201 | (T) (T) |
| Citizens Telecommunications Company of California, Inc. d/b/a Frontier Communications of California in the State of California Vice President Government and Regulatory Affairs FRONTIER COMMUNICATIONS PARENT, INC 1919 MCKINNEY AVE DALLAS, TX 75201 | (T) (T) |
| Citizens Telecommunications Company of Illinois d/b/a Frontier Citizens Communications of Illinois in the States of Illinois and Wisconsin Vice President Government and Regulatory Affairs FRONTIER COMMUNICATIONS PARENT, INC 1919 MCKINNEY AVE DALLAS, TX 75201 | (T) (T) |

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ISSUING CARRIERS (Cont'd)

Citizens Telecommunications Company of Minnesota, LLC
d/b/a Frontier Citizens Communications of Minnesota
in the State of Minnesota
Vice President Government and Regulatory Affairs
FRONTIER COMMUNICATIONS PARENT, INC
1919 MCKINNEY AVE (T)
DALLAS, TX 75201 (T)

Citizens Telecommunications Company of Nebraska
d/b/a Frontier Communications of Nebraska
in the State of Nebraska
Vice President Government and Regulatory Affairs
FRONTIER COMMUNICATIONS PARENT, INC
1919 MCKINNEY AVE (T)
DALLAS, TX 75201 (T)

Citizens Telecommunications Company of Nevada
d/b/a Frontier Communications of Nevada
in the State of Nevada
Vice President Government and Regulatory Affairs
FRONTIER COMMUNICATIONS PARENT, INC
1919 MCKINNEY AVE (T)
DALLAS, TX 75201 (T)

Citizens Telecommunications Company of New York, Inc.
d/b/a/ Frontier Communications of New York
in the States of New York and Pennsylvania
Vice President Government and Regulatory Affairs
FRONTIER COMMUNICATIONS PARENT, INC
1919 MCKINNEY AVE (T)
DALLAS, TX 75201 (T)

ACCESS SERVICE

ISSUING CARRIERS (Cont'd)

Ogden Telephone Company
d/b/a Frontier Ogden Telephone Company
in the State of New York
Vice President Government and Regulatory Affairs
FRONTIER COMMUNICATIONS PARENT, INC
1919 MCKINNEY AVE (T)
DALLAS, TX 75201 (T)

Citizens Telecommunications Company of Tennessee LLC
d/b/a/ Frontier Communications of Tennessee LLC
in the State of Tennessee
(Citizens Telecommunications Company Tennessee Study Area) (OCN 4336)
Vice President Government and Regulatory Affairs
FRONTIER COMMUNICATIONS PARENT, INC
1919 MCKINNEY AVE (T)
DALLAS, TX 75201 (T)

Citizens Telecommunications Company of Tennessee LLC
d/b/a/ Frontier Communications of Tennessee LLC
in the State of Tennessee
(Citizens Telecommunications Company Volunteer State Study Area) (OCN 0577)
Vice President Government and Regulatory Affairs
FRONTIER COMMUNICATIONS PARENT, INC
1919 MCKINNEY AVE (T)
DALLAS, TX 75201 (T)

Citizens Telecommunications Company of Utah
d/b/a/ Frontier Communications of Utah
in the State of Utah
Vice President Government and Regulatory Affairs
FRONTIER COMMUNICATIONS PARENT, INC
1919 MCKINNEY AVE (T)
DALLAS, TX 75201 (T)

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ISSUING CARRIERS (Cont'd)

Citizens Telecommunications Company of West Virginia
d/b/a/ Frontier Communications of West Virginia
in the State of West Virginia

Vice President Government and Regulatory Affairs

FRONTIER COMMUNICATIONS PARENT, INC

1919 MCKINNEY AVE

DALLAS, TX 75201

(T)

(T)

Frontier Communications of Wisconsin, LLC

in the State of Wisconsin

(Rhineland Telephone Study Area) (OCNs 0870, 0891, 0940, 0941)

Vice President Government and Regulatory Affairs

FRONTIER COMMUNICATIONS PARENT, INC

1919 MCKINNEY AVE

DALLAS, TX 75201

(T)

(T)

Navajo Communications Company, Inc.

d/b/a Frontier Navajo Communications Company

in the States of Arizona, New Mexico, and Utah

Vice President Government and Regulatory Affairs

FRONTIER COMMUNICATIONS PARENT, INC

1919 MCKINNEY AVE

DALLAS, TX 75201

(T)

(T)



ACCESS SERVICE

ISSUING CARRIERS (Cont'd)

Rate Groups for Frontier Telephone Companies INTERSTATE SERVICE GUIDE AND PRICELIST NO. 1

Rate Group 1

| Name | States | |
|---|---------------|-----|
| Citizens Utilities Rural Company, Inc. | AZ | |
| Citizens Telecommunications Company of California, Inc. (Elk Grove study area) (OCN 2308) | CA | |
| Citizens Telecommunications Company of Tennessee LLC (Citizens Telecommunications Company Tennessee Study Area) (OCN 4336) | TN | |
| Citizens Telecommunications Company of West Virginia (Bluefield and St Mary's study areas) | WV | |
| Citizens Telecommunications Company of Utah | UT | |
| | | (D) |
| Citizens Telecommunications Company of New York, Inc. | NY, PA | |
| | | (D) |
| Citizens Telecommunications Company of the White Mountains, Inc. | AZ | |
| Frontier Communications of Wisconsin, LLC (Rhineland Telephone Study Area) (OCN 0870, 0891, 0940, 0941) | WI | |

ACCESS SERVICE

ISSUING CARRIERS (Cont'd)

Rate Groups for Frontier Telephone Companies INTERSTATE SERVICE GUIDE AND PRICELIST NO. 1

Rate Group 2

| Name | States | (D) |
|---|---------------|-----|
| Citizens Telecommunications Company of West Virginia (Mountain State study area) | WV | |
| Citizens Telecommunications Company of Tennessee LLC (Citizens Telecommunications Company Volunteer State Study Area) (OCN 0577) | TN | |
| Navajo Communications Company | AZ, NM, UT | |
| Citizens Telecommunications Company of California (Golden State and Tuolomne study areas) (OCNs 3402, 2342) | CA | |
| Citizens Telecommunications Company of Nevada | NV | |

Rate Group 3

| Name | States |
|-------------------------|---------------|
| Ogden Telephone Company | NY |

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ISSUING CARRIERS (Cont'd)

Rate Groups for Frontier Telephone Companies INTERSTATE SERVICE GUIDE AND PRICELIST NO. 1

Rate Group 4

| Name | States |
|--|---------------|
| Citizens Telecommunications Company of Nebraska | NE |
| Citizens Telecommunications Company of Minnesota, LLC | MN |
| Citizens Telecommunications Company of Illinois (includes Fairplay, WI) | IL, WI |

Rate Group 5

| Name | States |
|--|---------------|
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ACCESS SERVICE

CONCURRING CARRIERS

(NO CONCURRING CARRIERS)

CONNECTING CARRIERS

NO CONNECTING CARRIERS

OTHER PARTICIPATING CARRIERS

NO OTHER PARTICIPATING CARRIERS

REGISTERED SERVICE MARKS

NONE

REGISTERED TRADEMARKS

NONE

ACCESS SERVICE

EXPLANATION OF SYMBOLS

- (R) - to signify reduction.
- (I) - to signify increase.
- (C) - to signify changed regulation.
- (T) - to signify a change in text but no change in rate or regulation.
- (S) - to signify reissued matter.
- (M) - to signify matter relocated without change.
- (N) - to signify new rate or regulation.
- (D) - to signify a discontinued rate or regulation.
- (Z) - to signify a correction.

EXPLANATION OF ABBREVIATIONS

- AAM - Assumed Access Minutes
- ac - Alternating current
- ACAT - Additional Cooperative Acceptance Testing
- ACD - Automatic Call Distributor
- AIOD - Automatic Identification of Outward Dialed
- AM - Access Minutes
- AML - Actual Measured Loss
- ANI - Automatic Number Identification
- AP - Program Audio
- ARC - Access Recovery Charge
- ARD - Automatic Ringdown
- ASR - Access Service Request
- AST - Automatic Scheduled Testing
- AT&T - American Telephone and Telegraph Company
- AUL - Annual Underutilization Liability

- BD - Business Day
- BHMC - Busy Hour Minutes of Capacity
- BP - Billing Percentage

- CAROT - Centralized Automatic Reporting on Trunks
- CCS - Centum Call Seconds
- CCSA - Common Control Switching Arrangement(s)
- CCS7 - Common Channel Signaling System 7
- CDL - Customer Designated Location
- CDM - Call Days in Month
- CMF - Chargeable Minimum Factor

ACCESS SERVICE

EXPLANATION OF ABBREVIATIONS (Cont'd)

| | |
|--------|--|
| CI | - Changes Interface |
| CIC | - Carrier Identification Code (S)(X) |
| CO | - Central Office |
| COCTX | - Central Office Centrex |
| COMPS | - Central Office Maintenance Planning System |
| Cont'd | - Continued |
| CPE | - Customer Premises Equipment or Customer Provided Equipment |
| CST | - Cooperative Scheduled Testing |
| CSU | - Circuit Switching Unit |
| CTX | - Centrex |
| | |
| DA | - Directory Assistance |
| DAM | - Distance in Airline Miles |
| dB | - decibel |
| dBm | - Decibels below one milliwatt |
| dBm | - Transmission Level Referred to the Zero Transmission Level Point |
| dBnC | - Decibel Reference Noise C-Message Weighting |
| dBnCO | - Decibel Reference Noise C-Message Weighted O |
| dBv | - Decibel(s) Relative to 1 Volt (Reference) |
| dBvl | - Decibel(s) Relating to 1 Volt (Reference) |
| dc | - direct current |
| DDA | - Digital Data Access |
| DDS | - Digital Data Service |
| DSAL | - Dedicated Switched Access Line |
| DSAT | - Dedicated Switched Access Transport |
| DTMF | - Dual Tone Multifrequency |
| DX | - Duplex |
| | |
| E&M | - The Receive and Transmit Leads of a Signaling System |
| EDD | - Envelope Day Distortion |
| ELEPL | - Equal Level Echo Path Loss |
| EML | - Expected Measured Loss |
| EPL | - Echo Path Loss |
| ERL | - Echo Return Loss |
| ESS | - Electronic Switching System |
| ESSX | - Electronic Switching System Exchange |

ACCESS SERVICE

EXPLANATION OF ABBREVIATIONS (Cont'd)

| | |
|------|---|
| f | - frequency |
| FCC | - Federal Communications Commission |
| FCO | - Foreign Central Office Service |
| FIA | - Facilities for Interstate Access |
| FID | - Field Identifier |
| FNPA | - Foreign Numbering Plan Area |
| FX | - Foreign Exchange |
| GSEC | - General Services and Equipment Code |
| HC | - High Capacity |
| HNPA | - Home Numbering Plan Area |
| Hz | - Hertz |
| IA | - Interface Arrangement |
| IC | - Interexchange Carrier |
| ICB | - Individual Case Basis |
| ICL | - Inserted Connection Loss |
| IDDD | - International Direct Distance Dialing |
| ILP | - Initial Liability Period |
| IP | - Interconnection Point |
| Kbps | - kilobits per second |
| kHz | - kilohertz |
| LATA | - Local Access and Transport Area |
| LEC | - Local Exchange Carrier |
| Ma | - Milliamperes |
| Mbps | - Megabits per second |
| MF | - Multifrequency |
| MHz | - Megahertz |
| MJU | - Multi-Junction Unit |
| MMUC | - Minimum Monthly Usage Charge |
| MRC | - Monthly Recurring Charge |
| MST | - Manual Scheduled Testing |
| MT | - Metallic |
| MTL | - Maximum Termination Liability |
| MTS | - Message Telecommunications Services |

ACCESS SERVICE

EXPLANATION OF ABBREVIATIONS (Cont'd)

| | |
|------|---|
| NA | - Not Available |
| NANP | - North American Numbering Plan |
| NECA | - National Exchange Carrier Association |
| NPA | - Numbering Plan Area |
| NRC | - Nonrecurring Charge |
| NST | - Nonscheduled Testing |
| NTS | - Non-Traffic Sensitive |
| NXX | - Three-Digit Central Office Code |
| OPS | - Off-Premises Station |
| OTPL | - Zero Transmission Level Point |
| PBX | - Private Branch Exchange |
| PCM | - Pulse Code Modulation |
| PI | - Priority Installation |
| PLP | - Private Line Ringdown |
| POT | - Point of Termination |
| PR | - Priority Restoration |
| RMC | - Recurring Monthly Charge |
| rms | - root-mean-square |
| RSM | - Remote Switching Modules |
| RSS | - Remote Switching Systems |
| SCP | - Service Control Point |
| SF | - Single Frequency |
| SMS | - Service Management System |
| SNAL | - Signaling Network Access Line |
| SP | - Signaling Point |
| SPOI | - Signaling Point of Interface |
| SRL | - Singing Return Loss |
| SSN | - Switched Service Network |
| SSP | - Service Switching Point |
| SS7 | - Signaling System Seven |
| STP | - Signal Transfer Point |
| STR | - Switched Transport Rate |
| SWC | - Serving Wire Center |

ACCESS SERVICE

EXPLANATION OF ABBREVIATIONS (Cont'd)

- TDCF - Total Day Conversion Factor
- TES - Telephone Exchange Service(s)
- TLP - Transmission Level Point
- TSP - Telecommunications Service Priority
- TSPS - Traffic Service Position System
- TV - Television

- UL - Under Utilization Liability
- USOC - Uniform Service Order Code

- VG - Voice Grade
- V&H - Vertical & Horizontal

- WA - Wideband Analog
- WATS - Wide Area Telecommunications Service(s)
- WD - Wideband Data

STATE ABBREVIATIONS

- AZ - Arizona
- CA - California (D)
- IL - Illinois
- MN - Minnesota (D)
- NE - Nebraska
- NM - New Mexico
- NV - Nevada
- NY - New York (D)
- TN - Tennessee
- UT - Utah
- WI - Wisconsin
- WV - West Virginia

ACCESS SERVICE

REFERENCE TO OTHER TARIFFS

Whenever reference is made in this guide to other tariffs of the Telephone Company, the reference is to the tariffs in force as of the effective date of this guide, and to amendments thereto and successive issues thereof.

REFERENCE TO NECA TARIFFS

- (1) National Exchange Carrier Association Tariff FCC No. 4.

USE OF THIS GUIDE

This guide contains the regulations, rates and charges applicable to the provision of Access Service by all of the Issuing Carriers listed on Title Pages 2, through 5.

The regulations applicable to the provision of Access Service are contained in Sections 2 through 19. These regulations are identical for all Issuing Carriers.

Rates and charges for all Access Services are shown in Section 20. If an Issuing Carrier does not presently have a rate for one of the rate elements shown in Section 20, the rate is shown as "Not Applicable" (N/A). Upon receipt of an order by a customer for the service not presently offered, the Issuing Carrier will file with the FCC the appropriate information necessary to establish rates.

ACCESS SERVICE

REFERENCE TO TECHNICAL PUBLICATIONS

The following technical publications are referenced in this guide and may be obtained from Bell Communications Research, Inc., Customer Services, 60 New England Avenue, Piscataway, NJ 08854-4196.

Technical Reference:

| | |
|--|---|
| PUB 41004 Issued: October, 1973 | Data Communications Using Voiceband Private Line Channels |
| PUB 62310 Issued: September, 1983 | Digital Data System Channel Interface Specification |
| PUB 62411 Issued: September, 1983 | High Capacity Digital Service Channel Interface Specification Addendum: October, 1984 |
| TR-NWT-000063 Issued: July, 1991 | Network Equipment Building System (NEBS) Generic Equipment Requirements, Issue 4 Available: July, 1991 |
| TR-NWT-000334 Issued: September, 1990 | Issue 2 Voice Grade Switched Access Service Transmission Parameter Limits and Interface Combinations |
| TR-NWT-000499 Issued: November, 1991 | Transport Systems Generic Requirements (TSGR), Issue 4 Available: November, 1991 |
| TR-TSY-000191 Issued: May, 1986 | Alarm Indication Signal Requirements and Objectives, Issue 1 Available: May, 1986 |
| TR-TSY-000335 Issued: May, 1990 | Issue 2 Voice Grade Special Access Service-Transmission Parameter Limits and Interface Combinations |
| TR-TSY-000487 Issued: July, 1989 | Generic Requirements for Electronic Equipment Cabinets, Issue 1 Available: July, 1989 |
| TR-TSV-000905 Issued: August, 1989 | Common Channel Signaling (CCS) Network Interface Specification, Issue 1 Available: August, 1989 |

ACCESS SERVICE

REFERENCE TO TECHNICAL PUBLICATIONS (Cont'd)

| | |
|-------------------------|--|
| TR-NPL-000054 | High Capacity Digital Service (1.544 Mbps) Interface Generic Requirements for End Users |
| Issued: April, 1989 | Available: April, 1989 |
| TR-NPL-000275 | Notes on the BOC Interlata Networks |
| Issued: April, 1986 | |
| TR-NPL-000320 | Fundamental Generic Requirements for Metallic Digital Signal Cross Connect Systems DSX-1, -1C, -2, -3, Issue 1 |
| Issued: April, 1988 | Available: April, 1988 |
| TR-NPL-000334 | Voice Grade Switched Access Service |
| Issued: June, 1986 | Available: July, 1986 |
| TR-NPL-000335 | Voice Grade Special Access Service |
| Issued: June, 1986 | Available: July, 1986 |
| TR-NPL-000336 | Metallic and Telegraph Grade Special Access Services |
| Issued: October, 1987 | Available: October, 1987 |
| TR-NPL-000337 | Program Audio Special Access Service and Local Channel Services |
| Issued: July, 1987 | |
| TR-NPL-000338 | Television Special Access and Local Channel Services |
| Issued: December, 1986 | Available: December, 1986 |
| TR-NPL-000339 | Wideband Analog Special Access Service |
| Issued: January, 1987 | Available: January, 1987 |
| TR-NPL-000340 | Wideband Digital Special Access Service |
| Issued: September, 1986 | Available: January, 1987 |
| TR-NPL-000341 | Digital Data Special Access Service - Transmission Parameter and Interface Combinations |
| Issued: March, 1989 | |

ACCESS SERVICE

REFERENCE TO TECHNICAL PUBLICATIONS (Cont'd)

| | |
|------------------------|--|
| TR-NPL-000342 | High Capacity Digital Special Access Service |
| Issued: January, 1987 | Available: January, 1987 |
| TR-INS-000342 | High Capacity Digital Special Access Service |
| Issued: February, 1991 | |
| SR-STDS-000307 | NC/NCI Code Dictionary |
| Issued: December, 1990 | |

The following technical publication is referenced in this guide and may be obtained from the Bell Communication Technical Education Center Room B02, 6200 Route 53, Lisle, IL 60532:

Telecommunications Transmission Engineering Volume 3 - Networks and Services
(Chapters 6 and 7)
Second Edition, 1980
Issued: June, 1980

The following technical publication is referenced in this guide and may be obtained from the National Exchange Carrier Association, Inc., Director - Tariff and Regulatory Matters, 100 S. Jefferson Road, Whippany, N.J. 07981 and the Federal Communications Commission's commercial contractor.

| | |
|--|-----------------------|
| PUB AS No. 1 - Issue II Access Service | |
| Issued: May, 1984 | Addendum: March, 1987 |

AT&T Technical Reference Publication 41014
Issued: February, 1978; entire issue.

The following technical publications are referenced in this guide and may be obtained from Bell Communications Research, Inc. Distribution Storage Center, 60 New England Avenue, Piscataway, N.J. 08854. Updates to this document are performed periodically.

- Multiple Exchange Carrier Access Billing Guidelines (MECAB)
Ordering and Billing Forum
Issued: December, 1991 Available: December, 1991
- Multiple Exchange Carrier Ordering and Design Guidelines (MECOD)
Ordering and Billing Forum
Issued: November, 1989 Available: November, 1989

ACCESS SERVICE

REFERENCE TO TECHNICAL PUBLICATIONS (Cont'd)

The following publications are referenced in this guide and may be obtained from the Government Printing Office, Superintendent of Documents, Document Control Branch, 941 N. Capitol St., N.E., Washington, D.C. 20401.

Telecommunications Service Priority (TSP) System for National Security Emergency Preparedness (NSEP) Service Vendor Handbook, National Communications System (NCSH 3-2-1)

Dated: July 9, 1990

Available: August, 1990

Telecommunications Service Priority (TSP) System for National Security Emergency Preparedness (NSEP) Service User Manual, National Communications System (NCSM 3-1-1)

Dated: July 9, 1990

Available: August, 1990

The following technical publication is referenced in this guide and may be obtained from the American National Standards Institute, 1430 Broadway, New York, New York 10018.

ANSI T1.102, Issued 1987

The following technical publication is referenced in this guide and may be obtained from the Underwriters Laboratory, Inc., Attention: Publications, 333 Pfingsten Road, Northbrook, Illinois 60062.

UL 94, Issued 1990

The following technical publication is referenced in this Guide and may be obtained from the Federal Communications Commission's commercial contractor.

GTE Service Corporation Telephone Operations - Traffic Grade of Service Standards
Issued: April, 1985; entire issue

The following technical publication is referenced in this guide and may be obtained from the Bellcore Information Exchange Management, 445 South Street, Room 2J-125, P.O. Box 1910, Morristown, NJ 07962-1910.

BR-795-403100 - Common Language Network Channels (NC)
Network Channel Interface (NCI) Codes

Issued: August, 1993

ACCESS SERVICE

REFERENCE TO TECHNICAL PUBLICATIONS (Cont'd)

The following technical publications are referenced in this guide and may be attained from Global Engineering Documents, Customer Support, A105, 15 Inverness Way, Englewood, CO 80112.

T1.606, Issued 1990

T1.606 Addendum 1, Issued 1991

T1.606a, Issued 1992

T1.617 Annex D, Issued 1992

TR-NWT-00112 Issue 1, Issued December 1994

GR-1110-CORE Issue 1, Issued September 1994

GR-1248-CORE Issue 2, Issued September 1995

SR-3330 Issue 1, Issued November 1994

PRETS 300-049 2nd Edition, Specifications for Permanent Virtual Connections,
Issued December 1997

The following technical publication is referenced in this guide and may be obtained from Alliance for Telecommunications Industry Solutions (ATIS), through their web site at www.atis.org or by telephone at 800-327-2199.

ATIS/OBF-CARE-013 Equal Access Subscription, Customer Account Record Exchange (CARE),
Issued July 2002

ACCESS SERVICE

1. APPLICATION AND USE OF THE INTERSTATE SERVICE GUIDE

- 1.1 This Interstate Service Guide contains regulations, rates and charges applicable to the provision of Private Line Transport Services, Advanced Communications Network Services and other miscellaneous services, hereinafter referred to collectively as service(s), provided by Frontier Telephone Companies, hereinafter respectively referred to as the Company, to customers.
- 1.2 The provision of such services by the Company as set forth in this Interstate Service Guide does not constitute a joint undertaking with the customer for the furnishing of any service.
- 1.3 This ISG contains the regulations, rates and charges applicable to the provision of Access Service by all of the Issuing Carriers listed on Title Pages 2, through 5.
- 1.4 The regulations applicable to the provision of Access Service are contained in Sections 2 through 8. These regulations are identical for all Issuing Carriers.
- 1.5 Rates and charges for all Competitive Access Services are shown in Section 20. If an Issuing Carrier does not presently have a rate for one of the rate elements shown in Section 20, the rate is shown as "Not Applicable" (N/A). Upon receipt of an order by a customer for the service not presently offered, the Issuing Carrier will file with the FCC the appropriate information necessary to establish rates.

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 guide.
- (B) The Telephone Company shall be responsible only for the installation, operation and maintenance of the service it provides.
- (C) The Telephone Company will, for maintenance purposes, test its services only to the extent necessary to detect and/or clear troubles.
- (D) Services are provided twenty-four (24) hours daily, seven (7) days per week, except as set forth in other sections of this guide.
- (E) The Telephone Company does not warrant that its facilities and services meet standards other than those set forth in this guide.

2.1.2 Limitations

- (A) The customer may assign or transfer the use of services under this guide if there is no interruption in or relocation of services. The assignee or transferee must agree to assume all outstanding indebtedness for services provided under this guide and any termination liability associated with the services provided. The customer will remain jointly liable with the assignee or transferee for any obligations existing at the time of the assignment. Prior to assignment, the Telephone Company must acknowledge in writing that all requirements have been met. Acknowledgement will be made within fifteen days after the Telephone Company has been notified of the proposed assignment.
- (B) All services offered in this guide will be provided on a first-come first-served basis except as described below. The regulations for the installation and restoration of Telecommunications Service Priority (TSP) System Services shall be subject to Part 64.401, Appendix A, of the Federal Communications Commission's Rules.
- (C) When an end office is scheduled to be converted to an equal access end office, and a shortage of facilities exists, the Telephone Company will allocate available resources to participating ICs as set forth in Section 5.2.2 following.

ACCESS SERVICE

2. General Regulations (Cont'd)

2.1 Undertaking of the Telephone Company (Cont'd)

2.1.3 Liability

- (A) Except in the case of willful misconduct for which the Telephone Company's liability is not limited by this guide, the Telephone Company's liability for damages shall not exceed an amount equal to the proportionate guide charge for the period during which the service was affected. This liability for damages shall be in addition to any amounts that may be due the customer as described in 2.4.3 following.
- (B) 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) 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) The Telephone Company shall be indemnified, defended and held harmless by the end user and by the customer against any claim, loss or damage arising from the end user's use of services offered under this guide, involving:
 - (1) Claims for libel, slander, invasion of privacy, or infringement of copyright arising from the end user's own communications;
 - (2) 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 IC or;
 - (3) All other claims arising out of any act or omission of the end user in the course of using services provided pursuant to this guide.

ACCESS SERVICE

2. General Regulations (Cont'd)

2.1 Undertaking of the Telephone Company (Cont'd)

2.1.3 Liability (Cont'd)

- (E) The Telephone Company's failure to provide or maintain services under this guide 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 2.4.3 following.
- (F) 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.
- (G) Except in the case of willful misconduct, under no circumstances whatever shall the Telephone Company be liable for indirect, incidental, special or consequential damages; and this disclaimer shall be effective notwithstanding any other provisions hereof.
- (H) No license under patents is granted by the Telephone Company to the customer or shall be implied or arise by estoppel in the customer's favor with respect to any circuit, apparatus, system or method used by the customer in connection with services provided under this guide. With respect to claims of patent infringement made by third persons, the Telephone Company will defend, indemnify, protect and save harmless the customer from and against all claims arising out of the use by the customer of services provided under this guide.

ACCESS SERVICE

2. General Regulations (Cont'd)

2.1 Undertaking of the Telephone Company (Cont'd)

2.1.4 Provision of Services

The Telephone Company's obligation to furnish the services described in this guide is dependent upon its ability to provide such service after provision has been made for the Telephone Company's exchange services.

Services provided to a customer under this guide may be connected directly to customer facilities and/or may be connected to access facilities of another telephone company or companies in the joint provision of interstate access.

Installation and Termination of Services

Except as provided for Expanded Interconnection Service, the services provided under this guide (A) 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 location at the customer-designated premises and (B) will be installed by the Telephone Company to such Point of Termination. The Telephone Company will work cooperatively with the customer to determine the location of the Point of Termination in accordance with the Telephone Company's standard operating procedures.

Each Access Service has only one Point of Termination per customer premises. Any additional terminations beyond such Point of Termination are the sole responsibility of the customer. Moves of the Point of Termination are handled as set forth in Section 7.2.1 following.

ACCESS SERVICE

2. General Regulations (Cont'd)

2.1 Undertaking of the Telephone Company (Cont'd)

2.1.6 Maintenance of Services

The services provided under this guide 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.

Customer provided transmission facilities and equipment terminating in the Telephone Company wire center for purposes of physical Expanded Interconnection Service (EIS), will not be maintained by the Telephone Company. Customer provided facilities and equipment terminating in Telephone Company manhole or similar location for virtual EIS will be maintained by 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 68.110(b), the Telephone Company may, where such action is reasonably required in the operation of its business, (A) change any facilities used in providing service under this guide, (B) change minimum protection criteria, (C) change operating or maintenance characteristics of facilities or (D) change operations or procedures of the Telephone Company. The Telephone Company shall not be responsible if the change renders customer furnished services obsolete or requires modification of the customer-furnished services. If such change 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 changes made. The Telephone Company will work cooperatively with the customer to determine reasonable notification procedures.

Should a major change occur, the Telephone Company shall notify the customer at least one year in advance. A major change is described as any change in telephone plant which will affect the technical parameters of the interface (e.g., level, impedance, signaling, interface, bandwidth, two-wire, four-wire, etc.).

ACCESS SERVICE

2. General Regulations (Cont'd)

2.1 Undertaking of the Telephone Company (Cont'd)

2.1.8 Refusal and Discontinuance of Service

(A) Unless the provisions of 2.2.1 or 2.5.1 following apply, if a customer fails to comply with the regulations set forth in: 2.1.6 Maintenance of Service; 2.2.2., Unlawful Use; 2.3.1, Damages; 2.3.4, Availability for Testing; 2.3.5, Balance; and 2.4, Payment Arrangements and Credit Allowances or, if applicable, 2.5.3, 2.5.4, Expanded Interconnection Service (EIS) or fails to make any payment to be made by it on the dates and times herein specified, the Telephone Company may, on thirty (30) days written notice by Certified U.S. Mail to the person designated by that customer to receive such notices of noncompliance:

- (1) Refuse additional applications for service and/or refuse to complete any pending orders for service by the noncomplying customer; and/or
- (2) Discontinue the provision of the services to the noncomplying customer. In the case of such discontinuance, all applicable charges including termination charges shall become due.

If the Telephone Company does not discontinue the provision of the services involved on the date specified in the thirty (30) days' notice, and the customer's noncompliance continues, nothing contained herein shall preclude the Telephone Company's right to discontinue the provision of the services to the noncomplying customer without further notice.

If the Telephone Company does not refuse additional applications for service on the date specified in the thirty (30) days' notice, and the customer's noncompliance continues, nothing contained herein shall preclude the Telephone Company's right to refuse additional applications for service to the noncomplying customer without further notice.

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) 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 guide provisions, the guide regulations of the end office Telephone Company shall apply for joint service discontinuance.

ACCESS SERVICE

2. General Regulations (Cont'd)

2.1 Undertaking of the Telephone Company (Cont'd)

2.1.9 Limitation of Use of Metallic Facilities

Signals applied to a metallic facility shall conform to the limitations set forth in Technical Reference Publication AS No. 1. In the case of applications of dc telegraph signaling systems, the customer shall be responsible, at its expense, for the provision of current limiting devices to protect the Telephone Company facilities from excessive current due to abnormal conditions and for the provision of noise mitigation networks when required to reduce excessive noise.

2.1.10 Notification of Service-Affecting Activities

The Telephone Company will provide the customer reasonable notification of service-affecting activities that may occur in normal operation of its business. Such activities may include, but are not limited to, 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, they affect many customer services. No specific advance notification period is applicable to all service-affecting activities. The Telephone Company will work cooperatively with the customer to determine the notification requirements.

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 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)

2.1 Undertaking of the Telephone Company (Cont'd)

2.1.12 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.

2.1.13 Preemption of Services

In certain instances, i.e., when spare facilities and/or equipment are not available, it may be necessary to preempt existing services to provision or restore National Security Emergency Preparedness (NSEP) Services. If, in its best judgment, the Telephone Company deems it necessary to preempt, then the Telephone Company will ensure that:

- (A) A sufficient number of public switched services are available for public use if preemption of such services is necessary to provision or restore NSEP Service.
- (B) The service(s) preempted have a lower or do not contain NSEP assigned priority levels.
- (C) A reasonable effort is made to notify the preempted service customer of the action to be taken.
- (D) A credit allowance for any preempted service shall be made in accordance with the provisions in 2.4.3 following.

ACCESS SERVICE

2. General Regulations (Cont'd)

2.2 Use

2.2.1 Interference or Impairment

- (A) The characteristics and methods of operation of any circuits, facilities or equipment provided by other than the Telephone Company, including customer transmission equipment and facilities used with Expanded Interconnection Services, and associated with the facilities utilized to provide services under this guide 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.
- (B) If interference as described in (A) above exists, except for equipment subject to the FCC Part 68 rules in 47 C.F.R. Section 68.108, when practicable, the Telephone Company will notify the customer that service will be temporarily disconnected until the problem is corrected. When prior notice is not practical, the Telephone Company may temporarily disconnect services without prior notification to the customer. The customer will be notified of the action as soon as possible and given the opportunity to correct the problem. During the period of discontinuance, the credit allowance for service interruptions as set forth in 2.4.3 following does not apply.

2.2.2 Unlawful Use of Services

The services are furnished subject to the condition that they will not be used for an unlawful purpose. Services will be discontinued if any law enforcement agency, acting within its apparent jurisdiction, advises in writing that such services are being used in violation of law. The Telephone Company will refuse to furnish services when it has reasonable grounds to believe that such services will be used in violation of law.

ACCESS SERVICE

2. General Regulations (Cont'd)

2.3 Obligations of the Customer

2.3.1 Damages

The customer shall reimburse the Telephone Company for damages to the Telephone Company facilities utilized to provide services under this guide 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. The amount of reimbursement shall be the actual cost of repair to the damaged facilities including labor costs as specified in Section 9.2.

2.3.2 Ownership of Facilities

Facilities utilized by the Telephone Company to provide service under the provisions of this guide 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 following the request in as good condition as reasonable wear will permit. Any cost of repair or replacement for unreasonable wear or damage will be billed to the customer who utilized the equipment.

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 guide 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 space at reasonable times for installing, testing, repairing or removing Telephone Company services.

Where available, the Telephone Company shall make available wire center floor space and electrical power by the customer for the provision of Expanded Interconnection Service at charges set forth in Section 20.

ACCESS SERVICE

2. General Regulations (Cont'd)

2.3 Obligations of the Customer (Cont'd)

2.3.4 Availability for Testing

The services provided under this guide 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. No credit will be allowed for any interruptions involved during such tests and adjustments.

2.3.5 Balance

All signals for transmission over the services provided under this guide shall be delivered by the customer balanced to ground except for ground start, duplex (DX) and McCulloh-Loop (Alarm System) type signaling and dc telegraph transmission at speeds of 75 baud or less.

2.3.6 Design of Customer Services

Subject to the provisions of 2.1.7 preceding, 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.

2.3.7 Reference 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.

ACCESS SERVICE

2. General Regulations (Cont'd)

2.3 Obligations of the Customer (Cont'd)

2.3.8 Claims and Demands for Damages

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 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 guide, including, without limitation, Workmen'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 guide; 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. 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 or omission of the customer in the course of using services provided under this guide.

In the event that a customer files a claim for an access billing or revenue adjustment with the Telephone Company, the Telephone Company will have thirty (30) days from the notification date to resolve the customer's claim or negotiate a mutually agreeable time frame for resolution of the claim.

ACCESS SERVICE

2. General Regulations (Cont'd)

2.3 Obligations of the Customer (Cont'd)

2.3.9 Reserved

ACCESS SERVICE

2. General Regulations (Cont'd)

2.3 Obligations of the Customer (Cont'd)

2.3.9 Reserved

ACCESS SERVICE

2. General Regulations (Cont'd)

2.3 Obligations of the Customer (Cont'd)

2.3.9 Reserved

ACCESS SERVICE

2. General Regulations (Cont'd)

2.3 Obligations of the Customer (Cont'd)

2.3.9 Reserved

ACCESS SERVICE

2. General Regulations (Cont'd)

2.3 Obligations of the Customer (Cont'd)

2.3.9 Reserved

ACCESS SERVICE

2. General Regulations (Cont'd)

2.3 Obligations of the Customer (Cont'd)

2.3.9 Reserved (Cont'd)

ACCESS SERVICE

2. General Regulations (Cont'd)

2.3 Obligations of the Customer (Cont'd)

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

When mixed interstate and intrastate Access Service is provided, all charges (i.e., nonrecurring, monthly and/or usage) will be prorated between interstate and intrastate. The percentage provided in the reports as set forth in 2.3.9 preceding will serve as the basis for prorating the charges.

The percentage of an Access Service to be charged as interstate is applied in the following manner:

- (A) For monthly and nonrecurring chargeable rate elements, multiply the percent interstate use times the quantity of chargeable elements times the stated guide rate per element.
- (B) For usage sensitive (i.e., access minutes and calls) chargeable rate elements, multiply the percent interstate use times actual use times the stated tariff rate.

The interstate percentage will change as revised usage reports are submitted as set forth in 2.3.9.

ACCESS SERVICE

2. General Regulations (Cont'd)

2.3 Obligations of the Customer (Cont'd)

2.3.11 Provision for Customer Audits

Upon thirty (30) days' written notice, the customer shall have the right to access all information, data and records necessary to audit, trace and verify the accuracy of access bills rendered to the customer for usage in connection with MTS, Private Line, WATS and other services. Such information will be provided in a mutually agreeable format and shall include, but not be limited to, call details (e.g., messages and minutes of use summarized by jurisdiction, call type, end office and state). A comprehensive audit of this nature can be conducted by the customer not more than once per year. Examinations of specific questions and issues may be undertaken more frequently.

Each party shall bear its own expenses in connection with the conduct of an comprehensive Audit (review) or a specific examination. Special data extractions required by the customer to conduct an audit or examination will be paid for by the customer. For purposes of this regulation, a "special data extraction" shall mean the creation of records that cannot normally be created by the Telephone Company's currently available software programs. If the Telephone Company changes software programs and as a result of this change previously available data records would be considered special extractions, the Telephone Company must retain the ability to extract that data for one year at no charge to the customer. After that time, the use of those data records would be considered a special data extraction, cost to be borne by the customer.

ACCESS SERVICE

2. General Regulations (Cont'd)

2.3 Obligations of the Customer (Cont'd)

2.3.12 Theft

The customer shall reimburse the Telephone Company for any loss through theft of facilities, apparatus, or equipment utilized to provide services under this guide as the customer designated location or at the end user's premises. The amount of reimbursement shall be the actual cost for replacement of facilities, apparatus, or equipment lost, plus labor costs as specified in Section 9.2.

2.3.13 Sectionalization and Trouble Reporting

The customer will be responsible for reporting troubles sectionalized to Telephone Company facilities and/or equipment. When trouble cannot be clearly sectionalized to the Telephone Company facilities and/or equipment, the Telephone Company will test cooperatively or independently to assist in trouble sectionalization.

ACCESS SERVICE

2. General Regulations (Cont'd)

2.3 Obligations of the Customer (Cont'd)

2.3.14 Identification and Rating of VoIP-PSTN Traffic

(A) Scope

VoIP-PSTN Traffic is defined as traffic exchanged between the Telephone Company end user and the customer in time division multiplexing ("TDM") format that originates and/or terminates in Internet protocol ("IP") format. This section governs the identification of VoIP-PSTN Traffic that is required to be compensated at interstate access rates 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"). Specifically, this section establishes the method of separating VoIP-PSTN Traffic from the customer's traditional intrastate access traffic, so that such VoIP-PSTN Traffic can be billed in accordance with the FCC Order.

(B) Rating of VoIP-PSTN Traffic

Interstate and Intrastate VoIP-PSTN Traffic identified in accordance with this guide section will be billed at rates equal to the Telephone Company's applicable rates as specified in Section 20 following.

(C) Calculation and Application of Percent-VoIP-Usage Factor

The Telephone Company will determine the number of VoIP-PSTN Traffic minutes of use ("MOU") to which interstate rates will be applied under subsection (B), above, by applying a Percent VoIP Usage ("PVU") factor to the total terminating intrastate access MOU received by The Telephone Company from the customer. The PVU will be derived and applied as follows:

- (1) The customer will calculate and furnish to the Telephone Company a factor (the "PVU") representing the percentage of the total intrastate and interstate access MOU that the customer terminates to the Telephone Company in the State, that is sent to the Telephone Company and that originated in IP format. This PVU shall be based on information such as traffic studies, actual call detail, or other relevant and verifiable information. The customer shall retain the call detail, work papers, and information used to develop the PVU factor for a minimum of one year.

ACCESS SERVICE

2. General Regulations (Cont'd)

2.3 Obligations of the Customer (Cont'd)

2.3.14 Identification and Rating of VoIP-PSTN Traffic (Cont'd)

(C) Calculation and Application of Percent-VoIP-Usage Factor (Cont'd)

- (2) The customer shall not modify their reported PIU factor to account for VoIP-PSTN Traffic.
- (3) The Telephone Company will apply the PVU factor to the total terminating intrastate access MOU received from the customer to determine the number of VoIP-PSTN Traffic MOUs.
- (4) If the customer does not furnish the Telephone Company with a PVU pursuant to the preceding paragraph 1, the Telephone Company will utilize a PVU equal to zero.

(D) Initial PVU Factor

If the PVU factor is not available and/or cannot be implemented in the Telephone Company's billing systems by December 31, 2011, once the factor is available and can be implemented the Telephone Company will adjust the customer's bills to reflect the PVU retroactively to December 31, 2011. This retroactive adjustment will be made to December 31, 2011, provided that the customer provides the factor to the Telephone Company no later than April 15, 2012; otherwise, it will set the initial PVU equal to zero, as specified in subsection (C)(4), above.

The Telephone Company may choose to provide credits based on the reported PVU factors until such time as billing system modifications can be implemented.

(E) PVU Factor Updates

The customer may update the PVU factor quarterly using the method set forth in subsection (C)(1), above. 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, a revised PVU factor based on data for the prior three months, ending the last day of December, March, June and September, respectively. The revised PVU factor will apply prospectively and serve as the basis for billing until superseded by a new PVU. No prorating or back billing will be done based on the updated PVU factor.

ACCESS SERVICE

2. General Regulations (Cont'd)

2.3 Obligations of the Customer (Cont'd)

2.3.14 Identification and Rating of VoIP-PSTN Traffic (Cont'd)

(F) PVU Factor Verification

- (1) Not more than four times 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 or terminates calls in IP format, and other information used to determine the customer's PVU factor furnished to the Telephone Company in order to validate the PVU factor supplied. The customer shall comply, and shall reasonably supply the requested data and information within 15 days of the Telephone Company's request.
- (2) The Telephone Company may dispute the customer's PVU factor based upon:
 - (a) A review of the requested data and information provided by the customer.
 - (b) The Telephone Company's reasonable review of other market information, FCC reports on VoIP lines, such as FCC Form 477 or state level results based on FCC Local Competition Report or other relevant data.
 - (c) A change in the reported PVU factor by more than five percentage points from the preceding quarter.
- (3) If after review of the data and information, the customer and the Telephone Company establish a revised PVU factor, the customer and the Telephone Company will begin using that revised PVU factor with the next bill period.

ACCESS SERVICE

2. General Regulations (Cont'd)

2.3 Obligations of the Customer (Cont'd)

2.3.14 Identification and Rating of VoIP-PSTN Traffic (Cont'd)

(F) PVU Factor Verification (Cont'd)

- (4) 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 four times 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.
- (a) 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 PVU factors reported by the customer. These PVU factors will remain in effect until the audit can be completed.
 - (b) During the audit, the undisputed PVU factors from the previous reporting period will be used by the Telephone Company.
 - (c) 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.
 - (d) 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

2. General Regulations (Cont'd)

2.4 Payment Arrangements and Credit Allowance

2.4.1 Payment of Rates, Charges and Deposits

- (A) The Telephone Company will require a deposit from all customers with a proven history of late payments to the Telephone Company and all customers who do not have established credit unless the customer is a successor of a company which has established credit and has no history of late payments to the Telephone Company. The deposit may be required prior to or after establishment of service. The total deposit may not exceed the estimated charges for service for a two-month period.

The fact that a deposit has been made does not relieve the customer from the responsibility of complying with the Telephone Company's regulations regarding prompt payment of bills. Annual interest at the rate described in 2.4.1(B)(3)(b) will be paid on all deposits held from the date the deposit is received up to and including the date the deposit is returned or credited to the customer's account. The deposit will be refunded after the customer has established a record of prompt payment for one year. When service is terminated, any deposit held will be credited on the final bill.

ACCESS SERVICE

2. General Regulations (Cont'd)

2.4 Payment Arrangements and Credit Allowance (Cont'd)

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

(B) The Telephone Company will bill all usage charges monthly in arrears. All nonusage-sensitive access services, including End User Access Service and Presubscription Service, will be billed monthly in advance. Nonrecurring charges will be billed in the month following the provision of service.

(1) The bill day for End User Access Service and Presubscription Service will be the same day established for the provision of local service.

(2) The bill day(s) for all access services other than End User Access Service and Presubscription Service will be established by the Telephone Company for each customer account and shall appear on the carrier access bill. If the Telephone Company advises the customer in writing, an alternate billing schedule may be established. Alternate billing schedules shall not be established on less than sixty (60) days' notice or initiated by the Telephone Company more than twice in any consecutive twelve (12) month period.

The bill will cover nonusage sensitive service charges for the ensuing billing period for which the bill is rendered, any known unbilled nonusage sensitive charges for prior periods and unbilled usage charges for that 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.

ACCESS SERVICE

2. General Regulations (Cont'd)

2.4 Payment Arrangements and Credit Allowance (Cont'd)

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

(B) (Cont'd)

- (3) (a) Payment for service is due thirty-one (31) days 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 twenty (20) days prior to the thirty-one (31) day payment due date, then the bill shall be considered delayed. When a 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 by the customer must be accompanied by proof of the late bill receipt. If such payment date would cause payment to be due on a Saturday, Sunday or legal holiday (i.e., New Year's Day, Independence Day, Labor Day, Thanksgiving, Christmas, Veteran's Day and the days when Washington's Birthday, Memorial Day, and Columbus Day are legally observed), payment for such bills will be due as follows:

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

ACCESS SERVICE

2. General Regulations (Cont'd)

2.4 Payment Arrangements and Credit Allowance (Cont'd)

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

(B) (Cont'd)

(3) (Cont'd)

- (b) 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 (a) 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 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.
- (c) In the event that a billing dispute arises, the customer shall pay the total amount billed by the due date or be subject to the last payment penalty beginning ten (10) days after the payment date. The customer shall notify the Telephone Company of his intent to dispute all or part of the amount due. If the dispute is resolved in favor of the customer, the Telephone Company will refund the disputed amount in question plus interest. The penalty interest period shall begin ten (10) days following the due date or on the date the disputed amount was actually paid, whichever is later. Interest will be calculated as described in (b) above.

ACCESS SERVICE

2. General Regulations (Cont'd)

2.4 Payment Arrangements and Credit Allowance (Cont'd)

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

- (C) For services provided on a monthly basis, the charge for the provision of a fractional month's service will be determined by dividing the number of days that service was provided by thirty (30) and multiplying the result times the monthly rate. This calculation will be made subject to any minimum service periods required for specific services.

- (D) When a rate as set forth in this guide is shown to more than two (2) 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 (2) decimal places).

The Telephone Company will, upon reasonable request and if available, furnish) such detailed information as may be required for verification of any bill.

The customer will receive its monthly bills in a standard paper format, or at the customer's option, on magnetic tape in standard industry format for those access services for which the Telephone Company is technically capable of providing magnetic tape billing. Additional copies of the customer's bill may be provided in standard paper format at the rates and charges set forth in Section 20 following. When the customer requests a paper copy of the customer's bill in addition to the customer bill provided on magnetic tape, the rate set forth in Section 20 following shall apply per page.

ACCESS SERVICE

2. General Regulations (Cont'd)

2.4 Payment Arrangements and Credit Allowance (Cont'd)

2.4.2 Minimum Periods

The minimum period for which services are provided are for which rates and charges are applicable is one month except as otherwise specified. The minimum periods for which Expanded Interconnection Services are provided and for which rates are applicable. 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 20. 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 Allowance (Cont'd)

2.4.3 Credit Allowance for Service Interruptions

(A) General

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

An allowance for interruption will apply only when the interruption is not due to the negligence of the customer. The credit allowance for an interruption or for a series of interruptions shall not exceed the monthly rate for the service interrupted in any one monthly billing period.

(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 as follows:

- (1) For Special Access services other than Program Audio and Videoband and Expanded Interconnect- ion, and for Switched Access Entrance Facilities, Direct-Trunked Transport and multiplexing services, a credit allowance will be made for an interruption period of 30 minutes or more. The allowance will be calculated at the rate of 1/1440 of the monthly charge for the portion of the service affected, for each 30 minutes or major fraction thereof that the interruption continues. A major fraction is considered to be sixteen minutes or more beyond the 30 minute period.

ACCESS SERVICE

2. General Regulations (Cont'd)

2.4 Payment Arrangements and Credit Allowance (Cont'd)

2.4.3 Credit Allowance for Service Interruptions (Cont'd)

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

(1) (Cont'd)

(a) For two-point service, the monthly charge shall be the total of all the monthly rate element charges associated with the service (i.e., a channel termination per customer designated premises, channel mileage and optional features and functions).

(b) If a portion of a service such as a portion of a multipoint special access facility can still be utilized during the service interruption, the credit allowance will only apply to the services which are inoperative (i.e., a channel termination per customer designated premises, channel mileage and optional features and functions).

(2) For Program Audio and Videoband Special Access services, a credit allowance will be made for an interruption of 30 seconds or more. Two or more such interruptions occurring during a period of 5 consecutive minutes shall be considered as one interruption. The allowance will be calculated as follows:

(a) For Program Audio Service provided at monthly rates, the credit will be at the rate of 1/8640 of the monthly service rate.

(b) For Program Audio Service provided at daily rates, the credit will be at the rate of 1/288 of the daily rate.

(c) For Temporary Videoband Service provided at hourly rates, the credit will be at 1/12 of the hourly rate.

ACCESS SERVICE

2. General Regulations (Cont'd)

2.4 Payment Arrangements and Credit Allowance (Cont'd)

2.4.3 Credit Allowance for Service Interruptions (Cont'd)

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

- (3) For DS1 and DS3 Special Access service, a credit allowance will be made for each occurrence of a service interruption period of three or more consecutive hours.

This credit allowance is in addition to the credit allowance in 2.4.3. The credit allowance will be \$200.00 for each out of service condition within the Telephone Company's facilities. The credit allowance will not be applied more than once per calendar month and will not exceed the monthly charge for the interrupted service. This credit allowance is applicable in the jurisdictions of:

Arizona
California

(D)
(D)

Nevada
New Mexico
New York

(D)

Tennessee
Utah
West Virginia

A credit allowance will not be extended in accordance with conditions in 2.1.3(E) and 2.4.3(C) for repair of Telephone Company owned facilities used to provide DS1 and DS3 service.

ACCESS SERVICE

2. General Regulations (Cont'd)

2.4 Payment Arrangements and Credit Allowance (Cont'd)

2.4.3 Credit Allowance for Service Interruptions (Cont'd)

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

- (4) For Switched Access Service, other than Entrance Facilities, Direct-Trunked Transport and Multiplexing, 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 charge, assumed usage, or minimum monthly usage charge for each period of 24 hours or major fraction thereof that the interruption continues.
- (5) For Common Channel Signaling System 7 (CCS7) Access Service, a credit allowance will be made for an interruption period of 30 minutes or more. The allowance will be calculated at the rate of 1/1440 of the monthly charge for the portion of the service affected, for each 30 minutes or major fraction thereof that the interruption continues. A major fraction is considered to be 16 minutes or more beyond the 30 minute period.

ACCESS SERVICE

2. General Regulations (Cont'd)

2.4 Payment Arrangements and Credit Allowance (Cont'd)

2.4.3 Credit Allowance for Service Interruptions (Cont'd)

(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 service during any period in which the Telephone Company is not afforded access to the premises where the service is terminated.
- (4) Interruptions of 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 2.4.3(B)(3) preceding applies.
- (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 the applicable Interstate Special Construction tariff. 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 of testing and/or repair and continues to use it on an impaired basis.
- (7) An interruption or a group of interruptions, resulting from a common cause, for amounts less than one dollar.

ACCESS SERVICE

2. General Regulations (Cont'd)

2.4 Payment Arrangements and Credit Allowance (Cont'd)

2.4.3 Credit Allowance for Service Interruptions (Cont'd)

(C) When a Credit Allowance Does Not Apply (Cont'd)

- (8) Periods when the Telephone Company must temporarily interrupt an EIS, in order to prevent damage or disruption to the Telephone Company's network due to the customer's equipment.
- (9) For EIS elements, no credit allowance will be made.

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 rates and charges for the alternative service used.

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 1/440 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 Allowance (Cont'd)

2.4.4 Re-establishment of Service Following Fire, Flood, or Other Occurrences

(A) Nonrecurring Charges Do Not Apply

Charges do not apply for the re-establishment of service for the same customer following an interruption resulting from 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 interruption.
- (2) The service is at the same location on the same premises.
- (3) The re-establishment of service begins within sixty (60) days after Telephone Company service is available.

(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 location.

ACCESS SERVICE

2. General Regulations (Cont'd)

2.4 Payment Arrangements and Credit Allowance (Cont'd)

2.4.5 Access Services Provided by More Than One Telephone Company

When Special Transport service is provided by more than one telephone company, the telephone companies involved will mutually agree upon one of the billing methods based upon the type of access service and the interconnection arrangements between the telephone companies.

The customer will place the ASR as in Section 5.3.

(A) Reserved

(B) Meet Point Billing

Meet Point Billing is required when an access service is provided by multiple Telephone Companies* Special Access.

*Meet Point Billing option guidelines, as contained in the MECAB document, may also be applied to services provided by one exchange carrier in two or more states within a single LATA.

ACCESS SERVICE

2. General Regulations (Cont'd)

2.4 Payment Arrangements and Credit Allowance (Cont'd)

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

(B) Meet Point Billing (Cont'd)

ACCESS SERVICE

2. General Regulations (Cont'd)

2.4 Payment Arrangements and Credit Allowance (Cont'd)

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

(B) Meet Point Billing (Cont'd)

ACCESS SERVICE

2. General Regulations (Cont'd)

2.4 Payment Arrangements and Credit Allowance (Cont'd)

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

(B) Meet Point Billing (Cont'd)

ACCESS SERVICE

2. General Regulations (Cont'd)

2.4 Payment Arrangements and Credit Allowance (Cont'd)

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

(B) Meet Point Billing (Cont'd)

ACCESS SERVICE

2. General Regulations (Cont'd)

2.4 Payment Arrangements and Credit Allowance (Cont'd)

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

(B) Meet Point Billing (Cont'd)

ACCESS SERVICE

2. General Regulations (Cont'd)

2.4 Payment Arrangements and Credit Allowance (Cont'd)

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

(B) Meet Point Billing (Cont'd)

ACCESS SERVICE

2. General Regulations (Cont'd)

2.4 Payment Arrangements and Credit Allowance (Cont'd)

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

(B) Meet Point Billing (Cont'd)

(2) Multiple Bill

ACCESS SERVICE

2. General Regulations (Cont'd)

2.4 Payment Arrangements and Credit Allowance (Cont'd)

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

(B) Meet Point Billing (Cont'd)

(2) Multiple Bill (Cont'd)

ACCESS SERVICE

2. General Regulations (Cont'd)

2.4 Payment Arrangements and Credit Allowance (Cont'd)

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

(B) Meet Point Billing (Cont'd)

(2) Multiple Bill (Cont'd)

ACCESS SERVICE

2. General Regulations (Cont'd)

2.4 Payment Arrangements and Credit Allowance (Cont'd)

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

(B) Meet Point Billing (Cont'd)

(2) Multiple Bill (Cont'd)

(b) Special Access

For Special Access Services, the Telephone Company will determine the applicable charges as follows:

Determine the distance in airline miles using the V&H method set forth in National Exchange Carrier Association Tariff No. 4 between the locations involved; i.e., the serving wire center associated with a customer designated premise and an end office, or a Telephone Company hub, or two Telephone Company hubs, a hub to an end office, or a hub to a tandem.

The airline distance in miles will be multiplied by the Special Access Channel Mileage-Facility rate element times the billing percentage to determine the appropriate charges. The billing percentage is that portion of circuit mileage to be billed by each company involved in providing Access Services to the customer. Billing percentages are listed in National Exchange Carrier Association Tariff FCC No. 4.

For Special Access, the total Channel Mileage charges shall be the Channel Mileage-Facility charge plus the Channel Mileage-Termination charges. The Channel Mileage-Termination Charge is always applied in full, once per channel mileage termination. The Channel Mileage-Termination rate does not apply when the Telephone Company provides an intermediate portion of a circuit mileage facility and no circuit mileage terminations.

ACCESS SERVICE

2. General Regulations (Cont'd)

2.4 Payment Arrangements and Credit Allowance (Cont'd)

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

(B) Meet Point Billing (Cont'd)

(2) Multiple Bill (Cont'd)

(b) Special Access (Cont'd)

All other appropriate recurring and nonrecurring charges in each Telephone Company's access tariff are applicable. The Special Access Nonrecurring Charge for circuit installation applies in full once per Circuit Termination provided by the Telephone Company.

ACCESS SERVICE

2. General Regulations (Cont'd)

2.4 Payment Arrangements and Credit Allowance (Cont'd)

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

(B) Meet Point Billing (Cont'd)

(2) Multiple Bill (Cont'd)

ACCESS SERVICE

2. General Regulations (Cont'd)

2.4 Payment Arrangements and Credit Allowance (Cont'd)

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

ACCESS SERVICE

2. General Regulations (Cont'd)

2.4 Payment Arrangements and Credit Allowance (Cont'd)

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

ACCESS SERVICE

2. General Regulations (Cont'd)

2.4 Payment Arrangements and Credit Allowance (Cont'd)

2.4.6 Cancellation of an Order for Service

Provisions for the cancellation of an order for service are set forth in Section 5.3.3 following.

2.4.7 Title or Ownership Rights

The payment of rates and charges by Customers for the services offered under the provisions of this guide 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.

2.4.8 Reserved for Future Use

(C)

ACCESS SERVICE

2. General Regulations (Cont'd)

2.4 Payment Arrangements and Credit Allowance (Cont'd)

2.4.8 Reserved for Future Use

(C)

ACCESS SERVICE

2. General Regulations (Cont'd)

2.5 Connections

2.5.1 General

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

2.5.2 Standard Access Service Connections

Access services are provided by means of wire, fiber optics, radio or any other suitable technology or a combination thereof. Special Access service connections are made directly or through a Telephone Company hub where bridging or multiplexing functions are performed. These connections can either be analog or digital.

ACCESS SERVICE

2. General Regulations (Cont'd)**2.6****Access Area**

The term "Access Area" denotes a specific calling area serviced by one or more Central Offices associated with the various Switched Access Services offered under this guide. The size and configuration of the Access Area a customer obtains is dependent upon the Feature Group type and the specific characteristics of the Central Office or Telephone Company Access Tandem Network in which the connection is made.

Access Code

The term "Access Code" denotes a uniform five or seven digit code assigned by the Telephone Company to an individual customer. The five digit code has the form 10XXX, and the seven digit code has the form 101XXXX, 950-1/0XXX, or 1+950-1/0XXX.

Access Minute

The unit of usage of exchange facilities in interstate or foreign service for the purpose of calculating chargeable usage. On the originating end of an interstate or foreign call, usage is measured from the time the originating end user's 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 interstate or foreign call, usage is measured from the time the call is received by the end user in the terminating exchange. Timing of usage at both originating and terminating ends of an interstate or foreign call shall terminate when the calling or called party disconnects, whichever event is recognized first in the originating and terminating end exchanges, as applicable.

Access Service Request

The term "Access Service Request" (ASR) denotes a document (i.e., order) used by the Telephone Company to process a customer's request for Access Services as offered throughout this guide.

Access Tandem

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's premises.

ACCESS SERVICE

2. General Regulations (Cont'd)

2.6 Definitions (Cont'd)

Access Tandem Network

The term "Access Tandem Network" denotes the network of trunk groups that provide a concentration and distribution function for originating and/or terminating Switched Access traffic between a single access tandem and Telephone Company subtending end offices.

Agent

The term "Agent" is defined as that person or entity that the Telephone Company acknowledges as the possessor of authority to make decisions pertaining to instrument placement, subscription authorization, and access or usage control of Public or Semipublic Pay Telephone Service or, that person or entity duly authorized to act in that capacity by the owner of the premises.

Aggregator

The term "Aggregator" denotes any individual, partnership, association, joint-stock company, trust or corporation 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.

ACCESS SERVICE

2. General Regulations (Cont'd)

2.6 Definitions (Cont'd)

Alternate Billing Service

The term "Alternate Billing Service" (ABS) denotes the ability of the end user to bill calls to an account not necessarily associated with the originating line, including calling card, collect and third number billing.

Annual Underutilization Liability

The term "Annual Underutilization Liability" denotes a per unit amount which may be billed annually if fewer services are in use utilizing specially constructed facilities at filed tariff rates than were ly specially constructed.

Answer Message

The term "Answer Message" denotes an SS7 message sent in the backward direction to indicate that the call has been answered.

Answer/Disconnect Supervision

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.

ACCESS SERVICE

2. General Regulations (Cont'd)

2.6 Definitions (Cont'd)

Area of Service

The term "Area of Service" (AOS) routing denotes the ability to ensure that 800/888 calls originate from subscribed service areas.

Attempt

The term "Attempt" denotes a call in the originating direction from an end user to a CDP which is completed (answered) or not completed (not answered) and a call in the terminating direction from a CDP to a customer which is completed (answered) or not completed (not answered).

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 a standard feature of FGA, FGB, FGC, FGD, and 800/888 Access Service and refers to the end office termination provided for balance and noise testing. The termination provides off-hook supervision to the calling end, and terminates the line or trunk in a resistive and capacitive arrangement which simulates the characteristic impedance of the end office.

BHMC

See Busy Hour Minutes of Capacity.

ACCESS SERVICE

2. General Regulations (Cont'd)

2.6 Definitions (Cont'd)

Billed Number Screening

The term "Billed Number Screening" (BNS) denotes the process of utilizing a line information data base to determine billing number acceptance for collect and third number calls and to perform public telephone line number checks to prevent the alternate billing of calls to public coin telephone lines.

Bit

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

Bridging

The term "Bridging" denotes the connection of one or more circuits in parallel with another circuit without interrupting the continuity of the first circuit.

Bridging Wire Center

The term "Bridging Wire Center" denotes the telephone company designated wire center in which bridging is accomplished.

Business Day

The times of day that a company is open for business. Business day hours for the Telephone Company may be determined by contacting the business office.

ACCESS SERVICE

2. General Regulations (Cont'd)

2.6 Definitions (Cont'd)

Busy Hour Minutes of Capacity (BHMC)

The customer specified maximum amount of Switched Access 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 Switched Access Service ordered. This customer furnished BHMC quantity is the input data the Telephone Company uses to determine the number of transmission paths for the Switched Access Service ordered.

Busy Season

The term "Busy Season" denotes the four consecutive weeks of the calendar year having the highest daily busiest hour traffic load based on a five day week. Normally the five-day week consists of Monday through Friday. Where weekend traffic is greater than weekday traffic, one or both weekend days may be used as a substitute for a weekday as long as a consistent five-day week is maintained for the four consecutive weeks.

Byte

The term "Byte" denotes a sequence or group of eight bits that represents one character.

C-Conditioning

The term "C-Conditioning" denotes a telephone company special treatment of the transmission path in order to control attenuation and envelope delay distortion.

ACCESS SERVICE

2. General Regulations (Cont'd)

2.6 Definitions (Cont'd)

C-Message Noise

The term "C-Message Noise" denotes the frequency weighted average noise within an idle voice circuit. 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.

C-Notched Noise

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

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 lines or trunks.

Call

A customer attempt for which the complete address code (e.g., 0-, 911, or 10 digits) is provided to the serving dial tone office.

Call Branding

Call Branding is the act of providing customer identification, audibly and distinctly, to the caller at the beginning of a Preferred Directory Assistance call.

Carrier or Common Carrier

See Interexchange Carrier.

Carrier Identification Code

The term "Carrier Identification Code ("CIC") identifies the interexchange carrier.

ACCESS SERVICE

2. General Regulations (Cont'd)

2.6 Definitions (Cont'd)

Cellular Mobile Carrier (CMC)

The term "Cellular Mobile Carrier" (CMC) denotes a Common Carrier authorized by the Federal Communications Commission to provide cellular mobile radio telecommunications services.

Central Office

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.

Central Office Loop Around Test Line

The term "Central Office Loop Around Test Line" denotes equipment in the Telephone Company's end office which provides a means for making two-way transmission tests for Switched Access services. These transmission tests are normally for the measurement of level and noise tests. This arrangement has two terminations, each reached by means of a separate seven digit number.

Central Office Prefix

The term "Central Office Prefix" denotes the first three digits (NXX) of the telephone number assigned to a telephone company subscriber's local service.

ACCESS SERVICE

2. General Regulations (Cont'd)

2.6 Definitions (Cont'd)

Centralized Automatic Reporting on Trunks (CAROT) Testing

The term "Centralized Automatic Reporting on Trunks (CAROT) Testing" denotes a type of testing which includes the capacity for measuring the 1000 Hz loss, C-message weighted noise, C-notched noise, loss slope, and the provision of a balance termination.

Channel Service Unit

The term "Channel Service Unit" denotes customer premises equipment which performs one or more of the following functions: termination of a digital facility, regeneration of digital signals, detection and/or correction of signal format error, and remote loop back.

Channelize

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

Circuit

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

Circuit Code

The term "Circuit Code" denotes the service class routing of an SS7 call that indicates the interexchange carrier trunk group to which the traffic will be routed (e.g. 0+, 0-, 500, 900, etc).

ACCESS SERVICE

2. General Regulations (Cont'd)

2.6 Definitions (Cont'd)

Coin Station

A location where telephone equipment is provided in a public place where end users can originate telephonic communications and pay the applicable charges by inserting coins into the equipment.

Commingling

The term "Commingling" means the connecting, attaching, or otherwise linking of an unbundled network element (UNE), or a combination of unbundled network elements (UNEs), to one or more facilities or services that a requesting telecommunications carrier has obtained at wholesale from an incumbent LEC, or the combining of an UNE, or a combination of UNEs, with one or more such facilities or services.

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.

Common Channel Signaling System 7 Network (CCS7)

The term "Common Channel Signaling System 7 Network" (CCS7) denotes a dedicated out-of-band signaling network which utilizes Signaling System 7 (SS7) protocol to provide call handling and data base access services.

Common Line

The term "Common Line" denotes a line, trunk, coin line or other facility provided under the Telephone Company General and/or Local Tariffs, terminated on a Central Office switch. A Common Line - Residence is a line or trunk provided under the residence regulations of the Telephone Company General and/or Local Tariffs. A Common Line - Business is a line or trunk provided under the business regulations of the Telephone Company General and/or Local Tariffs. A coin line is a line provided under the public and/or semi-public service regulations of the Telephone Company General and/or Local Tariffs.

ACCESS SERVICE

2. General Regulations (Cont'd)

2.6 Definitions (Cont'd)

Communications System

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

Competitive County

The term "Competitive County" denotes that the geographic unit of a county or county-equivalent that passes or has passed a competitive market test specified by the FCC. Competitive County also denotes a county or county-equivalent that failed a competitive market test specified by the FCC, but was granted Phase II, Level 2 pricing flexibility prior to June 1, 2017.

Confirmed ASR

The term "Confirmed ASR" denotes a customer's ASR for a) Switched Access service which the Telephone Company has processed with the Engineering Department to confirm for the customer and the Telephone Company the availability of facilities and/or equipment, and b) Special Access service for which the Telephone Company confirms to the customer that the established due date can be met. The date the ASR is confirmed, the standard service date interval commences.

Confirming Design Layout Report Date

The term "Confirming Design Layout Report (CDLR) Date" identifies the date that the Telephone Company is scheduled to receive confirmation that the Design Layout Report provided by the Telephone Company for a confirmed ASR is acceptable.

ACCESS SERVICE

2. General Regulations (Cont'd)

2.6 Definitions (Cont'd)

Conventional Signaling

The term "Conventional Signaling" denotes the inter-machine signaling system which has been traditionally used in North America for the purpose of transmitting the called number's address digits from the originating end office to the switching machine which will terminate the call. In this system, all of the dialed digits are received by the originating switching machine, a path is selected, and the sequence of supervisory signals and outpulsed digits is initiated. No overlap outpulsing, ten-digit ANI, ANI information digits, or acknowledgement wink are included in this signaling sequence.

Customer

The term "Customer" denotes any individual, partnership, association, joint-stock company, trust, corporation, or governmental entity or any other entity which subscribes to the services offered under this guide, including Interexchange Carriers (ICs), alternative access providers, facility based carriers, end users, Information and Enhanced Service Providers.

Customer Designated Location

The term "Customer Designated Premises" (CDP) denotes a location specified by the customer for the purpose of terminating services. The Telephone Company must have access to the location to perform installation, testing, and maintenance functions. The customer may or may not have access to the location. CDPs include locations such as customer premises, end user premises, customer repeater stations, customer microwave towers, a Telephone Company's first point of switching, some other point where Telephone Company testing can occur, etc. A CDP may be designated by the customer for Switched Access, Special Access, or both in combination. Customer transmission facilities and equipment terminated in Telephone Company central offices under EIS arrangements, are not considered a CDP. However, Telephone Company Special Access Services may be interconnected to such customer equipment using a Cross Connect arrangement.

ACCESS SERVICE

2. General Regulations (Cont'd)

2.6 Definitions (Cont'd)

Customer Designated Premises

The premises specified by the customer for the provision of Access Service.

Customer Message

A completed interstate call originated by a customer's end user. A customer message begins when answer supervision from the premise of the ordering customer is received by Telephone company recording equipment indicating that the called party has answered. A message ends when disconnect supervision is received by Telephone Company recording equipment from either the premise of the ordering customer or the customer's end user premise from which the call originated.

D-Conditioning

The term "D-Conditioning" denotes a Telephone Company special treatment of the transmission path in order to control C-notched noise and intermodulation distortion.

Daily Busiest Hour

The term "Daily Busiest Hour" denotes the highest usage hour for each day with the reading taken on the clock hour or half hour. The clock hour or half hour selection varies from day to day, depending upon the usage measured. The Daily Busiest Hour is also known as the Bouncing Busy Hour.

ACCESS SERVICE

2. General Regulations (Cont'd)**2.6 Definitions (Cont'd)****Data Transmission (107 Type) Test Line**

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 differences 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 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.

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.

Digital Subscriber Line (DSL) Service

Digital Subscriber Line Service (DSL) is a high-speed data access service that uses asymmetrical digital subscriber line technology

Digital Switched 56 Service

A switched access optional feature available with Feature Group D Access, which provides for data transmission at up to 56 Kilobits per second

ACCESS SERVICE

2. General Regulations (Cont'd)

2.6 Definitions (Cont'd)

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.

Discontinuance Non-Recurring Charge

(N)

In addition to any other charges associated with discontinuance of services, the Telephone Company will charge a discontinuance non-recurring charge to disconnect services. This charge applies on a per circuit basis.

DS-1

(N)

Digital Signal level one (DS1) provides a high capacity channel interface for use in providing point to point digital transmission. It handles simultaneous two-way transmission at the rate of 1.544 Mbps.

DS-3

Digital signal level three (DS3) provides a high capacity channel interface for use in providing point to point digital transmission. It handles simultaneous two way transmission at the rate of 44.736 Mbps.

Dual Tone Multifrequency Address Signaling

The term "Dual Tone Multifrequency (DTMF) Address Signaling" denotes a type of signaling that is an optional feature of FGA. It may be utilized when FGA is being used in the terminating direction. An office arranged for signaling would expect to receive address signals from the IC in the form of DTMF format.

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 four-wire interface without regard to the send and receive Transmission Level Point (TLP).

ACCESS SERVICE

2. General Regulations (Cont'd)

2.6 Definitions (Cont'd)

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.

Effective Four-Wire (4)

A condition which permits the simultaneous independent transmission of information in both directions over a channel. The method of implementing effective four-wire (4) transmission is at the discretion of the Telephone Company (physical, time domain, frequency-domain separation or echo cancellation techniques).

Effective Two-Wire (2)

A condition which permits the simultaneous transmission in both directions over a channel, which does not insure independent information transmission in both directions. Effective two-wire (2) channels may be terminated with two-wire (2) or four-wire (4) interfaces.

End Office Switch

A local Telephone Company switching system where Telephone Exchange Service customer common lines are terminated for purposes of interconnection to trunks. Included are Remote Switching Modules and Remote Switching Systems served by a host office in a different wire center.

End User

Any customer of an interstate or foreign telecommunications service that is not a carrier, except that a carrier shall be deemed to be an "end user" to the extent that such carrier uses a telecommunications service for administrative purposes, without making such service available to others, directly or indirectly.

ACCESS SERVICE

2. General Regulations (Cont'd)

2.6 Definitions (Cont'd)

Engineering Review

The term "Engineering Review" denotes the examination of an ASR with a customer requested change to determine if a design change is required. It includes, but is not limited to, the review for possible change requirements in equipment, interfaces, circuit configurations, engineering records, and billing.

Enhanced Service Provider

The term "Enhanced Service Provider" denotes a customer who offers the capability for generating, acquiring, storing, transforming, processing, retrieving, utilizing, or making available information which may be conveyed via telecommunications, except that such service does not include, 1) any use of any such capability for the management, control, or operation of a telecommunications system or the management of a telecommunications system, or 2) the provision of time, weather, and such other similar audio services that are offered by any Telephone Company.

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.

ACCESS SERVICE

2. General Regulations (Cont'd)

2.6 Definitions (Cont'd)

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 = TLP (send) + TLP (receive)]

Excess Capacity

The term "Excess Capacity" denotes a quantity of services requested by the customer which is greater than that which the Telephone Company would construct to fulfill the customer's ASR.

ACCESS SERVICE

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

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.

Exchange Access Signaling

The term "Exchange Access Signaling" denotes the signaling system used by equal access end offices to transmit originating information and address digits to the customer's premises and includes the means of verifying the receipt of these address digits. Features of this system include overlap outpulsing (in suitable equipped end offices), identification of the type of call, identification of the ten-digit telephone number of the calling party, and acknowledgement wink supervisory signals.

Existing Suitable Space

The term "Existing Suitable Space" denotes a space in which ac/dc power, heat and air conditioning, battery and generator back-up power, and other requirements necessary for provision of wire center equipment currently exists.

ACCESS SERVICE

2. General Regulations (Cont'd)

2.6 Definitions (Cont'd)

Exit Message

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

Expanded Interconnection Service (EIS)

The term "Expanded Interconnection Service" (EIS) denotes services which provide customers with the capability of terminating basic fiber optic and microwave transmission facilities, including optical terminating equipment and multiplexers in the Telephone Company central offices (physical) or outside the central office in a manhole or other similar location (virtual).

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.

ACCESS SERVICE

2. General Regulations (Cont'd)

2.6 Definitions (Cont'd)

Extended Area Service

The term "Extended Area Service" (EAS) denotes an arrangement whereby a customer in one exchange can call a local number in another exchange that is part of the extended area without paying a toll charge.

Facility

The term "Facility" denotes generically the various transmission media used for the transmission of telecommunications service. This included, but is not limited to, cable (copper pair, coaxial and fiber optic) and microwave radio equipment.

Field Identifier

The term "Field Identifier" denotes two to four characters that are used on service orders to convey specific instructions. Field Identifiers may or may not have associated data. Selected Field Identifiers are used in Telephone Company billing systems to generate nonrecurring charges.

Firm Order Confirmation Date

The term "Firm Order Confirmation (FOC) Date" denotes the date that the Telephone Company will provide the schedule of dates for the provisioning activities associated with the customer's request for service.

First Come - First Served

The term "First Come - First Served" denotes a procedure followed by the Telephone Company to process fully completed Access Orders according to the sequence in which they are received.

First Point of Switching

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 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 IC or customer premises.

ACCESS SERVICE

2. General Regulations (Cont'd)

2.6 Definitions (Cont'd)

Four-Wire to Two-Wire Conversion

The term "Four-Wire to Two-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 such as a central office switch trunk circuit or switching system.

Frequency Shift

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

Gateway Switch

The switch through which communication passes between public packet switched networks.

Geographically Aggregated Rate (GAR)

The term "Geographically Aggregated Rate" denotes a situation in which the rates and charges for a service offering, for which there is currently no demand, are developed based upon the aggregated revenue requirement and demand for more than one study area. Upon receipt of a request for service, the current geographically averaged rates will be redeveloped to include the new study area.

Example: Study areas A, B and C have been geographically aggregated. Geographically averaged rates for A and B were developed based upon their aggregated revenue requirement and demand, while Area C, marked "GAR", has no current demand. Should C receive a request for service, the current geographically averaged rates will be redeveloped to include C's revenue and demand. The redeveloped rates and charges will now be applicable to customers on A, B, and C.

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 guide, and which are considered grandfathered under Part 68 of the F.C.C.'s Rules and Regulations.

ACCESS SERVICE

2. General Regulations (Cont'd)

2.6 Definitions (Cont'd)

Ground Start Supervisory Signaling

The term "Ground Start Supervisory Signaling" denotes a type of signaling which provides for the application of ground on the tip side at the point of termination (assuming no signaling conversion has been provided by the Telephone Company) as an initial seizure signal before the application of ringing in the originating direction (towards the customer from the end office).

Host Office

An electronic switching system which provides call processing capabilities for one or more Remote Switching Modules or Remote Switching Systems.

IC CDL

The Term "IC CDL" denotes a Customer Designated Location (CDL) where facilities for (N) interstate access is terminated and connected to an Interexchange Carrier.

Immediately Available Funds

A corporate or personal check drawn on a bank account for which funds 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.

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 (ICB)

A condition in which the regulations, if applicable, rates and charges for an offering under the provisions of this guide are developed based on the circumstances in each case.

ACCESS SERVICE

2. General Regulations (Cont'd)

2.6 Definitions (Cont'd)

Information Service Provider

The term "Information Service Provider" denotes one who offers a capability for generating, acquiring, storing, transforming, processing, retrieving, utilizing, or making available information which may be conveyed via telecommunications, except that such service does not include (1) any use of any such capability for the management, control, or operation of a telecommunications system or the management of a telecommunications service, or (2) the provision of time, weather, and such other similar audio services that are offered by the Telephone Company.

Initial Address Message (IAM)

The term "Initial Address Message" (IAM) denotes an SS7 message sent in the forward direction to initiate trunk set up with the busying of an outgoing trunk which carries the information about that trunk along with other information relating to the routing and handling of the call to the next switch.

Initial Liability Period

The term "Initial Liability Period" denotes the initial planning period during which the customer expects to place specially constructed facilities in service.

ACCESS SERVICE

2. General Regulations (Cont'd)

2.6 Definitions (Cont'd)

Inserted Connection Loss

The term "Inserted Connection Loss" denotes the 1004 H2 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.

Installed Cost

The term "Installed Cost" denotes the total cost (estimated or actual) by the Telephone Company to provide facilities for the offered services.

Integrated Services Digital Network (ISDN)

Integrated services digital network (ISDN) permits digital transmission over ordinary local loops through the use of advanced hardware and software. ISDN offers data transmission at higher speeds than standard analog service.

Basic Rate Interface (BRI)-ISDN service allows subscribers to obtain two voice grade equivalent channels and one data signaling channel over two pairs of twisted copper wires.

Primary Rate Interface (PRI)-ISDN service allows subscribers to obtain 23 voice grade equivalent channels and one data signaling channel over two pairs of twisted copper wires.

Interconnection

The term "Interconnection" denotes the termination of a customer's basic transmission facilities, including optical terminating equipment and multiplexers at or near Telephone Company wire center. Interconnection may be provided as either physical or virtual.

ACCESS SERVICE

2. General Regulations (Cont'd)

2.6 Definitions (Cont'd)

Interexchange Carrier (IC) or Interexchange Common Carrier

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.

Intermodulation Distortion

The term "Intermodulation Distortion" denotes a measure of the nonlinearity of a circuit. It is measured using four tones, and evaluating the ratios (in dBs) 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).

Interstate Call

A term which denotes both interstate and foreign communications.

Intrastate Communications

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

Internet Digital Access Service (IDAS)

Internet Digital Access Service (IDAS) is the Telephone Company's Digital Channel Service offering (T-1/DS-1 equivalent) which is a wholesale business offering to provide one way digital service for Internet Service providers (ISPs).

Internet Service Provider (ISP)

Internet Service Providers (ISPs) are communications providers who link end-user customers with the internet/world wide web through their servers. Normally, this occurs as a dial-up service using modems, but can also utilize high speed digital services.

ACCESS SERVICE

2. General Regulations (Cont'd)

2.6 Definitions (Cont'd)

Kilosegment

The term "Kilosegment" denotes a unit of packet transmission defined as 64,000 bytes of data; one thousand segments.

Line

The term "Line" denotes a communications path connecting an end office switch with an end user's premises or a CDP for the provision for FGA.

Line Group

The term "Line Group" denotes a grouping of lines which are traffic engineered as a unit for the establishment of connections between end office switches and customers in which all of the communications paths are interchangeable.

Line Information Data Base

The term "Line Information Data Base" (LIDB) denotes a data base containing billing validation data providing the ability to screen billed numbers to support Alternate Billing services.

ACCESS SERVICE

2. General Regulations (Cont'd)

2.6 Definitions (Cont'd)

Line Side Connection

A connection of a transmission path to the line side of a local exchange switching system.

Local Access and Transport Area

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.

Logical Channel

The term "Logical Channel" denotes a communication channel which allows two-way simultaneous transmission of data packets through the network. No circuit capability is preassigned to a logical channel. Capacity is made available as the data is transmitted. Each virtual connection utilizes one logical channel.

Loop Around Test Line

An arrangement utilizing a Telephone Company central office to provide a means to make certain two-way transmission tests on a manual basis. This arrangement has two central office terminations, each reached by means of separate telephone numbers and does not require any specific customer premises equipment. Equipment subject to this test arrangement is at the discretion of the customer.

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.

Message

See "Call".

Mid Link

The term "Mid Link" denotes the Special Transport facilities between Hub Wire Centers where the circuit is bridged and/or where switching devices such as a loop transfer arrangement are located.

ACCESS SERVICE

2. General Regulations (Cont'd)

2.6 Definitions (Cont'd)

Milliwatt (102 Type) Test Line

An arrangement in an end office which provides a 1004 Hz tone at 0 dBm0 for one-way transmission measurements towards the customer's premises from the Telephone Company end office.

Mobile Telephone Switching Office (MTSO)

The term "Mobile Telephone Switching Office" (MTSO) denotes a Cellular Mobile Carrier (CMC) switching facility that is used to originate or terminate calls on the CMC network, or originate or terminate calls between the CMC and the public switched telephone network.

Multicarrier Access Area

The term "Multicarrier Access Area" denotes an EAS for FGA or an area for FGB where services are provided by more than one telephone company in which a customer obtains access to an entire EAS or FGB area by obtaining a FGA or FGB access tandem arrangement that connects its switch with the First Point of Switching of the Primary Exchange Carrier.

National Security Emergency Preparedness (NSEP) Services

The term "National Security Emergency Preparedness (NSEP) Services" denotes telecommunications services which are used to maintain a state of readiness or to respond to and manage any event or crisis (local, national or international), which causes or could cause injury or harm to the population, damage to or loss of property, or degrades or threatens the NSEP posture of the United States.

ACCESS SERVICE

2. General Regulations (Cont'd)

2.6 Definitions (Cont'd)

Net Salvage

The estimated scrap, sale, or trade-in value, less the estimated cost of removal. Cost of removal includes the costs of demolishing, or otherwise disposing of the material and any other applicable costs. Since the cost of removal may exceed salvage value, net salvage may be negative.

Network Address

The term "Network Address" denotes the alphanumeric character string used to specify the destination of each switched connection made within the network.

Network Channel Interface Code

The "Network Channel Interface" (NCI) code is an ordering code that provides an indication of the generic channel type. The NCI code provides the technical characteristics of the interface and describes the physical and electrical characteristics of the special access interface to the customer designated locations.

Network Control Signaling

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 reorder or busy conditions, alerting, coin denomination, coin collect and coin return tones) to control the operation of the telecommunications system.

Non-Competitive County

The term "Non-Competitive County" denotes a geographic unit of a county or county-equivalent that failed a competitive market test specified by the FCC (excluding those that were granted Phase II, Level 2 pricing flexibility prior to June 1, 2017 and thus are defined as "Competitive Counties").

ACCESS SERVICE

2. General Regulations (Cont'd)

2.6 Definitions (Cont'd)

Non-Overlap Outpulsing

The term "Non-Overlap Outpulsing" is the feature of the exchange access signaling system which provides initiation of pulsing to the customer's premises after the calling subscriber has completed dialing an originating call.

Nonrecoverable Cost

The term "Nonrecoverable Cost" denotes the cost of specially constructed facilities for which the Telephone Company has no foreseeable use should the customer terminate service.

Nonsynchronous Test Line

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.

ACCESS SERVICE

2. General Regulations (Cont'd)

2.6 Definitions (Cont'd)

North American Numbering Plan

A three-digit (3) area (Numbering Plan Area) code and a seven-digit (7) number made up of a three-digit (3) Central Office code plus a four-digit (4) station number.

NSEP Treatment

The term "NSEP Treatment" denotes the provisioning of a telecommunications service before others based on the provisioning priority level assigned by the Executive Office of the President.

Octet

The term "Octet" denotes a group of eight binary digits operated upon as an entity.

Off-Hook

The active condition of Switched Access or a Telephone Exchange Service line.

On-Hook

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

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.

Order Interval

The term "Order Interval" denotes the interval between the Scheduled Issue Date and the Service Date.

Originating Direction

The use of access service for the origination of calls from an end user premises to an IC premises.

Originating Point Code

The term "Originating Point Code" (OPC) denotes the identity assigned to each Operator Service System (OSS) location.

Overlap Outpulsing

The feature of the exchange access signaling system which permits initiation of pulsing to the customer's premises before the calling subscriber has completed dialing an originating call.

OZZ Code

The term "OZZ Code" identifies the interexchange carrier trunk group to which the traffic should be routed.

ACCESS SERVICE

2. General Regulations (Cont'd)

2.6 Definitions (Cont'd)

Packet

The term "Packet" denotes a continuous sequence of binary digits of information which is switched through the network as an integral unit. The user data is divided into segments for billing purposes. The number of segments contained in a packet is dependent upon the packet size.

Packet Switch

The term "Packet Switch" denotes a central office based switch that establishes a virtual connection between two data network addresses for the transmission of discrete amounts of information.

Packet Switching Office

The term "Packet Switching Office" denotes the central office where the packet switching functions are performed and access to the packet network is accomplished.

Pay Telephone

Telephone instruments and related facilities that are available to the general public for public convenience and necessity, including public and coinless telephones.

ACCESS SERVICE

2. General Regulations (Cont'd)

2.6 Definitions (Cont'd)

Permanent Facilities

The term "Permanent Facilities" denotes facilities providing service for one month or more.

Phase Jitter

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

Physical EIS

The term "Physical EIS" denotes an offering that enables customers to place equipment needed to terminate basic transmission facilities, including optical terminating equipment and multiplexers, within or upon the Telephone Company's central office buildings, to use such equipment to connect customer's fiber optic systems or microwave radio transmission facilities (where reasonably feasible) with the local exchange carrier's equipment and facilities used to provide interstate special access services.

Plant Test Date

The term "Plant Test Date" denotes the date on which installation is completed and the Telephone Company to customer testing can begin.

ACCESS SERVICE

2. General Regulations (Cont'd)

2.6 Definitions (Cont'd)

Point of Termination

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

Premises

A building or buildings on continuous property (except Railroad Right-of-Way, etc.) not separated by a public highway.

Pre-Service Testing

The term "Pre-Service Testing" denotes tests performed on services to assure standard transmission performance/parameters meet specifications prior to acceptance testing.

Primary Exchange Carrier

Denotes the Local Exchange Telephone Company in whose exchange a customer's first point of switching (i.e., dial tone office for FGA).

Prime Service Vendor

The term "Prime Service Vendor" denotes the status of the Telephone Company when contracting directly with the user of TSP service.

ACCESS SERVICE

2. General Regulations (Cont'd)

2.6 Definitions (Cont'd)

Protocol

The term "Protocol" denotes a set of rules governing the format to be followed when transmitting information between communicating devices.

Public Pay Telephone

The term "Public Pay Telephone" denotes a switched coin line provided under the Public Telephone Service regulations of the Telephone Company General Exchange and/or Local Exchange Tariffs.

Query

The term "Query" denotes the inquiry to a Telephone Company data base to obtain information, processing instructions or service data.

Recoverable Cost

The term "Recoverable Cost" denotes the cost of specially constructed facilities for which the Telephone Company has a foreseeable reuse, either in place or elsewhere should the customer terminate service.

ACCESS SERVICE

2. General Regulations (Cont'd)

2.6 Definitions (Cont'd)

Regional Signal Transfer Point (RSTP)

The term "Regional Signal Transfer Point" (RSTP) denotes a Signal Transfer Point (STP) equipped with gateway screening capability. Gateway screening is defined as the examination of designated fields within inbound SS7 messages to prevent unauthorized access to, and use of, the Telephone Company's SS7 network by another signaling network.

Regional Signal Transfer Point (RSTP) Port

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

Registered Equipment

The customer's premises equipment which complies with and has been approved within the Registration Provision of Part 68 of the FCC's Rules and Regulations.

Release Message

The term "Release Message" denotes an SS7 Message sent in either direction to indicate that a specific circuit is being released.

ACCESS SERVICE

2. General Regulations (Cont'd)

2.6 Definitions (Cont'd)

Remote Switching Modules and/or Remote Switching Systems

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

Response

The term "Response" denotes an SS7 message representing a reply to a request for information contained in a query.

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.

Route Mileage

The term "Route Mileage" denotes the actual Telephone Company provided facility mileage of a transmission circuit.

Scheduled Issue Date

The term "Scheduled Issue Date" denotes the date the Telephone Company is scheduled to issue the confirmed ASR to all associated work groups.

ACCESS SERVICE

2. General Regulations (Cont'd)

2.6 Definitions (Cont'd)

Secondary Exchange Carrier

Denotes the Local Exchange Telephone Company in whose exchange a FGA customer's end users' end office is located and where the customer's first point of switching is provided by a Primary Exchange Carrier who is not the same Exchange Carrier as the Secondary Exchange Carrier.

Segment

The term "Segment" denotes a unit of user information consisting of 64 octets or less. Billing for Packet Switching Network Service is based on the number of segments transmitted within the user data field of a packet. The number of segments transmitted within a packet is limited only by the subscribed or negotiated maximum size of the user data field for the customer interface.

Service Control Point

The term "Service Control Point" (SCP) denotes an SS7 network control interface element between the Telephone Company's SS7 network and one or more data bases.

Service Date

The term "Service Date" denotes the date that the service is to be placed in service. A confirmed ASR is required to establish a service date.

ACCESS SERVICE

2. General Regulations (Cont'd)

2.6 Definitions (Cont'd)

Service Management System

The term "Service Management System" (SMS) denotes the primary 800/888 service system that interfaces between the regional SCPs and 800/888 service providers order entry centers and/or systems. The primary function of the SMS is to administer 800/888 records in the SCPs that involve service provisioning, maintenance network administration and management.

Service Switching Point (SSP)

The term "Service Switching Point" (SSP) denotes a switch which recognizes 800/888 calls and suspends them in order to query the 800/888 Service Control Point (SCP) for routing instructions for the 800/888 call.

Serving Wire Center

That Telephone Company designated wire center serving the customer's designated premises and used for mileage measurement to determine local transport or circuit mileage charges for Access Service.

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.

Short Circuit Test Line

The term "Short Circuit Test Line" denotes the end office circuit which provides an ac short circuit termination of the trunk or line by means of a capacitor of at least 4 microfarads.

ACCESS SERVICE

2. General Regulations (Cont'd)

2.6 Definitions (Cont'd)

Shortage of Facilities or Equipment

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.

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. The technical interface specifications, transmission specifications, and diversity requirements for interconnecting to the Telephone Company's SS7 network at the STP are as described in Bellcore Technical Reference Publication TR-TSV-000905.

Signal Transfer Point (STP) Port

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

Signaling Point (SP)

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

Signaling System 7 (SS7)

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

ACCESS SERVICE

2. General Regulations (Cont'd)

2.6 Definitions (Cont'd)

Signaling for Tandem Switching

The term "Signaling for Tandem Switching" denotes the carrier identification code (CIC) and the OZZ code, or equivalent information needed to perform tandem switching functions. The CIC identifies the interexchange carrier and the OZZ code identifies the interexchange carrier trunk group to which the traffic will be routed.

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.

Singing Return Loss

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

Subcontractor

The term "Subcontractor" denotes the status of the Telephone Company when contracting directly with a Prime Service Vendor to provide TSP to a service user.

Subtending End Office of an Access Tandem

An end office that has final trunk group routing through that tandem.

Synchronous Test Line

An arrangement in an end office which performs marginal operational tests of supervisory and ring-tripping functions.

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.

Telecommunications Service Priority (TSP) System

Telecommunications Service Priority (TSP) is a regulatory, administrative, and operational system developed by the Federal Government to ensure priority provisioning and/or restoration of National Security Emergency Preparedness (NSEP) telecommunications services. The Federal Communications Commission (FCC) defines NSEP telecommunications services as those services which are used to maintain a state of readiness or to respond to and manage any event or crises, which causes or could cause harm to the population, damage to or loss of property, or degrades or threatens the NSEP posture of the United States.

Under the rules of the TSP System, Telephone Companies are authorized and required to provision and/or restore services with TSP assignments before services without such assignments.

Temporary Facilities

The term "Temporary Facilities" denotes facilities used to provide service to a customer for less than the minimum service period or less than one month, whichever is longer, or to provide service while permanent facilities are being constructed.

Terminating Direction

The use of Access Service for the completion of calls from an IC premises to an end user premises.

Termination Charge

The term "Termination Charge" denotes the portion of the Maximum Termination Liability that is applied as a nonrecurring charge when all services are discontinued prior to the expiration of the specified liability period.

ACCESS SERVICE

2. General Regulations (Cont'd)**2.6 Definitions (Cont'd)****Termination Liability**

The amount which will be billed if services using specially constructed facilities are terminated prior to the expiration of the Termination Liability Period.

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 Public Switched Telephone Network (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

An arrangement in an end office which provides far-end access to a recorder and permits two-way loss and noise measurements to be made on trunks from a near end office.

Transmission Path

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 three hundred (300) to three thousand (3,000) 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.

Trunk

A communications path connecting two switching systems in a network, used in the establishment of an end-to-end connection.

Trunk Group

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 connection of a transmission path to the trunk side of a local exchange switching system. This type of connection is used when providing FGB, FGC, or FGD Switched Access Service.

ACCESS SERVICE

2. General Regulations (Cont'd)

2.6 Definitions (Cont'd)

Two-Wire (2) to Four-Wire (4) Conversion

An arrangement which converts a four-wire (4) transmission path to a two-wire (2) transmission path to allow a four-wire (4) facility to terminate in a two-wire (2) entity (e.g., a central office switch).

Unbundled Network Elements (UNEs)

The term "Unbundled Network Elements" denotes the physical facilities of the network, including the associated features, functions and capabilities, that are capable of being used in the provision of a telecommunications service, made available pursuant to Section 251 of the Telecommunications Act of 1996.

Uniform Service Order Code (USOC)

The term "Uniform Service Order Code" denotes a three or five character alphabetic, numeric, or an alphanumeric code that identifies a specific item of service or equipment. Uniform Service Order Codes are used in the Telephone Company billing system to generate recurring rates and nonrecurring charges.

V and H Coordinates Method

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.

Virtual Connection

The term "Virtual Connection" denotes a logical channel resulting from call establishment to a network address that exists until the call is terminated by either party.

Virtual EIS

The term "Virtual EIS" denotes an offering that enables customers to designate or specify equipment needed to terminate basic transmission facilities, including optical terminating equipment and multiplexers, to be located within or upon the Telephone Company's wire center buildings, and dedicated to such customer's use.

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ACCESS SERVICE

2. General Regulations (Cont'd)

2.6 Definitions (Cont'd)

WATS Serving Office

The term "WATS Serving Office" denotes a Telephone Company designated serving wire center where switching, screening and/or recording functions are performed in connection with the closed-end of WATS or WATS-type services.

Wire Center

The term "Wire Center" denotes (1) a building in which one or more central offices, including end office switches, used for the provision of Telephone Exchange Services, are located, or (2) in the case of a centralized equal access tandem arrangement, a building in which Telephone Company access facilities are located for purposes of interconnection to customer premises.

Wire Center Area

The term "Wire Center Area" denotes the geographical area served by a Wire Center through the use of central office switching equipment, cross connection equipment, and subscriber loops.

X.25 Protocol

The term "X.25 Protocol" denotes an interface between Data Terminal Equipment and Data Circuit Terminating Equipment for terminals operating in the packet mode on public data networks.

X.75 Protocol

The term "X.75 Protocol" denotes terminal and transit call control procedures and data transfer system on circuits between packet switched data networks.

ACCESS SERVICE

3. Reserved for future use

ACCESS SERVICE

4. Reserved for future use

ACCESS SERVICE

5. Access Ordering

5.1 General

This section describes the regulations and order related charges for services set forth in other sections of this guide. 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 or Access Related Service or to provide changes to existing services.

The regulations, rates, and charges for Special Construction as set forth in the applicable Interstate Special Construction Tariff are in addition to the regulations, rates, and charges specified in this section.

Special Construction is not applicable to Expanded Interconnection Service.

5.1.1 Ordering Conditions

- (A) 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 multi-point service.

The ordering customer must provide a copy of the access order to the Telephone Company. The customer shall provide all information necessary for the Telephone Company to provide and bill for the requested service. In addition to the order information required in 5.2 following, 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:
 1. order negotiation
 2. order confirmation
 3. interactive design
 4. installation
 5. billing

ACCESS SERVICE

5. Access Ordering (Cont'd)

5.1 General (Cont'd)

5.1.1 Ordering Conditions (Cont'd)

(B) Packet Switching

For Packet Switching Network Service, the packet carrier must provide a Percent of Interstate Usage (PIU) in the Main Remarks section of the ASR when service is initially ordered. This PIU will be used as the basis for prorating the packet usage charges to the interstate and intrastate jurisdictions. The packet switching carrier may submit an updated PIU report in writing at any time following one full month's billing. The updated report will become effective on the first day of the next monthly billing period which begins at least 15 business days after the date the revised report is received by the Telephone Company.

(C) Special Access DS3

The provision of Special Access requires the selection of a Terminating Option as defined in 7.2.

ACCESS SERVICE

5. Access Ordering (Cont'd)

5.1 General (Cont'd)

5.1.2 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 and Special Access Services. 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 9.

ACCESS SERVICE

5. Access Ordering (Cont'd)

5.1 General (Cont'd)

5.1.3 Selection of Facilities for Access Orders

When there are analog or digital 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 to be used to provide the Special Access Service requested in an Access Service Request. The Telephone Company will make a reasonable effort to accommodate the customer request.

For all other Access Service Requests, the option to request a specific transmission path or channel is not provided except as provided for under Special Facilities Routing as set forth in Section 12 following.

5.1.4 Minimum Period

The minimum period for which Access Service is provided, and for which charges are applicable is one month.

When Access Service is disconnected prior to the expiration of the minimum period, charges are applicable for the balance of the minimum period.

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

The Minimum Period for Miscellaneous Services is in Section 9.

The minimum periods for Special Access Services are in Section 7.2.3(C).

The Minimum Period for Services provided under Special Construction provisions and for which charges are applicable is specified in the applicable Interstate Special Construction Tariff.

ACCESS SERVICE

5. Access Ordering (Cont'd)

5.1 General (Cont'd)

5.1.5 Reserved for future use

ACCESS SERVICE

- 5. Access Ordering (Cont'd)
 - 5.2 Ordering Requirements
 - 5.2.1 Reserved for future use

ACCESS SERVICE

5. Access Ordering (Cont'd)

5.2 Ordering Requirements (Cont'd)

5.2.2 Reserved

ACCESS SERVICE

- 5. Access Ordering (Cont'd)
 - 5.2 Ordering Requirements (Cont'd)
 - 5.2.2 Reserved (Cont'd)

ACCESS SERVICE

5. Access Ordering (Cont'd)

5.2 Ordering Requirements (Cont'd)

5.2.2 Reserved

ACCESS SERVICE

5. Access Ordering (Cont'd)

5.2 Ordering Requirements (Cont'd)

5.2.3 Special Access Service

(A) General

When placing an order for Special Access Services, the customer must provide the requirements as follows:

For all Special Access Services, the customer must specify the customer designated premises or Hubs involved, the type of service, (e.g., Voice Grade, High Capacity, etc.) the channel interface, technical specification package and options desired. The customer must also indicate the jurisdiction of the circuit as set forth in Section 7.1.7 following. For multipoint services, the channel interface at each premises may, at the request of the customer, be different but all such interfaces shall be compatible.

All part-time Video and Program Audio services are subject to a service inquiry. A service inquiry is a request to the Telephone Company to determine if facilities exist to provide the service ordered and to determine the service date on which service can be provided to the customer.

ACCESS SERVICE

5. Access Ordering (Cont'd)

5.2 Ordering Requirements (Cont'd)

5.2.4 WATS or WATS-Type Services

Special Access Service may be ordered for connection with FGA, FGB, FGC, or FGD Switched Access Service at Telephone Company designated WATS Service Offices (WSOs) for the provision of WATS or WATS-Type Services and may be ordered separately by a customer other than the customer which orders the FGA, FGB, FGC, or FGD Switched Access Service. For the Special Access Service the customer shall specify:

- The customer designated premises at which the Special Access service terminates
- The type of line (i.e., two-wire (2) or four-wire (4))
- The type of calling (i.e., originating, terminating or two-way (2))
- Type of Supervisory Signaling.

When the optional screening, switching and/or recording functions are not provided at the customer serving wire center, Channel Mileage, as set forth in Section 7.2.1 following, must be ordered between that wire center and the nearest WSO where the screening, switching and/or recording functions can be provided.

5.2.5 Shared Use Facilities - Switched and Special Access (T)

Shared use is the provision of both Switched Access and Special Access (T) Services over the same High Capacity facilities. Shared use facilities to a (T) hub will be ordered and provided as Special Access Service. Where shared use is employed, individual services utilizing these facilities must (T) be ordered as Special Access Service as further elaborated and set forth in Section 7.2.6 following.

ACCESS SERVICE

5. Access Ordering (Cont'd)**5.2 Ordering Requirements (Cont'd)****5.2.6 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 20 following will apply. When miscellaneous services are added to a pending order, charges for a design change as set forth in Section 20 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 5.3.2 following.

The rates and charges for these services, as set forth in Section 20 of this guide, will apply in addition to the ordering charges set forth in Section 20, and the rates and charges for the Access Service with which they are associated. These charges are also applicable when a customer orders International Blocking.

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 9 following. When it is required, the customer will be so notified and will be furnished with a written statement identifying the reasons 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 the 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 ten percent (10%).

ACCESS SERVICE

5. Access Ordering (Cont'd)

5.2 Ordering Requirements (Cont'd)

5.2.7 Reserved for future use

5.2.8 Notification of Discontinuance of Services (N)

- (a) An order/ASR for discontinuance of service must be received by the Telephone Company at least thirty (30) business days prior to actual disconnect of service.
- (b) Monthly charges will apply for a period of thirty (30) business days from the date the Company receives disconnect notification or until the requested disconnect date if longer than 30 business days. (N)

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 2.4.5 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.

ACCESS SERVICE

5. Access Ordering (Cont'd)

5.3 Access Orders For Services Provided By More Than One Telephone Company (Cont'd)

5.3.1 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 2.4.5(A). The customer will place the order with the Telephone Company as follows:

(A) Reserved

ACCESS SERVICE

5. Access Ordering (Cont'd)

5.3 Access Orders For Services Provided By More Than One Telephone Company (Cont'd)

5.3.1 Single Company Billing Ordering (Cont'd)

(B) Multiple Company (Interconnection Point) Billing

Each Telephone Company will provide its portion of the Access Service within its operating territory to an interconnection point(s) (IP) with the other Telephone Company(s). The interconnection point(s) and billing percentages will be determined by the Telephone Companies involved in providing the Access Service and listed in National Exchange Carrier Association, Inc., Tariff FCC No. 4. Each Telephone Company will bill the customer for its portion of the service as set forth in Section 2.4.5(B). All other appropriate charges in each Telephone Company tariff are applicable.

When service is ordered under the provisions of the following paragraphs, the customer must also supply a copy of the order to the Telephone Company in whose operating territory a customer designated premises is located an 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.

ACCESS SERVICE

5. Access Ordering (Cont'd)

5.3 Access Orders For Services Provided By More Than One Telephone Company (Cont'd)

5.3.1 Single Company Billing Ordering (Cont'd)

(B) Multiple Company (Interconnection Point) Billing (Cont'd)

- (1) Except for Special Access Service provided as set forth in (4) or (5) below, the customer may place the order for a Special Access Service with either Exchange Telephone Company.
- (2) For Special Access Service involving a hub(s), the customer must place the order with the Telephone Company in whose territory the hub(s) is located.
- (3) For Special Access Service to be interconnected with Switched Access Services at Telephone Company designated WATS Servicing Offices for the provision of WATS or WATS-Type Services, the customer must place an order with each Telephone Company in whose territory the end office and the WATS Service Office are located, if they are not collocated.

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 Access Service Request Modifications

The customer may request a modification of its Access Service Request prior to the service date. The Telephone Company will make every effort to accommodate a requested modification when it is able to do so with the normal work force assigned to complete such an order within normal business hours. If the modification 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 Service Request modification, the Telephone Company will schedule a new service date. All charges for Access Service Request modifications will apply on a per occurrence basis.

Any increase in the number of Special Access Service circuits, will be treated as a new Access Service Request (for the increased amount only).

If order modifications are necessary to satisfy the transmission performance for a Special Access Service ordered by a customer, these changes will be made without order modification charges being incurred by the customer.

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 Access Service Request Modifications (Cont'd)

(A) Service Date Change Charge

Access Order service dates may be changed, but the new service date may not exceed the service date by more than thirty (30) calendar days. If the customer is unable to accept the service on the established service date and/or the customer requested service date is more than thirty (30) calendar days after the service date, the customer will have the following options:

- (1) the order will be canceled by the Telephone Company, and reissued with appropriate cancellation charges applied, or
- (2) the billing will commence for the services ordered on the ASR.

If the Telephone Company determines it can accommodate the customer's request without delaying service dates for orders of other customers, a new service date may be established that is prior to the standard or negotiated interval service date.

If the service date is changed to an earlier date, the customer will be notified by the Telephone Company that Expedited Order Charges as set forth in (C) following apply. Such charges will apply in addition to the Service Date Change Charge.

A Service Date Change Charge will apply as shown in Section 20 on a per order per occurrence basis, for each service date changed.

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 Access Service Request Modifications (Cont'd)

(B) Design Change Charge

The customer may request a design change to the service ordered. A design change is any change to an Access Service Request 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 signaling arrangements associated with Switched Access Entrance Facility interface groups. Design changes do not include a change of Switched Access Entrance Facility type, end user premises, end office switch, Feature Group type or Special Access Service circuit type. Changes of this nature will require the issuance of a new order and the cancellation of the order with appropriate cancellation charges applied.

The Telephone Company will review the requested change, notify the customer whether the changes can be accommodated and whether a new service date is required. If the customer authorizes the Telephone Company to proceed with the design change, a Design Change Charge will apply. The Design Change Charge will apply on a per order per occurrence basis, for each order requiring a design change. The applicable charge is shown in Section 20 of this guide.

If a change of service date is required, the Service Date Change Charge as set forth in (A) preceding will also apply.

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 Access Service Request Modifications (Cont'd)

(C) Expedited Order Charge

- (1) When placing an Access Service Request a customer may request a service date that is prior to the Telephone Company's published service date interval. A customer may also request an earlier service date on a pending Access Service Request. If the Telephone Company determines that service can be provided on the requested date an Expedited Order Charges will apply.

A customer may request a change of end user premises within the same serving wire center. When this occurs, the service date is changed to reflect the standard service date interval. If the customer requests an earlier service date, an Expedited Order Charge will apply.

When an expedited service date is missed, the Expedited Order Charge will apply unless the missed service date is caused by the Telephone Company.

The Expedited Order Charge will apply to all services found in the tariff unless otherwise specified. This charge will be applied when the customer requests a service date that is prior to the standard service date interval on an Access Order, or when a customer requests an earlier service date on a pending Access Order.

The Expedited Order Charge, as set forth in Section 20, will apply on a per order basis for each day the service order is advanced.

Access Ordering Guidelines prohibit expedite orders (N)
when disconnecting services. (N)

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 Access Service Request Modifications (Cont'd)

(C) Expedited Order Charge (Cont'd)

- (2) If the Telephone Company determines that provision of service on the expedited date will require additional work efforts outside of normal scheduled business hours, the customer will be notified and will be provided with an estimate of the additional charges involved. The charges will be based on the Additional Labor Rates set forth in Section 9 following and are in addition to the Expedited Order Charge described in (1) preceding. Actual charges assessed will not exceed the estimate by more than ten percent (10%).

When the request for expediting occurs subsequent to the issuance of the Access Service Request, a Service Date Change Charge as set forth in (A) also applies.

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 Access Service Request Modifications (Cont'd)

(D) Miscellaneous Service Order Charge *

A Miscellaneous Service Order Charge applies to any service, or combination of services ordered simultaneously from the Tariff for which a service order is not already pending.

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
- Standby Repair
- Testing and Maintenance with Other Telephone Companies other than when in conjunction with Acceptance Testing
- Other Labor
- Maintenance of Service

* This material applies only to the following Citizens Telecommunications Company of Tennessee LLC exchanges - Powell, Tate Springs, Claxton, Rutledge and Washburn.

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 Access Service Request Modifications (Cont'd)

(D) Miscellaneous Service Order Charge * (Cont'd)

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

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

- Additional Engineering
- Overtime Installation
- Standby Acceptance Testing
- Testing and Maintenance with Other Telephone Companies when in conjunction with Acceptance Testing
- Additional Cooperative Acceptance Testing

(E) Discontinuance Non-Recurring Charge (C)

In addition to any other charges associated with discontinuance of services, the Telephone Company will charge a discontinuance non-recurring charge to discontinue services. This charge applies on a per circuit basis. The customer shall be responsible for payment of a discontinuance non-recurring charge as listed in section 20. In addition to the discontinuance non-recurring charge, minimum service period charges and early termination liability may apply if the circuit term or minimum service period has not been met. (C)

* This material applies only to the following Citizens Telecommunications Company of Tennessee LLC exchanges - Powell, Tate Springs, Claxton, Rutledge and Washburn.

ACCESS SERVICE

5. Access Ordering (Cont'd)**5.3 Access Orders For Services Provided By More Than One Telephone Company (Cont'd)****5.3.3 Cancellation of an Access Service Request**

A customer may cancel an Access Service Request on any date after receipt of the Access Service Request by the Telephone Company and prior to the installation of service. The cancellation date is the date the Telephone Company receives written or verbal notice from the customer that the Access Service Request order is to be canceled. The verbal notice must be followed by written notice confirmation within ten (10) days. If written confirmation of the cancellation is not received by the Telephone Company, the verbal notice will not be considered a valid cancellation notice. When a customer cancels an Access Service Request for the discontinuance of a service, no charges apply for the cancellation.

(A) Delay of Service Date by Customer

If a customer or a customer's end user is unable to accept Access Service within thirty (30) calendar days after the service date, the customer has the choice of the following options:

- The Access Service Request shall be canceled and charges described in (C) 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 thirty-first (31st) day beyond the service date of the Access Service Request.

(B) Delay of Service Date by Telephone Company

If the Telephone Company misses a service date by more than thirty (30) days due to circumstances over which it has direct control (excluding, e.g., Acts of God, governmental requirements, work stoppages and civil commotions), the customer may cancel the Access Service Request without incurring cancellation charges.

ACCESS SERVICE

5. Access Ordering (Cont'd)

5.3 Access Orders For Services Provided By More Than One Telephone Company (Cont'd)

5.3.3 Cancellation of an Access Service Request (Cont'd)

(C) Cancellation Charge

When a customer cancels an Access Service Request prior to the service date, but after the Firm Order Confirmation Date, a cancellation charge will apply for each Access Service Request cancelled. The Firm Order Confirmation Date is defined in Section 2.6 of this guide. The cancellation charge is shown in Section 20.

(D) Partial Cancellation Charge

Any decrease in the number of ordered Special Access Service circuits or Switched Access Service lines, trunks or CCS/SS7* Port Terminations on a pending ASR will be treated as a partial cancellation. The charge will be determined by prorating the cancellation charge shown in Section 20 by the percentage of the order cancelled. The percentage of the order cancelled will be based on the capacity of the cancelled circuits compared to the total capacity ly ordered.

(X) Under authority of Special Permission No. 12-031, withdraws material filed under Transmittal No.31 before it becomes effective and reinstates existing language.

ACCESS SERVICE

5. Access Ordering (Cont'd)

5.3 Access Orders For Services Provided By More Than One Telephone Company (Cont'd)

5.3.4 Minimum Period Charges

- (A) When Access Service is disconnected 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.

For purposes of applying minimum period charges, the disconnect date shall be thirty (30) business days after the date the Telephone Company receives written notification from the customer, or the date the customer requests service be disconnected if longer than thirty (30) business days.

- (B) The Minimum Period Charge for monthly billed services will be determined as follows:

For Switched Access usage sensitive rate elements, the charge for the minimum period, or fraction thereof, is equal to the applicable rates for the actual or assumed usage for the minimum period or such fraction thereof. For Switched Access flat-rated monthly elements (i.e., Entrance Facility, Direct-Trunked Transport and Multiplexing rates), the charge for the minimum period or fraction thereof is the applicable monthly rates for the service.

For Special Access, the minimum Period Charges are described in Section 7.2.7.

5.3.5 Reserved for future use

ACCESS SERVICE

- 6. Reserved for future use

ACCESS SERVICE

7. Special Access Service**7.1 General**

Special Access provides a transmission path to connect customer designated premises * for Interstate Telecommunications within the operating territories of the Telephone Company. Special Access provided to a customer may be connected directly to customer facilities, through Telephone Company Hub Wire Centers where bridging or multiplexing functions are performed, and/or may be connected to access facilities of another telephone company or companies in the joint provision of Special Access Service as well as may be connected to Switched Access. Special Access Services may also be connected to a customer's transmission equipment and facilities using a DS1 or DS3 Cross Connect arrangement where the customer is provided Expanded Interconnection Service (EIS).

The provision of Switched Access and Special Access in combination is normally for, but not limited to, the use of WATS or WATS-type Access. When Special Access is connected to Switched Access, the terms, conditions and rates for the facilities between the end user's customer designated premises and the WATS Serving Office are as set forth in this section of the tariff; the terms, conditions and rates for the facilities between the WATS Serving Office and the IC's customer designated premises, as well as the switching functionalities (e.g., end user access codes, screening) are as set forth in this guide.

Special Access can be provided in either analog or digital format. Analog formats are differentiated by spectrum and bandwidth. Digital formats are differentiated by bit rate. The specific types of Special Access (e.g., Voiceband, Digital Data Service) provided are described in 7.2 following.

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

* Telephone Company Centrex CO-like switches are considered to be CDPs for the purpose of this guide.

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.1 General (Cont'd)

7.1.1 Circuit Types

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

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

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

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

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.1 General (Cont'd)

7.1.1 Circuit Types (Cont'd)

Following is a brief description of each type of circuit:

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

Program Audio - a circuit for the transmission of audio signals. The nominal frequency bandwidths are from 100 to 5000 Hz, from 50 to 8000 Hz, or from 50 to 15000 Hz.

Video - a circuit for the transmission of standard 525 line 60 field monochrome or National Television Systems Committee color video signal and one or two associated 5 or 1.5 kHz audio signals. The bandwidth is either 30 Hz to 4.5 MHz or 30 Hz to 6.6 MHz.

Digital Data - a circuit for the digital transmission of synchronous serial digital data at rates of 2.4, 4.8, 9.6, 19.2, 56, or 64 kbps.

High Capacity - a circuit for the transmission of synchronous serial digital data at rates of 1.544 Mbps or higher.

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

Detailed descriptions of each of the channel types are provided in 7.4 through 7.9 following.

The customer also has the option of ordering Voice Grade and High Capacity facilities to Telephone Company hubs for multiplexing to individual channels of a lower capacity or bandwidth. Descriptions of the types of multiplexing available at the hubs, as well as the number of individual channels which may be derived from each type of facility are set forth in 7.4 and 7.9 following. Additionally, the customer may specify optional features for the individual channels derived from the facility to further tailor the channel to meet specific communications requirements. Descriptions of the optional features and functions available are set forth in 7.4.3 through 7.9.4 following.

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.1 General (Cont'd)

7.1.2 Service Descriptions

For the purposes of ordering, there are six (6) categories of Special Access Service. These are:

Service Designator Codes

| | |
|---------------|----|
| Metallic | MT |
| Voice | VG |
| Program Audio | AP |
| Video | TV |
| Digital Data | DA |
| High Capacity | HC |

Each service consists of a basic channel to which a technical specifications package, (customized or predefined), channel interface(s) and, when desired, optional features and functions are added to construct the service desired by the customer.

Technical specification packages and optional features and functions are described in 7.4.2 following. Channel interfaces are described in Section 11.1 following.

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

When a customized channel is ordered the customer will be notified whether Additional Engineering Charges apply. In such cases, the customer will be advised and given the opportunity to change the order.

The channel descriptions provided in 7.4 through 7.9 following, specify the characteristics of the basic channel and indicate whether the channel is provided between customer designated premises, between a customer designated premises and a Telephone Company hub where bridging or multiplexing functions are performed, between hubs, or between a customer designated premises and a WATS Serving Office.

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.1 General (Cont'd)

7.1.2 Service Descriptions (Cont'd)

- (A) Information pertaining to the technical specifications packages indicates the transmission parameters that are available with each package. This information is displayed in matrices set forth in Section 11.2 following.
- (B) Channel interfaces at each Point of Termination on a two-point service may be symmetrical or asymmetrical. On a multipoint service they may also be symmetrical or asymmetrical, but communications can only be provided between compatible channel interfaces. Only certain channel interfaces are compatible. These are set forth in Section 11.3 following, in a combination format.
- (C) Only certain channel interface combinations are available with the predefined technical specifications packages. These are delineated in the Technical References set forth in (E) following. When a customized channel is requested, all channel interface combinations available with the specified type of service are available with the customized channel.
- (D) The Telephone Company will maintain existing transmission specifications on services installed prior to the effective date of this guide, except that existing services with performance specifications exceeding the standards listed in the provision will be maintained at the performance levels specified in this guide.
- (E) The optional features and functions available with each type of Special Access Service are described in this section. The optional features and functions information also indicates with which technical specifications packages they are available. Such information is displayed in matrices set forth in 7.4.2 following with the optional feature or function listed down the left side and the technical specifications package listed across the top.

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.1 General (Cont'd)

7.1.2 Service Descriptions (Cont'd)

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

| | |
|---------------|--|
| Metallic | PUB TR-NPL-000336 |
| Voice Grade | PUB TR-NPL-000335 PUB TR-TSY-000335 PUB 41004, Table 4 |
| Program Audio | TR-NPL-000337 and associated Addendum |
| Video | TR-NPL-000338 |
| Digital Data | TR-NPL-000341 and associated Addendum PUB 62310 |
| High Capacity | TR-INS-000342 PUB TR-NPL-000342 PUB 62411 PUB TR-NPL-000054 |

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.1 General (Cont'd)

7.1.3 Service Configurations

There are two (2) types of service configurations over which Special Access Services are provided: two-point service and multipoint service.

(A) Two-Point Service

A two-point service connects two customer designated premises, either on a directly connected basis or through a hub where multiplexing functions are performed, or a customer designated premises and a WATS Serving Office (WSO).

All Special Access offerings may be provided as a two- point configuration.

With the exception of Temporary Videoband Service, applicable rate elements are:

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

A Special Access Surcharge, as set forth in 7.3 following, may be applicable.

ACCESS SERVICE

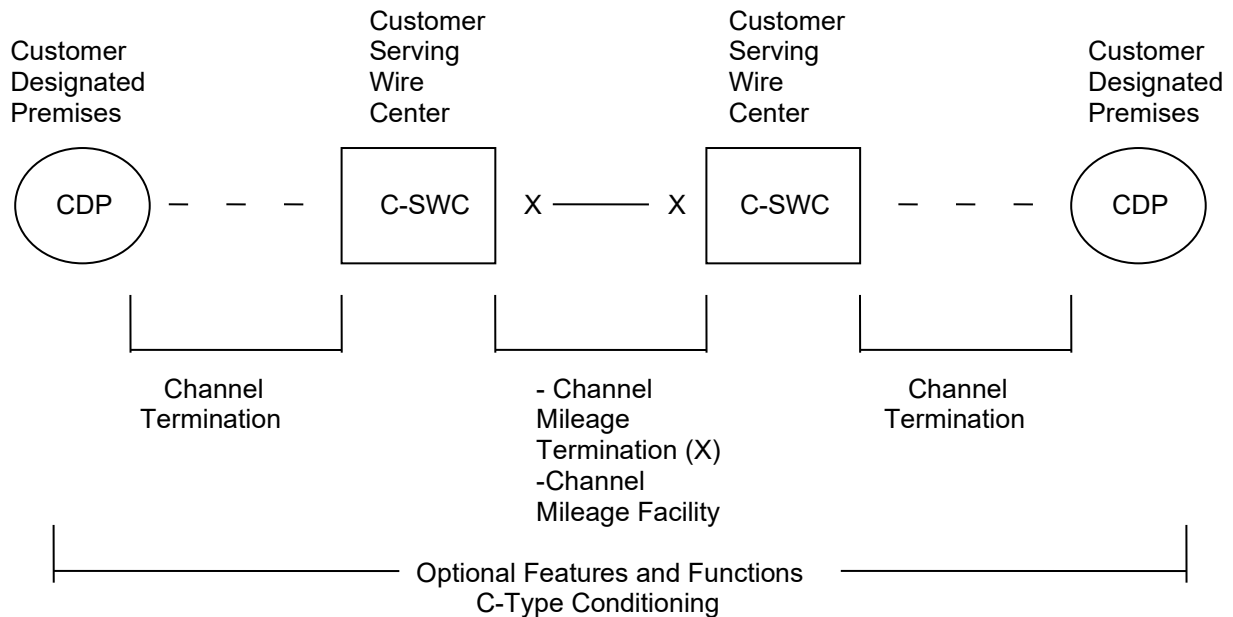
7. Special Access Service (Cont'd)

7.1 General (Cont'd)

7.1.3 Service Configurations

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

The following diagram depicts a two-point Voice Grade service connecting two (2) Customer Designated Premises (CDP). The service is provided with C-Type conditioning.



Applicable rate elements are:

- Channel Terminations (applicable one (1) per CDP)
- Channel Mileage
 - 2 Channel Mileage Termination plus
 - 1 section, Channel Mileage Facility per mile
- C-Type Conditioning Optional-Feature

ACCESS SERVICE

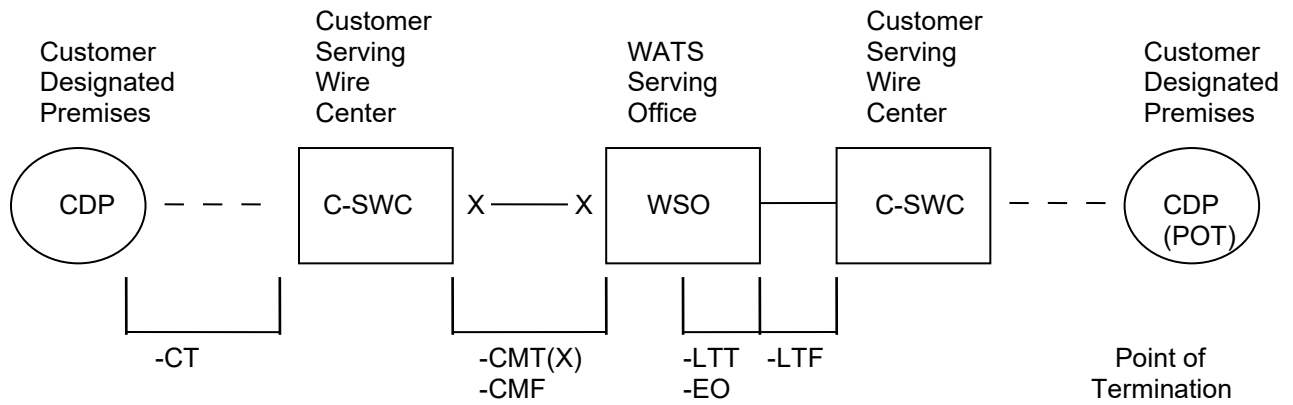
7. Special Access Service (Cont'd)

7.1 General (Cont'd)

7.1.3 Service Configurations

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

The following diagram depicts a two-point Voice Grade service connecting a customer designated premises to a WATS serving office.



Special Access

CT - Channel Termination
 CMT - Channel Mileage Termination
 CMF - Channel Mileage Facility

Switched Access

LTT - Local Transport Termination
 EO - End Office Elements
 LTF - Local Transport Facility

Applicable rate elements for Special Access are:

- Channel Terminations (applicable one (1) per CDP)
- Channel Mileage
 - 2 Channel Mileage Termination plus
 - 1 section, Channel Mileage Facility per mile
- C-Type Conditioning Optional-Feature
- Special Access Surcharge*

*May not apply if exemption certification is provided.

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.1 General (Cont'd)

7.1.3 Service Configurations

(B) Multipoint Service

Multipoint service connects three (3) or more customer designated premises through one (1) or more Telephone Company hubs. Only certain types of Special Access Service are provided as multipoint service. These are so designated in the descriptions for the appropriate channel.

The channel between hubs (i.e., bridging locations) on a multipoint service is a mid-link. There is no limitation on the number of mid-links available with a multi-point service. However, when more than three (3) mid-links in tandem are provided the quality of the overall service may be degraded.

Multipoint service utilizing a customized technical specifications package, as set forth in 7.1.2 preceding and Section 11.2 following, will be provided when technically possible. If the Telephone Company determines that the requested characteristics for a multipoint service are not compatible, the customer will be advised and given the opportunity to change the order.

When ordering, the customer will specify the desired bridging hub(s). NATIONAL EXCHANGE CARRIER ASSOCIATION TARIFF FCC NO. 4 identifies serving wire centers, hub locations and the type of bridging functions available.

ACCESS SERVICE

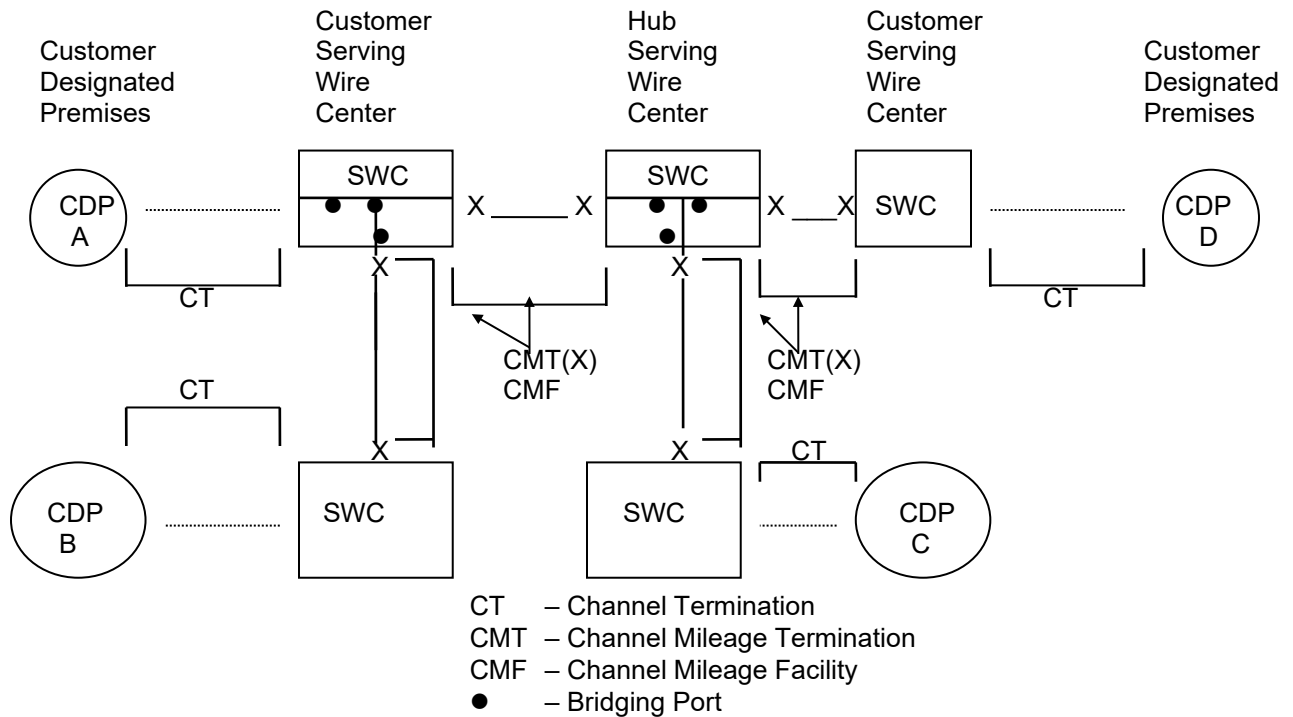
7. Special Access Service (Cont'd)

7.1 General (Cont'd)

7.1.3 Service Configurations

(B) Multipoint Service

The following diagram depicts an example of a Voice Grade multipoint service connecting four (4) customer premises via two (2) customer specified bridging hubs.



Applicable rate elements are:

- Channel Termination (4 applicable)
- Channel Mileage (4 sections-fixed rate plus rate per mile between SWC)
- Bridging (6 applicable, i.e., each bridge port)
- Additional Optional Features and Functions (when applicable)

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.1 General (Cont'd)

7.1.4 Alternate Use

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

The arrangement required to transfer the service from one (1) operation to the other (i.e., the transfer relay and control leads) will be rated and provided on an individual case basis and filed in Section 20 following. The customer will pay the stated tariff rates for the Access Service rate elements for the service ordered [i.e., Channel Terminations, Channel Mileage (as applicable) and Optional Features and Functions (if any)].

7.1.5 Special Facilities Routing

A customer may request that the facilities used to provide Special Access Service be specially routed. The regulations, rates and charges for Special Facilities Routing (i.e., Avoidance, Diversity and Cable-Only) are set forth in Section 12 following.

7.1.6 Acceptance Testing

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

- (A) For Voice Grade analog services, the acceptance test will include tests for loss, 3-tone slope, DC continuity, operational signaling, C-notched noise, and C-message noise when these parameters are applicable and specified in the order of service. Additionally, for Voice Grade services, a balance (improved loss) test will be made if the customer has ordered the improved loss optional feature.
- (B) For other analog services (i.e., Metallic, Program Audio, and Video) and for digital services, (i.e., Digital Data and High Capacity), acceptance tests will include tests applicable to the service as specified by the customer in the order for service.

In addition to the above tests, Additional Cooperative Acceptance Testing for Voice Grade service to test other parameters, as described in Section 9.4 following, is available at the customer's request. All test results will be made available to the customer upon request.

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.1 General (Cont'd)

7.1.7 Ordering Options and Conditions

Ordering conditions are set forth in detail in Section 5 preceding. Also included in that section, are other charges which may be associated with ordering Special Access (e.g., Service Date Change Charges, Cancellation Charges, etc.).

(A) Determination of Jurisdiction of Mixed Use Special Access Lines

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

- (1) If the customer's estimate of the interstate traffic on the physically intrastate line involved constitute 10% or less of the total traffic on that line, the line will be ordered and provided in accordance with the applicable rules and regulations of the appropriate intrastate tariff.
- (2) If the customer's estimate of the interstate traffic on the physically intrastate line involved constitutes more than 10% of the total traffic on that line, the line will be ordered and provided in accordance with the applicable rules and regulations of this guide.
- (3) For lines in service on the effective date of this guide, changes will be made in accordance with 7.2.2(D). Existing customers will be allowed 90 days from the effective date of this guide to certify by letter the jurisdiction of the lines. The customer must submit an ASR for each line changing jurisdiction.
- (4) Lines in service on the effective date of this guide certified to be jurisdictionally intrastate and having a maximum termination liability associated with them will not be assessed the termination liability. The customer must submit an ASR for each line changing jurisdiction no later than 90 days from the effective date of this guide to have the termination liability waived.

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.1 General (Cont'd)

7.1.7 Ordering Options and Conditions (Cont'd)

(B) Special Access Jurisdictional Verification

If a billing dispute arises or a regulatory commission questions the customer's certification of the jurisdiction of the line the Telephone Company will ask the customer to provide the data used to determine the jurisdiction. The customer shall supply the data within 30 days of the Telephone Company's request. The customer shall keep records of system design and functions from which the jurisdiction can be ascertained and upon request of the Telephone Company make the records available for inspection as reasonably necessary for purposes of verification of the jurisdiction of the service.

7.1.8 Design Layout Report

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

ACCESS SERVICE

7. Special Access Service (Cont'd)**7.2 Rate Regulations**

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

7.2.1 Rate Categories

There are four (4) basic rate categories which apply to Special Access Service:

- Channel Terminations (described in 7.2.1(A) following)
- Channel Mileage (described in 7.2.1(B) following)
- Optional Features and Functions (described in 7.2.1(C) following)
- Special Access Cross Connect (described in 7.2.1(D) following)

(A) Channel Termination

The Channel Termination rate category provides for the communications path between a customer designated premises and the serving wire center of that premises. Included as part of the Channel Termination is a standard channel interface arrangement which defines the technical characteristics associated with the type of facilities to which the access service is to be connected at the Point of Termination (POT) and the type of signaling capability, if any. The signaling capability itself is provided as an optional feature as set forth in (C) following. If an IXC's Point of Presence (POP) is collocated in a Company serving wire center, then the POP is treated as a customer premises and two (2) Channel Termination charges apply. Customer transmission facilities and equipment terminated in Telephone Company wire center under EIS, are not considered customer designated premises, and one (1) Channel Termination charge will apply for the loop external to the serving wire center. Connection to Telephone Company provided DS1 or DS3 Circuit Terminations within a serving wire center for customers with EIS will require a Special Access Cross Connect arrangement as described in 7.2.1(D).

Rates for End User Channel Terminations are subject to the rules governing Competitive and Non-Competitive Counties as discussed in Section 10. Where Competitive and Non-Competitive Rates are present the Channel Termination consists of two different rate elements: an End User Channel termination that serves the customer premises and an Interexchange Carrier (IC) POP that is collocated in a Company serving wire center. The customer will be charged for both the End User Channel Termination and the IC Channel Termination.

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Rate Regulations (Cont'd)

7.2.1 Rate Categories (Cont'd)

(B) Channel Mileage

The Channel Mileage rate category provides for the end office equipment and transmission facilities between serving wire centers and/or Telephone Company hubs. In addition, when Special Access is used in conjunction with Switched Access Service as set forth in the companies tariff preceding for Switched Access Interface Arrangements, and the end office serving the customer's end user premises is not a WATS Serving Office, Channel Mileage is used to extend the Special Access Channel to a WATS Serving Office. Customer transmission facilities and equipment terminated in Telephone Company wire centers under EIS, are not considered customer designated premises. Connection to Telephone Company provided DS1 or DS3 Channel Mileage within a serving wire center for customers with EIS will require a Special Access Cross Connect arrangement as described in 7.2.1(D).

The Channel Mileage charge is composed of a flat monthly charge known as Channel Mileage Termination plus a per mile charge known as Channel Mileage Facility. The Channel Mileage Termination rate is billed at each end of segment of Channel Mileage. The number of miles used to Channel Mileage Facility is calculated as set forth in Section 7.2.4 of this guide.

For special access circuits that originate and terminated in the same serving wire center, one Channel Mileage Termination and no Channel Mileage Facility rate will be charged for the equipment required.

The selection of Terminating Option, as defined in 7.1.2(C), is required for terminating the network portion of a Special Access Line at a customer designated premises. Terminating Options provide a clearly delineated interface which facilitates the design, isolation, and testing of the Special Access.

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Rate Regulations (Cont'd)

7.2.1 Rate Categories (Cont'd)

(C) Optional Features and Functions

Optional Features and Functions may be added to a basic circuit service to improve its quality or utility to meet the customer's specific communications requirements. These optional features and functions are identifiable with specific equipment, and represent the end result in terms of performance characteristics which may be obtained. These characteristics may be obtained by using various combinations of equipment. Although the equipment necessary to perform a specified function may be installed at various locations along the path of the service, they will be charged for as a single rate element.

Descriptions for each of the available Optional Features and Functions are set forth in Sections 7.4 through 7.10 following. Specific rate applications for multiplexing are set forth in 7.2.6 following.

(D) Cross Connect

The Cross Connect charge provides the communications path between Telephone Company provided DS0, DS1 or DS3 Switched or Special access facilities and a customer's equipment and facilities where the customer is provided EIS. The Cross Connect arrangement may be directly connected to Telephone Company provided DS0, DS1 or DS3 services or to a Telephone Company provided multiplexing arrangement. The Cross Connect Charge applies per DS0, DS1 or DS3 connection.

(E) Temporary Videoband Service

(1) Type I

The rates and charges for use of facilities for Temporary Videoband - Type I Service are assessed on a per hop basis. A hop is defined as the transporting of a one-way video and associated audio signal(s) in a direct path from a transmitter location to an adjacent receiver location. The distance of a single hop is primarily a factor of the local geographics of the video path, therefore, more than one hop may be required between customer designated premises.

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Rate Regulations (Cont'd)

7.2.1 Rate Categories (Cont'd)

(E) Temporary Videoband Service (Cont'd)

(1) Type I (Cont'd)

There are two separate rate categories for a hop which are based on the provisioning of service:

- Video broadcasts which use permanent facilities, and
- Video broadcasts which use nonpermanent facilities.

(a) Use of Permanent Facilities for Temporary Video Broadcast - Type I

Permanent facilities are those in-place facilities that are not removed at the end of a broadcast. Sites where existing permanent facilities are located for temporary broadcast service are listed in 7.2.1(E)(1)(e).

The rates and charges for services provided over permanent facilities are set forth in Section 20. Charges for Temporary Videoband Service - Type I are also described in 7.2.2(D)(5) following.

The Telephone Company does not contemplate constructing permanent facilities to provision future requests for temporary Type I Videoband service. However, in the event that a customer requests this type of provisioning in those states not designated as "NA", as set forth in 20 following, the Telephone Company will provide such facilities under the applicable Interstate Special Construction Tariff. Accordingly, such facilities are deemed to be provided for the sole use of that customer and no other future use of those facilities is planned or expected by the Telephone Company.

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Rate Regulations (Cont'd)

7.2.1 Rate Categories (Cont'd)

(E) Temporary Videoband Service (Cont'd)

(1) Type I (Cont'd)

(b) Use of Nonpermanent Facilities for Temporary Video Broadcast - Type I

Nonpermanent facilities consist of portable microwave equipment (e.g., transmitter, receiver, antenna, connecting cables and associated equipment) which is set up for the broadcast and subsequently removed after the broadcast.

The rates and charges for services provided over nonpermanent facilities are set forth in Section 20 following. Charges for Temporary Videoband Service - Type I are described in 7.2.2(D)(5) following.

Where multiple hops are required to provide the requested service, the rates and charges will apply to each hop set up for the broadcast. The Technician Standby charge will only apply to the time the Type I Videoband service is provided. The Technician Standby charge is not applied on a per hop basis.

(c) Use of Combined Facilities for Temporary Video Broadcast - Type I

Temporary Videoband Service may require the use of combined facilities to provide the requested service. Where permanent and nonpermanent facilities are used in tandem to provide a Video service, one-half the nonrecurring charge will apply for the permanent facilities while the full nonrecurring charge will apply for the nonpermanent facilities. The hourly charge for both facilities will be applicable. The Technician Standby charge will only apply to the time the service is provided.

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Rate Regulations (Cont'd)

7.2.1 Rate Categories (Cont'd)

(E) Temporary Videoband Service (Cont'd)

(1) Type I (Cont'd)

(d) Joint Provisioning of Service

Where more than one Telephone Company is involved in the provisioning of a Temporary Videoband Service - Type I, such jointly provided facilities are subject to the rules and regulations outlined in Sections 2.4.5 and 5.3.

When the multiple bill option is employed as set forth in Section 2.4.5(B)(2), the rates will apply as follows: When only nonpermanent facilities are used to provision the service and the service is jointly provided, the rates for the Video service will be one-half the nonrecurring charge and one-half the hourly charge. Where permanent facilities are used to provision the Video service and the service is jointly provided, the rates for the service are the entire nonrecurring charge and the entire hourly charge. Where a combination of permanent and nonpermanent facilities are used in the joint provisioning of the service, the rates for the Video service will be one-half the nonrecurring charge for the permanent and nonpermanent facilities and one-half the hourly charge for the nonpermanent facilities and the entire hourly charge for the permanent facilities.

The entire Technician Standby charge will be applied to the time the service is provided under either a single bill option or a multiple bill option.

 ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Rate Regulations (Cont'd)7.2.1 Rate Categories (Cont'd)(E) Temporary Videoband Service (Cont'd)(1) Type I (Cont'd)(e) Permanent Sites for Temporary Video Broadcast - Type I

Sites where permanent facilities are located are listed below for each jurisdiction where such facilities exist:

| <u>Jurisdiction</u> | <u>Location City, State</u> |
|---------------------|-----------------------------|
|---------------------|-----------------------------|

None at this time

(2) Type II(a) Rate Application

The rates and charges for Videoband Service - Type II are time sensitive and applied based on the duration of the video connection. Only one level of charge will apply to continuous usage, either minute sensitive, daily, weekly or monthly. In no event will the charge for continuous video usage exceed the rate for the next higher time frame level of usage. For example, for two days of continuous usage, two times the daily rate would apply. For three days, the weekly rate is applicable since three times the daily rate exceeds the weekly rate.

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Rate Regulations (Cont'd)

7.2.1 Rate Categories (Cont'd)

(E) Temporary Videoband Service (Cont'd)

(2) Type II (Cont'd)

(b) Shared Use of Videoband Service - Type II

Multiple users may share a Videoband - Type II connection from a specific customer site to a video carrier's location. The Telephone Company will bill the usage to the customer who requests the video connection.

(c) Availability of Videoband Service - Type II

The Telephone Company does not guarantee the availability of access facilities to serve all customers for all possible simultaneous video connection requirements. Customer access will be provided on a first-come, first-serve basis.

(d) Use of Videoband Service - Type II Facilities for Other Than Video Transport

Type II Videoband facilities are designed for the express use of Type II video connections. Use of these facilities for transmission of other than video and the associated audio signals, by the customer, may result in interference or impairment of telephone company facilities and will be subject to the provisions in Section 2.2.1.

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Rate Regulations (Cont'd)

7.2.2 Types of Rates and Charges

There are three (3) types of rates and charges. These are monthly rates, daily rates and nonrecurring charges. The rates and charges are described as follows:

(A) Monthly Rates

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

(B) Daily Rates

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

Part-time Video or Program Audio Service provided within a consecutive thirty (30) day period will be charged the daily rate, not to exceed the monthly rate. For each day or partial day after a consecutive thirty (30) day period of service, a charge equal to 1/30th of the monthly rate shall apply.

(C) Hourly Rates

Hourly rates are recurring charges that apply to each 60 minute period, or fraction thereof, that a part-time Videoband Special Access Service is provided. The billing period commences when the video circuit is available for the customer's use and ceases when the customer's use is discontinued. There is a maximum monthly charge that may be assessed to any Temporary Videoband Special Access Service. The maximum charge during any 30 day period will be that amount equal to 100 hours of use.

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Rate Regulations (Cont'd)

7.2.2 Types of Rates and Charges (Cont'd)

(D) Nonrecurring Charges

Nonrecurring charges are one-time charges that apply for installation of Special Access Service, installation of optional features and functions, moves and service rearrangements, and discontinuance of services. (C)

(1) Service Rearrangements

Service rearrangements are changes to existing (installed) services which may be administrative only in nature, as set forth following, or that involve actual physical change to the service. Changes to pending orders are set forth in Section 5.3.2 preceding.

Changes in the physical location of the point of termination or customer designated premises are moves as described below:

(a) Moves

A move involves a change in the physical location of either the customer's premises or a point of termination at the customer's premises. The charges for the move are dependent on whether the move is to be a new location within the same building or to a different building.

(b) Moves Within the Same Building

When the move is to a new location within the same building, the charge for the move will be an amount equal to one-half of the nonrecurring (i.e., installation) charge for the service termination affected. There will be no change in the minimum period requirements.

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Rate Regulations (Cont'd)

7.2.2 Types of Rates and Charges (Cont'd)

(D) Nonrecurring Charges (Cont'd)

(1) Service Rearrangements (Cont'd)

(c) Moves to a Different Building

Moves to a different building will be treated as a discontinuance and a start of service and all associated nonrecurring charges will apply. New minimum period requirements will be established for the new services. The customer will also remain responsible for satisfying all outstanding minimum period charges for the discontinued service.

Changes in the type of Service or Channel Termination which result in a change of the minimum period requirement will be treated as a discontinuance of the service and an installation of a new service.

Changes in ownership or transfer of responsibility from one customer to another will be treated as a discontinuance of the service and an installation of a new service. In the event the change in ownership or transfer of responsibility is as set forth in Section 2 preceding where there is no change in facilities or arrangements, the change will be treated as an administrative change.

Nonrecurring charges are one-time (1) charges that apply for specific work activity (i.e., installation or change to an existing service). The types of nonrecurring charges that apply for Special Access Service are: installation of service, installation of optional features and functions, and service rearrangements. These charges are in addition to the Access Order Charge as specified in Section 20 following.

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Rate Regulations (Cont'd)

7.2.2 Types of Rates and Charges (Cont'd)

(D) Nonrecurring Charges (Cont'd)

(1) 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 physical relocation of equipment,
- Change in billing data (name, address, or contact name or telephone number),
- Change of agency authorization,
- Change of customer test line number,
- Change of billing account number,
- Change of customer or customer's end user contact name or telephone number, and
- Change of jurisdiction.

All other service rearrangements will be charged as follows:

- If the change involves the addition of other customer designated premises to an existing service, the nonrecurring charge for the channel termination rate element will apply. The charge(s) will apply only for the location(s) that is being added. The charge(s) will be in addition to an Access Order Charge as set forth in Section 20 following.

-If the change involves the addition of an optional feature or function, or if the change involves changing the type of signaling on a Voice Grade service, and for all other changes, the Access Order Charge as set forth in Section 20 following will apply.

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Rate Regulations (Cont'd)

7.2.2 Types of Rates and Charges (Cont'd)

(D) Nonrecurring Charges (Cont'd)

(2) Installation of Service

Nonrecurring charges apply to each service installed. The nonrecurring charges for the installation of service are applied per order and per Channel Termination installed. The installation charge per Channel Termination is assessed for each Channel Termination ordered. The nonrecurring charge per order is assessed for each Access service order (ASR) initiated for a given type of circuit. When the same customer requests multiple services of the same type (e.g., Voice Grade or DS1) on the same ASR, to be installed at the same location, only one order charge applies.

(3) Installation of Optional Features and Functions

When optional features and functions are installed coincident with the initial installation of service a nonrecurring charge may be applicable.

The optional features and functions for which installation charges apply are:

- Multiplexing
- Clear Channel Capability

When optional features and functions are installed and changed subsequent to the installation of service, an Access Order Charge as specified in Section 20 following applies per order.

(4) Modifying Existing High Capacity Circuit Configurations

If a customer elects to modify the configuration of an existing high capacity circuit, a Service Order Charge equal to the Channel Termination nonrecurring charge, as described in 7.2.2(D)(2) will apply per customer initiated change.

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Rate Regulations (Cont'd)

7.2.2 Types of Rates and Charges (Cont'd)

(D) Nonrecurring Charges (Cont'd)

(5) Installation of Temporary Videoband Service

(a) Temporary Videoband Service - Type I

There are two nonrecurring charges set forth in Section 20 for the installation of Temporary Videoband Service - Type I. One nonrecurring charge will be assessed when permanent in place facilities are used to provide the service, and a different nonrecurring charge will be assessed when nonpermanent portable facilities are used to provide the service. A list of permanent facilities by location is provided in 7.2.1(E) preceding. In addition to these charges, the appropriate Special Access Ordering Charge, as set forth in 7.2.2(D)(7) following, will apply.

If the customer orders Temporary Videoband Service - Type I with broadcast intervals of 5 nonconsecutive days or less within a 7-day period, the Telephone Company may, if facilities are available, leave the facilities in place, in which case the associated installation nonrecurring charges would not apply.

(b) Videoband Service - Type II

Initially, an ASR is required from the customer to establish an account for Videoband Service - Type II, prior to a request for video connection. The Special Access Ordering Charge, as set forth in 7.2.2(D)(1), will apply. Thereafter, once the account has been established, the customer may request video connection by contacting the Telephone Company's Video Transport Contact Center. The customer will provide the originating and terminating location(s) for the video connection and the expected duration of the transmission. There is no nonrecurring charge associated with activating this connection.

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Rate Regulations (Cont'd)

7.2.2 Types of Rates and Charges (Cont'd)

(D) Nonrecurring Charges (Cont'd)

(6) Design Change Charge

The Customer may request a design change to the service ordered. A design change is any change to a pending ASR for Special Access Service which requires engineering review. Design changes include such things as the addition or deletion of supplemental features or changes in the terminating options. Design changes do not include a change of IC customer designated premises or end user premises when its serving wire center changes or Special Access service type (e.g., 2-wire to 4-wire Voiceband or Voiceband to Program Audio, etc.). Changes of this nature will require the issuance of a new ASR and the cancellation of the ASR. The cancellation charges apply as set forth in Section 5.3.3 preceding.

The Telephone Company will review the requested change, notify the customer whether the change can be accommodated and specify if a new service date is required. If the customer authorizes the Telephone Company to proceed with the design change, a Design Change Charge will apply.

The Design Change Charge, as set forth in Section 20 following, will apply on a per ASR per occurrence basis, for each ASR requiring a design change.

If a change of service date is required, the Service Date Change Charge as set forth in Section 5 preceding will also apply.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Rate Regulations (Cont'd)7.2.2 Types of Rates and Charges (Cont'd)(D) Nonrecurring Charges (Cont'd)(7) Special Access Ordering Charges

Special Access Ordering Charges are associated with the work performed by the Telephone Company in connection with the receiving, recording and processing of customer service requests. There are two types of service ordering charges.

(a) Initial Ordering Charge - Special Access

This charge applies on a per Access Service Request (ASR) basis, including those requests to add additional terminations to an existing service.

(b) Subsequent Ordering Charge - Special Access

This charge applies on a per ASR basis for modifications to an existing service. This would include activities such as:

- Additions of supplemental features and multiplexing arrangements.
- Changes in the type of transport rate option from Switched Transport to Special Transport for FGA.

(8) Discontinuance Non-Recurring Charge (C)

In addition to any other charges associated with discontinuance of services, the Telephone Company will charge a discontinuance non-recurring charge to disconnect services. This charge applies on a per circuit basis as listed in Section 20. (C)

7.2.3 Minimum Periods

The minimum service period for part-time Video and Program Audio Services is one day even though the service will be provided only for the duration of the event specified on the order (e.g., one-half hour, two hours, five hours, etc.). The minimum period for High Capacity DS3 or OC-3 Service is 12 months. The minimum period for any service provided as a term payment plan or a term contract is the length of the specified payment plan or term contract. The minimum service period for all other special access services is one month.

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Rate Regulations (Cont'd)

7.2.4 Mileage Measurement

The mileage to be used to determine the monthly rate for the Channel Mileage Facility is calculated on the airline distance between the locations involved, i.e.,

- the serving wire centers associated with two (2) customer designated premises,
- a serving wire center associated with a customer designated premises and a Telephone Company hub,
- two (2) Telephone Company hubs,
- or between the serving wire center associated with a customer designated premises and a WATS Serving Office.

The serving wire center associated with a customer designated premises is the serving wire center from which this customer designated premises would normally obtain dial tone.

Mileage charges are shown with each channel type. To determine the rate to be billed, first compute the mileage using the V&H coordinates method, as set forth in the NATIONAL EXCHANGE CARRIER ASSOCIATION, INC. TARIFF FCC NO. 4, then multiply the resulting number of miles times the Channel Mileage Facility per mile rate, and add the Channel Mileage Termination rate for each termination. When 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. When more than one (1) Telephone Company is involved in the provision of service, billing will be accomplished as set forth in Section 2.4.5 preceding.

When hubs are involved, mileage is computed and rates applied separately for each section of the Channel Mileage, i.e.,

- customer designated premises serving wire center to hub,
- hub to hub, and/or
- hub to customer designated premises serving wire center.

However, when any service is routed through a hub for purposes other than customer specified bridging or multiplexing (e.g., the Telephone Company chooses to so route for test access purposes), rates will be applied only to the distance calculated between the serving wire centers associated with the customer designated premises.

See the service configuration example for multipoint service as set forth in 7.1.3 preceding.

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Rate Regulations (Cont'd)

7.2.5 Facility Hubs

A customer has the option of ordering Voice Grade service or High Capacity services to a facility hub for channelizing to individual services requiring lower capacity facilities.

Different locations may be designated as hubs for different facility capacities, e.g., multiplexing from digital to digital may occur at one (1) location while multiplexing from digital to analog may occur at a different location. When placing an Access Order the customer will specify the desired hub. NATIONAL EXCHANGE CARRIER ASSOCIATION, INC. TARIFF FCC NO. 4 identifies serving wire centers, hub locations and the type of multiplexing functions available.

Some of the types of multiplexing available include the following:

- from higher to lower bit rate
- from higher to lower bandwidth
- from high capacity to voice frequency channels

Point to point services may be provided on channels of these services to a hub. The transmission performance for the point to point service provided between customer designated premises will be that of the lower capacity or bit rate. For example, when a 1.544 Mbps channel is multiplexed to voice frequency channels, the transmission performance of the channelized services will be Voice Grade, not High Capacity.

The Telephone Company will commence billing the monthly rate for the service to the hub on the date specified by the customer on the Access Order. Individual channels utilizing these services may be installed coincident with the installation of the service to the hub or may be ordered and/or installed at a later date, at the option of the customer. The customer will be billed for a Voice Grade or a High Capacity Channel Termination, Channel Mileage (when applicable), and the multiplexer at the time the service is installed. Individual service rates (by service type) will apply for a Channel Termination and additional Channel Mileage (as required) for each channelized service. These will be billed to the customer as each individual service is installed.

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Rate Regulations (Cont'd)

7.2.5 Facility Hubs (Cont'd)

Cascading multiplexing occurs when a High Capacity service is de-multiplexed to provide channels with a lesser capacity and one (1) of the lesser capacity channels is further de-multiplexed. For example, 6.312 Mbps High Capacity service is de-multiplexed, to four DS1 channels and then one (1) of the DS1 channels is further de-multiplexed to 24 individual Voice Grade Channels.

When cascading multiplexing is performed, whether in the same or a different hub, a charge for the additional multiplexing unit also applies. When cascading multiplexing is performed at different hubbing locations, Channel Mileage charges also apply between the hubs.

The Telephone Company will designate hubs for Program Audio and Video Services. Full-time or part-time service may be provided between customer designated premises or between a customer designated premises and a hub and billed accordingly at the monthly rates set forth in Section 20 following for a Channel Termination, Channel Mileage and Optional Features and Functions, as applicable. When the service is ordered to a hub, the customer may order a full-time or part-time Video and Program Audio services as needed between that hub and additional customer designated premises. The rate elements required to provide the part-time service (i.e., Channel Termination, Channel Mileage and Optional Features and Functions, as applicable) will be billed at daily rates for the duration of the service requested.

7.2.6 Shared Use Analog and Digital High Capacity Services (T)

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

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Rate Regulations (Cont'd)

7.2.6 Shared Use Analog and Digital High Capacity Services (Cont'd) (T)

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

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

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

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

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

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Rate Regulations (Cont'd)

7.2.7 Early Termination Liabilities

(A) Minimum Period of One Month of Less

For services with a minimum period of one month or less, the customer must pay for the minimum period even if service is discontinued earlier.

(B) Expiration of Minimum Service Periods

When a customer retains service(s) for the duration of a minimum service period, the termination liabilities expire. As long as the customer makes no physical changes to the configuration of service(s), the customer will no longer be liable for early termination discontinuance charges regardless of the minimum service period rate level. Should a customer choose to disconnect a service having satisfied the minimum service period termination liabilities, the disconnect steps will still be applied as specified in (E) following.

(C) Reserved for future use. (C)

(D) Discontinuance With Liability

When a service is discontinued prior to the end of the minimum service period, the customer will be liable for the total monthly charges for the remaining portion of the minimum service period.

(E) Notification of Discontinuance

Notice of discontinuance must be given by the customer at least thirty (30) business days prior to actual discontinuance. (C)

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.3 Surcharge for Special Access Service

7.3.1 General

Special access services provided under this guide may be subject to the monthly Special Access Surcharge.

7.3.2 Application

- (A) The Special Access Surcharge will apply to each interstate Special Access Service that terminates on an end user's PBX or other device, where through a function of the device, the Special Access Service interconnects to the local exchange network. Interconnection functions include, but are not limited to, wiring and software functions, bridging, switching or patching of calls or stations. The Surcharge will apply irrespective of whether the interconnection functions are performed in equipment located at the customer's premises or in a Centrex CO-type switch.
- (B) Special Access Service will be exempted from the Surcharge by the Telephone Company upon receipt of the customer's written certification for the following Special Access Service terminations:
- (1) an open-end termination in a Telephone Company switch of an FX line, including CCSA and CCSA equivalent ONALS; or
 - (2) an analog channel termination that is used for radio or television program transmission; or
 - (3) a termination used for TELEX service; or
 - (4) a termination that by the nature of its operating characteristics could not make use of the Telephone Company common lines such as, terminations which are restricted through hardware or software; or
 - (5) a termination that interconnects either directly or indirectly to the local exchange network where the usage is subject to Carrier Common Line charges such as, where the Special Access Service accesses only FGA and no local exchange lines, or Special Access Service between customer points of termination, or Special Access Service connecting CCSA or CCSA-type equipment (inter-machine trunks); or

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.3 Surcharge for Special Access Service (Cont'd)

7.3.2 Application (Cont'd)

(B) (Cont'd)

- (6) a termination that the customer certifies to the Telephone Company is not connected to a PBX or other device which interconnects the Special Access Service to a local exchange subscriber line.

7.3.3 Exemption of Special Access Service

- (A) Special Access Services which are terminated as set forth in 7.3.2(B) preceding will be exempted from the Special Access Surcharge if the customer provides the Telephone Company with written exemption certification. The certification may be provided to the Telephone Company as follows:
- at the time the Special Access Service is ordered or installed;
 - at such time as the service is re-terminated to a device which does not interconnect the service to local exchange facilities; or
 - at such time as the service becomes associated with a Switched Access Service that is subject to Carrier Common Line Charges.
- (B) The exemption certification is to be provided by the customer ordering the service. The certification must be signed by the customer or authorized representative and include the category of exemption, as set forth in 7.3.2(B) preceding, for each termination, and the date which the exemption is effective.
- (C) The customer shall also notify the Telephone Company when an exempted Special Access Service is changed or re-terminated such that the exemption is no longer applicable.
- (D) The Telephone Company will work cooperatively with the customer to resolve any questions regarding the exemption certification. In addition, the Telephone Company may withhold exemption of the service until the questions are resolved.

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.3 Surcharge for Special Access Service (Cont'd)

7.3.4 Rate Regulations

- (A) The surcharge will apply as set forth in 7.3.2(A) preceding, except that a surcharge will be assessed on a per voice grade equivalent basis for Special Access Services derived from High Capacity Special Access Services as illustrated in the following example:

| <u>Special Access Service</u> | <u>Voice Grade Equivalent</u> | <u>Monthly Surcharge</u> | <u>Charge</u> |
|-------------------------------|-------------------------------|--------------------------|---------------|
| DS1 | 24 x | \$25 = | \$600.00 |

The preceding example illustrates the maximum number of surcharges applicable to a DS1. If the customer claims exemption(s) as set forth in 7.3.3 preceding or, is not utilizing all available voice grade equivalents and has spare capacity, the number of surcharges would be reduced accordingly.

In the case of multipoint Special Access Services, one (1) Special Access Surcharge will apply for each termination of a Special Access Channel at an end user's premises.

- (B) The telephone Company will bill the appropriate Special Access Surcharge to the ordering customer for each interstate Special Access Service installed unless exemption certification is provided as set forth in 7.3.3 preceding.
- (C) If a written certification is not received at the time the Special Access Service is obtained, the Surcharge will be applied. Exempt status will become effective on the certification date indicated by the customer, subject to the regulations set forth in (D) following.
- (D) Crediting the Surcharge

The Telephone Company will cease billing the Special Access Surcharge when certification, as set forth in 7.3.3 preceding, is received. If the status of the Special Access Service was changed prior to receipt of the exemption certification, the Telephone Company will credit the customer's account, not to exceed ninety (90) days, based on the effective date of the change as specified by the customer in the letter of certification.

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.4 Voice Grade Service

7.4.1 Basic Channel Description

A Voice Grade channel is a channel which provides voice frequency transmission capability in the nominal frequency range of 300 to 3000 Hz and may be terminated two-wire (2) or four-wire (4). Voice Grade channels are provided between customer designated premises, between a customer designated premises and a Telephone Company hub or hubs, or between a customer designated premises and a WATS Serving Office (WSO).

Voice Grade Special Access services are typically used for voice and voiceband data applications. Typical examples of voice grade circuits are Foreign Exchange lines (station end only), multipoint private line, voice trunk type, two-point voice grade data (one-way (1) or simultaneous two-way (2)), multipoint voice grade data, and voice grade telephoto or facsimile. These examples of applications are not intended to limit a customer's use of the channel nor to imply that the channel is limited to a particular use.

Rates and charges for Special Access Voice Grade Service are as set forth in Section 20 following.

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.4 Voice Grade Service (Cont'd)

7.4.2 Technical Specifications Packages and Network Channel Interfaces

Technical Specifications Packages are set forth in the following matrix. Compatible network channel interfaces are set forth in Section 11.3 following.

| <u>Parameter</u> | <u>PackageVG</u> | | | | | | | | | | | | | |
|----------------------------------|------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-----------|-----------|-----------|-----------|
| | <u>C</u> | <u>1</u> | <u>2</u> | <u>3</u> | <u>4</u> | <u>5</u> | <u>6</u> | <u>7</u> | <u>8</u> | <u>9</u> | <u>10</u> | <u>11</u> | <u>12</u> | <u>C*</u> |
| Attenuation | | | | | | | | | | | | | | |
| Distortion | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| C-Message Noise | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| Echo Control | X | X | X | X | | X | | X | X | | | X | X | X |
| Envelope Delay Distortion | X | | | | | | X | X | X | X | X | X | X | X |
| Frequency Shift | X | | | | | | X | X | X | X | X | X | X | X |
| Impulse Noise | X | | | | | X | X | X | X | X | X | X | X | X |
| Intermodulation Distortion | X | | | | | | X | X | X | X | X | X | | X |
| Loss Deviation | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| Phase Hits, Gain Hits & Dropouts | X | | | | | | | | | | | | | |
| Phase Jitter | X | | | | | | X | X | X | X | X | X | X | X |
| Return Loss | | | | | | | | | | | | | | X |
| Signal-to-C Message Noise | | | | | X | | | | | | | | | |
| Signal-to-C Notch Noise | X | | | | | X | X | X | X | X | X | X | X | X |

The technical specifications for these parameters (except for dropouts, gain hits, and phase hits) are delineated in Technical Reference TR-NWT-000334 and TR-TSY-000335. The technical specifications for dropouts, phase hits, and gain hits are delineated in Technical Reference PUB 41004, Table 4.* The desired parameters are selected by the customer from the list of available parameters.

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.4 Voice Grade Service (Cont'd)

7.4.3 Optional Features and Functions

(A) Central Office Bridging Capability

(1) Voice Bridging (two-wire (2) and four-wire (4))

(2) Data Bridging (two-wire (2) and four-wire (4))

(3) Telemetry and Alarm Bridging

Active Bridging

Passive Bridging

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

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

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

(7) Multipoint Data Bridging

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

(8) Voice Conference Bridging

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

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.4 Voice Grade Service (Cont'd)

7.4.3 Optional Features and Functions (Cont'd)

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

(9) Alarm Distribution

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

The rates for these options are set forth in Section 20 following.

(B) Conditioning

Conditioning provides more specific transmission characteristics for Voice Grade services. The rates for these options are set forth in Section 20 following.

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

(1) C-Type Conditioning

C-Type Conditioning is provided for the additional control of attenuation distortion and envelope delay distortion on data services. The attenuation distortion and envelope delay distortion specifications for C-Type Conditioning are delineated in Technical Reference TR-TSY-000335.

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.4 Voice Grade Service (Cont'd)

7.4.3 Optional Features and Functions (Cont'd)

(B) Conditioning (Cont'd)

(2) Improved C-Type Conditioning

Improved C-Type Conditioning options are provided in conjunction with C-Type Conditioning at the rates set forth in Section 20 following. The C-Type Conditioning rate shall apply only once regardless if one or both of the following Improved Options are ordered.

(3) Improved Attenuation Distortion*

Improved Attenuation Distortion upgrades the frequency versus loss limits of the channel. The technical specifications for Improved Attenuation Distortion are delineated Technical Reference TR-TSY-000335. This option is available only when ordered in combination with C-Type Conditioning.

(4) Improved Envelope Delay Distortion*

Improved Envelope Delay Distortion upgrades the frequency versus delay response limits of the channel. The technical specifications for Improved Envelope Delay Distortion are delineated in Technical Reference TR-TSY-000335. This option is available only when ordered in combination with C-Type Conditioning.

* Improved Attenuation Distortion and improved Envelope Delay Distortion will continue to be provided to all customers who were provided with either or both of these optional features in conjunction with C-Type Conditioning prior to May 4, 1988.

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.4 Voice Grade Service (Cont'd)

7.4.3 Optional Features and Functions (Cont'd)

(B) Conditioning (Cont'd)

(5) Data Capability (D Conditioning) (Cont'd)

Data Capability provides transmission characteristics suitable for data communications. Specifically, Data Capability provides for the control of Signal to C-Notched Noise Ratio and intermodulation distortion. It is available for two-point services or three-point multipoint services. The Signal to C-Notched Noise Ratio and intermodulation distortion parameter for Data Capability are delineated in Technical Reference TR-TSY-000335. The rate for this option is set forth in Section 20 following.

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

(6) Sealing Current Conditioning

Sealing Current Conditioning is provided to help maintain continuity on dry metallic loops. It is usually associated with four-wire (4) DA or NO type network channel interfaces.

(7) Type DA Conditioning

Type DA conditioning of Voiceband facilities provides a facility with the following transmission parameter enhanced to meet the values specified for Type DA conditioning in Technical Reference TR-TSY-000335, in addition to the standard parameters for voiceband circuits.

- (1) Signal to C-notched noise ratio.
- (2) Nonlinear signal to second order distortion.
- (3) Nonlinear signal to third order distortion.

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.4 Voice Grade Service (Cont'd)

7.4.3 Optional Features and Functions (Cont'd)

(C) Customer Specified Premises Receive Level

This option allows the customer to specify the receive level at the Point of Termination. The level must be within a specific range on effective four-wire (4) transmission. The ranges are delineated in Technical Reference TR-TSY-000335. The rate for this option is set forth in Section 20 following.

(D) Improved Return Loss

- (1) On Effective Four-Wire (4) Transmission at Four-Wire (4) Point of Termination (applicable to each two-wire (2) port): Provides for a fixed 600 ohm impedance, variable level range and simplex reversal. Telephone Company equipment is required at the customer's premises where this option is ordered. The Improved Return Loss parameters are delineated in Technical Reference TR-TSY-000335. The rate for this option is set forth in Section 20 following.
- (2) On Effective Two-Wire (2) Transmission at Two-Wire (2) Point of Termination: Provides for more stringent Echo Control specifications. In order for this option to be applicable, the transmission path must be four-wire (4) at one POT and two-wire (2) at the other POT. Placement of Telephone Company equipment may be required at the customer's premises with the two-wire (2) POT. The Improved Return Loss parameters are delineated in Technical Reference TR-TSY-000335. The rate for this option is set forth in Section 20 following.

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.4 Voice Grade Service (Cont'd)

7.4.3 Optional Features and Functions (Cont'd)

(E) Signaling Capability

Signaling Capability provides for the ability to transmit signals from one customer premises to another customer premises on the same service. The rate for this option is set forth in Section 20 following.

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

The following network channel interfaces for Voice Grade service require signaling capability: AB, AC, CT, DX, EA, EB, EC, EX, GO, GS, LA, LB, LC, LO, LR, LS, RV, and SF. The signaling capability charge will not apply when used in the provision of WATS access service.

(F) Telephoto Capability

Telephoto Capability provides transmission characteristics suitable for telephotographic communications. Specifically, Telephoto Capability is provided for the control of attenuation distortion and envelope delay distortion of telephotographic services. The attenuation distortion and envelope delay distortion parameters for Telephoto Capability are:

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

(G) Selective Signaling Arrangement

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

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.4 Voice Grade Service (Cont'd)

7.4.3 Optional Features and Functions (Cont'd)

(H) Transfer Arrangement

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

(I) Four-Wire (4)/Two-Wire (2) Conversions

When a customer requests that an effective four-wire (4) channel be terminated with a two-wire (2) channel interface at the customer designated premises, a four wire (4) to two-wire (2) conversion is required. The customer will be charged the four-wire (4) Channel Termination rate as set forth in Section 20 following when an effective four-wire (4) is specified in the order for service. The rate for the conversion is included as part of the basic four-wire (4) Channel Termination rate.

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.4 Voice Grade Service (Cont'd)

7.4.3 Optional Features and Functions (Cont'd)

(J) Improved Two-Wire (2) Voice Transmission

(1) Loss Deviation

The maximum Loss Deviation of the 1004 Hz loss relative to the Expected Measured Loss (EML) is -4.0dB to +4.0dB.

(2) Attenuation Distortion

The maximum Attenuation Distortion in the 404 to 280 Hz frequency band relative to loss at 1004 Hz is -2.0dB to + 6.0 dB.

(3) C-Message Noise

The maximum C-Message Noise for the transmission path at the route miles listed is less than:

| <u>Route Miles</u> | <u>C-Message Noise</u> |
|--------------------|------------------------|
| Less than 50 | 35 dBrnc0 |
| 51 to 100 | 37 dBrnc0 |
| 101 to 200 | 40 dBrnc0 |
| 201 to 400 | 43 dBrnc0 |
| 401 to 1000 | 45 dBrnc0 |

(4) Return Loss

The Return Loss, expressed as Echo Return Loss (ERL) and Singing Return Loss (SRL), is equal to or greater than:

| | |
|-----|--------|
| ERL | 13.0dB |
| SRL | 6.0 dB |

The rate for the provision of Improved Two-Wire (2) Voice Transmission is included as part of the basic Channel Termination rate.

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.4 Voice Grade Service (Cont'd)

7.4.3 Optional Features and Functions (Cont'd)

(K) Echo Control

(1) Echo Suppression

An arrangement provided at the customer's request to attenuate reflected speech energy on a four-wire facility. This conditioning is generally required on circuits with long propagation delay. Echo suppression is charged on a per Special Access circuit basis. Echo suppression is an obsolete service offering and is applicable only to those circuits equipped with echo suppression prior to January 1, 1987. Any service rearrangements or order activity on the circuits equipped with echo suppression may require a change to echo canceller as described in 7.4.3(K)(2) following.

(2) Echo Canceller

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

(L) Voiceband Facility Switching Arrangement

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

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.4 Voice Grade Service (Cont'd)

7.4.3 Optional Features and Functions (Cont'd)

(M) Improved Termination Option

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

The Improved Termination option will be ordered and rates and charges, as set forth in Section 20 following, will apply on a per channel termination basis. Technical parameters and the applicable Voiceband services are specified in Technical Reference TR-TSY-000335.

(N) Improved Equal Level Echo Path Loss Option - ELEPL-2

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

The term "Equal Level Echo Path Loss" (ELEPL) represents the measure of Echo Path Loss (EPL) at a four-wire interface which is corrected by the difference between the send and receive Transmission Level Point (TLP), i.e., $ELEPL = EPL - TLP(\text{send}) + TLP(\text{receive})$. Improved ELEPL rates and charges will apply on a per channel termination basis at the rates set forth in Section 20 following. Technical parameters are specified in Technical Reference TR-TSY-000335.

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.5 Program Audio Service

7.5.1 Basic Channel Description

A Program Audio channel is a channel with bandwidth measured in Hz for the transmission of a complex signal voltage. The actual bandwidth is a function of the channel interface selected by the customer. Only one-way transmission is provided. Program Audio channels are provided between customer designated premises or between a customer designated premises and a Telephone Company hub or hubs.

Program Audio Special Access services are typically used in full-time and part-time applications for radio broadcasting, noncommercial educational audio, and wired music. These examples of applications are not intended to limit a customer's use of the channel nor to imply that the channel is limited to a particular use.

Rates and charges for Special Access Program Audio Service are as set forth in Section 20 following.

7.5.2 Technical Specifications Packages and Network Channel Interfaces

Compatible network channel interfaces are set forth in Section 11.3 following.

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

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

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.5 Program Audio Service (Cont'd)

7.5.3 Optional Features and Functions

(A) Central Office Bridging Capability

Distribution Amplifier

(B) Gain Conditioning

Control of 1004 Hz AML at initiation of service to 0 dB ± 0.5 dB.

(C) Stereo

Provision of a pair of gain/phase equalized channels for stereo applications. (An additional Program Audio channel must be ordered separately.)

(D) Zero Loss

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

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.6 Video Service

7.6.1 Basic Channel Description

These facilities are arranged and provided for the transmission of television to be broadcast or used in connection with viewing or recording.

The facilities are furnished for two point transmission in one direction only of United States 525 line/60 field standard monochrome and National Television Systems Committee (NTSC) color television baseband video signals and the associated audio signals.

Videoband Services are provided on a full-time or part-time (temporary) basis. The minimum periods are set forth in Section 5.1.4 and Section 5.3.4 preceding. The monthly rates and nonrecurring charges for full-time Videoband Service will be developed on an Individual Case Basis. The hourly rates and nonrecurring charges for temporary service are those set forth in Section 20 following.

There is a maximum monthly charge that may be assessed to any temporary Videoband Service as described in Section 20 following.

Technician Standby is a non-optional arrangement furnished in conjunction with temporary Videoband Service only. Technician Standby provides for Telephone Company monitoring of the temporary Video broadcast to ensure satisfactory transmission. The telephone company will determine the location of the video technician. At the option of the customer, additional technicians will be made available during the temporary Video broadcast; the customer will be assessed the Technician Standby charge, as set forth in Section 20 following, for each additional technician.

A customer may request (as an option) an active, alternate temporary Videoband transmission path for use in the event that the primary service becomes inoperative. This is referred to as a "hot standby" facility. The charge for this additional service will be the nonrecurring charges and hourly rates set forth in Section 20 following for Temporary Videoband Facilities. Technician Standby charges are not applicable to the "hot standby" facility.

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.6 Video Service (Cont'd)

7.6.2 Technical Specifications Packages and Network Channel Interfaces

| <u>Parameter</u> | <u>Package TV-</u> | | |
|--|--------------------|----------|----------|
| | <u>C*</u> | <u>1</u> | <u>2</u> |
| Amplitude vs. Frequency Response | X | | |
| Chrominance/Luminance Inequalities | | | |
| Gain | X | X | X |
| Delay | X | X | X |
| Chrominance/Luminance Intermodulation | X | | |
| Chrominance Nonlinear Gain | X | | |
| Chrominance Nonlinear Phase | X | | |
| Crosstalk | X | | X |
| Differential Gain | X | X | X |
| Differential Phase | X | X | X |
| Dynamic Gain (picture and sync signal) | | | |
| Field-Time Distortion | X | X | X |
| Gain/Frequency Distortion | X | X | X |
| Gain Stability | X | X | X |
| Insertion Gain | X | X | X |
| Line-Time Distortion | X | X | X |
| Long-Time Distortion | X | X | X |
| Luminance Nonlinearity | X | | |
| Luminance Signal/CCIR | | | |
| Weighted Noise | X | X | X |
| Short-Time Distortion | | | |
| 2 T-Pulse | X | X | X |
| T-Bar Ringing | X | X | X |
| Signal/15 kHz Flat | | | |
| Weighted Noise | X | X | X |
| Signal/Low Frequency Noise | X | | |
| Stereo Gain Difference | X | X | |
| Stereo Phase Difference | X | X | |
| Total Harmonic Distortion | X | X | X |
| Transient Sync Signal | | | |
| Non-Linearity | X | | |
| Video/Audio Delay Difference | X | | |

* The technical specifications are delineated in Technical Reference TR-NPL-000338 and associated Addendum. The desired parameters are selected by the customer from the list of available parameters.

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.6 Video Service (Cont'd)

7.6.2 Technical Specifications Packages and Network Channel Interfaces (Cont'd)

The following network channel interfaces (NCIs) define the bandwidth and the provision of the audio signal(s) associated with a Video channel:

| <u>NCI</u> | <u>Audio Bandwidth</u> | <u>Provision</u> |
|------------|------------------------|----------------------|
| 2TV6-1 | 15 kHz | 1 Channel, diplexed |
| 2TV6-2 | 15 kHz | 2 Channels, diplexed |
| 2TV7-1 | 15 kHz | 1 Channel, diplexed |
| 2TV7-2 | 15 kHz | 2 Channels, diplexed |
| 4TV6-5 | 05 kHz | 1 Channel, separate |
| 4TV6-15 | 15 kHz | 1 Channel, separate |
| 4TV7-5 | 05 kHz | 1 Channel, separate |
| 4TV7-15 | 15 kHz | 1 Channel, separate |
| 6TV6-5 | 05 kHz | 2 Channels, separate |
| 6TV6-15 | 15 kHz | 2 Channels, separate |
| 6TV7-5 | 05 kHz | 2 Channels, separate |
| 6TV7-15 | 15 kHz | 2 Channels, separate |

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.7 Digital Data Service

7.7.1 Basic Channel Description

A Digital Data channel is a channel for duplex four-wire (4) transmission of synchronous serial data at the rate of 2.4, 4.8, 9.6, 19.2, 56 or 64 Kbps where facilities are available. The actual bit rate is a function of the channel interface selected by the customer. The channel provides a synchronous service with timing provided by the Telephone Company through the Telephone Company's facilities to the customer in the received bit stream. Digital Data channels are only available via Telephone Company designated hubs and are provided between customer designated premises or between a customer designated premises and a Telephone Company hub or hubs.

The customer will provide the Channel Service Unit/Data Service Unit equipment associated with the Digital Data channel at the customer premises.

Rates and charges for Special Access Digital Data Service are as set forth in Section 20 following.

7.7.2 Technical Specifications Packages and Network Channel Interfaces

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

Compatible Channel Interfaces are set forth in Section 11.3 following.

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

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

| <u>NCI</u> | <u>Bit Rate</u> |
|------------|-----------------|
| DU-24 | 2.4 Kbps |
| DU-48 | 4.8 Kbps |
| DU-96 | 9.6 Kbps |
| DU-19 | 9.2 Kbps |
| DU-56 | 6.0 Kbps |
| DU-64 | 4.0 Kbps |

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.7 Digital Data Service (Cont'd)

7.7.3 Optional Features and Functions

The Optional Features and Functions described in (A) following are only available where Digital Data Service is provided via a hub.

(A) Bridging

Digital data bridging is available on an individual case basis only.

(B) Transfer Arrangement

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

(C) Digital Data Carrier Multiplexer

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

(D) Digital Data Subrate Multiplexer

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

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.7 Digital Data Service (Cont'd)

7.7.3 Optional Features and Functions (Cont'd)

(E) Digital Data Service Secondary Channel

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

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

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

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

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

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

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

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.8 High Capacity Service

7.8.1 Basic Channel Description

A High Capacity circuit is a circuit for the transmission of nominal 64.0 kbps* 1.544 Mbps, or higher rate synchronous serial data. The actual bit rate is a function of the channel interface selected by the customer. High Capacity circuits are provided between customer designated premises or between a customer Designated premises and a Telephone Company hub. High Capacity DS1 and DS3 services may also be connected to customer transmission equipment and facilities where the customer is provided EIS.

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

| <u>Level</u> | <u>Bit Rate</u> | <u>Equiv DS-3s</u> | <u>Equiv DS-1s</u> | <u>Equiv DS0s</u> |
|--------------|-----------------|--------------------|--------------------|-------------------|
| DS0 | 64 kbps-- | -- | -- | 1 |
| DS-1 | 1.544 mbps | -- | 1 | 24 |
| DS-3 | 44.736 mbps | 1 | 28 | 672 |
| OC-3 | 155.520 mbps | 3 | 84 | 2,016 |
| OC-3c * | 155.520 mbps | -- | -- | -- |

* OC-3c is a means of transporting large bandwidths as a "single entity," as opposed to being treated as separate bits, bytes or time slots. The data is accepted from a customer, optically transported and ultimately delivered as a solid stream of bandwidth. No multiplexing is available for this type of service.

Rates and charges for Special Access High Capacity Service are set forth in Section 20 following.

7.8.2 Technical Specifications Packages and Network Channel Interfaces

A channel with technical specifications package HC1 will be capable of an error-free second performance of 98.75% over a continuous twenty-four (24) hour period as measured at the 1.544 and 44.736 Mbps rate through a CSU equivalent which is designated, manufactured, and maintained to conform with specifications contained in Technical Reference PUB 62411.

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

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.8 High Capacity Service (Cont'd)

7.8.3 Channel Interfaces

Compatible channel interfaces are set forth in Section 11.3 following.

7.8.4 Optional Features and Functions

(A) Automatic Loop Transfer

The Automatic Loop Transfer provides protection on a 1 x N basis against failure of the facilities between a customer designated premises and the wire center serving that premises. Protection is furnished through the use of a switching arrangement that automatically switches to a spare channel line when a working line fails. The spare channel is not included as a part of the option. This option requires compatible equipment at both the serving wire center and the customer designated premises. The customer is responsible for providing the equipment at its designated premises.

(B) OC-3 to DS-3 Multiplexing

An arrangement that converts a 155.520 Mbps channel to 3 DS-3 channels using digital time division multiplexing.

(C) OC-3 to DS-1 Multiplexing

An arrangement that converts a 155.520 Mbps channel to 84 DS-1 channels using digital time division multiplexing.

(D) DS3 to DS1 Multiplexing

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

(E) DS1 to Voice Multiplexing

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

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.8 High Capacity Service (Cont'd)

7.8.4 Optional Features and Functions (Cont'd)

(F) DS1 to DS0 Multiplexing (T)

An arrangement that converts a 1.544 Mbps channel to 23 64.0 Kbps channels utilizing digital time division multiplexing.

(G) DS0 to Subrate Multiplexing

Where facilities are available, the telephone company will provide an arrangement that converts a 64.0 Kbps channel to subspeeds of up to twenty (20) 2.4 Kbps, ten (10) 4.8 Kbps, or five (5) 9.6 Kbps channels using digital time division multiplexing.

(H) Transfer Arrangement

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

(I) Clear Channel Capability (CCC)

CCC provides a Bipolar with Eight Zero Substitution (B8ZS) encoding technique that allows a customer to transport 1.536 Mbps information rate signals over a 1.544 Mbps High Capacity Channel with no restraint on the quantity or sequence of one (mark) and zero (space) bits. This arrangement allows customers to derive 64 kbps clear channels. This service is provided only on 1.544 Mbps High Capacity Channels between two customer designated premises and is subject to availability of facilities. This arrangement requires the customer-provided multiplexing equipment to be compatible with the B8ZS line code as specified in Technical Reference TR-NPL-000054 and Technical Reference PUB TR-NPL-000342.

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.8 High Capacity Service (Cont'd)

7.8.4 Optional Features and Functions (Cont'd)

(J) Automatic Protection Switch

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

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

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

(H) DS3 Multiplexer Cross Connect Arrangement

For DS3 multiplexed services, the DS3 Multiplexer Cross Connect arrangement allows a customer to cross connect digital DS1 channels from one multiplexer to another multiplexer. The rate as specified in Section 20 will apply per cross connect arrangement. If the DS3 multiplexed services are located in different hub wire centers, DS1 special transport will apply in addition to the DS1 cross connect charge. The customer must provide the channel assignments (CFA and SCFA) for both multiplexed services on the ASR. When a customer chooses to order the cross connect arrangement, the Initial Ordering Charge - Special Access will apply.

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.9 Metallic Services

7.9.1 Basic Circuit Description

A Metallic circuit is an unconditioned two-wire circuit capable of transmitting low speed varying signals at rates up to 30 baud and direct current. Metallic circuits are provided between customer designated premises or between a customer designated premises and a Telephone Company hub where bridging functions are performed. Interoffice metallic facilities will be limited in length to a total of five (5) miles per circuit.

Metallic Special Access services are typically used for applications such as alarm, pilot wire protective relaying, and dc tripping protective relaying. These examples of applications are not intended to limit a customer's use of the channel nor to imply that the channel is limited to a particular use.

7.9.2 Technical Specifications Packages

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

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

7.9.3 Channel Interfaces

Compatible channel interfaces are set forth in Section 11.3 following.

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.9 Metallic Services (Cont'd)

7.9.4 Optional Features and Functions

(A) Central Office Bridging Capability

- (1) Three (3) Premises Bridging - Provision of tip-to-tip and ring-to-ring connection in a central office of a metallic pair to a third customer premises.
- (2) Series Bridging of up to 26 customer premises.

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

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

7.10 Individual Case Filings

Certain services set forth in Special Access Service, Section 7 are provided on an Individual Case Basis. Services provided on an Individual Case Basis are set forth in Section 20 following.

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.11 Internet Digital Access Service (IDAS)

7.11.1 General

Internet Digital Access Service (IDAS) is the Telephone Company's Digital Channel Service offering which is a wholesale business offering to provide one way digital service for Internet Service providers (ISPs). Subject to the terms and conditions set forth herein, the service provides for the establishment of a circuit between the telephone company's serving wire center and a designated ISP premises location. IDAS allows for the termination of end-user-originated switched network calls over a high capacity digital facility terminating to an ISP. The service transmits and receives digital signals between the serving wire center and digital switching equipment located at the ISP's premises or the ISP's designated interface point. Each IDAS service enables ISPs to channel up to 24 voice grade DS0's on a single transport facility. IDAS is comprised of two independent services: Internet Digital Access Port (IDAP), which provides a port in the central office switch, and Internet Digital Access Transport (IDAT), which provides a port and a transport facility connecting the serving wire center and the ISP's premises or designated location. An ISP would order one of these services, but not both.

IDAS is designed to be used by customers with functionality similar to an ISP. All calls carried by the IDAS circuit must be from individual telephone customers in the network at large directed one-way into the ISP's serving wire center (SWC) (or routed to a SWC designated by the Company) and thence by IDAS service to the ISP's designated premises location.

An ISP may order IDAS from a serving wire center other than his designated serving wire center. Rates for IDAS FX service apply in addition to the IDAP or IDAT rates, as shown in Sections 20.1.11, 20.2.11, and 20.4.11, following.

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.11 Internet Digital Access Service (IDAS) (Cont'd)

7.11.2 Terms and Conditions

(A) Availability of Service

IDAS is subject to the availability of facilities and is only offered where technically feasible.

(B) Use of Service

IDAS is intended to fulfill the need of ISPs for fast, efficient one-way connection of calls to the ISP's facilities.

The IDAS customer's equipment must conform to industry standards and connection provisions as specified in "Reference to Technical Publications."

(C) Service Provision Location

IDAS may be provided from the ISP's central office (serving wire center or SWC), subject to the availability of facilities or from a designated central office (SWC).

Internet Digital Access Transport (IDAT) includes Internet Digital Access Port (IDAP) as well as transport facilities to reach the IDAS customer's location external to the SWC. IDAP is a port charge only and includes no transport.

Expanded interconnection (collocation) is not part of the IDAS offering and, if required, must be obtained separately from Section 20 of this guide.

(D) End Office Designation Change

An ISP requested change in the end office designation used to provide IDAS will be considered a disconnection of existing service and a connection of new service.

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.11 Internet Digital Access Service (IDAS) (Cont'd)

7.11.2 Terms and Conditions (Cont'd)

(E) Minimum Block of Service Offerings

IDAS will be provided in increments of whole digital IDAS facilities (T-1 equivalents), each of which is the equivalent of 24 DS0 Circuits. No partial IDAS services will be offered. Four or more digital facilities must be subscribed to whether or not all lines/circuits are to be used within any one digital facility.

(F) ISP Provided Equipment

The ISP is responsible for the installation, operation and maintenance of any and all ISP provided equipment, including terminal equipment and software. The equipment must be compatible with the Company's equipment and facilities. The equipment must conform to industry standards and specifications.

(G) Telephone Numbers Associated with Each Transport Facility

Each IDAS Transport Facility (T-1 equivalent) comes equipped with one local telephone number.

7.11.3 Rate Regulations

(A) General Provisions

Monthly rates and nonrecurring charges apply as specified in Section 20 of this guide. Optional Term Payment Plans are available for IDAS (TPP-IDAS). See Paragraph 7.11.3 (D) for provisions. At the expiration of a TPP-IDAS period, the Company will automatically renew the service at the same TPP-IDAS terms and rates, unless the ISP notifies the Company and chooses to convert to a different period, convert to month-to-month rates or discontinue service. At least 30 days notice must be given before any of these can take effect.

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.11 Internet Digital Access Service (IDAS) (Cont'd)

7.11.3 Rate Regulations (Cont'd)

(B) Nonrecurring Charges

Nonrecurring charges are the same with or without a TPP-IDAS. Nonrecurring charges are not applicable when service is renewed for an additional term or renewed with a month-to-month payment plan.

(C) Minimum Subscriber Period

The minimum subscriber service period for digital ports and for digital transport facilities is one month. In the case of termination of the ISP's service, the charge for IDAS is based on the date of termination of the ISP's service, but the minimum charge is the established rate for one month. If a TPP-IDAS was selected, then the termination liability identified in Paragraph 7.11.3 (E) applies.

(D) Term Payment Plans for Internet Digital Access Service (TPP-IDAS)

Optional Term Payment Plans are available for IDAS (TPP-IDAS). If the ISP subscribes to a TPP-IDAS, then reduced monthly charges apply as shown in Section 20. When the ISP orders service from a TPP-IDAS, the ISP must designate to the Telephone Company the commitment and term desired

(E) ISP-Initiated Disconnection of Service -Term Payment Plans for IDAS (TPP-IDAS)

In the event that IDAS service under one of the Company's Term Payment Plans for IDAS (TPP-IDAS) is disconnected at the ISP's request prior to completion of the ISP-selected payment period, the ISP will be required to pay a termination liability charge. This charge will be equal to the greater of: (1) the difference between the month-to-month charge for the time period the service was used and the term plan selected by the ISP for the same period or (2) 70 % of the term payments for the remaining time left in the ISP's Term Plan. The ISP-designated payment period and commitment period may not be reduced, unless the ISP selects another Term Payment Plan to complete the term of service obligation.

ACCESS SERVICE

8. Reserved for future use

ACCESS SERVICE

9. Additional Engineering, Additional Labor and Miscellaneous Services

9.1 Additional Engineering

Additional Engineering will be provided by the Telephone Company at the request of the customer or when the Telephone Company determines that Additional Engineering is necessary to accommodate a customer's request.

Additional Engineering is provided when:

- (A) A customer requests additional technical information beyond that normally included by the Telephone Company on the Design Layout Report (DLR) as set forth in Section 7.1.8.
- (B) Additional engineering time is incurred by the Telephone Company to engineer a customer's specific written request for a customized service or additional engineering activities which are not normally performed in the provision of services under this guide.

The Telephone Company will notify the customer that Additional Engineering charges, as set forth in 9.1.1 following, will apply before any additional engineering is undertaken. 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 the 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%.

9.1.1 Charges for Additional Engineering

The charges for additional engineering are shown as in Section 20.

ACCESS SERVICE

9. Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd)**9.2 Additional Labor**

Additional labor is that labor requested by the customer on a given service and agreed to by the Telephone Company. The Telephone Company will notify the customer that additional labor charges will apply before any additional labor is undertaken. Additional labor charges apply to the services described in 9.2.1 through 9.2.6. Charges for additional labor will apply per order submitted

Normally scheduled working hours are an employee's scheduled work period on any given business day which totals eight (8) hours.

9.2.1 Overtime Installation

Overtime installation is that Telephone Company installation effort outside of normally scheduled working hours.

9.2.2 Overtime Repair

Overtime repair is that Telephone Company maintenance effort performed outside of normally scheduled working hours, but on a normally scheduled workday. Premium time is Telephone Company installation or maintenance effort outside a normally scheduled workday.

9.2.3 Stand By

Stand by includes all time in excess of one-half (1/2) hour during which Telephone Company personnel stand by to make installation acceptance tests or cooperative tests with a customer.

9.2.4 Testing and Maintenance with Other Telephone Companies

Additional labor charges apply for additional testing, maintenance or repair of facilities which connect to facilities of other telephone companies. This is in addition to the normal effort required to test, maintain or repair facilities provided solely by the Telephone Company.

9.2.5 Testing Services

Testing services other than those described in other parts of this guide will be provided at the hourly rates described if requested by the customer. Testing will be provided subject to the availability of equipment and qualified personnel.

ACCESS SERVICE

9. Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd)

9.2 Additional Labor (Cont'd)

9.2.6 Other Labor

Other labor is that additional labor incurred to accommodate a specific customer request that involves labor which is not covered by any other section of this guide. It also covers additional labor necessary to meet customer requests as described in Section 5.2.6.

9.2.7 NID Replacement

The Telephone Company terminates its facilities at customers' premises in a Network Interface Device, or NID. The NIDs used by the Telephone Company are industry standard equipment at the time they are installed. When a customer requests that the Telephone Company replace a NID with a newer model to enable the use of an interstate service, the Telephone Company will charge a NID Replacement Charge.

The NID Replacement Charge includes the labor and equipment needed to replace a simple NID capable of connecting one or two pairs of copper facilities to the Telephone Company's network. If the customer desires to replace a NID that connects more than two pairs of copper to the network, the Telephone Company will charge a NID Replacement Charge for each 2 lines of the NID's capacity. If the customer requests a specialized installation or NID replacement outside normally scheduled working hours, appropriate labor charges described in Section 9.2.1 through 9.2.6 will also apply.

9.2.8 Charges for Additional Labor

The charges for additional labor are shown in Section 20.

ACCESS SERVICE

9. Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd)

9.3 Miscellaneous Services

9.3.1 Maintenance of Service

- (A) The customer will be responsible for reporting troubles sectionalized to Telephone Company facilities and/or equipment. When trouble cannot be clearly sectionalized to the Telephone Company facilities and/or equipment, the Telephone Company will test cooperatively or independently to assist in trouble sectionalization.

When a customer reports 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 for the period of time from when the Telephone Company personnel are dispatched to the customer's or customer's end user 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's 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.

A Maintenance of Service charge is also applicable for "call outs" after hours to test at the central office when the trouble is found to be in the equipment or communication systems provided by other than 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.

- (C) The charge for Maintenance of Service are as follows:

Maintenance of Service
Periods

Per Technician

Per occurrence

The charges for Maintenance of Service are the same as those set for Additional Labor as set forth in 9.2 preceding.

ACCESS SERVICE

9. Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd)

9.3 Miscellaneous Services (Cont'd)

9.3.2 Programming Services

- (A) Programming charges apply when a request by a customer for information concerning the access services provided to the customer result in the creation of new computer software or the modification of existing software in order to provide the requested information.

The Telephone Company will notify the customer that additional programming charges will apply before any additional programming is undertaken.

- (B) The charges for Programming Service are shown in Section 20.

ACCESS SERVICE

9. Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd)

9.4 Additional Testing

The Telephone Company will perform acceptance testing as specified in Section 7.1.6 preceding to ensure that services ordered by the customer are functioning properly, prior to turning over such services to the customer. In addition, the Telephone Company will perform ongoing tests as specified in Sections 6.3.1, 6.3.2, 6.3.3, 6.3.4, 6.3.5, and 6.3.6 preceding to assure the continued satisfactory performance of Switched Access Services ordered by the customer.

Testing offered under this section of the tariff is in addition to those tests described above and will be provided, when requested by the customer, at an additional charge.

Testing is provided by the Telephone Company personnel at Telephone Company locations. However, provisions are made in 9.4(A)(5) and 9.4(B)(2) following, to allow a customer to request Telephone Company personnel to perform testing at the customer designated premises or the end user premises.

Additional testing is provided on a scheduled or nonscheduled basis. Scheduled testing shall be performed on a predetermined time basis to allow for cost efficient utilization of Telephone Company and customer resources. Scheduled testing should be based on a one year period. Nonscheduled tests are performed by the Telephone Company on a request-by-request basis, not in conjunction with any fixed schedule.

The offering of testing 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 (A) and (B) following.

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9. Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd)

9.4 Additional Testing (Cont'd)

9.4.1 Special Access Testing

The Telephone Company will, at the request of a customer, provide assistance in performing specific tests requested by the customer, however, the Telephone Company will only perform maintenance testing for its facilities within the LATA.

(A) Additional Cooperative Acceptance Testing

When a customer provides a technician at its customer designated premises or at the end user premises, with suitable test equipment to perform the required tests, the Telephone Company will provide a technician at its office for the purpose of conducting Additional Cooperative Acceptance Testing (ACAT). The labor charges as set forth in 9.2.7 preceding will apply to ACAT at the appropriate Basic, Overtime, or Premium rate. Additional Cooperative Acceptance Testing Charges will apply when the customer requests tests which are not required to meet the transmission performance parameters.

(B) Nonscheduled Testing

When a customer provides a technician at its customer designated premises or at the end user premises, with suitable test equipment to perform the required tests, the Telephone Company will provide a technician at its end office(s) (cooperative testing) for the purpose of conducting Nonscheduled Testing (NST). Nonscheduled testing may consist of any test (e.g., loss, noise, slope, envelope delay, etc.) which the customer may request. If such testing indicates trouble in Telephone Company facilities, then the customer will not be charged. NST charges will apply if the trouble is in the facilities of the customer. At the customer's request, the Telephone Company will provide a technician at the customer designated premises or at the end user premises (manual testing). The labor charges as set forth in 9.2.7 preceding will apply to Nonscheduled Testing at the appropriate Basic, Overtime, or Premium rate.

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10. Competitive Counties for Special Access10.1 General

As of August 1, 2017, Private Line Transport Services were changed to a competitive or non-competitive designation. Non-Competitive End-Use Channel Terminations (EUCT) are filed as Part of Tariff F.C.C. No. 11 and remain under Price Cap Regulation for certain rate groups. Competitive Counties are defined in Section 2.6, and the wire centers within such counties are listed in Section 10.2 below.

In wire centers within a Competitive County, monthly rates and nonrecurring charges for Special Access rate elements are subject to the "Competitive County Rate" to the extent it is specified. In wire centers within a Non-Competitive County, monthly rates and nonrecurring charges for Special Access rate elements are subject to the "Non-Competitive County Rate" to the extent it is specified. Until February 1, 2018, the "Competitive County Rate" reflects the rate in place as of August 1, 2017.

For Interexchange Carrier Point of Presence Channel Terminations, Channel Mileage and Optional Features and Functions, including Multiplexing, the "Competitive County Rate," if specified, applies regardless of whether the county is Competitive or Non-Competitive.

10.2 Competitive County Lists10.2.1 Rate Group 1

(A) The following wire centers in Rate Group 1 are in Competitive Counties:

| State | County | Wire Center |
|--------------|---------------|--------------------|
| CA | Sacramento | CRLDCAXG |
| CA | Sacramento | EKGVCAXH |
| CA | Sacramento | EKGVCAXG |
| CA | Sacramento | EKGVCAXI |
| CA | Sacramento | EKGVCAXJ |
| CA | Sacramento | ISTNCAXF |
| CA | Sacramento | MDVWCAXF |
| CA | Sacramento | WLGVCAXF |
| CA | Shasta | BLVSCAXF |
| CA | Shasta | BRNYCAXF |
| CA | Shasta | FRMLCAXF |
| CA | Shasta | MNCKCAXF |
| CA | Shasta | PLCDCAXF |
| CA | Siskiyou | MCLDCAXF |
| CA | Solano | RIVSCAXF |
| CA | Tehama | MNRLCAXF |
| CA | Tehama | PYCKCAXF |
| CA | Yolo | CLBGCAXF |

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10. Competitive Counties for Special Access (Cont'd)

10.2 Competitive County Lists (Cont'd)

10.2.1 Rate Group 1 (Cont'd)

(A) The following wire centers in Rate Group 1 are in Competitive Counties: (Cont'd)

(D)
(D)
(D)
(D)
(D)

(D)
(D)
(D)

| | | |
|----|-------------|----------|
| NY | Allegany | ALFENYXA |
| NY | Allegany | ALMDNYXA |
| NY | Allegany | ANDVNYXA |
| NY | Allegany | FLMRNYXA |
| NY | Broome | CHBRNYXA |
| NY | Broome | HWTNNYXA |
| NY | Broome | WHPNNYXA |
| NY | Cattaraugus | WSVYNYXA |
| NY | Cayuga | CATONYXA |
| NY | Chemung | CHMGNYXA |
| NY | Chenango | BNBRNYXA |
| NY | Chenango | ERVLNYXA |
| NY | Chenango | GRNENYXA |
| NY | Chenango | GUFDNYXA |
| NY | Chenango | MCDNNYXA |
| NY | Chenango | MTUPNYXA |
| NY | Chenango | NWBLNYXA |
| NY | Chenango | NRWCNYXA |
| NY | Chenango | OXFRNYXA |
| NY | Chenango | SHBNNYXA |
| NY | Chenango | SMYRNYXA |
| NY | Chenango | SNBLNYXA |
| NY | Chenango | SOTSNYXA |

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10. Competitive Counties for Special Access (Cont'd)

10.2 Competitive County Lists (Cont'd)

10.2.1 Rate Group 1 (Cont'd)

(A) The following wire centers in Rate Group 1 are in Competitive Counties: (Cont'd)

| | | |
|----|-----------|----------|
| NY | Columbia | EZVLNYXA |
| NY | Cortland | CNCNNYXA |
| NY | Cortland | MRTHNYXA |
| NY | Cortland | TXTNNYXA |
| NY | Cortland | VRGLNYXA |
| NY | Delaware | DSVLNYXA |
| NY | Delaware | FKLNNYXA |
| NY | Delaware | MSVLNYXA |
| NY | Delaware | SDNYNYXB |
| NY | Delaware | WLTNNYXA |
| NY | Dutchess | RDHKNYXB |
| NY | Dutchess | RHNBNYXA |
| NY | Dutchess | STATNYXA |
| NY | Dutchess | TIVONYXA |
| NY | Essex | NWCMNYXA |
| NY | Fulton | BRDBNYXA |
| NY | Fulton | CGLKNYXA |
| NY | Fulton | GLVVNYXA |
| NY | Fulton | JHTWNYXA |
| NY | Fulton | MYFDNYXA |
| NY | Fulton | NRVLNYXA |
| NY | Genesee | CORFNYXA |
| NY | Genesee | DARNNYXA |
| NY | Herkimer | OLDFNYXA |
| NY | Jefferson | ADMSNYXA |
| NY | Jefferson | ADCTNYXA |
| NY | Jefferson | BLVLNYXA |
| NY | Jefferson | HNSNNYXA |
| NY | Jefferson | MNVLNYXA |
| NY | Lewis | CSTVNYXB |
| NY | Lewis | CRGHNYXA |
| NY | Lewis | LOWVNYXA |
| NY | Lewis | LYFLNYXA |

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10. Competitive Counties for Special Access (Cont'd)

10.2 Competitive County Lists (Cont'd)

10.2.1 Rate Group 1 (Cont'd)

(A) The following wire centers in Rate Group 1 are in Competitive Counties: (Cont'd)

| | | |
|----|------------|----------|
| NY | Livingston | DLTNNYXA |
| NY | Madison | BRFDNYXA |
| NY | Madison | NBFDNYXA |
| NY | Madison | DRTRNYXA |
| NY | Madison | GRTWNYXA |
| NY | Madison | LNRVNYXA |
| NY | Madison | MDSNNYXA |
| NY | Madison | MRVLNYXA |
| NY | Madison | NWWDNYXA |
| NY | Montgomery | CNJHNYXA |
| NY | Montgomery | FONDNYXA |
| NY | Montgomery | FTPLNYXA |
| NY | Montgomery | GLENNYXA |
| NY | Montgomery | STJNNYXA |
| NY | Montgomery | TRHLNYXA |
| NY | Niagara | SNBRNYXA |
| NY | Oneida | BNVLNYXA |
| NY | Oneida | CYVLNYXA |
| NY | Oneida | EGBANYXA |
| NY | Oneida | FOPTNYXA |
| NY | Oneida | REMSNYXA |
| NY | Oneida | WTVLNYXA |
| NY | Onondaga | LYSNNYXA |
| NY | Orange | CRVLNYXA |
| NY | Orange | CKVLNYXA |
| NY | Orange | DNTNNYXA |
| NY | Orange | MDTWNYXA |
| NY | Orange | OTVLNYXA |
| NY | Orange | PTJRNXYA |
| NY | Orange | SCTWNYXA |
| NY | Orange | UVLONYXF |
| NY | Orange | SLHLNYXA |

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10. Competitive Counties for Special Access (Cont'd)

10.2 Competitive County Lists (Cont'd)

10.2.1 Rate Group 1 (Cont'd)

(A) The following wire centers in Rate Group 1 are in Competitive Counties: (Cont'd)

| | | |
|----|----------|----------|
| NY | Oswego | FHNCNYXA |
| NY | Oswego | HNBLNYXA |
| NY | Oswego | SNCKNYXA |
| NY | Oswego | PLSKNYXA |
| NY | Oswego | WLTWNYXA |
| NY | Otsego | GBVLNYXA |
| NY | Otsego | MRRSNYXA |
| NY | Otsego | UNADNYXA |
| NY | Saratoga | CRNTNYXA |
| NY | Schuyler | WAYNNYXA |
| NY | Steuben | GNWDNYXA |
| NY | Steuben | HMPTNYXA |
| NY | Steuben | JSPRNYXA |
| NY | Sullivan | BYVLNYXA |
| NY | Sullivan | BMBGNYXA |
| NY | Sullivan | NRBGNYXB |
| NY | Sullivan | ROSCNYXA |
| NY | Sullivan | WRBONYXA |
| NY | Tioga | APLCNYXA |
| NY | Tioga | BRKSNYXA |
| NY | Tioga | CNDRNYXA |
| NY | Tioga | LCWDNYXA |
| NY | Tioga | NWVYNYXA |
| NY | Tioga | SPNCNYXA |
| NY | Tompkins | SLSPNYXA |
| NY | Tompkins | DRYDNYXA |
| NY | Tompkins | ETNANYXA |
| NY | Warren | CHRTNYXA |
| NY | Warren | NRCKNYXA |
| NY | Warren | LZRNNYXA |
| NY | Yates | BNPTNYXA |
| NY | Yates | DUNDNYXA |

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10. Competitive Counties for Special Access (Cont'd)

10.2 Competitive County Lists (Cont'd)

10.2.1 Rate Group 1 (Cont'd)

(A) The following wire centers in Rate Group 1 are in Competitive Counties: (Cont'd)

| | | |
|----|-------------|----------|
| PA | Susquehanna | LTMDPAXL |
| PA | Susquehanna | QKLPAXQ |
| TN | Cumberland | CSVLTNXA |
| TN | Cumberland | PLHLTNXA |
| TN | Cumberland | TANSTNXA |
| TN | Putnam | ALGDTNXA |
| TN | Putnam | CKVLTNXA |
| TN | Putnam | MTRYTNXA |
| TN | Warren | MMVLTNXA |
| TN | Weakley | DRSDTNXA |
| TN | Weakley | LTHMTNXA |
| TN | Weakley | MARTTNXA |
| TN | Weakley | PLVLTNXA |
| TN | Weakley | SHRNTNXA |
| TN | Weakley | SIDNTNXA |
| UT | Millard | DELTUTXC |
| UT | Millard | FLMRUTXC |
| UT | Millard | HLDNUTXC |
| UT | Millard | KNSHUTXC |
| UT | Millard | LYNDUTXC |
| UT | Millard | MEDWUTXC |
| UT | Millard | OKCYUTXC |
| UT | Millard | SCIPUTXC |

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10. Competitive Counties for Special Access (Cont'd)

10.2 Competitive County Lists (Cont'd)

10.2.1 Rate Group 1 (Cont'd)

(A) The following wire centers in Rate Group 1 are in Competitive Counties: (Cont'd)

| | | |
|----|------------|----------|
| WI | Forest | ARGNWIXA |
| WI | Forest | CRNDWIXA |
| WI | Langlade | ELCHWIXA |
| WI | Oneida | CRLKWIXA |
| WI | Oneida | LKTMWIXA |
| WI | Oneida | PCLKWIXA |
| WI | Oneida | RHNLWIXA |
| WI | Rock | SGCPWIXA |
| | | |
| WV | Calhoun | ARBGWVXA |
| WV | Calhoun | GTVLWVXA |
| WV | Greenbrier | RPRTWVXA |
| WV | Harrison | SRDSWVXA |
| WV | Harrison | WLLCWVXA |
| WV | Marion | JOTWWVXA |
| WV | Marion | WOTNWVXA |
| WV | Mason | LTRTWVXA |
| WV | Mason | NWHNWVXA |
| WV | Mercer | ATHNWVXA |
| WV | Mercer | BLFDWVXA |
| WV | Mercer | BLWLWVXA |
| WV | Mercer | BRWLWVXA |
| WV | Mercer | MATKWVXA |
| WV | Mercer | OKVAWVXA |
| WV | Mercer | PRTNWVXA |
| WV | Nicholas | BRRWVXA |
| WV | Pleasants | BLMTWVXA |
| WV | Pleasants | STMYWVXA |
| WV | Preston | BRMLWVXA |
| WV | Preston | EGLNWVXA |

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10. Competitive Counties for Special Access (Cont'd)

10.2 Competitive County Lists (Cont'd)

10.2.1 Rate Group 1 (Cont'd)

(A) The following wire centers in Rate Group 1 are in Competitive Counties: (Cont'd)

| | | |
|----|----------|----------|
| WV | Randolph | THMSWVXA |
| WV | Roane | NWTNWVXA |
| WV | Wayne | DNLWWVXA |
| WV | Wayne | ELYNWVXA |
| WV | Wayne | WAYNWVXA |

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10. Competitive Counties for Special Access (Cont'd)

10.2 Competitive County Lists (Cont'd)

10.2.1 Rate Group 2

(A) The following wire centers in Rate Group 2 are in Competitive Counties:

| State | County | Wire Center |
|--------------|---------------|--------------------|
| AZ | Coconino | KABTAZXC |
| AZ | Coconino | LEPPAZXC |
| AZ | Coconino | TBCYAZXC |
| | San | |
| CA | Bernardino | NDLSCAXG |
| CA | Shasta | OKRNCAXF |
| CA | Shasta | SHTNCAXF |
| CA | Tuolumne | TLMNCAXF |
| NM | Rio Arriba | TRNSNMXC |

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10. Competitive Counties for Special Access (Cont'd)

10.2 Competitive County Lists (Cont'd)

10.2.2 Rate Group 2 (Cont'd)

(A) The following wire centers in Rate Group 2 are in Competitive Counties: (Cont'd)

(D)
(D)
(D)
(D)
(D)
(D)
(D)
(D)
(D)
(D)

| | | |
|----|----------|----------|
| TN | Grainger | RTLGTNXA |
| TN | Grainger | TTSPTNXA |
| TN | Grainger | WSBNTNXA |
| TN | Knox | CXTNTNXA |
| TN | Knox | POWLTNXA |

| | | |
|----|------------|----------|
| WV | Greenbrier | FRFRWVXA |
| WV | Monongalia | BLCVWVXA |
| WV | Monongalia | MTMRWVXA |
| WV | Monongalia | WDTWWVXA |
| WV | Preston | RDVLWVXA |
| WV | Randolph | MLCKWVXA |
| WV | Wetzel | HDRDWVXA |
| WV | Wetzel | REDRWVXA |
| WV | Wetzel | SMFDWVXA |

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10. Competitive Counties for Special Access (Cont'd)

10.2 Competitive County Lists (Cont'd)

10.2.3 Rate Group 3

(A) The following wire centers in Rate Group 3 are in Competitive Counties:

| State | County | Wire Center |
|--------------|---------------|--------------------|
| NY | Monroe | HLTNNYXA |
| NY | Monroe | NCHINYXA |
| NY | Monroe | SPPTNYXA |

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10. Competitive Counties for Special Access (Cont'd)

10.2 Competitive County Lists (Cont'd)

10.2.4 Rate Group 4

(A) The following wire centers in Rate Group 4 are in Competitive Counties:

| State | County | Wire Center |
|--------------|---------------|--------------------|
| IL | Bond | DNSNILXC |
| IL | Bond | MLGVILXE |
| IL | Bond | SRNTILXC |
| IL | Carroll | CHWKILXA |
| IL | Carroll | LNRKILXA |
| IL | Carroll | MDVLILXA |
| IL | Carroll | SHNNILXA |
| IL | Clinton | BTLSILXE |
| IL | Clinton | KYPTILXE |
| IL | Clinton | SHTCILXE |
| IL | Effingham | ALMTILXE |
| IL | Effingham | BCCYILXE |
| IL | Effingham | EDWDILXE |
| IL | Effingham | SHWYILXC |
| IL | Effingham | TTPLILXD |
| IL | Effingham | WTSNILXC |
| IL | Henderson | BGVLILXD |
| IL | Henderson | GLPTILXD |
| IL | Henderson | OQWKILXD |
| IL | Henderson | STRNILXD |
| IL | Henry | ANPHILXD |
| IL | Henry | ANDVILXD |
| IL | Jefferson | INA ILXE |
| IL | Jefferson | WTVLILXE |
| IL | Jefferson | WDLWILXE |
| IL | Jersey | DOW ILXE |
| IL | Jersey | FLDNILXE |
| IL | Jersey | JRVLILXE |
| IL | Jo Daviess | EDBQILXS |
| IL | Knox | ABNGILXD |
| IL | Knox | RIO ILXD |

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10. Competitive Counties for Special Access (Cont'd)

10.2 Competitive County Lists (Cont'd)

10.2.4 Rate Group 4 (Cont'd)

(A) The following wire centers in Rate Group 4 are in Competitive Counties: (Cont'd)

| | | |
|----|-------------|----------|
| IL | Madison | NWDGILXC |
| IL | Marion | HFMNILXE |
| IL | Marion | PATKILXE |
| IL | Marion | SNDVILXE |
| IL | Menard | GNVWILXC |
| IL | Mercer | ALEDILXD |
| IL | Mercer | ALXSILXD |
| IL | Mercer | JOY ILXD |
| IL | Mercer | KTBGILXD |
| IL | Mercer | MTVLILXD |
| IL | Mercer | NBTNILXD |
| IL | Mercer | NHNDILXD |
| IL | Mercer | PRMPILXD |
| IL | Mercer | SETNILXD |
| IL | Mercer | SHRRILXD |
| IL | Rock Island | CRDVILXD |
| IL | Rock Island | ELIZILXD |
| IL | Rock Island | HMPNILXD |
| IL | Rock Island | HLDLILXD |
| IL | Rock Island | PTBYILXD |
| IL | Warren | KRWDILXD |
| IL | Warren | LTYRILXD |
| IL | Warren | MNMOILXD |
| IL | Warren | RSVLILXD |
| MN | Brown | CMFRMNXC |
| MN | Carlton | CRWLMNXC |
| MN | Carlton | KTRVMNXX |
| MN | Carlton | NCSNMNXN |
| MN | Carlton | WRGHMNXX |
| MN | Carver | MAYRMNXX |
| MN | Carver | NWGRMNXX |
| MN | Carver | WTTWMNXX |

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10. Competitive Counties for Special Access (Cont'd)

10.2 Competitive County Lists (Cont'd)

10.2.4 Rate Group 4 (Cont'd)

(A) The following wire centers in Rate Group 4 are in Competitive Counties: (Cont'd)

| | | |
|----|------------|----------|
| MN | Chisago | ALMLMNXA |
| MN | Chisago | LNSTMNXL |
| MN | Chisago | TYFLMNXT |
| MN | Chisago | WYNGMNXA |
| MN | Cottonwood | DLFTMNXD |
| MN | Cottonwood | MTLKMNXM |
| MN | Crow Wing | GRSNMNXG |
| MN | Dodge | CLMTMNXA |
| MN | Dodge | DDCTMNXD |
| MN | Dodge | HYFDMNXA |
| MN | Dodge | WCNCMNXW |
| MN | Fillmore | CHGVMNXC |
| MN | Fillmore | FONTMNXF |
| MN | Freeborn | ALDNMNXB |
| MN | Freeborn | CLGVMNXC |
| MN | Freeborn | HODLMNXH |
| MN | Goodhue | CNFLMNXC |
| MN | Goodhue | KNYNMNXA |
| MN | Goodhue | WNMNMNXW |
| MN | Grant | HRMNMNXA |
| MN | Hennepin | MPPLMNXM |
| MN | Hennepin | STBNMNXS |
| MN | Itasca | WARBMNXA |
| MN | Kandiyohi | ATWRMNXA |
| MN | Kandiyohi | KDYHMNXA |
| MN | Kandiyohi | LKLLMNXL |
| MN | Kandiyohi | PRBGMNXP |
| MN | Kandiyohi | RYMNMNXA |
| MN | Kandiyohi | SVEAMNXS |
| MN | Kittson | HLCKMNXH |
| MN | Kittson | KNDYMNXA |

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10. Competitive Counties for Special Access (Cont'd)

10.2 Competitive County Lists (Cont'd)

10.2.4 Rate Group 4 (Cont'd)

(A) The following wire centers in Rate Group 4 are in Competitive Counties: (Cont'd)

| | | |
|----|---------------|----------|
| MN | Koochiching | BGFSMNXB |
| MN | Koochiching | ERBGMNXE |
| MN | Koochiching | INFLMNXI |
| MN | Koochiching | KBTGMNXN |
| MN | Koochiching | LTFKMNXL |
| MN | Koochiching | RANRMNXR |
| MN | Lac qui Parle | BOYDMNXB |
| MN | Lake | ISBLMNXI |
| MN | Lake | TWHRMNXA |
| MN | Lincoln | ARCOMNXA |
| MN | Lincoln | TYLRMNXT |
| MN | Lyon | CTWDMNXC |
| MN | Lyon | GHNTMNXG |
| MN | Lyon | LYNDMNXL |
| MN | Marshall | ALVDMNXA |
| MN | Marshall | ARGYMNXB |
| MN | Marshall | OSLOMNXO |
| MN | Marshall | STPHMNXS |
| MN | Marshall | WRRNMNXW |
| MN | Meeker | CSMSMNXC |
| MN | Mille Lacs | ISLEMNXI |
| MN | Mille Lacs | MILCMNXM |
| MN | Mille Lacs | ONAMMNXO |
| MN | Mille Lacs | PEASMNXP |
| MN | Mille Lacs | WHKNMNXW |
| MN | Mower | ADMSMNXB |
| MN | Mower | BWDLMNXB |
| MN | Mower | DXTRMNXA |
| MN | Mower | LERYMNXB |
| MN | Mower | LYLEMNXM |
| MN | Nobles | BGLWMNXB |

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10. Competitive Counties for Special Access (Cont'd)

10.2 Competitive County Lists (Cont'd)

10.2.4 Rate Group 4 (Cont'd)

(A) The following wire centers in Rate Group 4 are in Competitive Counties: (Cont'd)

| | | |
|----|------------|----------|
| MN | Olmsted | BYRNMNXB |
| MN | Pine | ASKVMNXA |
| MN | Pine | DNHMMNXD |
| MN | Pine | FNSNMNXF |
| MN | Pine | SGLKMNXS |
| MN | Pipestone | JSPRMNXJ |
| MN | Rock | HRWKMNXH |
| MN | Sherburne | CLLKMNXA |
| MN | St. Louis | ALBOMNXB |
| MN | St. Louis | AURRMNXA |
| MN | St. Louis | BBTTMNXB |
| MN | St. Louis | BRRVMNXB |
| MN | St. Louis | BRSNMNXB |
| MN | St. Louis | BKTNMNXB |
| MN | St. Louis | CNLKMNXB |
| MN | St. Louis | ELY MNXE |
| MN | St. Louis | EMBRMNXE |
| MN | St. Louis | FLWDMNXF |
| MN | St. Louis | HYLKMNXH |
| MN | St. Louis | MDLDMNXA |
| MN | St. Louis | PALOMNXP |
| MN | St. Louis | TOWRMNXA |
| MN | Stearns | BLGRMNXB |
| MN | Stearns | ELRSMNXE |
| MN | Steele | BLPRMNXB |
| MN | Steele | ELDLMNXA |
| MN | Traverse | WHTNMNXW |
| MN | Washington | SCNDMNXS |
| MN | Watonwan | BTFDMNXB |
| MN | Watonwan | ODINMNXO |
| MN | Wright | CLWRMNXC |
| MN | Wright | DELNMNXD |
| MN | Wright | MONDMNXA |

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10. Competitive Counties for Special Access (Cont'd)

10.2 Competitive and Non-Competitive County Lists (Cont'd)

10.2.4 Rate Group 4 (Cont'd)

(A) The following wire centers in Rate Group 4 are in Competitive Counties: (Cont'd)

| | | |
|----|----------|----------|
| | Yellow | |
| MN | Medicine | CLFDMNXC |
| | Yellow | |
| MN | Medicine | HNFLMNXH |
| | Yellow | |
| MN | Medicine | HZRNMNXA |
| | | |
| NE | Antelope | BRWKNEXH |
| NE | Antelope | NLGHNEXH |
| NE | Antelope | ORCHNEXG |
| NE | Boone | ALBNNEXG |
| NE | Buffalo | AMHRNEXG |
| NE | Buffalo | KRNYNEXG |
| NE | Buffalo | MLLRNEXG |
| NE | Buffalo | PLTNEXG |
| NE | Buffalo | RVDLNEXG |
| NE | Dawson | SMNRNEXH |
| NE | Franklin | BLTNEXG |
| NE | Franklin | FKLNNEXH |
| NE | Franklin | HLDRNEXG |
| NE | Franklin | NAPNNEXG |
| NE | Furnas | BVCYNEXH |
| NE | Furnas | EDSNEXH |
| NE | Furnas | WIVLNEXG |
| NE | Harlan | ALMANEXG |
| NE | Harlan | ORLNEXH |
| NE | Harlan | RPCYNEXG |
| NE | Harlan | SMFRNEAA |
| NE | Kearney | HRWLNEXH |
| NE | Phelps | BRTRNEXG |
| NE | Platte | CLMBNEXG |
| NE | Platte | DNCNNEXH |
| NE | Platte | LNSDNEXH |

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10. Competitive Counties for Special Access (Cont'd)

10.2 Competitive and Non-Competitive County Lists (Cont'd)

10.2.4 Rate Group 4 (Cont'd)

(A) The following wire centers in Rate Group 4 are in Competitive Counties: (Cont'd)

| | | |
|----|--------|----------|
| NE | Platte | MONRNEXH |
| NE | Platte | PLCTNEXG |
| NE | Valley | ORD NEXH |

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10. Competitive Counties for Special Access (Cont'd)10.2 Competitive County Lists (Cont'd)10.2.5 Rate Group 5

(A) The following wire centers in Rate Group 5 are in Competitive Counties:

| State | County | Wire Center |
|--------------|---------------|--------------------|
| CA | Alameda | SNATCAXF |
| CA | Merced | LVTNCAXF |
| CA | Stanislaus | PASNCAXF |
| CA | Yolo | GUNDCAXG |

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11. Interface Groups, Transmission Specifications and Channel Code

11.1 Reserved

11.2 Reserved

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11. Interface Groups, Transmission Specifications and Channel Code (Cont'd)11.3 Special Access Channel Interface and Network Channel Codes

This section explains the Channel Interface codes and Network Channel codes that the customer must specify when ordering Special Access Service. Included is an example which explains the specific characters of the code, a glossary of Channel Interface codes, impedance levels, Network Channel codes and compatible Channel Interfaces.

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

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

11.3.1 Glossary of Channel Interface Codes and Options

| <u>Code</u> | <u>Option</u> | <u>Definition</u> |
|-------------|---------------|--|
| AB - | | Accepts 20 Hz ringing signal at customer's point of termination |
| AC - | | Accepts 20 Hz ringing signal at customer's end user's point of termination |
| AH - | | Analog high capacity interface |
| - | B | 60 kHz to 108 kHz (12 Channels) |
| - | C | 312 kHz to 552 kHz (60 channels) |
| - | D | 564 kHz to 3084 kHz (600 channels) |
| CT - | | Centrex Tie Trunk Termination |
| DA - | | Data stream in VF frequency band at customer's end user's point of termination |

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11. Interface Groups, Transmission Specifications and Channel Code (Cont'd)11.3 Special Access Channel Interface and Network Channel Codes (Cont'd)11.3.1 Glossary of Channel Interface Codes and Options (Cont'd)

| <u>Code</u> | <u>Option</u> | <u>Definition</u> |
|-------------|---------------|---|
| DB - | | Data stream in VF frequency band at customer's point of termination |
| - | 10 | VF for TG1 and TG2 |
| - | 43 | VF for 43 Telegraph Carrier type signals, TG1 and TG2 DC - direct current or voltage |
| - | 1 | Monitoring interface with series RC combination (McCulloch format) |
| - | 2 | Telephone Company energized alarm channel |
| - | 3 | Metallic facilities (DC continuity) for direct current/low frequency control signals or slow speed data (30 baud) |
| DD - | | DATAPHONE Select-A-Station (and TABS) interface at customer's point of termination |
| DE - | | DATAPHONE Select-A-Station (and TABS) interface at the customer's end user's point of termination |
| DS - | | Digital hierarchy interface |
| - | 15 | 1.544 Mbps (DS1) format per PUB 41451 plus D4 |
| - | 15E | 8-bit PCM encoded in one 64 kbps of the DS1 signal |
| - | 15F | 8-bit PCM encoded in two 64 kbps of the DS1 signal |
| - | 15G | 8-bit PCM encoded in three 64 kbps of the DS1 signal |
| - | 15H | 14/11-bit PCM encoded in six 64 kbps of the DS1 signal |
| - | 15J | 1.544 Mbps format per PUB 41451 |
| - | 15K | 1.544 Mbps format per PUB 41451 plus extended framing format |
| - | 15L | 1.544 Mbps (DS1) with SF signaling |
| - | 27 | 274.176 Mbps (DS4) |
| - | 27L | 274.176 Mbps (DS4) with SF signaling |
| - | 31 | 3.152 Mbps (DS1C) |
| - | 31L | 3.152 Mbps (DS1C) with SF signaling |
| - | 44 | 44.736 Mbps (DS3) |
| - | 44L | 44.736 Mbps (DS3) with SF signaling |
| - | 63 | 6.312 Mbps (DS2) |
| - | 63L | 6.312 Mbps (DS2) with SF signaling |

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11. Interface Groups, Transmission Specifications and Channel Code (Cont'd)

11.3 Special Access Channel Interface and Network Channel Codes (Cont'd)

11.3.1 Glossary of Channel Interface Codes and Options (Cont'd)

| <u>Code</u> | <u>Option</u> | <u>Definition</u> |
|-------------|---------------|---|
| DU - | | Digital access interface |
| - | 19 | 19.2 kbps |
| - | 24 | 2.4 kbps |
| - | 48 | 4.8 kbps |
| - | 56 | 56.0 kbps |
| - | 64 | 64 kbps |
| - | 96 | 9.6 kbps |
| - | A | 1.544 Mbps format per PUB 41451 |
| - | B | 1.544 Mbps format per PUB 41451 plus D4 |
| - | C | 1.544 Mbps format per PUB 41451 plus extended framing format |
| DX - | | Duplex signaling interface at customer's point of termination |
| DY - | | Duplex signaling interface at customer's end user's point of termination |
| EA - | E | Type I E&M Lead Signaling. Customer at POT or customer's end user at POT originates on E Lead. |
| EA - | M | Type I E&M Lead Signaling. Customer at POT or customer's end user at POT originates on M Lead. |
| EB - | E | Type II E&M Lead Signaling. Customer at POT or customer's end user at POT originates on E Lead. |
| EB - | M | Type II E&M Lead Signaling. Customer at POT or customer's end user at POT originates on M Lead. |
| EC - | | Type III E&M signaling at customer POT |

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11. Interface Groups, Transmission Specifications and Channel Code (Cont'd)11.3 Special Access Channel Interface and Network Channel Codes (Cont'd)11.3.1 Glossary of Channel Interface Codes and Options (Cont'd)

| <u>Code</u> | <u>Option</u> | <u>Definition</u> |
|-------------|---------------|---|
| EX - | A | Tandem channel unit signaling for loop start or ground start and customer supplies open end (dial tone, etc.) functions. |
| EX - | B | Tandem channel unit signaling for loop start or ground start and customer supplies closed end (dial pulsing, etc.) functions. |
| GO - | | Ground start loop signaling - open end function by customer or customer's end user. |
| GS - | | Ground start loop signaling - closed end function by customer or customer's end user. |
| IA - | | E.I.A. (25 pin RS-232) |
| LA - | | End user loop start loop signaling - Type A OPS registered port open end |
| LB - | | End user loop start loop signaling - Type B OPS registered port open end |
| LC - | | End user loop start loop signaling - Type C OPS registered port open end |
| LO - | | Loop start loop signaling - open end function by customer or customer's end user |
| LR - | | 20 Hz automatic ringdown interface at customer with Telephone Company provided PLAR |
| LS - | | Loop start loop signaling - closed end function by customer or customer's end user |
| NO - | | No signaling interface, transmission only |
| PG - | | Program transmission - no dc signaling |
| - | 1 | Nominal frequency from 50 to 15000 Hz |
| - | 3 | Nominal frequency from 200 to 3500 Hz |
| - | 5 | Nominal frequency from 100 to 5000 Hz |
| - | 8 | Nominal frequency from 50 to 8000 Hz |

ACCESS SERVICE

11. Interface Groups, Transmission Specifications and Channel Code (Cont'd)

11.3 Special Access Channel Interface and Network Channel Codes (Cont'd)

11.3.1 Glossary of Channel Interface Codes and Options (Cont'd)

| <u>Code</u> | <u>Option</u> | <u>Definition</u> |
|-------------|---------------|---|
| PR - | | Protective relaying* |
| RV - | 0 | Reverse battery signaling, one way operation, originate by customer |
| | T | Reverse battery signaling, one way operation, terminate function by customer or customer's end user |
| SF - | | Signal frequency signaling with VF band at either customer POT or customer's end user POT. |
| TF - | | Telephotograph interface |
| TT - | | Telegraph/Teletypewriter interface at either customer POT or customer's end user POT |
| | 2 | 20.0 milliamperes |
| | 3 | 3.0 milliamperes |
| | 6 | 62.5 milliamperes |
| TV - | | Television interface |
| | 1 | Combined (duplexed) video and one audio signal |
| | 2 | Combined (duplexed) video and two audio signals |
| | 5 | Video plus one (or two) audio 5 kHz signal(s) or one (or two) two-wire. |
| | 15 | Video plus one (or two) audio 15 kHz signal(s) |
| WA - | | Wideband bandwidth interface at customer's end user POT |
| | 1 | Limited bandwidth |
| | 2 | Nominal passband from 29000 to 44000 Hz |

* Available only for the transmission of audio tone protective relaying signals used in the protection of electric power systems during fault conditions.

ACCESS SERVICE

11. Interface Groups, Transmission Specifications and Channel Code (Cont'd)

11.3 Special Access Channel Interface and Network Channel Codes (Cont'd)

11.3.1 Glossary of Channel Interface Codes and Options (Cont'd)

| <u>Code</u> | <u>Option</u> | <u>Definition</u> |
|-------------|---------------|--|
| WB - | | Wideband data interface at customer POT |
| - | 18S | 18.75 kbps, synchronous |
| - | 19A | Up to 19.2 kbps asynchronous |
| - | 19S | 19.2 kbps synchronous |
| - | 23A | Up to 230.4 kbps, asynchronous |
| - | 23S | 230.4 kbps, synchronous |
| - | 40S | 40.8 kbps, synchronous |
| - | 50A | Up to 50.0 kbps, asynchronous |
| - | 50S | 50.0 kbps synchronous |
| WC - | | Wideband data interface at customer's end user |
| - | 18 | POT 18.75 kbps, synchronous |
| - | 19 | For 12-wire interface: 19.2 kbps, synchronous for 10-wire interface: up to 19.2 kbps |
| - | 23 | Asynchronous up to 230.4 kbps, asynchronous |
| - | 23S | 230.4 kbps, synchronous |
| - | 40 | 40.8 kbps, synchronous |
| - | 50 | For 12-wire interface: 50.0 kbps, synchronous for 10-wire interface: up to 50.0 kbps |
| WD - | | Asynchronous wideband bandwidth interface at customer POT |
| - | 1 | Nominal passband from 300 to 18000 Hz |
| - | 2 | Nominal passband from 28000 to 44000 Hz |
| - | 3 | Nominal passband from 29000 to 44000 Hz |

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11. Interface Groups, Transmission Specifications and Channel Code (Cont'd)

11.3 Special Access Channel Interface and Network Channel Codes (Cont'd)

11.3.2 Impedance

The nominal reference impedance with which the channel will be terminated for the purpose of evaluating transmission performance:

| <u>Value (ohms)</u> | <u>Code(s)</u> |
|---------------------|----------------|
| 110 | 0 |
| 150 | 1 |
| 600 | 2 |
| 900 | 3* |
| 135 | 5 |
| 75 | 6 |
| 124 | 7 |
| Variable | 8 |
| 100 | 9 |

11.3.3 Digital Hierarchy Channel Interface Codes

Customers selecting the multiplexed four-wire DSX-1 or higher facility interface option at the customer designated premises will be requested to provide subsequent system and channel assignment data. The various digital bit rates in the digital hierarchy employ the channel interface code 4DS8, 4DS9, 4DS0, or 4DS6 plus the speed options indicated below:

| <u>Interface Code and Speed Option</u> | <u>Nominal Bit Rate (Mbps)</u> | <u>Digital Hierarchy Level</u> |
|--|--------------------------------|--------------------------------|
| 4DS8-15 | 1.544 | DS1 |
| 4DS9-31 | 3.152 | DS1C |
| 4DS0-63 | 6.312 | DS2 |
| 4DS6-44 | 44.736 | DS3 |
| 4DS6-27 | 274.176 | DS4* |

* For those interface codes with a four-wire (4) transmission path at the customer designated POT, rather than a standard 900 ohm impedance the code (3) denotes a customer provided transmission equipment termination. Such terminations were provided to customers in accordance with the FCC Docket No. 20099 Settlement Agreement.

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11. Interface Groups, Transmission Specifications and Channel Code (Cont'd)

11.3 Special Access Channel Interface and Network Channel Codes (Cont'd)

11.3.4 Service Designator/Network Channel Code Conversion Table

The purpose of this table is to show the relationship between the service designator codes (e.g., VGC, MT2, etc.), and the network channel codes that are used for various administrative purposes.

| <u>Service Designator Code</u> | <u>Network Channel Code</u> |
|--------------------------------|-----------------------------|
| MTC | MQ |
| MT1 | NT |
| MT2 | NU |
| MT3 | NV |
| TGC | NQ |
| TG1 | NW |
| TG2 | NY |
| VGC | LQ |
| VG1 | LB |
| VG2 | LC |
| VG3 | LD |
| VG4 | LE |
| VG5 | LF |
| VG6 | LG |
| VG7 | LH |
| VG8 | LJ |
| VG9 | LK |
| VG10 | LN |
| VG11 | LP |
| VG12 | LR |
| APC | PQ |
| AP1 | PE |
| AP2 | PF |
| AP3 | PJ |
| AP4 | PK |
| TVC | TQ |
| TV1 | TV |
| TV2 | TW |

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11. Interface Groups, Transmission Specifications and Channel Code (Cont'd)

11.3 Special Access Channel Interface and Network Channel Codes (Cont'd)

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

| <u>Service Designator Code</u> | <u>Network Channel Code</u> |
|--------------------------------|-----------------------------|
| WA1 | WJ |
| WA1T | WQ |
| WA2 | WL |
| WA2A | WR |
| WA3 | WN |
| WA4 | WP |
| WD1 | WB |
| WD2 | WE |
| WD3 | WF |
| DA1 | XA |
| DA2 | XB |
| DA3 | XG |
| DA4 | XH |
| HC0 | HS |
| HC1 | HC |
| HC1C | HD |
| HC2 | HE |
| HC3 | HF |
| HC4 | HG |

11.3.5 Compatible Channel Interfaces

The following tables show the channel interface codes (CIs) which are compatible:

(A) Metallic

| <u>Compatible CIs</u> | | <u>Compatible CIs</u> | |
|-----------------------|--------|-----------------------|--------|
| 4AH5-B | 2DC8-1 | 4AH6-D | 2DC8-2 |
| 4AH5-B | 24C8-2 | 2DC8-1 | 2DC8-2 |
| 4AH6-C | 2DC8-1 | 2DC8-3 | 2DC8-3 |
| 4AH6-C | 2DC8-2 | 4DS9-* | 2DC8-1 |
| 4AH6-D | 2DC8-1 | 4DS9-* | 2DC8-2 |
| 4DS8-* | 2DC8-1 | 4DS8-* | 2DC8-2 |

* See 11.3 preceding for explanation.

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11. Interface Groups, Transmission Specifications and Channel Code (Cont'd)

11.3 Special Access Channel Interface and Network Channel Codes (Cont'd)

11.3.5 Compatible Channel Interfaces

(B) Voice Grade

| <u>Compatible CIs</u> | | <u>Compatible CIs</u> | | <u>Compatible CIs</u> | |
|-----------------------|------|-----------------------|--------|-----------------------|--------|
| 4AB2 | 4AB2 | | | | |
| 4AB2 | 4AC2 | 4AH5-B | 6DA2 | 4AH6-D | 2DY2 |
| 4AB3 | 4AC2 | 4AH5-B | 4DA2 | 4AH6-C | 9DY2 |
| 4AB2 | 2AC2 | 4AH5-B | 2DA2 | 4AHG-C | 9DY3 |
| 4AB3 | 2AC2 | | | 4AH6-C | 6DY2 |
| 2AB2 | 2AC2 | 4AH6- D | 4DE2 | 4AH6-C | 6DY3 |
| 2AB3 | 2AC2 | 4AH6-C | 4DE2 | 4AH6-C | 4DY2 |
| | | 4AH5-B | 4DE2 | 4AH6-C | 2DY2 |
| 4AB2 | 4SF2 | 4AH6-D | 2DE2 | 4AH5-B | 9DY2 |
| 4AB3 | 4SF2 | 4AH6-C | 2DE2 | 4AH5-B | 9DY3 |
| 4AH5-B | 2DE2 | 4AH5-B | 6DY2 | | |
| 4AH6-D | 4AC2 | | | 4AH5-B | 6DY3 |
| 4AH6-D | 2AC2 | 4AH6-D | 4DX3 | 4AH5-B | 4DY2 |
| 4AH6-C | 4AC2 | 4AH6-C | 4DX3 | 4AH5-B | 2DY2 |
| 4AH6-C | 2AC2 | 4AH5-B | 4DX3 | | |
| 4AH5-B | 4AC2 | 4AH6-D | 4DX2 | 4AH6-D | 9EA2 |
| 4AH5-B | 2AC2 | 4AH6-C | 4DX2 | 4AH6-D | 9EA3 |
| 4AH5-B | 4DX2 | 4AH6-D | 6EA2-E | | |
| 4AH6-D M | 2CT3 | | | 4AH6-D | 6EA2- |
| 4AH6-C M | 2CT3 | | | 4AH6-D | 4EA2-E |
| | | | | 4AH6-D | 4EA2- |
| 4AH5-B | 2CT3 | | | 4AH6-C | 9EA2 |
| 4AH6-D | 6DA2 | | | 4AJ7-C | 9EA3 |
| 4AH6-D | 4DA2 | 4AH6-D | 9DY2 | 4AH6-C | 6EA2-E |
| 4AH6-D | 2DA2 | 4AH6-D | 9DY3 | | |
| 4AH6-C | 6DA2 | 4AH6-D | 6DY2 | | |
| 4AH6-C | 4DA2 | 4AH6-D | 6DY3 | | |
| 4AH6-C | 2DA2 | 4AH6-D | 4DY2 | | |

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11. Interface Groups, Transmission Specifications and Channel Code (Cont'd)

11.3 Special Access Channel Interface and Network Channel Codes (Cont'd)

11.3.5 Compatible Channel Interfaces (Cont'd)

(B) Voice Grade (Cont'd)

| <u>Compatible CIs</u> | | <u>Compatible CIs</u> | | <u>Compatible CIs</u> | |
|-----------------------|--------|-----------------------|------|-----------------------|--------|
| 4AH6-C | 6EA2-M | 4AH6-D | 6GS2 | 4AH6-D | 2LO2 |
| 4AH6-C | 4EA2-E | 4AH6-D | 4GS2 | 4AH6-C | 2LO3 |
| 4AH6-C | 4EA2-M | 4AH6-D | 2GS3 | 4AH6-C | 2LO2 |
| 4AH5-B | 9EA2 | 4AH6-D | 2GS2 | 4AH5-B | 2LO3 |
| 4AH5-B | 9EA3 | 4AH6-C | 6GS2 | 4AH5-B | 2LO2 |
| 4AH5-B | 6EA2-E | 4AH6-C | 4GS2 | | |
| 4AH5-B | 6EA2-M | 4AH6-C | 2GS3 | 4AH6-B | 4LR2 |
| 4AH5-B | 4EA2-E | 4AH6-C | 2GS2 | 4AH6-D | 2LR2 |
| 4AH5-B | 4EA2-M | 4AH5-B | 6GS2 | 4AH6-C | 4LR2 |
| | | 4AH5-B | 4GS2 | 4AH6-C | 2LR2 |
| 4AH6-D | 8EB2-E | 4AH5-B | 2GS3 | 4AH5-B | 4LR2 |
| 4AH6-D | 8EB2-M | 4AH5-B | 2GS2 | 4AH5-B | 2LR2 |
| | | | | | |
| 4AH6-D | 6EB2-E | | | | |
| 4AH6-D | 6EB2-M | 4AH6-D | 2LA2 | 4AH6-D | 6LS2 |
| 4AH6-C | 8EB2-E | 4AH6-C | 2LA2 | 4AH6-D | 4LS2 |
| 4AH6-C | 8EB2-M | 4AH5-B | 2LA2 | 4AH6-D | 2LS2 |
| 4AH6-C | 6EB2-E | 4AH6-D | 2LS3 | | |
| 4AH6-C | 6EB2-M | 4AH6-D | 2LB2 | 4AH6-C | 6LS2 |
| 4AH5-B | 8EB2-E | 4AHG-C | 2LB2 | 4AH6-C | 4LS2 |
| 4AH5-B | 8EB2-M | 4AH5-B | 2LB2 | 4AH6-C | 2LS2 |
| 4AH5-B | 6EB2-E | 4AH6-C | 2LS3 | | |
| 4AH5-B | 6EB2-M | 4AH6-D | 2LC2 | 4AH5-B | 6LS2 |
| | | 4AH6-C | 2LC2 | 4AH5-B | 4LS2 |
| | | 4AH5-B | 2LC2 | 4AH5-B | 2LS2 |
| | | | | | |
| 4AH6-D | 2GO2 | | | | |
| 4AH6-D | 2GO3 | | | | |
| 4AH6-C | 2GO2 | | | | |
| 4AH6-C | 2GO2 | | | 4AH5-B | 2LS3 |
| 4AH5-B | 2GO2 | 4AH6-D | 2LO3 | | |
| 4AH5-B | 2GO3 | | | | |
| 4AH6-D | 4NO2 | 4AH6- D | 4TF2 | 2CT3 | 8EB2-E |

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11. Interface Groups, Transmission Specifications and Channel Code (Cont'd)

11.3 Special Access Channel Interface and Network Channel Codes (Cont'd)

11.3.5 Compatible Channel Interfaces (Cont'd)

(B) Voice Grade (Cont'd)

| <u>Compatible CIs</u> | | <u>Compatible CIs</u> | | <u>Compatible CIs</u> | |
|-----------------------|--------|-----------------------|--------|-----------------------|--------|
| 4AH6-D | 2NO2 | 4AJ7-D | 2TF2 | 2CT3 | 8EB2- |
| M | | | | | |
| 4AH6-C | 4NO2 | 4AH6-C | 4TF2 | | |
| 4AH6-C | 2NO2 | 4AH6-C | 2TF2 | 2CT3 | 6482-E |
| 4AH5-B | 4NO2 | 4AH5-B | 4TF2 | 2CT3 | 6EB2- |
| M | | | | | |
| 4AH5-B | 2NO2 | 4AH5-B | 2TF2 | | |
| | | | | 2CT3 6 | EB3-E |
| | | 2CT3 | 4DS9-* | | |
| | | | | 2CT3 | 8EC2 |
| | | 2CT3 | 6DX2 | | |
| | | 2CT3 | 4DX2 | 2CT3 | 4SF2 |
| | | 2CTS | 4DX3 | 2CT3 | 4SF3 |
| 4AH6-D | 4PR2 | 2CT3 | 9DY3 | 6DA2 | 6DA2 |
| 4AH6-D | 2PR2 | 2CT3 | 6DY3 | 6DA2 | 4DA2 |
| 4AH6-C | 4PR2 | 2CT3 | 9DT2 | 4DA2 | 4DA2 |
| 4AH6-C | 2PR2 | 2CT3 | 6DY2 | | |
| 4AH5-B | 4PR2 | 2CT3 | 4DY3 | 4DB2 | 6DA2 |
| 4AH5-B | 2PR2 | 2CT3 | 2DY2 | 4DB2 | 4DA2 |
| | | 4DB2 | 2DA2 | | |
| 4AH6-D | 4RV2-T | 2CT3 | 9EA3 | 2DB3 | 2DA2 |
| 4AH6-D | 2RV2-T | 2CT3 | 9EA2 | 2DB2 | 2DA2 |
| 4AH6-C | 4RV2-T | 2CT3 | 6EA2-E | 4DB2 | 4DB2 |
| 4AH6-C | 2RV2-T | 2CT3 | 6EA2-M | 4DB2 | 4NO2 |
| 4AH5-B | 4TV2-T | 2CT3 | 4EA2-E | 4DB2 | 2NO2 |
| 4AH5-B | 2RV2-T | 2CT3 | 4EA2-M | 2DB2 | 2NO2 |
| 4AH6-D | 4SF2 | | | 4DB2 | 4PR2 |
| 4AH6-C | 4SF2 | | | 4DB2 | 2PR2 |
| 2CT3 | 2DY2 | | | | |
| 2CT3 | 4DS8* | | | | |
| 2CT3 | 4DY2 | | | | |
| 2CT3 | 6EB2-E | | | | |
| 2CT3 | 9DY2 | | | | |
| 2CT3 | 6EB2-E | | | | |
| 2CT3 | 9DY2 | | | | |

* See 11.3 preceding for explanation.

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11. Interface Groups, Transmission Specifications and Channel Code (Cont'd)

11.3 Special Access Channel Interface and Network Channel Codes (Cont'd)

11.3.5 Compatible Channel Interfaces (Cont'd)

(B) Voice Grade (Cont'd)

| <u>Compatible CIs</u> | | <u>Compatible CIs</u> | | <u>Compatible CIs</u> | |
|-----------------------|--------|-----------------------|--------|-----------------------|------|
| 4AH5-B | 4SF2 | 2DB2 | 2PR2 | | |
| 4AH6-D | 4SF3 | | | | |
| 4AH6-C | 4SF3 | | | | |
| 4AH5-B | 4SF3 | | | | |
| 4DD3 | 4DE2 | 4DS8-* | 9DY3 | | |
| 4DD3 | 2DE2 | 4DS8-* | 9DY2 | | |
| | | 4DS8-* | 6DY3 | | |
| 4DS8-* | 4AC2 | 4DS8-* | 6DY2 | | |
| 4DS8-* | 2AC2 | 4DS8-* | 4DY2 | | |
| | | 4DS8-* | 2DY2 | | |
| 4DS8-* | 6DA2 | | | | |
| 4DS8-* | 4DA2 | | | | |
| 4DS8-* | 2DA2 | 4DS8-* | 9EA2 | | |
| | | 4DS8-* | 9EA3 | | |
| 4DS8-* | 4DE2 | 4DS8-* | 6EA2-E | | |
| 4DS8-* | EDE2 | 4DS8-* | 6EA2-M | | |
| | | 4DS8-* | 4EA2-E | | |
| 4DS8-* | 4DX3 | | | | |
| 4DS8-* | 4DX2 | | | | |
| 4DS8-* | 8EB2-E | 4DS8-* | 4NO2 | 4DX3 | 9DY2 |
| 4DS8-* | 8EB2-M | 4DS8-* | 2NO2 | 4DX2 | 6DY3 |
| 4DS8-* | 6EB2-E | | | 4DX3 | 6DY3 |
| 4DS8-* | 6EB2-M | 4DS8-* | 4PR2 | 4DX2 | 6DY2 |
| | | 4DS8-* | 2PR2 | 4DX3 | 6DY2 |
| 4DS8-* | 2GO2 | 4DX2 | 4DY2 | | |
| 4DS8-* | 2GO3 | 4DS8-* | 4RV2-T | 4DX3 | 4DY2 |
| 4DS8-* | 6GS2 | 4DS8-* | 2RV2-T | 4DX2 | 2DY2 |
| 4DS8-* | 4GS2 | | | 4DX3 | 2DY2 |
| 4DS8-* | 2GS2 | 4DS8-* | 4SF2 | | |
| 4DS8-* | 2GS3 | 4DS8-* | 4SF3 | 6DX2 | 9EA3 |
| | | | | 6DX2 | 9EA2 |

* See 11.3 preceding for explanation.

ACCESS SERVICE

11. Interface Groups, Transmission Specifications and Channel Code (Cont'd)

11.3 Special Access Channel Interface and Network Channel Codes (Cont'd)

11.3.5 Compatible Channel Interfaces (Cont'd)

(B) Voice Grade (Cont'd)

| <u>Compatible CIs</u> | | <u>Compatible CIs</u> | | <u>Compatible CIs</u> | |
|-----------------------|--------|-----------------------|--------|-----------------------|--------|
| 4DS8-* | 2LA2 | 4DS8-* | 4TF2 | 6DX2 | 6EA2-E |
| M | | 4DS8-* | 2TF2 | 6DX2 | 6EA2- |
| 4DS8-* | 2LB2 | | | 6DX2 | 4EA2-E |
| M | | 4DX2 | 4DX2 | 6DX2 | 4EA2- |
| 8DS8-* | 2LC2 | 4DX3 | 4DX2 | 4DX2 | 9EA2 |
| | | 4DX3 | 4DX3 | 4DX3 | 9EA2 |
| 4DS8-* | 2LO2 | | | 4DX2 | 9EA3 |
| 4DS8-* | 2LO3 | 6DX2 | 9DY3 | 4DX3 | 9EA3 |
| | | | | | |
| | | 6DX2 | 9DY2 | 4DX2 | 6EA2-E |
| 4DS8-* | 4LR2 | 6DX2 | 6DY3 | 4DX3 | 6EA2-E |
| 4DS8-* | 2LR2 | 6DX2 | 6DY2 | 4DX2 | 6EA2- |
| M | | | | | |
| | | 6DX2 | 4DY2 | 4DX3 | 6EA2- |
| M | | | | | |
| 4DS8-* | 6LS2 | 6DX2 | 2DY2 | 4DX2 | 4EA2-E |
| 4DS8-* | 4LS2 | 4DX2 | 9DY3 | 4DX3 | 4EA2-E |
| 4DS8-* | 2LS2 | 4DX3 | 9DY3 | 4DX2 | 4EA2- |
| M | | | | | |
| 4DS8-* | 2LS3 | 4DX2 | 9DY2 | 4DX3 | 4EA2- |
| M | | | | | |
| 6DX2 | 8EB2-E | 4DX2 | 6LS2 | 9DY2 | 6DY3 |
| 6DX2 | 8EB2-M | 4DX3 | 6LS2 | 9DY3 | 4DY2 |
| 6DX2 | 6EB2-E | 4DX3 | 4LS2 | 9DY2 | 4DY2 |
| 6DX2 | 6EB2-M | 4DX2 | 4LS2 | 9DY2 | 2DY2 |
| 4DX2 | 8EB2-E | 4DX3 | 2LS3 | 9DY3 | 2DY2 |
| 4DX2 | 8EB2-M | 4DX2 | 2LS3 | 6DY3 | 6DY3 |
| 4DX3 | 8EB2-E | 4DX3 | 2LS2 | 6DY3 | 6DY2 |
| 4DX3 | 8EB2-M | 4DX2 | 2LS2 | 6DY2 | 6DY2 |
| 4DX2 | 6EB2-E | 2DX3 | 2LS2 | 6DY3 | 4DY2 |
| 4DX2 | 6EB2-M | 2DX3 | 2LS3 | 6DY3 | 2DY2 |
| 4DX3 | 6E82-E | | | 6DY2 | 4DY2 |
| 4DX3 | 6EB2-M | 4DX3 | 4RV2-T | 6DY2 | 2DY2 |
| | | 4DX2 | 4RV2-T | 4DY2 | 2DY2 |
| | | | | | |
| 4DX2 | 2LA2 | 4DX3 | 2RV2-T | 4DY2 | 4DY2 |
| 4DX3 | 2LA2 | 4DX2 | 2RV2-T | | |
| 2DX3 | 2LA2 | | | 6EA2-E | 4AC2 |
| | | 6DX2 | 4SF2 | 6EA2-M | 4AC2 |

* See 11.3 preceding for explanation.

ACCESS SERVICE

11. Interface Groups, Transmission Specifications and Channel Code (Cont'd)

11.3 Special Access Channel Interface and Network Channel Codes (Cont'd)

11.3.5 Compatible Channel Interfaces (Cont'd)

(B) Voice Grade (Cont'd)

| <u>Compatible CIs</u> | | <u>Compatible CIs</u> | | <u>Compatible CIs</u> | |
|-----------------------|------|-----------------------|--------|-----------------------|--------|
| 4DX2 | 2LB2 | 4DX2 | 4SF2 | 6EA2-E | 2AC2 |
| 4DX3 | 2LB2 | 4DX3 | 4SF2 | 6EA2-M | 2AC2 |
| 2DX3 | 2LB2 | 4DX2 | 4SF3 | | |
| | | 4DX3 | 4SF3 | 9EA2 | 9DY3 |
| | | | | | |
| 4DX2 | 2LC2 | | | 9EA2 | 9DY2 |
| 4DX3 | 2LC2 | 9DY3 | 9DY3 | 9EA2 | 6DY3 |
| 2DX3 | 2LC2 | 9DY3 | 9DY2 | 9EA2 | 6DY2 |
| | | 9DY2 | 9DY2 | 9EA2 | 4DY2 |
| 4DX2 | 2LO3 | 9DY3 | 6DY3 | 9EA2 | 2DY2 |
| 4DX3 | 2LO3 | 9DY3 | 6DY2 | 9EA3 | 9DY3 |
| 2DX3 | 2LO3 | 9DY2 | 6DY2 | | |
| 9EA3 | 9DY2 | 4EA2-M | 9DY2 | 4EA3-E | 9EA2 |
| 9EA3 | 6DY3 | 4EA2-M | 6DY3 | 4EA3-E | 9EA3 |
| 9EA3 | 6DY2 | 4EA2-M | 6DY2 | 4EA2-M | 4EA2- |
| M | | | | | |
| 9EA3 | 4DY2 | 4EA2-M | 4DY2 | | |
| 9EA3 | 2DY2 | 4EA2-M | 2DY2 | 9EA2 | 8EB2-E |
| | | | | | |
| 6EA2-E | 9DY3 | | | 9EA2 | 8EB2- |
| M | | | | | |
| 6EA2-E | 9DY2 | 9EA2 | 9EA2 | 9EA2 | 6EB2-E |
| 6EA2-E | 6DY3 | 9EA2 | 9EA3 | 9EA2 | 6EB2- |
| M | | | | | |
| 6EA2-E | 6DY2 | 9EA2 | 6EA2-E | 9EA3 | 8EB2-E |
| 6EA2-E | 4DY2 | 9EA2 | 6EA2-M | 9EA3 | 8EB2-M |
| 6EA2-E | 2DY2 | 9EA2 | 4EA2-E | 9EA3 | 6EB2-E |
| 6EA2-M | 9DY3 | 9EA2 | 4EA2-M | 9EA3 | 6EB2- |
| M | | | | | |
| 6EA2-M | 9DY2 | 9EA3 | 9EA3 | 6EA2-E | 8EB2-E |
| 6EA2-M | 6DY3 | 9EA3 | 6EA2-E | 6EA2-E | 8EB2- |
| M | | | | | |
| 6EA2-M | 6DY2 | 9EA3 | 6EA2-M | 6EA2-E | 6EB2-E |
| 6EA2-M | 4DY2 | 9EA3 | 4EA2-E | 6EA2-E | 6EB2- |
| M | | | | | |
| 6EA2-M | 2DY2 | 9EA3 | 4EA2-M | 6EA2-M | 8EB2-E |
| 4EA2-E | 9DY3 | 6EA2-E | 6EA2-E | 6EA2-M | 8EB2-M |
| 4EA2-E | 9DY2 | 6EA2-E | 6EA2-M | 6EA2-M | 6EB2-E |

ACCESS SERVICE

11. Interface Groups, Transmission Specifications and Channel Code (Cont'd)

11.3 Special Access Channel Interface and Network Channel Codes (Cont'd)

11.3.5 Compatible Channel Interfaces (Cont'd)

(B) Voice Grade (Cont'd)

| <u>Compatible CIs</u> | | <u>Compatible CIs</u> | | <u>Compatible CIs</u> | |
|-----------------------|--------|-----------------------|--------|-----------------------|--------|
| 4EA3-E | 9DY3 | 6EA2-M | 6EA2-M | 6EA2-M | 6EB2-M |
| 4EA3-E | 9DY2 | 6EA2-E | 4EA2-E | 4EA2-E | 8EB2-E |
| 4EA3-E | 6DY3 | 6EA2-E | 4EA2-M | 4EA2-E | 8EB2-M |
| 4EA3-E | 6DY2 | 6EA2-M | 4EA2-E | 4EA3-E | 8EB2-E |
| 4EA3-E | 4DY2 | 6EA2-M | 4EA2-M | 4EA3-E | 8EB2-M |
| 4EA3-E | 2DY2 | 4EA2-E | 4EA2-E | 4EA2-E | 6EB2-E |
| 4EA2-E | 6DY3 | 4EA3-E | 6EA2-E | 4EA2-E | 6EB2-M |
| 4EA2-E | 6DY2 | 4EA3-E | 6EA2-M | 4EA3-E | 6EB2-E |
| 4EA2-E | 4DY2 | 4EA3-E | 4EA2-E | 4EA3-E | 6EB2-M |
| 4EA2-E | 2DY2 | 4EA3-E | 4EA2-M | 4EA2-M | 8EB2-E |
| 4EA2-M | 9DY3 | 4EA2-E | 4EA2-M | | |
| 4EA2-M | 8EB2-M | 9EA3 | 43F2 | 6EB3-E | 9DY2 |
| 4EA2-M | 6EB2-E | 9EA2 | 4SF2 | 6EB3-E | 9DY3 |
| 4EA2-M | 6EB2-M | 6EA2-E | 4SF3 | 6EB2-E | 6DY2 |
| | | 6EA2-M | 4SF3 | 6EB3-E | 6DY2 |
| 6EA2-E | 2LA2 | 6EA2-E | 4SF2 | 6EB2-E | 6DY3 |
| 6EA2-M | 2LA2 | 6EA2-M | 4SF2 | 6EB3-E | 6DY3 |
| | | 4EA3-E | 4SF2 | 6EB2-E | 4DY2 |
| 6EA2-E | 2LB2 | 4EA2-E | 4SF2 | 6EB3-E | 2DY2 |
| 6EA2-M | 2LB2 | 4EA2-M | 4SF2 | 6EB3-E | 4DY2 |
| | | | | 6EB2-M | 9DY2 |
| 6EA2-E | 2LC2 | 8EB2-E | 4AC2 | 6EB2-M | 9DY3 |
| 6EA2-M | 2LC2 | 8EB2-M | 4AC2 | 6EB2-M | 6DY2 |
| | | 8EB2-E | 2AC2 | 6EB2-M | 6DY3 |
| 6EA2-E | 2LO3 | 8EB2-M | 2AC2 | 6EB2-M | 4DY2 |
| 6EA2-M | 2LO3 | | | 6EB2-E | 2DY2 |
| | | 8EB2-E | 9DY3 | 6EB2-M | 2DY2 |
| 6EA2-E | 6LS2 | 8EB2-E | 9DY2 | | |
| 6EA2-M | 6LS2 | 8EB2-E | 6DY3 | 6EB3-E | 9EA2 |
| 6EA2-E | 4LS2 | 8EB2-E | 6DY2 | 6EB3-E | 9EA3 |
| 6EA2-M | 4LS2 | 8EB2-E | 4DY2 | 6EB3-E | 6EA2-E |
| 6EA2-E | 2LS2 | 8EB2-E | 2DY2 | 6EB3-E | 6EA2-M |
| 6EA2-M | 2LS2 | 8EB2-M | 9DY3 | 6EB3-E | 4EA2-E |
| 6EA2-E | 2LS3 | 8EB2-M | 9DY2 | 6EB3-E | 4EA2- |
| M | | | | | |
| 6EA2-M | 2LS3 | 8EB2-M | 6DY3 | | |

ACCESS SERVICE

11. Interface Groups, Transmission Specifications and Channel Code (Cont'd)

11.3 Special Access Channel Interface and Network Channel Codes (Cont'd)

11.3.5 Compatible Channel Interfaces (Cont'd)

(B) Voice Grade (Cont'd)

| <u>Compatible CIs</u> | | <u>Compatible CIs</u> | | <u>Compatible CIs</u> | |
|-----------------------|--------|-----------------------|--------|-----------------------|--------|
| 6EA2-E | 4RV2-T | 8EB2-M | 6DY2 | 8EB2-E | 8EB2-E |
| M | | 8EB2-M | 4DY2 | 8EB2-E | 8EB2- |
| 6EA2-M | 4RV2-T | 8EB2-M | 2DY2 | 8EB2-M | 8EB2- |
| M | | | | | |
| 6EA2-E | 2RV2-T | 6EB2-E | 9DY2 | 8EB2-E | 6EB2-E |
| 6EA2-M | 2RV2-T | 6EB2-E | 9DY3 | 8EB2-E | 6EB2- |
| M | | | | | |
| 8EB2-M | 6EB2-E | 8EB2-E | 4RV2-T | 8EC2 | 8EB2- |
| M | | | | | |
| 8EB2-M | 6EB2-M | 8EB2-M | 4RV2-T | 8EC2 | 6EB2-E |
| 6EB2-E | 6EB2-E | 8EB2-E | 2RV2-T | 8EC2 | 6EB2- |
| M | | | | | |
| 6EB2-E | 6EB2-M | 8EB2-M | 2RV2-T | | |
| 6EB3-E | 8EB2-E | | | 8EC2 | 4SF2 |
| 6EB3-E | 8EB2-M | 8EB2-E | 4SF2 | 6EX2-B | 2GO3 |
| 6EB2-M | 6EB2-M | 8EB2-M | 4SF2 | 6EX2-A | 6GS2 |
| | | 8EB2-E | 4SF3 | 6EX2-A | 4GS2 |
| 8EB2-E | 2LA2 | 8EB2-M | 4SF3 | 6EX2-A | 2GS2 |
| 8EB2-M | 2LA2 | 6EB3-E | 4SF2 | 6EX2-A | 2GS3 |
| | | 6EB2-E | 4SF2 | | |
| 8EB2-E | 2LB2 | 6EB2-M | 4SF2 | 6EX2-B | 2LA2 |
| 8EB2-M | 2LB2 | | | | |
| | | 8EC2 | 9DY2 | 6EX2-B | 2LB2 |
| 8EB2-E | 2LC2 | 8EC2 | 9DY3 | | |
| 8EB2-M | 2LC2 | 8EC2 | 6DY2 | 6EX2-B | 2LC2 |
| | | | | | |
| | | 8EC2 | 6DY3 | | |
| 8EB2-E | 2LO3 | 8EC2 | 4DY2 | 6EX2-B | 2LO2 |
| 8EB2-M | 2LO3 | 8EC2 | 2DY2 | 6EX2-B | 2LO3 |
| 8EB2-E | 6LS2 | 8EC2 | 9EA2 | 6EX2-B | 4LR2 |
| 8EB2-M | 6LS2 | 8EC2 | 9EA3 | 6EX2-B | 2LR2 |
| 8EB2-E | 4LS2 | 8EC2 | 6EA2-E | | |
| 8EB2-M | 4LS2 | 8EC2 | 6EA2-M | 6EX2-A | 6LS2 |
| 8EB2-E | 2LS2 | 8EC2 | 4EA2-E | 6EX2-A | 4LS2 |
| 8EB2-M | 2LS2 | 8EC2 | 4EA2-M | 6EX2-A | 2LS2 |
| 8EB2-E | 2LS3 | | | 6EX2-A | 2LS3 |
| 8EB2-M | 2LS3 | 8EC2 | 8EB2-E | | |

ACCESS SERVICE

11. Interface Groups, Transmission Specifications and Channel Code (Cont'd)

11.3 Special Access Channel Interface and Network Channel Codes (Cont'd)

11.3.5 Compatible Channel Interfaces (Cont'd)

(B) Voice Grade (Cont'd)

| <u>Compatible CIs</u> | | <u>Compatible CIs</u> | | <u>Compatible CIs</u> | |
|-----------------------|------|-----------------------|------|-----------------------|------|
| 6EX2-A | 4SF2 | 6LO2 | 6LS2 | 4LR2 | 4SF2 |
| 6EX2-B | 4SF2 | 6LO2 | 4LS2 | 4LR3 | 4SF2 |
| | | 6LO2 | 2LS2 | | |
| 6GO2 | 6GS2 | 6LO2 | 2LS3 | 6LS2 | 2LA2 |
| 6GO2 | 4GS2 | 4LO2 | 6LS2 | 4LS2 | 2LA2 |
| 6GO2 | 2GS2 | 4LO2 | 4LS2 | 4LS3 | 2LA2 |
| 6GO2 | 2GS3 | 4LO3 | 6LS2 | 2LS2 | 2LA2 |
| 4GO2 | 6GS2 | 4LO3 | 4LS2 | 2LS3 | 2LA2 |
| 4GO3 | 6GS2 | 4LO3 | 2LS3 | | |
| 4GO2 | 4GS2 | 4LO3 | 2LS2 | 6LS2 | 2LB2 |
| 4GO3 | 4GS2 | 4LO2 | 2LS2 | 4LS2 | 2LB2 |
| 4GO2 | 2GS2 | 4LO2 | 2LS3 | 4LS3 | 2LB2 |
| 4GO2 | 2GS3 | 2LO3 | 2LS3 | 2LS2 | 2LB2 |
| 4GO3 | 2GS2 | 2LO3 | 2LS2 | 2LS3 | 2LB2 |
| 4GO3 | 2GS3 | 2LO2 | 2LS2 | | |
| 2GO2 | 2GS2 | 2LO2 | 2LS3 | 6LS2 | 2LC2 |
| 2GO3 | 2GS2 | | | 4LS2 | 2LC2 |
| 2GO2 | 2GS3 | 6LO2 | 4SF2 | 4LS3 | 2LC2 |
| 2GO3 | 2GS3 | 4LO2 | 4SF2 | 2LS2 | 2LC2 |
| | | 4LO3 | 4SF2 | 2LS3 | 2LC2 |
| 6GO2 | 4SF2 | | | | |
| 4GO2 | 4SF2 | 4LR2 | 4LR1 | 6LS2 | 2LO3 |
| 4GO3 | 4SF2 | 4LR3 | 2LR2 | 6LS2 | 2LO2 |
| | | 4LR2 | 4LR2 | 4LS2 | 2LO2 |
| 6GS2 | 2GO2 | 4LR2 | 2LR2 | 4LS2 | 2LO3 |
| 4GS2 | 2GO2 | 2LR2 | 2LR2 | 4LS3 | 2LO2 |
| 4GS3 | 2GO2 | 2LR3 | 2LR2 | 4LS3 | 2LO3 |
| 4GS2 | 2GO3 | | | | |

ACCESS SERVICE

11. Interface Groups, Transmission Specifications and Channel Code (Cont'd)

11.3 Special Access Channel Interface and Network Channel Codes (Cont'd)

11.3.5 Compatible Channel Interfaces (Cont'd)

(B) Voice Grade (Cont'd)

| <u>Compatible CIs</u> | | <u>Compatible CIs</u> | | <u>Compatible CIs</u> | |
|-----------------------|--------|-----------------------|--------|-----------------------|--------|
| 6LS2 | 4SF2 | 4SF3 | 9DY2 | 4SF3 | 2LA2 |
| 4LS3 | 4SF2 | 4SF2 | 9DY3 | | |
| | | 4SF3 | 6DY3 | 4SF2 | 2LB2 |
| 4NO2 | 6DA2 | | | 4SF3 | 2LB2 |
| 4NO2 | 4DA2 | 4SF2 | 6DY3 | | |
| 4NO2 | 2DA2 | 4SF3 | 6DY2 | 4SF2 | 2LC2 |
| 2NO2 | 2DA2 | 4SF2 | 4DY2 | 4SF3 | 2LC2 |
| | | 4SF3 | 4DY2 | | |
| 4NO2 | 4DE2 | 4SF3 | 2DY2 | 4SF2 | 2LO3 |
| 4NO2 | 2DE2 | 4SF2 | 2DY2 | 4SF3 | 2LO3 |
| 4NO2 | 4NO2 | 4SF3 | 9EA2 | 4SF2 | 2LR2 |
| 4NO2 | 2NO2 | 4SF3 | 9EA3 | 4SF3 | 4LR2 |
| 2NO2 | 2NO2 | 4SF3 | 4EA2-E | 4SF3 | 2LR2 |
| 2NO3 | 2NO2 | 4SF3 | 4EA2-M | | |
| | | | | 4SF3 | 6LS2 |
| 2NO3 | 2PR2 | 4SF3 | 6EB2-E | 4SF2 | 4LS2 |
| | | 4SF3 | 6EB2-M | 4SF3 | 4LS2 |
| 4RV2-0 | 4RV2-T | 4SF3 | 2GO3 | 4SF2 | 2LS2 |
| 4RV2-0 | 2RV2-T | 4SF3 | 6GS2 | 4SF2 | 2LS3 |
| | | 4SF2 | 6GS2 | 4SF3 | 2LS2 |
| | | | | 4SF3 | 2LS3 |
| 4RV2-0 | 4SF2 | 4SF3 | 4GS2 | | |
| | | 4SF2 | 2GS2 | 4SF3 | 4RV2-T |
| 4SF2 | 4AC2 | 4SF2 | 2GS3 | 4SF2 | 4RV2-T |
| 4SF2 | 2AC2 | 4SF3 | 2GS2 | 4SF2 | 2RV2-T |
| | | 4SF3 | 2GS3 | 4SF3 | 2RV2-T |
| 4SF3 | 9DY3 | | | | |

ACCESS SERVICE

11. Interface Groups, Transmission Specifications and Channel Code (Cont'd)

11.3 Special Access Channel Interface and Network Channel Codes (Cont'd)

11.3.5 Compatible Channel Interfaces (Cont'd)

(B) Voice Grade (Cont'd)

| <u>Compatible CIs</u> | | <u>Compatible CIs</u> | | <u>Compatible CIs</u> | |
|-----------------------|---------|-----------------------|------|-----------------------|------|
| 4SF2 | 9DY2 | 4SF2 | 2LA2 | 4SF3 | 4SF3 |
| 4SF3 | 4SF2 | | | | |
| 4SF2 | 4SF2 | | | | |
| 4TF2 | 4TF2 | | | | |
| 4TF2 | 2TF2 | | | | |
| 2TF3 | 2TF2 | | | | |
| 4AC2 | 2AC2 | | | | |
| 4AC2 | 4AC2 | | | | |
| 4DS8*- | 4EA2M | | | | |
| 4DS8*- | 4DG2 | | | | |
| 4DX3 | 6EB2-E | | | | |
| 4EA2-E | 8EABZ-E | | | | |
| 4EA3-E | 9EB2-M | | | | |
| 4G02 | 2G02 | | | | |
| 4G02 | 2G03 | | | | |
| 4G03 | 2G02 | | | | |
| 4GS | 2GS | | | | |
| 4GS | 2LS | | | | |
| 4GS | 4GS | | | | |
| 4GS | 4LS | | | | |
| 4SF2 | 6DY2 | | | | |
| 4LR3 | 4LR2 | | | | |
| 8G02 | 2G02 | | | | |

* See 11.3 preceding for explanation.

ACCESS SERVICE

11. Interface Groups, Transmission Specifications and Channel Code (Cont'd)

11.3 Special Access Channel Interface and Network Channel Codes (Cont'd)

11.3.5 Compatible Channel Interfaces (Cont'd)

(C) Program Audio

| <u>Compatible CIs</u> | | <u>Compatible CIs</u> | | <u>Compatible CIs</u> | |
|-----------------------|--------|-----------------------|--------|-----------------------|--------|
| 4AH5-B | 2PG1-3 | 4AH6-D | 2PG1-3 | 4DS8-15F | 2PG2-5 |
| 4AH5-B | 2PG1-5 | 4AH6-D | 2PG1-5 | 4DS8-15G | 2PG2-8 |
| 4AH5-B | 2PG1-8 | 4AH6-D | 2PG1-8 | 4DS8-15H | 2PG2-1 |
| 4AH5-B | 2PG2-3 | 4AH6-D | 2PG2-3 | 2PG2-1 | 2PG1-1 |
| 4AH5-B | 2PG2-5 | 4AH6-D | 2PG2-5 | 2PG2-1 | 2PG2-1 |
| 4AH5-B | 2PG2-8 | 4AH6-D | 2PG2-8 | 2PG2-3 | 2PGI-3 |
| 4AH6-C | 2PG1-3 | 4DS8-15E | 2PG1-3 | 2PG2-3 | 2PG2-3 |
| 4AH6-C | 2PG1-5 | 4DS8-15F | 2PG1-5 | 2PG2-5 | 2PG1-5 |
| 4AH6-C | 2PG1-8 | 4DS8-15G | 2PG1-8 | 2PG2-5 | 2PG2-5 |
| 4AH6-C | 2PG2-3 | 4DS8-15H | 2PG1-1 | 2PG2-8 | 2PG1-8 |
| 8AH6-C | 2PG2-5 | 4DS8-15E | 2PG2-3 | 2PG2-8 | 2PG2-8 |

(D) Video

| <u>Compatible CIs</u> | | <u>Compatible CIs</u> | |
|-----------------------|---------|-----------------------|---------|
| 2TV6-1 | 4TV6-15 | 4TV7-5 | 4TV6-5 |
| | 4TV7-15 | | 4TV7-5 |
| 2TV6-2 | 6TV6-15 | 4TV7-15 | 4TV6-15 |
| | 6TV7-15 | | 4TV7-15 |
| 2TV7-1 | 4TV6-15 | 6TV6-5 | 6TV6-5 |
| | 4TV7-15 | | 6TV7-5 |
| 2TV7-2 | 6TV6-15 | 6TV6-15 | 6TV6-15 |
| | 6TV7-15 | | 6TV7-15 |
| 4TV6-5 | 4TV6-5 | 6TV7-5 | 6TV6-5 |
| | 4TV7-5 | | 6TV7-5 |
| 4TV6-15 | 4TV6-15 | 6TV7-15 | 6TV6-15 |
| | 4TV7-15 | | 6TV7-15 |

ACCESS SERVICE

11. Interface Groups, Transmission Specifications and Channel Code (Cont'd)

11.3 Special Access Channel Interface and Network Channel Codes (Cont'd)

11.3.5 Compatible Channel Interfaces (Cont'd)

(E) Digital Data

| <u>Compatible CIs</u> | | <u>Compatible CIs</u> | | <u>Compatible CIs</u> | |
|-----------------------|----------|-----------------------|----------|-----------------------|---------|
| 4DS8-15 | 4DU8-15+ | 4DS8-15 | 6DU5-48 | 4DU5-96 | 4DU5-96 |
| 4DS8-15 | 4DU8-24 | 4DS8-15 | 6DU5-56 | 6DU5-24 | 6DU5-24 |
| 4DS8-15 | 4DU8-48 | 4DU5-24 | 4DU5-24 | 6DU5-48 | 6DU5-48 |
| 4DS8-15 | 4DU8-56 | 4DU5-48 | 4DU5-48 | 6DU5-56 | 6DU5-56 |
| 4DS8-15 | 6DU5-96 | 4DU8-56 | 4DU5-56 | 6DU5-96 | 6DU5-96 |
| 4DS8-15 | 6DU5-24 | 4DS9-15 | 4DU5-19 | 4DS6-44A | 4DU5-19 |
| 4DS9-15B | 4DU5-64X | 4DS6-44A | 4DU5-64X | | |

(D) High Capacity

| <u>Compatible CIs</u> | | <u>Compatible CIs</u> | |
|-----------------------|-------------|-----------------------|-------------|
| 4DSO-63 | 4DSO-63 | 4DS8-15 | 4DU8-8 |
| 4DSO-63 | 6DU8-A,BorC | 4DS8-15J | 6DU8-A |
| 4DSO-63 | 4DU8-A,BorC | 4DS8-15J | 4DU8-A |
| 4DS6-27 | 4DS6-27 | 4DS8-15K | 6DU8-B |
| 4DS6-27 | 6DU8-A,BorC | 4DS8-15K | 4DU8-B |
| 4DS6-27 | 4DU8-A,BorC | 4DS8-15K | 6DU8-C |
| 4DS6-44 | 4DS6-44 | 4DS8-15K | 4D78-C |
| 4DS6-44 | 6DU8-A,BorC | 4DS9-31 | 4DS9-31 |
| 4DS6-44 | 4DU8-A,BorC | 4DS9-31 | 6DU8-A,BorC |
| 4DS8-15 | 4DS8-15+ | 4DS9- | 4DU8-A,BorC |
| 4DS8-15 | 6DU8-B | 4DU9-A,BorC | 4DU8-A,BorC |
| 4DS6-44A | 4DU5-19 | 4DS9-15 | 4DU5-19 |
| 4DS6-44A | 4DU5-64 | 4DS9-15B | 4DU5-64 |
| 4DS8-15 | 4DU8-B | 4DU8-A,BorC | 4DU8-A,BorC |

+ Available only as a cross connect of two digital circuits at appropriate digital speeds at a Telephone Company hub.

ACCESS SERVICE

11. Interface Groups, Transmission Specifications and Channel Code (Cont'd)

11.4 Wats Access Line Standard Transmission Specifications

11.4.1 Standard Two-Wire Voice Transmission Specifications

(A) Loss Deviation

The maximum Loss Deviation of the 1004 Hz loss relative to the Expected Measured Loss (EML) is plus or minus 4.0 dB.

(B) Attenuation Distortion

The maximum Attenuation Distortion in the 404 to 2804 Hz frequency band relative to the loss at 1004 Hz is -3.0 dB to +9.0 dB.

(C) C-Message Noise

The maximum C-Message Noise for the transmission path at the route miles listed is less than:

| <u>Route Miles</u> | <u>C-Message Noise</u> |
|--------------------|------------------------|
| Less than 50 | 35 dBmCO |
| 51 to 100 | 37 dBmCO |
| 101 to 200 | 40 dBmCO |
| 201 to 400 | 43 dBmCO |
| 401 to 1000 | 45 dBmCO |

(D) Echo Control

Return Loss for both Echo Return Loss (ERL) and Singing Return Loss (SRL), is equal to or greater than:

| | |
|-----|--------|
| ERL | 6.0 dB |
| SRL | 3.0 dB |

ACCESS SERVICE

11. Interface Groups, Transmission Specifications and Channel Code (Cont'd)

11.4 Wats Access Line Standard Transmission Specifications (Cont'd)

11.4.2 Standard Four-Wire Voice Transmission Specifications

(A) Loss Deviation

The maximum Loss Deviation of the 1004 Hz loss relative to the Expected Measured Loss (EML) is -3.0 dB to +3.0 dB.

(B) Attenuation Distortion

The maximum Attenuation Distortion in the 404 to 2804 Hz frequency band relative to loss at 1004 Hz is -1.0 dB to +4.5 dB.

(C) C-Message Noise

The maximum C-Message Noise for the transmission path at the route miles listed is less than:

| <u>Route Miles</u> | <u>C-Message Noise</u> |
|--------------------|------------------------|
| Less than 50 | 35 dBmCO |
| 51 to 100 | 37 dBmCO |
| 101 to 200 | 40 dBmCO |
| 201 to 400 | 43 dBmCO |
| 401 to 1000 | 45 dBmCO |

(D) Echo Control

The Equal Level Echo Path Loss for both Echo Return Loss (ERL) and Singing Return Loss (SRL), is equal to or greater than:

| | |
|-----|---------|
| ERL | 15.0 dB |
| SRL | 9.0 dB |

ACCESS SERVICE

11. Interface Groups, Transmission Specifications and Channel Code (Cont'd)

11.5 Wats Access Line Data Transmission Parameters

11.5.1 Signal to C-Notched Noise Ratio

The maximum Signal-to-C-Notched Noise Ratio is 30 dB.

11.5.2 Envelope Delay Distortion

The maximum Envelope Delay Distortion for the frequency bands specified is:

| | | |
|------|--------------|----------------|
| 1000 | microseconds | 604 to 2804 Hz |
|------|--------------|----------------|

| | | |
|-----|--------------|-----------------|
| 500 | microseconds | 1000 to 2404 Hz |
|-----|--------------|-----------------|

11.5.3 Impulse Noise Counts

The Impulse Noise Counts exceeding a 67 dB_{rnCO} threshold in 15 minutes is no more than 15 counts.

(A) 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 |
|------------------|-------|

11.5.4 Phase Jitter

The Phase Jitter over the 4 to 300 Hz frequency band is less than or equal to 7 degrees peak-to-peak.

11.5.5 Frequency Shift

The maximum Frequency Shift does not exceed -2 to +2 Hz.

ACCESS SERVICE

11. Interface Groups, Transmission Specifications and Channel Code (Cont'd)

11.6 Wats Access Line Transmission Specifications

11.6.1 Improved Two-Wire Voice Transmission Specifications

(A) Loss Deviation

The maximum Loss Deviation of the 1004 Hz loss relative to the Expected Measured Loss (EML) is -4.0 to +4.0 dB.

(B) Attenuation Distortion

The maximum Attenuation Distortion in the 404 to 280 Hz frequency band relative to loss at 1004 Hz is -2.0 dB to +6.0 dB.

(C) C-Message Noise

The maximum C-Message Noise for the transmission path at the route miles listed is less than:

| <u>Route Miles</u> | <u>C-Message Noise</u> |
|--------------------|------------------------|
| Less than 50 | 35 dBmCO |
| 51 to 100 | 37 dBmCO |
| 101 to 200 | 40 dBmCO |
| 201 to 400 | 43 dBmCO |
| 401 to 1000 | 45 dBmCO |

(D) Return Loss

The Return Loss, expressed as Echo Return Loss (ERL) and Singing Return Loss (SRL), is equal to or greater than:

| | |
|-----|---------|
| ERL | 13.0 dB |
| SRL | 6.0 dB |

ACCESS SERVICE

12. Special Facilities Routing of Access Services

12.1 Description of Special Facilities Routing of Access Services

The services provided under this guide are provided over such routes and facilities as the Telephone Company may elect. Special Facilities Routing is involved when, in order to comply with requirements specified by the customer, the Telephone Company provides Switched Access Service, Special Access Service or Special Federal Government Access Service in a manner which includes one or more of the following conditions:

12.1.1 Diversity

Two or more services must be provided over not more than two different physical routes.

12.1.2 Avoidance

A service must be provided on a route which avoids specified geographical locations.

12.1.3 Cable-Only Facilities

Certain Voice Grade services are provided on Cable-Only Facilities to meet the particular needs of a customer.

Service is provided subject to the availability of Cable-Only Facilities. In the event of service failure, restoration will be made through the use of any available facilities as selected by the Telephone Company.

Avoidance and Diversity are available on Special Access Services as set forth in Section 7 preceding. Cable-Only

Facilities are available for Switched Access Service as set forth in Voice Grade Special Access Services as set forth in Section 7 preceding..

In order to avoid the compromise of special routing information, the Telephone Company will provide the required routing information for each specially routed service to only the ordering customer. If requested by the customer, this information will be provided when service is installed and prior to any subsequent changes in routing.

The rates and charges for Special Facilities Routing of Access Services as set forth in 12.2 following are in addition to all other rates and charges that may be applicable for services provided under other sections of this guide.

ACCESS SERVICE

12. Special Facilities Routing of Access Services (Cont'd)

12.2 Rates and Charges for Special Facilities Routing of Access Service

The rates and charges for Special Facilities Routing of Access Services are as follows:

12.2.1 Diversity

For each service provided in accordance with 12.1.1 preceding, the rates and charges will be developed on an individual case basis and filed following:

| <u>Customer Name</u> | <u>Description and Location</u> | <u>MTL/NRC MRC</u> | <u>Telephone Company</u> | <u>Termination Liability Period</u> |
|---------------------------------|--|---|--------------------------|--|
| Averette Express ID#TN02582I | Provide diverse routing between Averette Express, 518 Old Ky. Rd., Cookville, Tennessee and AT&T's CDP at 100 N. Willow Ave., Cookville, Tennessee | MTL: \$7,153.28 NRC: \$3,045.00 MRC: \$ 325.00 | CTC of Tennessee | 3 Yrs Beginning 6/29/92. Reduces 1/36 for each month in service |

12.2.2 Avoidance

For each service provided in accordance with 12.1.2 preceding, the rates and charges will be developed on an individual case basis.

12.2.3 Diversity and Avoidance Combined

For each service provided in accordance with 12.1.1 and 12.1.2 preceding, combined, the rates and charges will be developed on an individual case basis.

12.2.4 Cable-Only Facilities

For each service provided in accordance with 12.1.3 preceding, the rates and charges will be developed on an individual case basis.

ACCESS SERVICE

13. Reserved for future use

ACCESS SERVICE

14. Reserved for future use

ACCESS SERVICE

15. Packet Switching Network Service

15.1 General

This section contains the rules and regulations pertaining to the provision of Packet Switching Network Service.

15.2 Service Description

Packet Switching Network Service uses packet switching technology to provide a switched data transport service. This service uses analog and digital facilities to provide usage-sensitive data transport for a variety of interactive (or bursty) data applications between two or more customer designated premises (CDPs). The packet switch will be classified as a CDP.

Packet switching technology divides data streams into packets. The packet network examines, routes and transports packets individually without maintaining a physical path between bursts of data. This service is based on CCITT (Consultative Committee on International Telegraphy and Telephony) X.25 protocol and X.75 internetworking protocol. The X.25 and X.75 protocols are international standards developed by the CCITT that provide the foundation for Public Packet Switched Networks. Packet Switching Network Service and features are available where facilities and conditions permit.

ACCESS SERVICE

15. Packet Switching Network Service (Cont'd)

15.3 Service Provisioning

Customers may access the Packet Switching Network through an X.75 internetworking access.

Packet switching carriers with a Data Network Identification Code may interconnect to an access port on the Packet Switching Network with X.75 protocol at transmission speeds of 9.6 Kbps or 56 Kbps. Each X.75 access will require an X.75 Access Port charge, a DDS Special Access Line charge (9.6 Kbps or 56 Kbps), associated DDS Special Transport charges, and Special Access Ordering charges set forth in Section 7.

The Special Access Line and Special Transport charges provide analog or digital connections from the packet carrier's location to the access port on the Telephone Company's packet network. Shared use (ratcheting) to provision the access connection is not permitted.

The packet switching carrier must provide the Telephone Company with a Percent Interstate Usage (PIU) in the Main Remarks section of the ASR when service is initially ordered. This PIU will be used as the basis for prorating charges to the interstate and intrastate jurisdictions. The packet switching carrier may submit an updated PIU report in writing at any time following one full month's billing. The updated report will become effective on the first day of the next monthly billing period which begins at least 15 business days after the date the revised report is received by the Telephone Company.

Where the packet switching carrier's location is another telephone company's territory, the special access service connecting that location to the Telephone Company's packet network will be subject to the meet point billing requirements set forth in Section 2. All usage recorded at the Telephone Company's packet switch will be billed to the packet switching carrier by the Telephone Company.

ACCESS SERVICE

15. Packet Switching Network Service (Cont'd)

15.4 Rate Regulations

15.4.1 Minimum Period

The minimum service period is one month.

15.4.2. Rate Application

- (A) Usage will be rounded up to the nearest minute at the end of the billing period.
- (B) Fractional segments per transmission will be rounded up to the next segment.
- (C) The minimum billable unit for Kilosegments is one Kilosegment. Segments will be accumulated during the billing period and fractional Kilosegments will be billed as whole Kilosegments.
- (D) All usage will be billed at the rate schedule in effect when usage concurred. All usage will be treated as current for determination of volume discount application.
- (E) All call attempts and completions will be billable except where calls are blocked or terminated because of network failure or congestion.
- (F) Rates for usage of the packet network will apply in addition to the monthly recurring charges for X.75 access. Rates applicable for X.75 access include a monthly recurring rate and an installation charge per X.75 access port, and are specified under 15.6. A DDS Special Access Line charge (9.6 Kbps or 56 Kbps), associated with DDS Special Transport and Special Access Ordering charges from Section 7 will also apply.
- (G) The night/holiday rate will apply to the following holidays:

| | | |
|-----------------|------------------|------------------|
| New Year's Day | Independence Day | Thanksgiving Day |
| President's Day | Labor Day | Christmas Day |
| Memorial Day | Veteran's Day | |

ACCESS SERVICE

15. Packet Switching Network Service (Cont'd)

15.4 Rate Regulations (Cont'd)

15.4.3 Usage Plans

The customer must select either the Basic Plan, Transaction Plan, or the High Volume Plan.

(A) Basic Plan

Basic Plan rates include both a per minute of use charge and a charge per kilosegment transmitted.

Usage will be rated at the day rate (8:00 a.m. to 5:00 p.m.) for that portion of the call in effect during the day rate period and at the night/holiday rate (after 5:00 p.m. and before 8:00 a.m. and all day on holidays) for that portion of the call in effect during the night/holiday period. When a call begins in one rate period and ends in another, the rate in effect for each rate period applies to the portion of the message occurring within that rate period. Refer to 15.6.2(A) for rates.

(B) Transaction Plan

Usage rates for the Transaction Plan are charged per transaction. A maximum of 15 seconds is allowed for each billable transaction. Usage over 15 seconds will be charged an overtime rate in 15 second increments at the rate specified in 15.6.2(B).

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15. Packet Switching Network Service (Cont'd)15.4 Rate Regulations (Cont'd)15.4.3 Usage Plans (Cont'd)(C) High Volume Plan

High Volume rates include a per minute of use charge and a charge per kilosegment transmitted. Per minute of use charges will be rated at the day rate (8:00 a.m. to 5:00 p.m.) for that portion of the call in effect during the day rate period and at the night/holiday rate (after 5:00 p.m. and before 8:00 a.m. and all day on holidays) for that portion of the call in effect during the night/holiday period. When a call begins in one rate period and ends in another, the rate in effect for each rate period applies to the portion of the message occurring within that rate period.

In addition, incremental usage charges will apply based on the tapered schedule shown below. Day/night/holiday rates do not apply to the incremental usage charges.

Kilosegment
0001 - 2000
2001 - 4000
4001 - 6000
6001 and over

Example:

For a total of 5000 Kilosegments, the incremental usage rates would be applied as follows:

- 2000 Kilosegments billed at the rate specified per Kilosegment for 0001 - 2000 Kilosegments
- 2000 Kilosegments billed at the rate specified per Kilosegment for 2001 - 4000 Kilosegments
- 1000 Kilosegments billed at the rate specified per Kilosegment for 4001 - 6000 Kilosegments

Refer to 15.6.2(C) for rates.

ACCESS SERVICE

15. Packet Switching Network Service (Cont'd)15.5 Supplemental Features

15.5.1 Fast Select allows a sending data terminal to forward up to 128 bytes of data along with call setup and clearing packets. This feature is available to all customers and is initiated on a call-by-call basis.

15.5.2 Priority allows a customer to establish a "priority" status to the customer's data as it processes through the network. This feature is available to all customers and is initiated on a call-by-call basis.

15.6 Rates and Charges15.6.1 X.75 Access, Per Port

| | |
|------------|-----------------|
| Tennessee | Not applicable. |
| W Virginia | Not applicable. |

15.6.2 Usage Rates(A) Basic Plan

| | |
|------------|-----------------|
| Tennessee | Not applicable. |
| W Virginia | Not applicable. |

(B) Transaction Plan

| | |
|------------|-----------------|
| Tennessee | Not applicable. |
| W Virginia | Not applicable. |

(C) High Volume Plan

| | |
|------------|-----------------|
| Tennessee | Not applicable. |
| W Virginia | Not applicable. |

15.6.3 Supplemental Features

| | |
|------------|-----------------|
| Tennessee | Not applicable. |
| W Virginia | Not applicable. |

ACCESS SERVICE

16. Reserved for future use

ACCESS SERVICE

17. Advanced Data Applications**17.1 Frame Relay Service**

Frame Relay Service (FRS) is a medium to high-speed connection-oriented packet-switched data service that allows for the interconnection of Local Area Networks (LANs), or other compatible customer equipment across a wide area for the purpose of interstate access. FRS allows for the transfer of variable length frames (packets). Frames are relayed by virtual connections, i.e., frames travel a fixed path through the network although bandwidth is not dedicated to each virtual connection.

This service uses Permanent Virtual Connections (PVCs). A PVC is a logical channel from one Frame Relay port to another Frame Relay port. PVCs are end-to-end, bi-directional symmetric channels that are installed and disconnected via the service order process.

The Frame Relay standard specifies an address field called the Data Link Connection Identifier (DLCI). The DLCI specifies a connection (e.g., customer premises to LEC switch or LEC switch to inter-exchange carrier network). A PVC is comprised of two or more DLCI's.

This service is comprised of a User Network Interface (UNI) which, allows FRS compatible customer premises equipment (CPE) to originate or terminate intra- and inter-exchange services. All UNI access facilities must be in conformance with American National Standards Institute (ANSI) standards T1.606-1990, T1.606 Addendum 1-1991, T1.606a-1992, T1.617, Annex D-1992.

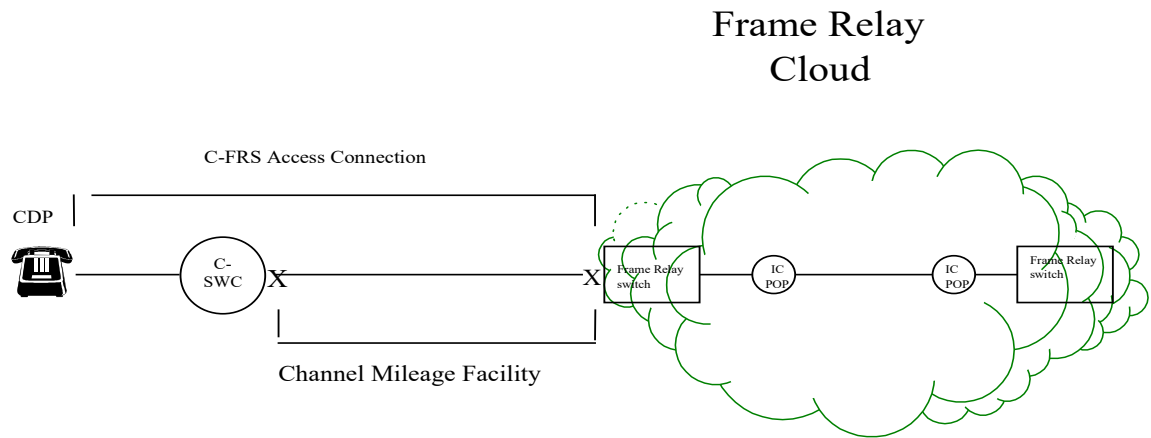
FRS provides high-speed throughput over digital facilities at speeds of 56 kbps, 64 kbps, 1.536 Mbps or 44.736 Mbps. Physical access to the Telephone Company's Frame Relay network is provided via a UNI Access Connection: 56 kbps DDS, 64 kbps DDS, DS1, or DS-3 rated channel termination from Section 20 of this guide. FRS is generally available and is ordered through the access service order process. The Access Order Service Date Interval for FRS is negotiated.

ACCESS SERVICE

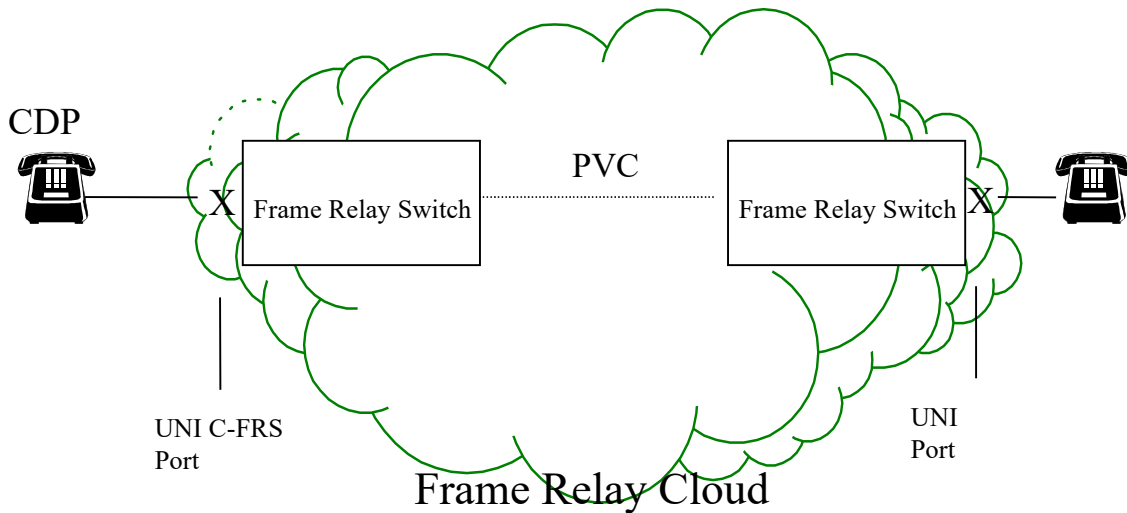
17. Advanced Data Applications (Cont'd)

17.1 Frame Relay Service (Cont'd)

The following diagram depicts a generic view of components of access service for FRS Service and the manner in which components are combined.



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



ACCESS SERVICE

17. Advanced Data Applications (Cont'd)

17.1 Frame Relay Service (Cont'd)

17.1.1 User Network Interface (UNI) Connections

The User Network Interface (UNI), is a standard interface used to connect the end user to the FRS Network. It receives the data frame from the customer's Local Area Network or other CPE devices and verifies that the DLCI is valid before relaying the frame to the destination end point.

- (A) The UNI Access Connection consists of a 56 kbps, 64 kbps, 1.536 Mbps or 44.736 Mbps digital facility from the customer premises to the FRS network and the appropriate port interface connection. Additional UNI Access Connections may be ordered for disaster recovery of one or multiple UNI Access Connections and are referred to as Back-up UNIs.

17.1.2 Optional UNI Features

(A) Additional PVCs per UNI

This feature provides the assignment of additional Data Link Connection Identifiers (DLCIs). When any two DLCIs are mapped together, a PVC is created.

Each PVC must be a minimum of 25% of the port speed.

17.1.3 Network to Network Interface (NNI) Port

Network to Network Interface (NNI), specifies how an FRS switch sends and receives data from a Frame Relay interexchange carrier's or other customer's network. NNI's are available as 1.536 Mbps/DS1 or 44.736 Mbps/DS-3 digital transmission facility.

17.1.4 Committed Information Rate

Committed Information Rate (CIR) is a feature that provides the customer with a mechanism for prioritizing data on a per PVC basis across a given UNI. A Committed Information Rate allows a sustained throughput at a chosen rate without having any frames designated "discard eligible" under normal operating conditions. Various CIR rates are available; however, 0 (zero) CIR is not available.

ACCESS SERVICE

17. Advanced Data Applications (Cont'd)

17.1 Frame Relay Service (Cont'd)

17.1.5 Maintenance Window

Network maintenance and network upgrades for FRS are performed during the hours of 11:00 p.m. and 8:00 a.m. At times, during the hours of maintenance activity, it will be necessary to place a customer's service in an inactive (out of service) condition. The amount of time that this scheduled out of service condition will exist is called a "maintenance window". The Company will provide the customer notice prior to the maintenance window. Maintenance window activity could be scheduled for consecutive days.

17.1.6 Rate Regulations

(A) Administrative Charge

An administrative charge will be applied whenever a change is made to a customer's Frame Relay configuration (including changes to existing group addressing), at the customer's request. Such changes are defined as those rearrangements necessary to add, delete, or rearrange the customer's configuration, including changes to a customer's selected carrier. Although multiple changes may be caused by such actions, only one administrative charge will apply.

(B) Termination Charges: Month-to-Month

Each NNI provided on a month-to-month basis is subject to a minimum Service period of three months. If service is disconnected prior to the Expiration of the minimum service period, termination liability charges are applicable for the remaining portion of the minimum period, whether service is used or not. The termination liability charge will be reduced by one-third for each month of the minimum service period.

(C) Nonrecurring Charges

A nonrecurring charge applies for each installation of certain FRS rate elements. This charge also applies whenever the facility associated with the rate element is moved, changed or rearranged.

(D) Expedite Charges

Expedite charges are to be assessed in accordance with the rules described in Section 5.3.2(C) of this guide.

ACCESS SERVICE

17. Advanced Data Applications (Cont'd)

17.1 Frame Relay Service (Cont'd)

17.1.6 Rate Regulations (Cont'd)

(E) Term Payment Plan – Frame Relay (TPP – FR)

(1) General

- (a) The terms and conditions specified herein are applicable to Frame Relay Service and are in addition to other regulations as specified in this guide.
- (b) The Frame Relay UNI Port, NNI Port and PVC monthly recurring charges are the only rate elements subject to discounts under a Term Payment Plan (TPP - FR). Frame Relay Access Connection, Channel Mileage Facility, Service charges and any non-recurring charges are not eligible for TPP - FR discounts.
- (c) One, two and three year TPP - FR rates will be equal to or less than the standard month-to-month rates. Decreases to the month-to-month rates will flow through to the one, two and three year TPP rates.
- (d) Payment periods of one year, two years, and three years are available to all customers, at the applicable rates set forth in Section 20, regardless of when they subscribe to a TPP – FR arrangement. All Frame Relay rate elements must be ordered under the same payment period; e.g. mixing payment periods for the rate elements under the same Frame Relay service is not permitted.
- (e) The customer must designate on the ASR Order Form the payment period for the TPP - FR.
- (f) Inside moves in which the UNI location is changed, but remains within the customer premises, will not incur termination liability charges.

ACCESS SERVICE

17. Advanced Data Applications (Cont'd)

17.1 Frame Relay Service (Cont'd)

17.1.6 Rate Regulations (Cont'd)

(E) Term Payment Plan – Frame Relay (TPP – FR) (Cont'd)

(1) General (Cont'd)

- (g) On outside moves, in which the UNI location is changed to a different customer premises location within the same central office exchange area, the Company will allow the customer to retain the same TPP - FR payment period. Any other move will be treated as a disconnect of the service and termination liability charges as specified in Paragraph 17.1.6(E)(6) will apply.

(2) Changes in Length of TPP - FR Period

Prior to the completion of the selected TPP - FR payment period, the customer may elect to convert to a new TPP - FR period of the same or different length, subject to the following conditions:

- (a) No credit will be given toward the new payment period for payments made under the TPP – FR arrangement.
- (b) No additional Nonrecurring charges will be applied for changing the existing service period.
- (c) If the new TPP – FR period is shorter in length than the time remaining under the existing TPP - FR, the change to the new TPP period constitutes a discontinuance of the existing TPP – FR service and termination liability charges apply, as set forth in paragraph 17.1.6(E)(6).

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17. Advanced Data Applications (Cont'd)17.1 Frame Relay Service (Cont'd)17.1.6 Rate Regulations (Cont'd)(E) Term Payment Plan – Frame Relay (TPP – FR) (Cont'd)(3) Renewal Options

- (a) At the expiration of a TPP – FR period, the Telephone Company will automatically renew the service at the same TPP – FR period unless the customer notifies the Company and chooses to convert to a different TPP – FR period, convert to month-to-month rates or discontinue service.
- (b) Conversion to a different TPP – FR payment period will require the customer to submit a Change Order/ASR. Conversion of existing TPP - FR service to a different TPP – FR period will not incur application of nonrecurring or ordering charges.
- (c) Conversion from a TPP –FR plan to month-to-month rates will be treated as a disconnection of service and establishment of new service. However, if no other changes are ordered, no NRC will be applied.

(4) Notification of Discontinuance of the TPP – FR service

- (a) An order/ASR for discontinuance of a TPP – FR arrangement must be received by the Telephone Company at least thirty (30) business days prior to actual disconnect of service. (C)
- (b) Monthly charges will apply for a period of thirty (30) business days from the date the Company receives disconnect notification or until the requested disconnect date if longer than thirty (30) business days. (C)

ACCESS SERVICE

17. Advanced Data Applications (Cont'd)

17.1 Frame Relay Service (Cont'd)

17.1.6 Rate Regulations (Cont'd)

(E) Term Payment Plan – Frame Relay (TPP – FR) (Cont'd)

(5) Upgrade to Higher Speed Service

Customers may elect to upgrade service(s) to a higher speed during a TPP – FR period, subject to the following conditions:

- (a) Both the existing and the new services are provided solely by the Company.
- (b) The order to discontinue a service at an existing speed or capacity and the order for the upgraded service are received by the Company at the same time.
- (c) The new service will be provided at the same customer location as the discontinued service.
- (d) The TPP for the upgraded service(s) meets or exceeds the remaining length of the existing TPP.
- (e) The total monthly rate of the new agreement is equal to or greater than the total monthly rate of the existing agreement period.
- (f) The monthly rates for the upgraded services and/or service elements will be those in effect at the time of the service upgrade. The upgraded service will be subject to all appropriate nonrecurring charges.
- (g) Termination liability charges will not apply as long as the upgraded service remains connected at the same point of termination(s) or meets the requirements for Inside or Outside moves.

ACCESS SERVICE

17. Advanced Data Applications (Cont'd)17.1 Frame Relay Service (Cont'd)17.1.6 Rate Regulations (Cont'd)(E) Term Payment Plan – Frame Relay (TPP – FR) (Cont'd)(6) Termination Liability

- (a) When a TPP – FR arrangement is discontinued prior to the end of the period, termination liability charges, as set forth below, will apply based on the remainder of the TPP – FR period in effect at the time of disconnect.
- (b) One Year TPP - FR: the termination liability will be 50% of any remaining portion of the first year's recurring charges for the in-service quantity.
- (c) Two Year TPP - FR: the termination liability will be 50% of any remaining portion of the first year's recurring charges. In addition, for any remaining portion of the second year, the customer will be liable for 10% of the total monthly recurring charges in that time period for the in-service quantity.
- (d) Three Year TPP – FR: the termination liability will be 50% of any remaining portion of the first year's recurring charges. In addition, for any remaining portion of the second and third years, the customer will be liable for 10% of the total monthly recurring charges in that time period for the in-service quantity.

(7) Reserved For Future Use (C)

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18. Reserved for future use

ACCESS SERVICE

20. Rates and Charges

Rates and charges for Access Service set forth below apply to all of the Issuing Carriers shown on Title Pages 2 through 5. These carriers are arranged into rate groups as set forth on Title Pages 6 through 8.

20.1 Rate Group #1

For a list of Carriers included in Rate Group 1, refer to Title Page 6.

20.1.1 Reserved for future use

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20. Rates and Charges (Cont'd)

20.1 Rate Group #1 (Cont'd)

20.1.1 Reserved for future use (Cont'd)

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.1 Rate Group #1 (Cont'd)

20.1.2 Reserved for future use

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.1 Rate Group #1 (Cont'd)

20.1.2 Reserved for future use

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.1 Rate Group #1 (Cont'd)

20.1.2 Reserved for Future use

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.1 Rate Group #1 (Cont'd)

20.1.2 Reserved for future use

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.1 Rate Group #1 (Cont'd)

20.1.2 Reserved for future use (Cont'd)

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.1 Rate Group #1 (Cont'd)

20.1.3 Access Ordering

Regulations concerning Access Ordering are set forth in Section 5 preceding.

| <u>Service Date Change Charge</u> | <u>Nonrecurring Charge</u> | |
|-----------------------------------|----------------------------|-----|
| - Per Order | \$50.00 | |
| <u>Design Change Charge</u> | | |
| - Per order, per occurrence | \$979.26 | (C) |
| <u>Cancellation Charge</u> | | |
| - Per Order | \$10,798.37 | (C) |
| <u>Expedited Order Charge</u> | | |
| - Per Order, per day expedited | \$300.00 | |

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.1 Rate Group #1 (Cont'd)

20.1.4 Reserved for future use

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.1 Rate Group #1 (Cont'd)

20.1.4 Reserved for future use (Cont'd)

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.1 Rate Group #1 (Cont'd)

20.1.4 Reserved for future use (Cont'd)

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.1 Rate Group #1 (Cont'd)

20.1.4 Reserved for future use (Cont'd)

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.1 Rate Group #1 (Cont'd)

20.1.4 Reserved for future use (Cont'd)

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.1 Rate Group #1 (Cont'd)

20.1.4 Reserved for future use (Cont'd)

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.1 Rate Group #1 (Cont'd)

20.1.4 Reserved for future use (Cont'd)

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.1 Rate Group #1 (Cont'd)

20.1.4 Reserved for future use (Cont'd)

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.1 Rate Group #1 (Cont'd)

20.1.4 Reserved for future use (Cont'd)

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.1 Rate Group #1 (Cont'd)

20.1.4 Reserved for future use (Cont'd)

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.1 Rate Group #1 (Cont'd)

20.1.5 Special Access Service

Regulations concerning Special Access are set forth in Section 7 preceding.

Metallic Service

Channel Termination

| | | |
|---|--------------------------------------|------------|
| - | per Order | \$130.23 |
| - | per Termination, per month | \$150.00 |
| - | per Termination, nonrecurring charge | \$1,000.00 |

Channel Mileage

| | | |
|---|--|---------|
| - | Channel Mileage Facility, per Mile, per month | \$0.75 |
| - | Channel Mileage Termination, per termination, per month | \$42.00 |

Optional Features & Functions

Bridging

Three premises bridging, per port *

Series bridging, per port *

* No demand - rates available on request.

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.1 Rate Group #1 (Cont'd)

20.1.5 Special Access Service (Cont'd)

Voice Grade Service

Service Order Charge – per order \$4,015.43 (C)

Channel Termination

| | | | |
|---|--|-------------|--|
| - | per Two Wire Termination, per month | \$1,233.34 | |
| - | per Two Wire Termination, nonrecurring charge | \$15,054.06 | |
| - | per Four Wire Termination, per month | \$2,004.19 | |
| - | per Four Wire Termination, nonrecurring charge | \$15,054.06 | |

Channel Mileage

| | | | |
|---|--|------------|-----|
| - | Channel Mileage Facility, per Mile, per month | \$18.81 | |
| - | Channel Mileage Termination, per termination, per month | \$1,202.50 | (C) |

Discontinuance Non-Recurring Charge – per Circuit \$975.00

Optional Features & Functions

Monthly
Rate

Central Office Bridging Capability

Two-Wire or Four-Wire, per Port

| | | | |
|---|-------------------|--------|--|
| - | Data | \$1.00 | |
| - | Voice | \$1.00 | |
| - | Telephoto | * | |
| - | DATAPHONE | * | |
| - | Telemetry & Alarm | * | |

Conditioning, per Termination

| | | | |
|---|--------------------------------------|--------|--|
| - | C Type | \$1.00 | |
| - | Improved Attenuation Distortion** | \$1.00 | |
| - | Improved Envelope Delay Distortion** | \$7.74 | |
| - | Data Capability | \$1.00 | |
| - | Sealing Current | * | |

* No demand rates available on request.

** Improved Attenuation Distortion and Improved Envelope Delay Distortion will continue to be provided to all customers who were provided with either or both of these optional features in conjunction with C-Type Conditioning prior to May 4, 1988.

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.1 Rate Group #1 (Cont'd)

20.1.5 Special Access Service (Cont'd)

Voice Grade Service (Cont'd)

Optional Features & Functions (Cont'd)

Monthly
Rate

Improved Return Loss for Effective
Two-Wire or Four-Wire Transmission
- per Termination

\$1.00

Customer Specified Receive Level,
- per Termination

\$1.00

Signaling Capability

- per Termination
- Loop Signaling Range Extension
- Loop or E&M to SF
- E&M to DX
- E&M to Loop
- Loop or E&M to PCM
- Automatic Ringdown

\$1.00

Selective Signaling Arrangement

\$1.00

Transfer Arrangement
(Key Activated ** or Dial Up)***

- Per Four Port Arrangement
including control circuit termination****

*

- Per Five Port Arrangement
including control circuit termination****

*

* No demand rates available on request.

** The key activated control circuit is rated as a Metallic Circuit Termination and Circuit Mileage, if applicable.

*** The Dial Up option requires the customer to purchase the Controller Arrangement from Section 20.1.7.

**** An additional Channel Termination charge will apply whenever a space circuit is configured as a leg to the customer's premises. Additional circuit mileage charges will apply when the transfer arrangement is not located in the customer premises serving wire center.

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.1 Rate Group #1 (Cont'd)

20.1.5 Special Access Service (Cont'd)

Voice Grade Service (Cont'd)

Optional Features & Functions (Cont'd)

Monthly
Rate

Voice Grade Facility Switching Arrangement

Echo Control

- Echo Suppression, per Circuit
- Echo Canceller, per Circuit

*
*

Improved Termination Option, per Termination

\$1.00

* No demand rates available on request.

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.1 Rate Group #1 (Cont'd)

20.1.5 Special Access Service (Cont'd)

Program Audio Service

Channel Termination

| | | |
|---|-------------------------------------|----------|
| - | per Order | \$130.23 |
| - | 200 to 3500 Hz, monthly rate | \$37.52 |
| - | 100 to 5000 Hz, monthly rate | \$37.95 |
| - | 50 to 8000 Hz, monthly rate | \$37.95 |
| - | 50 to 15000 Hz, monthly rate | \$37.95 |
| - | 200 to 3500 Hz, daily rate | \$5.20 |
| - | 100 to 5000 Hz, daily rate | \$5.20 |
| - | 50 to 8000 Hz, daily rate | \$5.20 |
| - | 50 to 15000 Hz, daily rate | \$5.20 |
| - | 200 to 3500 Hz, Nonrecurring Charge | \$741.01 |
| - | 100 to 5000 Hz, Nonrecurring Charge | \$741.01 |
| - | 50 to 8000 Hz, Nonrecurring Charge | \$741.01 |
| - | 50 to 15000 Hz, Nonrecurring Charge | \$741.01 |

Channel Mileage

| | | |
|---|--|---------|
| - | Channel Mileage Facility, per Mile | |
| - | 200 to 3500 Hz, monthly rate | \$0.80 |
| - | 100 to 5000 Hz, monthly rate | \$1.55 |
| - | 50 to 8000 Hz, monthly rate | \$2.40 |
| - | 50 to 15000 Hz, monthly rate | \$3.10 |
| - | 200 to 3500 Hz, daily rate | \$0.08 |
| - | 100 to 5000 Hz, daily rate | \$0.16 |
| - | 50 to 8000 Hz, daily rate | \$0.24 |
| - | 50 to 15000 Hz, daily rate | \$0.32 |
| - | Channel Mileage Termination, per Termination | |
| - | 200 to 3500 Hz, monthly rate | \$37.95 |
| - | 100 to 5000 Hz, monthly rate | \$37.95 |
| - | 50 to 8000 Hz, monthly rate | \$37.95 |
| - | 50 to 15000 Hz, monthly rate | \$37.95 |
| - | 200 to 3500 Hz, daily rate | \$4.57 |
| - | 100 to 5000 Hz, daily rate | \$4.57 |
| - | 50 to 8000 Hz, daily rate | \$4.57 |
| - | 50 to 15000 Hz, daily rate | \$4.57 |

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.1 Rate Group #1 (Cont'd)

20.1.5 Special Access Service (Cont'd)

Program Audio Service (Cont'd)

Optional Features and Functions

| | |
|---|---------|
| Bridging Distribution Amplifier, per Port, monthly rate | * |
| Bridging Distribution Amplifier, per Port, daily rate | * |
| Gain Conditioning per Service, monthly rate | \$12.00 |
| Gain Conditioning per Service, daily rate | \$1.20 |
| Stereo, per Service, monthly rate | * |
| Stereo, per Service, daily rate | * |

* No demand rates available on request.

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.1 Rate Group #1 (Cont'd)

20.1.5 Special Access Service (Cont'd)

Video Service

Channel Termination

| | | |
|---|--------------------------------------|----------|
| - | per Order | \$130.23 |
| - | per Termination, monthly rate | |
| | TV-1 or 2 | * |
| | 4TV-5 | * |
| | 6TV-5 | * |
| | TV-15 | * |
| - | per Termination, daily rate | |
| | TV-1 or 2 | ** |
| | 4TV-5 | ** |
| | 6TV-5 | ** |
| | TV-15 | ** |
| - | per Termination, Nonrecurring Charge | |
| | TV-1 or 2 | * |
| | 4TV-5 | * |
| | 6TV-5 | * |
| | TV-15 | * |

Channel Mileage

| | | |
|---|---|----|
| - | Channel Mileage Facility, per Mile, monthly rate | * |
| | per Mile, daily rate | ** |
| - | Channel Mileage Termination, per termination, monthly rate | * |
| | per termination, daily rate | ** |

* No demand - rates available on request.

** Daily rates will be topped and maximum rates derived as set forth in Section 7 preceding.

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.1 Rate Group #1 (Cont'd)

20.1.5 Special Access Service (Cont'd)

Digital Data Service

Service Order Charge – per Order \$4,015.43 (C)

Channel Termination

- per Termination, monthly rate
All Speeds \$1,541.68

- per Termination, Nonrecurring Charge
All Speeds \$16,005.26

Channel Mileage

- Channel Mileage Facility,
Per Mile, per month

| | |
|-----------|---------|
| 2.4 kbps | \$10.80 |
| 4.8 kbps | \$10.80 |
| 9.6 kbps | \$10.80 |
| 19.2 kbps | \$10.80 |
| 56.0 kbps | \$20.02 |
| 64.0 kbps | \$20.02 |

- Channel Mileage Termination,
Per Termination, per month

| | |
|-----------|----------------|
| 2.4 kbps | \$1,449.16 |
| 4.8 kbps | \$1,449.16 |
| 9.6 kbps | \$1,449.16 |
| 19.2 kbps | \$1,449.16 |
| 56.0 kbps | \$2,158.34 |
| 64.0 kbps | \$2,158.34 (C) |

Discontinuance Non-Recurring Charge – per Circuit
All Speeds \$975.00

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.1 Rate Group #1 (Cont'd)

20.1.5 Special Access Service (Cont'd)

Digital Data Service (Cont'd)

Optional Features and Functions

| | |
|---|---------|
| Central Office Bridging per Port, per month | \$12.53 |
| Secondary Channel per Station | * |
| Multiplexing | |
| Digital Data Carrier, per month | * |
| Digital Data Carrier, Nonrecurring Charge | * |
| Loop Transfer Arrangement (Key Activated** or Dial Up***) Per Four Port Arrangement, including control circuit termination**** monthly rate | ICB |
| Nonrecurring Charge | ICB |

* No demand- rate available on request.

** The key activated control circuit is rated as a Metallic Circuit Termination and Circuit mileage, if applicable.

*** The Dial Up option requires the customer to purchase the Controller Arrangement from Section 20.1.7

**** An additional Circuit Termination charge will apply whenever a space circuit is configured as a leg to the customer's premises. Additional circuit mileage charges will apply when the transfer arrangement is not located in the customer premises serving wire center.

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.1 Rate Group #1 (Cont'd)

20.1.5 Special Access Service (Cont'd)

High Capacity Service

Service Order Charge – per Order

| | | | |
|---|----------------------|-------------|-----|
| - | per Order | | |
| | DS-1 - 1.544 Mbps | \$4,015.43 | (C) |
| | DS-3 - 44.736 Mbps | \$12,795.83 | |
| | OC-3 - 155.520 Mbps | \$12,795.83 | |
| | OC-3c - 155.520 Mbps | \$12,795.83 | |

Channel Termination

- per Termination, monthly rate

Competitive End User & IC CDL

| | | | |
|---|--------------------------------------|--------------|--|
| | DS1 – 1.544 Mbps | \$6,715.46 | |
| | DS-3 - 44.736 Mbps | \$38,902.38 | |
| | OC3 – 155.520 Mbps | \$98,666.56 | |
| | OC-3c- 155.520 Mbps | \$92,499.88 | |
| - | per Termination, Nonrecurring Charge | | |
| | DS-1 - 1.544 Mbps | \$21,583.29 | |
| | DS-3 - 44.736 Mbps | \$105,141.53 | |
| | OC-3 - 155.520 Mbps | \$110,999.86 | |
| | OC-3c - 155.520 Mbps | \$110,999.86 | |

Channel Mileage

- Channel Mileage Facility,
Per mile, per month

| | | | |
|--|----------------------|------------|--|
| | DS-1 - 1.544 Mbps | \$339.16 | |
| | DS-3 - 44.736 Mbps | \$4,069.99 | |
| | OC-3 - 155.520 Mbps | \$8,633.37 | |
| | OC-3c - 155.520 Mbps | \$8,633.37 | |

- Channel Mileage Termination,
Per termination, per month

| | | | |
|--|----------------------|-------------|-----|
| | DS-1 - 1.544 Mbps | \$6,549.30 | |
| | DS-3 - 44.736 Mbps | \$30,524.97 | |
| | OC-3 - 155.520 Mbps | \$61,666.56 | |
| | OC-3c - 155.520 Mbps | \$61,666.56 | (C) |

Discontinuance Non-Recurring Charge – per Circuit

| | | | |
|--|----------------------|----------|--|
| | DS-1 - 1.544 Mbps | \$975.00 | |
| | DS-3 - 44.736 Mbps | \$975.00 | |
| | OC-3 - 155.520 Mbps | \$975.00 | |
| | OC-3c - 155.520 Mbps | \$975.00 | |

* Material filed with Transmittal 88 with effective date of 8/1/2018

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.1 Rate Group #1 (Cont'd)

20.1.5 Special Access Service (Cont'd)

High Capacity Service (Cont'd)

Optional Features and Functions

Multiplexing

| | | | |
|---|----------------------------|-------------|-----|
| - | OC-3 to DS-3 per month | \$46,249.93 | (C) |
| | Nonrecurring Charge | \$39,990.78 | |
| - | OC-3 to DS-1 per month | \$55,499.95 | (C) |
| | Nonrecurring Charge | \$39,990.78 | |
| - | DS-3 to DS-1 per month | \$43,166.66 | (C) |
| | Nonrecurring Charge | \$39,990.78 | |
| - | DS-1 to Voice per month | \$8,047.54 | (C) |
| | Nonrecurring Charge | \$12,857.51 | |
| - | DS-1 to DS0 per month | \$8,047.54 | (C) |
| | Nonrecurring Charge | \$12,857.51 | |

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.1 Rate Group #1 (Cont'd)

20.1.5 Special Access Service (Cont'd)

High Capacity Service (Cont'd)

Optional Features and Functions (Cont'd)

Multiplexing (Cont'd)

| | | | |
|---|--|--|-----------------|
| - | Digital DS3 Cross Connect per month | | * |
| | Nonrecurring Charge | | * |
| - | Digital Data Substrate | | |
| | One DSO to Twenty 2.4 Kbps monthly rate | | ICB |
| | Nonrecurring Charge | | ICB |
| | One DSO to Ten 4.8 Kbps monthly rate | | ICB |
| | Nonrecurring Charge | | ICB |
| | One DSO to Five 9.6 Kbps monthly rate | | ICB |
| | Nonrecurring Charge | | ICB |
| | Automatic Loop transfer** | | |
| - | per Arrangement | | ICB |
| - | per Termination | | \$143.05 |
| | Automatic Protection Switching per DS1 monthly rate | | * |
| | Nonrecurring Charge | | * |
| | Clear Channel Capability, per DS1 circuit arranged monthly rate | | \$0.00 |
| | Nonrecurring Charge | | \$16,594.19 (C) |

* No demand - rates available on request.

** An additional Channel Termination charge will apply whenever the space channel is configured as a leg to the customer designated premises. Additional Channel Mileage charges will also apply when the transfer arrangement is not located in the customer designated premises serving wire center.

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.1 Rate Group #1 (Cont'd)

20.1.5 Special Access Service (Cont'd)

High Capacity Service (Cont'd)

DS1- Optional Payment Plan #

| | | |
|---------------------|-------------|-----|
| Term: Five Years # | | |
| Monthly Rate | \$29,908.27 | (C) |
| Nonrecurring Charge | \$27,749.96 | |

DS1- Term Payment Plan*(2) #

| | | |
|--------------------------|-------------|-----|
| Nonrecurring Charge | \$13,874.99 | |
| One Year Monthly Rates | \$5,549.98 | |
| Two Year Monthly Rates | \$5,241.66 | |
| Three Year Monthly Rates | \$4,933.34 | |
| Five Year Monthly Rates | \$4,316.68 | (C) |

Discontinuance Non-Recurring Charge Per Circuit

| | |
|--------------------------------|----------|
| DS1 - Optional Payment Plan # | \$975.00 |
| DS1 - Term Payment Plan *(2) # | \$975.00 |

Effective November 19, 2021, DS1 Optional Payment Plans and DS1 Term Payment Plans are no longer permitted. DS1 Optional Payment Plans and DS1 Term Payment Plans in effect as of November 19, 2021 may continue the existing term but will not be eligible to extend, renew, reenroll in, convert to a new term period, or in any other way continue beyond its current expiration. At expiration of either Payment Plan, the service will convert to the Month to Month Rate. If at any time an existing customer terminates its DS1 Optional Payment and/or DS1 Term Payment Plan, the customer may not re-subscribe to the rate.

(2) Applies only to Citizens Telecommunications Company of California - Meadowview, Courtland, Walnut Grove, Isleton, and Clarksburg exchanges.

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.1 Rate Group #1 (Cont'd)

20.1.6 Reserved for future use

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.1 Rate Group #1 (Cont'd)

20.1.6 Reserved for future use (Cont'd)

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.1 Rate Group #1 (Cont'd)

20.1.7 Miscellaneous Services

Additional Engineering and Additional Labor

| | |
|--|---------|
| Charges for Additional Engineering per Engineer, 1/2 hour or Fraction thereof | |
| Basic Time | \$40.00 |
| Overtime | \$60.00 |
| Premium Time* | \$80.00 |

| | |
|--|---------|
| Charges for Additional Labor per Technician, 1/2 hour or Fraction thereof | |
| Basic Time | \$30.00 |
| Overtime | \$45.00 |
| Premium Time* | \$60.00 |

| | |
|--|---------|
| Charges for Additional Testing per Technician, 1/2 hour or Fraction thereof | |
| Basic Time | \$30.00 |
| Overtime | \$45.00 |
| Premium Time* | \$60.00 |

| | |
|---|---------|
| Charges for Standby per Technician, 1/2 hour or Fraction thereof | |
| Basic Time | \$30.00 |
| Overtime | \$45.00 |
| Premium Time* | \$60.00 |

| | |
|---|---------|
| Charges for Programming per Programmer, 1/2 hour or Fraction thereof | |
| Basic Time | \$30.00 |
| Overtime | \$45.00 |
| Premium Time* | \$60.00 |

| | |
|---|---------|
| <u>NID Replacement</u> | |
| Nonrecurring Charge per 2 pairs of capacity | \$99.00 |

* Subject to Minimum Charge of Four Hours.

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.1 Rate Group #1 (Cont'd)

20.1.7 Miscellaneous Services (Cont'd)

Additional Testing

Charges for Additional Testing
per Transmission Path, First Point
of Switching, per Month

- Automated Scheduled Testing
 - monthly rate *
 - Nonrecurring Charge *

- Additional Cooperative Scheduled Testing
 - Basic Offering
 - monthly rate *
 - Nonrecurring Charge *

 - Gain Slope
 - monthly rate *
 - Nonrecurring Charge *

- Additional Manual Scheduled Testing
 - Basic Offering
 - monthly rate *
 - Nonrecurring Charge *

 - Gain Slope
 - monthly rate *
 - Nonrecurring Charge *

Controller Agreement

- Per Arrangement
 - monthly rate *
 - Nonrecurring Charge *

* No demand - rates available on request.

ACCESS SERVICE

20. Rates and Charges (Cont'd)20.1 Rate Group #1 (Cont'd)20.1.7 Miscellaneous Services (Cont'd)

| | |
|---|--------|
| - Paper or fax LOA processing Per telephone number | \$0.75 |
|---|--------|

| | |
|---|---------|
| <u>Special Access Surcharge</u> monthly rate | \$25.00 |
|---|---------|

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.1 Rate Group #1 (Cont'd)

20.1.7 Miscellaneous Services (Cont'd)

End User/Agents List

| | | |
|---|--|---------|
| - | Agent List, Nonrecurring Charge per State, per Order | \$50.00 |
| - | Agent List, Initial per Customer Account* | \$0.03 |
| - | Agent List, Allocation, per Listing** | \$0.03 |
| - | Snapshot List, NRC per State, per Order | \$75.00 |
| - | Snapshot List, per Listing*** | \$0.05 |

Telecommunications Service Priority

| | | |
|---|--|---------|
| - | Establishment of TSP System Nonrecurring Service Charge | \$14.50 |
| - | Restoration Priority, monthly rate | \$4.90 |

End User Validation List

| | |
|--|---------|
| Standard Sort, Per Record Provided | \$0.034 |
| Administrative Fee--Paper Report, Electronic Transmission or Magnetic Tape, Per Request | \$78.00 |
| Special Sort, Per Record Provided | \$0.054 |

PIC Freeze Verification Report

Refer to Section 20.1.7 Snapshot List, NRC and Snapshot List, Per Listing for rates and charges.

* For the purpose of the Initial Lists customer and agent is defined in Section 2.6.

** For the Purpose of the Allocation list, a listing is defined as an end user or agent record eligible for a Primary Interexchange Carrier Selection.

*** For the purpose of the Snapshot list, a listing is defined as an end user or agent eligible for a Predesignated Interexchange Carrier Selection.

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.1 Rate Group #1 (Cont'd)

20.1.7 Miscellaneous Services (Cont'd)

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.1 Rate Group #1 (Cont'd)

20.1.8 Special Facilities Routing Access Service

The following rates and charges are in addition to all other rates and charges that may be applicable for other services that may be furnished under the provisions of this guide to operate in conjunction with this service.

| | | |
|-----|---|-----|
| (A) | Special Routing Access Service Area Plan-Setup and Removal, Per End Office or Tandem Office Switching System. (Note 1) (Note 2) | |
| | Recurring Charges | ICB |
| | Nonrecurring Charges | ICB |
| (B) | Special Routing Access Service Trunk Group Setup and Removal, Per End Office Switching System, Per Occurrence (Note 1) (Note 2) | |
| | Recurring Charges | ICB |
| | Nonrecurring Charges | ICB |
| (C) | Activation or Deactivation of Special Routing Access Service, Per End Office or Tandem Office Switching System, Per Occurrence | |
| | Recurring Charges | ICB |
| | Nonrecurring Charges | ICB |

(Note 1) The service setups will only be activated in offices that are specifically negotiated by the customer with the Telephone Company and are mutually agreeable between both parties.

(Note 2) End Offices will be updated for activation and/or deactivation annually.

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.1 Rate Group #1 (Cont'd)

20.1.8 Special Facilities Routing Access Service (Cont'd)

| | | |
|-----|--|------|
| (D) | Special Routing Access Service Trunk Usage, When Activated, Per Trunk, Per Initial Activation Hour | |
| | Recurring Charges | ICB* |
| | Nonrecurring Charges | ICB |
| (E) | Special Routing Access Service Trunk Usage, When Activated, Per Trunk, Per Subsequent 1/2 Hour | |
| | Recurring Charges | ICB* |
| | Nonrecurring Charges | ICB |
| (F) | Special Routing Access Service Maintenance and Administration. Per End Office or Tandem Office Switching System, Per Month | |
| | Recurring Charges | ICB |
| | Nonrecurring Charges | ICB |

* This rate is in addition to Trunk Side premium Access Service rates which may apply on an ongoing basis whether SRAS is activated or not

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.1 Rate Group #1 (Cont'd)

20.1.9 Reserved for future use

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.1 Rate Group #1 (Cont'd)

20.1.9 Reserved for future use (Cont'd)

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.1 Rate Group #1 (Cont'd)

20.1.9 Reserved for future use (Cont'd)

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.1 Rate Group #1 (Cont'd)

20.1.10 Reserved for future use (Cont'd)

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.1 Rate Group #1 (Cont'd)

20.1.11 Frame Relay Service

Network to Network Interface (NNI) - Month To Month*

| | | |
|----------------------|--|------------|
| DS1 Port 1.536 Mbps, | | |
| Monthly Charge | | \$475.00 |
| Nonrecurring Charge | | \$400.00 |
| DS-3 Port | | |
| Monthly Charge | | \$1,000.00 |
| Nonrecurring Charge | | \$1,050.00 |

Network to Network Interface NNI – 1 YR Term Payment Plan (TPP)*

| | | |
|---------------------|--|------------|
| DS1 Port 1.536 Mbps | | |
| Monthly Charge | | \$404.00 |
| Nonrecurring Charge | | \$400.00 |
| DS-3 Port | | |
| Monthly Charge | | \$850.00 |
| Nonrecurring Charge | | \$1,050.00 |

Network to Network Interface NNI – 2 YR Term Payment Plan (TPP)*

| | | |
|---------------------|--|------------|
| DS1 Port 1.536 Mbps | | |
| Monthly Charge | | \$390.00 |
| Nonrecurring Charge | | \$400.00 |
| DS-3 Port | | |
| Monthly Charge | | \$820.00 |
| Nonrecurring Charge | | \$1,050.00 |

Network to Network Interface NNI – 3 YR Term Payment Plan (TPP)*

| | | |
|---------------------|--|------------|
| DS1 Port 1.536 Mbps | | |
| Monthly Charge | | \$356.00 |
| Nonrecurring Charge | | \$400.00 |
| DS-3 Port | | |
| Monthly Charge | | \$750.00 |
| Nonrecurring Charge | | \$1,050.00 |

| | | |
|--------------------------------|----------|----------|
| Service Order Charge Per Order | \$130.23 | |
| Administrative Charge | | \$50.00 |
| Expedited Order Charge, | | \$250.00 |

* Frame Relay NNI services will be offered for LATA 932 (Bluefield, WV), LATA 726 (Elk Grove, CA), LATA 133 (Middletown, NY), and LATA 470 (Cookville\Crossville, TN) only. Additional Special Access charges with meet-point billing arrangements could apply in addition to NNI port charge.

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.1 Rate Group #1 (Cont'd)

20.1.11 Frame Relay Service (Cont'd)

Frame Relay Access Connection

| | | |
|------------|---------------------|------------|
| 56 Kbps | Monthly Charge | \$135.00 |
| | Nonrecurring Charge | \$204.23 |
| 1.536 Mbps | Monthly Charge | \$200.00 |
| | Nonrecurring Charge | \$916.12 |
| DS-3 | Monthly Charge | \$1,800.00 |
| | Nonrecurring Charge | \$3,410.00 |

UNI Port Connection Month to Month

| | | |
|----------|---------------------|----------|
| 56 Kbps | Monthly Charge | \$25.00 |
| | Nonrecurring Charge | \$200.00 |
| 64 Kbps | Monthly Charge | \$25.00 |
| | Nonrecurring Charge | \$200.00 |
| 128 Kbps | Monthly Charge | \$60.00 |
| | Nonrecurring Charge | \$200.00 |
| 256 Kbps | Monthly Charge | \$65.00 |
| | Nonrecurring Charge | \$300.00 |
| 384 Kbps | Monthly Charge | \$70.00 |
| | Nonrecurring Charge | \$300.00 |
| 512 Kbps | Monthly Charge | \$75.00 |
| | Nonrecurring Charge | \$400.00 |

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.1 Rate Group #1 (Cont'd)

20.1.11 Frame Relay Service (Cont'd)

UNI Port Connection Month to Month (Cont'd)

| | | |
|------------|---------------------|------------|
| 768 Kbps | | |
| | Monthly Charge | \$80.00 |
| | Nonrecurring Charge | \$400.00 |
| 1.536 Mbps | | |
| | Monthly Charge | \$90.00 |
| | Nonrecurring Charge | \$400.00 |
| DS-3 | | |
| | Monthly Charge | \$700.00 |
| | Nonrecurring Charge | \$1,050.00 |

UNI Port Connection 1 YR Term Payment Plan (TPP)

| | | |
|------------|---------------------|------------|
| 56 Kbps | | |
| | Monthly Charge | \$23.00 |
| | Nonrecurring Charge | \$200.00 |
| 64 Kbps | | |
| | Monthly Charge | \$23.00 |
| | Nonrecurring Charge | \$200.00 |
| 128 Kbps | | |
| | Monthly Charge | \$55.00 |
| | Nonrecurring Charge | \$200.00 |
| 256 Kbps | | |
| | Monthly Charge | \$60.00 |
| | Nonrecurring Charge | \$300.00 |
| 384 Kbps | | |
| | Monthly Charge | \$64.00 |
| | Nonrecurring Charge | \$300.00 |
| 512 Kbps | | |
| | Monthly Charge | \$69.00 |
| | Nonrecurring Charge | \$400.00 |
| 768 Kbps | | |
| | Monthly Charge | \$74.00 |
| | Nonrecurring Charge | \$400.00 |
| 1.536 MBps | | |
| | Monthly Charge | \$77.00 |
| | Nonrecurring Charge | \$400.00 |
| DS-3 | | |
| | Monthly Charge | \$595.00 |
| | Nonrecurring Charge | \$1,050.00 |

ACCESS SERVICE

20. Rates and Charges (Cont'd)20.1 Rate Group #1 (Cont'd)20.1.11 Frame Relay Service (Cont'd)UNI Port Connection 2 YR Term Payment Plan (TPP)

| | | |
|------------|---------------------|------------|
| 56 Kbps | | |
| | Monthly Charge | \$22.50 |
| | Nonrecurring Charge | \$200.00 |
| 64 Kbps | | |
| | Monthly Charge | \$22.50 |
| | Nonrecurring Charge | \$200.00 |
| 128 Kbps | | |
| | Monthly Charge | \$54.00 |
| | Nonrecurring Charge | \$200.00 |
| 256 Kbps | | |
| | Monthly Charge | \$58.50 |
| | Nonrecurring Charge | \$300.00 |
| 384 Kbps | | |
| | Monthly Charge | \$63.00 |
| | Nonrecurring Charge | \$300.00 |
| 512 Kbps | | |
| | Monthly Charge | \$67.50 |
| | Nonrecurring Charge | \$400.00 |
| 768 Kbps | | |
| | Monthly Charge | \$72.00 |
| | Nonrecurring Charge | \$400.00 |
| 1.536 MBps | | |
| | Monthly Charge | \$74.00 |
| | Nonrecurring Charge | \$400.00 |
| DS-3 | | |
| | Monthly Charge | \$574.00 |
| | Nonrecurring Charge | \$1,050.00 |

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.1 Rate Group #1 (Cont'd)

20.1.11 Frame Relay Service (Cont'd)

UNI Port Connection 3 YR Term Payment Plan (TPP)

| | | |
|------------|---------------------|------------|
| 56 Kbps | | |
| | Monthly Charge | \$21.50 |
| | Nonrecurring Charge | \$200.00 |
| 64 Kbps | | |
| | Monthly Charge | \$21.50 |
| | Nonrecurring Charge | \$200.00 |
| 128 Kbps | | |
| | Monthly Charge | \$51.60 |
| | Nonrecurring Charge | \$200.00 |
| 256 Kbps | | |
| | Monthly Charge | \$55.90 |
| | Nonrecurring Charge | \$300.00 |
| 384 Kbps | | |
| | Monthly Charge | \$60.20 |
| | Nonrecurring Charge | \$300.00 |
| 512 Kbps | | |
| | Monthly Charge | \$64.50 |
| | Nonrecurring Charge | \$400.00 |
| 768 Kbps | | |
| | Monthly Charge | \$68.80 |
| | Nonrecurring Charge | \$400.00 |
| 1.536 MBps | | |
| | Monthly Charge | \$68.00 |
| | Nonrecurring Charge | \$400.00 |
| DS-3 | | |
| | Monthly Charge | \$525.00 |
| | Nonrecurring Charge | \$1,050.00 |

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.1 Rate Group #1 (Cont'd)

20.1.11 Frame Relay Service (Cont'd)

Committed Information Rate, per PVC Month to Month

| | | |
|------------|---------------------|---------|
| 14 Kbps | | |
| | Monthly Charge | \$2.00 |
| | Nonrecurring Charge | \$12.00 |
| 16 Kbps | | |
| | Monthly Charge | \$2.00 |
| | Nonrecurring Charge | \$12.00 |
| 28 Kbps | | |
| | Monthly Charge | \$3.00 |
| | Nonrecurring Charge | \$12.00 |
| 32 Kbps | | |
| | Monthly Charge | \$4.00 |
| | Nonrecurring Charge | \$12.00 |
| 56/64 Kbps | | |
| | Monthly Charge | \$5.00 |
| | Nonrecurring Charge | \$12.00 |
| 128 Kbps | | |
| | Monthly Charge | \$6.00 |
| | Nonrecurring Charge | \$12.00 |
| 192 Kbps | | |
| | Monthly Charge | \$7.00 |
| | Nonrecurring Charge | \$12.00 |
| 256 Kbps | | |
| | Monthly Charge | \$9.00 |
| | Nonrecurring Charge | \$12.00 |
| 320 Kbps | | |
| | Monthly Charge | \$10.00 |
| | Nonrecurring Charge | \$12.00 |
| 384 Kbps | | |
| | Monthly Charge | \$12.00 |
| | Nonrecurring Charge | \$12.00 |
| 512 Kbps | | |
| | Monthly Charge | \$25.00 |
| | Nonrecurring Charge | \$12.00 |

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.1 Rate Group #1 (Cont'd)

20.1.11 Frame Relay Service (Cont'd)

Committed Information Rate, per PVC Month to Month (Cont'd)

| | | |
|---------------------|--|----------|
| 768 Kbps | | |
| Monthly Charge | | \$28.00 |
| Nonrecurring Charge | | \$12.00 |
| 1.024 MBps | | |
| Monthly Charge | | \$32.00 |
| Nonrecurring Charge | | \$12.00 |
| 1.536 MBps | | |
| Monthly Charge | | \$75.00 |
| Nonrecurring Charge | | \$12.00 |
| 5 Mbps | | |
| Monthly Charge | | \$125.00 |
| Nonrecurring Charge | | \$100.00 |
| 10 Mbps | | |
| Monthly Charge | | \$200.00 |
| Nonrecurring Charge | | \$100.00 |
| 15 Mbps | | |
| Monthly Charge | | \$275.00 |
| Nonrecurring Charge | | \$100.00 |
| 20 Mbps | | |
| Monthly Charge | | \$350.00 |
| Nonrecurring Charge | | \$100.00 |
| 25 Mbps | | |
| Monthly Charge | | \$425.00 |
| Nonrecurring Charge | | \$100.00 |
| 30 Mbps | | |
| Monthly Charge | | \$500.00 |
| Nonrecurring Charge | | \$100.00 |
| 35 Mbps | | |
| Monthly Charge | | \$575.00 |
| Nonrecurring Charge | | \$100.00 |

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.1 Rate Group #1 (Cont'd)

20.1.11 Frame Relay Service (Cont'd)

Committed Information Rate, per PVC 1 YR Term Payment Plan (TPP)

| | | |
|------------|---------------------|---------|
| 14 Kbps | | |
| | Monthly Charge | \$1.84 |
| | Nonrecurring Charge | \$12.00 |
| 16 Kbps | | |
| | Monthly Charge | \$2.76 |
| | Nonrecurring Charge | \$12.00 |
| 28 Kbps | | |
| | Monthly Charge | \$3.68 |
| | Nonrecurring Charge | \$12.00 |
| 32 Kbps | | |
| | Monthly Charge | \$3.68 |
| | Nonrecurring Charge | \$12.00 |
| 56/64 Kbps | | |
| | Monthly Charge | \$4.60 |
| | Nonrecurring Charge | \$12.00 |
| 128 Kbps | | |
| | Monthly Charge | \$5.52 |
| | Nonrecurring Charge | \$12.00 |
| 192 Kbps | | |
| | Monthly Charge | \$6.44 |
| | Nonrecurring Charge | \$12.00 |
| 256 Kbps | | |
| | Monthly Charge | \$8.28 |
| | Nonrecurring Charge | \$12.00 |
| 320 Kbps | | |
| | Monthly Charge | \$9.20 |
| | Nonrecurring Charge | \$12.00 |
| 384 Kbps | | |
| | Monthly Charge | \$11.04 |
| | Nonrecurring Charge | \$12.00 |
| 512 Kbps | | |
| | Monthly Charge | \$23.00 |
| | Nonrecurring Charge | \$12.00 |

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.1 Rate Group #1 (Cont'd)

20.1.11 Frame Relay Service (Cont'd)

Committed Information Rate, per PVC 1 YR Term Payment Plan (TPP) (Cont'd)

| | | |
|---------------------|--|----------|
| 768 Kbps | | |
| Monthly Charge | | \$25.76 |
| Nonrecurring Charge | | \$12.00 |
| 1.024 MBps | | |
| Monthly Charge | | \$29.44 |
| Nonrecurring Charge | | \$12.00 |
| 1.536 MBps | | |
| Monthly Charge | | \$69.00 |
| Nonrecurring Charge | | \$12.00 |
| 5 Mbps | | |
| Monthly Charge | | \$106.00 |
| Nonrecurring Charge | | \$100.00 |
| 10 Mbps | | |
| Monthly Charge | | \$170.00 |
| Nonrecurring Charge | | \$100.00 |
| 15 Mbps | | |
| Monthly Charge | | \$234.00 |
| Nonrecurring Charge | | \$100.00 |
| 20 Mbps | | |
| Monthly Charge | | \$298.00 |
| Nonrecurring Charge | | \$100.00 |
| 25 Mbps | | |
| Monthly Charge | | \$361.00 |
| Nonrecurring Charge | | \$100.00 |
| 30 Mbps | | |
| Monthly Charge | | \$425.00 |
| Nonrecurring Charge | | \$100.00 |
| 35 Mbps | | |
| Monthly Charge | | \$489.00 |
| Nonrecurring Charge | | \$100.00 |

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.1 Rate Group #1 (Cont'd)

20.1.11 Frame Relay Service (Cont'd)

Committed Information Rate, per PVC 2 YR Term Payment Plan (TPP)

| | | |
|------------|---------------------|---------|
| 14 Kbps | | |
| | Monthly Charge | \$1.80 |
| | Nonrecurring Charge | \$12.00 |
| 16 Kbps | | |
| | Monthly Charge | \$2.70 |
| | Nonrecurring Charge | \$12.00 |
| 28 Kbps | | |
| | Monthly Charge | \$3.60 |
| | Nonrecurring Charge | \$12.00 |
| 32 Kbps | | |
| | Monthly Charge | \$3.60 |
| | Nonrecurring Charge | \$12.00 |
| 56/64 Kbps | | |
| | Monthly Charge | \$4.50 |
| | Nonrecurring Charge | \$12.00 |
| 128 Kbps | | |
| | Monthly Charge | \$5.40 |
| | Nonrecurring Charge | \$12.00 |
| 192 Kbps | | |
| | Monthly Charge | \$6.30 |
| | Nonrecurring Charge | \$12.00 |
| 256 Kbps | | |
| | Monthly Charge | \$8.10 |
| | Nonrecurring Charge | \$12.00 |
| 320 Kbps | | |
| | Monthly Charge | \$9.00 |
| | Nonrecurring Charge | \$12.00 |
| 384 Kbps | | |
| | Monthly Charge | \$10.80 |
| | Nonrecurring Charge | \$12.00 |
| 512 Kbps | | |
| | Monthly Charge | \$22.50 |
| | Nonrecurring Charge | \$12.00 |

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.1 Rate Group #1 (Cont'd)

20.1.11 Frame Relay Service (Cont'd)

Committed Information Rate, per PVC 2 YR Term Payment Plan (TPP) (Cont'd)

| | | |
|------------|---------------------|----------|
| 768 Kbps | | |
| | Monthly Charge | \$25.20 |
| | Nonrecurring Charge | \$12.00 |
| 1.024 MBps | | |
| | Monthly Charge | \$28.80 |
| | Nonrecurring Charge | \$12.00 |
| 1.536 MBps | | |
| | Monthly Charge | \$62.00 |
| | Nonrecurring Charge | \$12.00 |
| 5 Mbps | | |
| | Monthly Charge | \$103.00 |
| | Nonrecurring Charge | \$100.00 |
| 10 Mbps | | |
| | Monthly Charge | \$164.00 |
| | Nonrecurring Charge | \$100.00 |
| 15 Mbps | | |
| | Monthly Charge | \$226.00 |
| | Nonrecurring Charge | \$100.00 |
| 20 Mbps | | |
| | Monthly Charge | \$287.00 |
| | Nonrecurring Charge | \$100.00 |
| 25 Mbps | | |
| | Monthly Charge | \$349.00 |
| | Nonrecurring Charge | \$100.00 |
| 30 Mbps | | |
| | Monthly Charge | \$410.00 |
| | Nonrecurring Charge | \$100.00 |
| 35 Mbps | | |
| | Monthly Charge | \$472.00 |
| | Nonrecurring Charge | \$100.00 |

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.1 Rate Group #1 (Cont'd)

20.1.11 Frame Relay Service (Cont'd)

Committed Information Rate, per PVC 3YR Term Payment Plan (TPP)

| | | |
|------------|---------------------|---------|
| 14 Kbps | | |
| | Monthly Charge | \$1.72 |
| | Nonrecurring Charge | \$12.00 |
| 16 Kbps | | |
| | Monthly Charge | \$2.58 |
| | Nonrecurring Charge | \$12.00 |
| 28 Kbps | | |
| | Monthly Charge | \$3.44 |
| | Nonrecurring Charge | \$12.00 |
| 32 Kbps | | |
| | Monthly Charge | \$3.44 |
| | Nonrecurring Charge | \$12.00 |
| 56/64 Kbps | | |
| | Monthly Charge | \$4.30 |
| | Nonrecurring Charge | \$12.00 |
| 128 Kbps | | |
| | Monthly Charge | \$5.16 |
| | Nonrecurring Charge | \$12.00 |
| 192 Kbps | | |
| | Monthly Charge | \$6.02 |
| | Nonrecurring Charge | \$12.00 |
| 256 Kbps | | |
| | Monthly Charge | \$7.74 |
| | Nonrecurring Charge | \$12.00 |
| 320 Kbps | | |
| | Monthly Charge | \$8.60 |
| | Nonrecurring Charge | \$12.00 |
| 384 Kbps | | |
| | Monthly Charge | \$10.32 |
| | Nonrecurring Charge | \$12.00 |
| 512 Kbps | | |
| | Monthly Charge | \$21.50 |
| | Nonrecurring Charge | \$12.00 |

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.1 Rate Group #1 (Cont'd)

20.1.11 Frame Relay Service (Cont'd)

Committed Information Rate, per PVC 3YR Term Payment Plan (TPP) (Cont'd)

| | | |
|---------------------|--|----------|
| 768 Kbps | | |
| Monthly Charge | | \$24.08 |
| Nonrecurring Charge | | \$12.00 |
| 1.024 MBps | | |
| Monthly Charge | | \$27.52 |
| Nonrecurring Charge | | \$12.00 |
| 1.536 MBps | | |
| Monthly Charge | | \$56.00 |
| Nonrecurring Charge | | \$12.00 |
| 5 Mbps | | |
| Monthly Charge | | \$94.00 |
| Nonrecurring Charge | | \$100.00 |
| 10 Mbps | | |
| Monthly Charge | | \$150.00 |
| Nonrecurring Charge | | \$100.00 |
| 15 Mbps | | |
| Monthly Charge | | \$206.00 |
| Nonrecurring Charge | | \$100.00 |
| 20 Mbps | | |
| Monthly Charge | | \$263.00 |
| Nonrecurring Charge | | \$100.00 |
| 25 Mbps | | |
| Monthly Charge | | \$319.00 |
| Nonrecurring Charge | | \$100.00 |
| 30 Mbps | | |
| Monthly Charge | | \$375.00 |
| Nonrecurring Charge | | \$100.00 |
| 35 Mbps | | |
| Monthly Charge | | \$431.00 |
| Nonrecurring Charge | | \$100.00 |

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.1 Rate Group #1 (Cont'd)

20.1.12 Internet Digital Access Service (IDAS)

(A) Nonrecurring Charges

(1) Internet Digital Access Service

| | |
|----------------------------|------------|
| Initial Order, per request | \$1,000.00 |
| Change Order, per request | \$130.26 |

(B) Monthly Recurring Charges

(1) Internet Digital Access Transport (IDAT)**

This is the rate per Facility.

4 to 7 Facilities

| | |
|----------------|----------|
| Month to Month | \$760.00 |
| 1 Year Term | \$690.00 |
| 2 Year Term | \$675.00 |
| 3 Year Term | \$600.00 |

8 to 9 Facilities

| | |
|----------------|----------|
| Month to Month | \$730.00 |
| 1 Year Term | \$660.00 |
| 2 Year Term | \$635.00 |
| 3 Year Term | \$550.00 |

10 or More Facilities

| | |
|----------------|----------|
| Month to Month | \$710.00 |
| 1 Year Term | \$640.00 |
| 2 Year Term | \$615.00 |
| 3 Year Term | \$550.00 |

** The rate per facility is based on the total number of facilities being billed at any location, at the time of the bill, even if the facilities were ordered at different times.

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.1 Rate Group #1 (Cont'd)

20.1.12 Internet Digital Access Service (IDAS) (Cont'd)

(B) Monthly Recurring Charges (Cont'd)

(2) Internet Digital Access Port (IDAP)**

This is the rate per Facility.

4 to 7 Facilities

| | |
|----------------|----------|
| Month to Month | \$730.00 |
| 1 Year Term | \$600.00 |
| 2 Year Term | \$550.00 |
| 3 Year Term | \$500.00 |

8 to 9 Facilities

| | |
|----------------|----------|
| Month to Month | \$710.00 |
| 1 Year Term | \$570.00 |
| 2 Year Term | \$520.00 |
| 3 Year Term | \$450.00 |

10 or More Facilities

| | |
|----------------|----------|
| Month to Month | \$690.00 |
| 1 Year Term | \$550.00 |
| 2 Year Term | \$500.00 |
| 3 Year Term | \$450.00 |

(3) Internet Digital Access Foreign Exchange Service (IDAS-FX)

Rates applicable to IDAS-FX service can be found in Section 20.1.5 of this guide for DS-1 Channel Mileage Facility and Channel Mileage Termination. These rates are in addition to the rates for IDAT or IDAP as shown above.

** The rate per facility is based on the total number of facilities being billed at any location, at the time of the bill, even if the facilities were ordered at different times.

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.2 Rate Group #2

For a list of Carriers included in Rate Group 2, refer to Title Page 7.

20.2.1 Reserved for future use

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.2 Rate Group #2 (Cont'd)

20.2.1 Reserved for future use (Cont'd)

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.2 Rate Group #2 (Cont'd)

20.2.2 Reserved for future use (Cont'd)

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.2 Rate Group #2 (Cont'd)

20.2.2 Reserved for future use (Cont'd)

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.2 Rate Group #2 (Cont'd)

20.2.2 Reserved for future use (Cont'd)

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.2 Rate Group #2 (Cont'd)

20.2.2 Reserved for future use (Cont'd)

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.2 Rate Group #2 (Cont'd)

20.2.3 Access Ordering

Regulations concerning Access Ordering are set forth in Section 5 preceding.

| <u>Service Date Change Charge</u> | <u>Nonrecurring Charge</u> | |
|-----------------------------------|----------------------------|-----|
| - Per Order | \$50.00 | |
| | | |
| <u>Design Change Charge</u> | | |
| - Per order, per occurrence | \$979.26 | (C) |
| | | |
| <u>Cancellation Charge</u> | | |
| - Per Order | \$10,798.37 | (C) |
| | | |
| <u>Expedited Order Charge</u> | | |
| - Per Order, per day expedited | \$300.00 | |

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.2 Rate Group #2 (Cont'd)

20.2.4 Reserved for future use

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.2 Rate Group #2 (Cont'd)

20.2.4 Reserved for future use (Cont'd)

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.2 Rate Group #2 (Cont'd)

20.2.4 Reserved for future use (Cont'd)

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.2 Rate Group #2 (Cont'd)

20.2.4 Reserved for future use (Cont'd)

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.2 Rate Group #2 (Cont'd)

20.2.4 Reserved for future use (Cont'd)

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.2 Rate Group #2 (Cont'd)

20.2.4 Reserved for future use (Cont'd)

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.2 Rate Group #2 (Cont'd)

20.2.4 Reserved for future use (Cont'd)

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.2 Rate Group #2 (Cont'd)

20.2.4 Reserved for future use (Cont'd)

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.2 Rate Group #2 (Cont'd)

20.2.4 Reserved for future use (Cont'd)

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.2 Rate Group #2 (Cont'd)

20.2.5 Special Access Service

Regulations concerning Special Access are set forth in Section 7 preceding.

Metallic Service

Channel Termination

| | | |
|---|--------------------------------------|------------|
| - | per Order | \$130.26 |
| - | per Termination, per month | \$150.00 |
| - | per Termination, nonrecurring charge | \$1,000.00 |

Channel Mileage

| | | |
|---|--|---------|
| - | Channel Mileage Facility, per Mile, per month | \$0.29 |
| - | Channel Mileage Termination, per termination, per month | \$35.00 |

Optional Features & Functions

Bridging

Three premises bridging, per port *

Series bridging, per port *

* No demand - rates available on request.

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.2 Rate Group #2 (Cont'd)

20.2.5 Special Access Service (Cont'd)

| | | | |
|---|--|-------------|---------------------|
| <u>Voice Grade Service</u> | | | |
| <u>Service Order Charge</u> - | per order | \$4,015.43 | (C) |
| <u>Channel Termination</u> | | | |
| - | per Two Wire Termination, per month | \$1,724.50 | |
| - | per Two Wire Termination, nonrecurring charge | \$15,054.06 | |
| - | per Four Wire Termination, per month | \$2,127.53 | |
| - | per Four Wire Termination, nonrecurring charge | \$15,054.06 | |
| <u>Channel Mileage</u> | | | |
| - | Channel Mileage Facility, per Mile, per month | \$8.96 | |
| - | Channel Mileage Termination, per termination, per month | \$925.00 | (C) |
| <u>Discontinuance Non-Recurring Charge</u> – per Circuit | | \$975.00 | |
| <u>Optional Features & Functions</u> | | | <u>Monthly Rate</u> |
| Central Office Bridging Capability Two-Wire or Four-Wire, per Port | | | |
| - | Data | \$1.00 | |
| - | Voice | \$1.00 | |
| - | Telephoto | * | |
| - | DATAPHONE | * | |
| - | Telemetry & Alarm | * | |
| Conditioning, per Termination | | | |
| - | C Type | \$1.00 | |
| - | Improved Attenuation Distortion** | \$7.74 | |
| - | Improved Envelope Delay Distortion** | \$7.74 | |
| - | Data Capability | \$1.00 | |
| - | Sealing Current | * | |

* No demand rates available on request.

** Improved Attenuation Distortion and Improved Envelope Delay Distortion will continue to be provided to all customers who were provided with either or both of these optional features in conjunction with C-Type Conditioning prior to May 4, 1988.

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.2 Rate Group #2 (Cont'd)

20.2.5 Special Access Service (Cont'd)

Voice Grade Service (Cont'd)

Optional Features & Functions (Cont'd)

Monthly
Rate

Improved Return Loss for Effective
Two-Wire or Four-Wire Transmission
- per Termination

\$1.00

Customer Specified Receive Level,
- per Termination

\$1.00

Signaling Capability
- per Termination
- Loop Signaling Range Extension
- Loop or E&M to SF
- E&M to DX
- E&M to Loop
- Loop or E&M to PCM
- Automatic Ringdown

\$1.00

Selective Signaling Arrangement

\$1.00

Transfer Arrangement
(Key Activated ** or Dial Up)***

- Per Four Port Arrangement
including control circuit termination****

*

- Per Five Port Arrangement
including control circuit termination****

*

* No demand rates available on request.

** The key activated control circuit is rated as a Metallic Circuit Termination and Circuit Mileage, if applicable.

*** The Dial Up option requires the customer to purchase the Controller Arrangement from Section 20.2.7.

**** An additional Channel Termination charge will apply whenever a space circuit is configured as a leg to the customer's premises. Additional circuit mileage charges will apply when the transfer arrangement is not located in the customer premises serving wire center.

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.2 Rate Group #2 (Cont'd)

20.2.5 Special Access Service (Cont'd)

Voice Grade Service (Cont'd)

Optional Features & Functions (Cont'd)

Monthly
Rate

Voice Grade Facility Switching Arrangement

Echo Control

- Echo Suppression, per Circuit

*

- Echo Canceller, per Circuit

*

Improved Termination Option, per Termination

\$11.09

* No demand rates available on request.

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.2 Rate Group #2 (Cont'd)

20.2.5 Special Access Service (Cont'd)

Program Audio Service

Channel Termination

| | | |
|---|-------------------------------------|----------|
| - | per Order | \$130.26 |
| - | 200 to 3500 Hz, monthly rate | \$35.65 |
| - | 100 to 5000 Hz, monthly rate | \$38.69 |
| - | 50 to 8000 Hz, monthly rate | \$38.69 |
| - | 50 to 15000 Hz, monthly rate | \$38.69 |
| - | 200 to 3500 Hz, daily rate | \$3.55 |
| - | 100 to 5000 Hz, daily rate | \$3.86 |
| - | 50 to 8000 Hz, daily rate | \$3.86 |
| - | 50 to 15000 Hz, daily rate | \$3.86 |
| - | 200 to 3500 Hz, Nonrecurring Charge | \$741.01 |
| - | 100 to 5000 Hz, Nonrecurring Charge | \$741.01 |
| - | 50 to 8000 Hz, Nonrecurring Charge | \$741.01 |
| - | 50 to 15000 Hz, Nonrecurring Charge | \$741.01 |

Channel Mileage

| | | |
|---|--|----------|
| - | Channel Mileage Facility, per Mile | |
| - | 200 to 3500 Hz, monthly rate | \$0.30 |
| - | 100 to 5000 Hz, monthly rate | \$0.59 |
| - | 50 to 8000 Hz, monthly rate | \$0.89 |
| - | 50 to 15000 Hz, monthly rate | \$1.18 |
| - | 200 to 3500 Hz, daily rate | \$0.03 |
| - | 100 to 5000 Hz, daily rate | \$0.06 |
| - | 50 to 8000 Hz, daily rate | \$0.09 |
| - | 50 to 15000 Hz, daily rate | \$0.12 |
| - | Channel Mileage Termination, per Termination | |
| - | 200 to 3500 Hz, monthly rate | \$35.38 |
| - | 100 to 5000 Hz, monthly rate | \$70.46 |
| - | 50 to 8000 Hz, monthly rate | \$104.48 |
| - | 50 to 15000 Hz, monthly rate | \$140.93 |
| - | 200 to 3500 Hz, daily rate | \$3.53 |
| - | 100 to 5000 Hz, daily rate | \$7.05 |
| - | 50 to 8000 Hz, daily rate | \$10.57 |
| - | 50 to 15000 Hz, daily rate | \$14.09 |

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.2 Rate Group #2 (Cont'd)

20.2.5 Special Access Service (Cont'd)

Program Audio Service (Cont'd)

Optional Features and Functions

| | |
|---|---------|
| Bridging Distribution Amplifier, per Port, monthly rate | * |
| Bridging Distribution Amplifier, per Port, daily rate | * |
| Gain Conditioning per Service, monthly rate | \$12.00 |
| Gain Conditioning per Service, daily rate | \$1.20 |
| Stereo, per Service, monthly rate | * |
| Stereo, per Service, daily rate | * |

* No demand rates available on request.

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.2 Rate Group #2 (Cont'd)

20.2.5 Special Access Service (Cont'd)

Video Service

Channel Termination

| | | |
|---|--------------------------------------|----------|
| - | per Order | \$130.26 |
| - | per Termination, monthly rate | |
| | TV-1 or 2 | * |
| | 4TV-5 | * |
| | 6TV-5 | * |
| | TV-15 | * |
| - | per Termination, daily rate | |
| | TV-1 or 2 | ** |
| | 4TV-5 | ** |
| | 6TV-5 | ** |
| | TV-15 | ** |
| - | per Termination, Nonrecurring Charge | |
| | TV-1 or 2 | * |
| | 4TV-5 | * |
| | 6TV-5 | * |
| | TV-15 | * |

Channel Mileage

| | | |
|---|---|----|
| - | Channel Mileage Facility, per Mile, monthly rate | * |
| | per Mile, daily rate | ** |
| - | Channel Mileage Termination, per termination, monthly rate | * |
| | per termination, daily rate | ** |

* No demand - rates available on request.

** Daily rates will be topped and maximum rates derived as set forth in Section 7 preceding

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.2 Rate Group #2 (Cont'd)

20.2.5 Special Access Service (Cont'd)

Digital Data Service

Service Order Charge – per order \$4,016.34 (C)

Channel Termination

- per Termination, monthly rate
All Speeds \$2,181.39

- per Termination, Nonrecurring Charge
All Speeds \$16,008.94

Channel Mileage

- Channel Mileage Facility,
Per mile, per month

| | |
|-----------|---------|
| 2.4 kbps | \$10.80 |
| 4.8 kbps | \$10.80 |
| 9.6 kbps | \$10.80 |
| 19.2 kbps | \$10.80 |
| 56.0 kbps | \$20.02 |
| 64.0 kbps | \$20.02 |

- Channel Mileage Termination,
Per termination, per month

| | |
|-----------|------------|
| 2.4 kbps | \$1,187.09 |
| 4.8 kbps | \$1,187.09 |
| 9.6 kbps | \$1,187.09 |
| 19.2 kbps | \$1,187.09 |

56.0 kbps \$2,004.19
64.0 kbps \$2,004.19 (C)

Discontinuance Non-Recurring Charge – per Circuit
All Speeds \$975.00

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.2 Rate Group #2 (Cont'd)

20.2.5 Special Access Service (Cont'd)

Digital Data Service (Cont'd)

Optional Features and Functions

| | |
|---|---------|
| Central Office Bridging per Port, per month | \$12.72 |
| Secondary Channel per Station | * |
| Multiplexing | |
| Digital Data Carrier, per month | * |
| Digital Data Carrier, Nonrecurring Charge | * |
| Loop Transfer Arrangement (Key Activated** or Dial Up***) Per Four Port Arrangement, including control circuit termination**** monthly rate | ICB |
| Nonrecurring Charge | ICB |

* No demand- rate available on request.

** The key activated control circuit is rated as a Metallic Circuit Termination and Circuit mileage, if applicable.

*** The Dial Up option requires the customer to purchase the Controller Arrangement from Section 20.1.7

**** An additional Circuit Termination charge will apply whenever a space circuit is configured as a leg to the customer's premises. Additional circuit mileage charges will apply when the transfer arrangement is not located in the customer premises serving wire center.

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.2 Rate Group #2 (Cont'd)

20.2.5 Special Access Service (Cont'd)

High Capacity Service

Service Order Charge - per Order

| | | |
|----------------------|-------------|-----|
| DS-1 - 1.544 Mbps | \$4,026.53 | (C) |
| DS-3 - 44.736 Mbps | \$12,795.83 | |
| OC-3 - 155.520 Mbps | \$12,795.83 | |
| OC-3c - 155.520 Mbps | \$12,795.83 | |

Channel Termination

per Termination, monthly rate -

Competitive End User & IC CDL

| | |
|----------------------|-------------|
| DS-1 1.544 Mbps | \$5,935.40 |
| DS-3 - 44.736 Mbps | \$47,483.31 |
| OC-3 - 155.520 Mbps | \$98,666.56 |
| OC-3c - 155.520 Mbps | \$92,499.88 |

- per Termination, Nonrecurring Charge

| | |
|----------------------|--------------|
| DS-1 - 1.544 Mbps | \$21,583.29 |
| DS-3 - 44.736 Mbps | \$105,141.53 |
| OC-3 - 155.520 Mbps | \$110,999.86 |
| OC-3c - 155.520 Mbps | \$110,999.86 |

Channel Mileage

- Channel Mileage Facility,
Per Mile, per month

| | |
|----------------------|------------|
| DS-1 - 1.544 Mbps | \$237.41 |
| DS-3 - 44.736 Mbps | \$4,069.99 |
| OC-3 - 155.520 Mbps | \$8,633.37 |
| OC-3c - 155.520 Mbps | \$8,633.37 |

- Channel Mileage Termination,
Per Termination, per month

| | |
|----------------------|-------------|
| DS-1 - 1.544 Mbps | \$4,782.19 |
| DS-3 - 44.736 Mbps | \$30,524.97 |
| OC-3 - 155.520 Mbps | \$61,666.56 |
| OC-3c - 155.520 Mbps | \$61,666.56 |

Discontinuance Non-Recurring Charge – per Circuit

| | |
|----------------------|----------|
| DS-1 - 1.544 Mbps | \$975.00 |
| DS-3 - 44.736 Mbps | \$975.00 |
| OC-3 - 155.520 Mbps | \$975.00 |
| OC-3c - 155.520 Mbps | \$975.00 |

* Material filed with Transmittal 88 with effective date of 8/1/2018

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.2 Rate Group #2 (Cont'd)

20.2.5 Special Access Service (Cont'd)

High Capacity Service (Cont'd)

Optional Features and Functions

Multiplexing

| | | | | |
|---|---------------------|--|-------------|-----|
| - | OC-3 to DS-3 | | | |
| | per month | | \$46,249.93 | (C) |
| | Nonrecurring Charge | | \$39,990.79 | |
| - | OC-3 to DS-1 | | | |
| | per month | | \$55,499.95 | |
| | Nonrecurring Charge | | \$39,990.79 | |
| - | DS-3 to DS-1 | | | |
| | per month | | \$43,166.66 | |
| | Nonrecurring Charge | | \$39,990.79 | |
| - | DS-1 to Voice | | | |
| | per month | | \$8,109.18 | |
| | Nonrecurring Charge | | \$12,857.49 | |
| - | DS-1 to DS0 | | | |
| | per month | | \$8,109.18 | |
| | Nonrecurring Charge | | \$12,857.49 | (C) |

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.2 Rate Group #2 (Cont'd)

20.2.5 Special Access Service (Cont'd)

High Capacity Service (Cont'd)

Optional Features and Functions (Cont'd)

Multiplexing (Cont'd)

| | | | |
|---|--|-------------|-----|
| - | Digital DS3 Cross Connect per month | | * |
| | Nonrecurring Charge | | * |
| - | Digital Data Subrate | | |
| | One DSO to Twenty 2.4 Kbps monthly rate | | ICB |
| | Nonrecurring Charge | | ICB |
| | One DSO to Ten 4.8 Kbps monthly rate | | ICB |
| | Nonrecurring Charge | | ICB |
| | One DSO to Five 9.6 Kbps monthly rate | | ICB |
| | Nonrecurring Charge | | ICB |
| | Automatic Loop transfer** | | |
| - | per Arrangement | | ICB |
| - | per Termination | \$143.05 | |
| | Automatic Protection Switching per DS1 monthly rate | | * |
| | Nonrecurring Charge | | * |
| | Clear Channel Capability, per DS1 circuit arranged monthly rate | \$0.00 | |
| | Nonrecurring Charge | \$16,594.17 | (C) |

* No demand - rates available on request.

** An additional Channel Termination charge will apply whenever the space channel is configured as a leg to the customer designated premises. Additional Channel Mileage charges will also apply when the transfer arrangement is not located in the customer designated premises serving wire center.

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.2 Rate Group #2 (Cont'd)

20.2.6 Reserved for future use (Cont'd)

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.2 Rate Group #2 (Cont'd)

20.2.6 Reserved for future use (Cont'd)

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.2 Rate Group #2 (Cont'd)

20.2.7 Miscellaneous Services

Additional Engineering and Additional Labor

| | |
|--|---------|
| Charges for Additional Engineering per Engineer, 1/2 hour or Fraction thereof | |
| Basic Time | \$40.00 |
| Overtime | \$60.00 |
| Premium Time* | \$80.00 |

| | |
|--|---------|
| Charges for Additional Labor per Technician, 1/2 hour or Fraction thereof | |
| Basic Time | \$30.00 |
| Overtime | \$45.00 |
| Premium Time* | \$60.00 |

| | |
|--|---------|
| Charges for Additional Testing per Technician, 1/2 hour or Fraction thereof | |
| Basic Time | \$30.00 |
| Overtime | \$45.00 |
| Premium Time* | \$60.00 |

| | |
|---|---------|
| Charges for Standby per Technician, 1/2 hour or Fraction thereof | |
| Basic Time | \$30.00 |
| Overtime | \$45.00 |
| Premium Time* | \$60.00 |

| | |
|---|---------|
| Charges for Programming per Programmer, 1/2 hour or Fraction thereof | |
| Basic Time | \$30.00 |
| Overtime | \$45.00 |
| Premium Time* | \$60.00 |

| | |
|---|---------|
| <u>NID Replacement</u> | |
| Nonrecurring Charge per 2 pairs of capacity | \$99.00 |

* Subject to Minimum Charge of Four Hours.

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.2 Rate Group #2 (Cont'd)

20.2.7 Miscellaneous Services (Cont'd)

Additional Testing

Charges for Additional Testing
per Transmission Path, First Point
of Switching, per Month

- Automated Scheduled Testing
 - monthly rate *
 - Nonrecurring Charge *

- Additional Cooperative Scheduled Testing
 - Basic Offering
 - monthly rate *
 - Nonrecurring Charge *

 - Gain Slope
 - monthly rate *
 - Nonrecurring Charge *

- Additional Manual Scheduled Testing
 - Basic Offering
 - monthly rate *
 - Nonrecurring Charge *

 - Gain Slope
 - monthly rate *
 - Nonrecurring Charge *

Controller Agreement

- Per Arrangement
 - monthly rate *
 - Nonrecurring Charge *

* No demand - rates available on request.

ACCESS SERVICE

20. Rates and Charges (Cont'd)20.2 Rate Group #2 (Cont'd)20.2.7 Miscellaneous Services (Cont'd)

- Paper or fax LOA processing
Per telephone number \$0.75

Special Access Surcharge
monthly rate \$25.00

Billing Name and Address Service (BNA)

- Billing Name and Address per Order \$28.00
- Billing Name and Address Found/Each \$0.40
- Billing Name and Address Not Found/Each \$0.40

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.2 Rate Group #2 (Cont'd)

20.2.7 Miscellaneous Services (Cont'd)

End User/Agents List

| | | |
|---|--|---------|
| - | Agent List, Nonrecurring Charge per State, per Order | \$50.00 |
| - | Agent List, Initial per Customer Account* | \$0.03 |
| - | Agent List, Allocation, per Listing** | \$0.03 |
| - | Snapshot List, NRC per State, per Order | \$75.00 |
| - | Snapshot List, per Listing*** | \$0.05 |

Telecommunications Service Priority

| | | |
|---|--|---------|
| - | Establishment of TSP System Nonrecurring Service Charge | \$14.50 |
| - | Restoration Priority, monthly rate | \$4.90 |

End User Validation List

| | | |
|--|--|---------|
| | Standard Sort. Per Record Provided | \$0.034 |
| | Administrative Fee--Paper Report, Electronic Transmission or Magnetic Tape, Per Request | \$78.00 |
| | Special Sort, Per Record Provided | \$0.054 |

PIC Freeze Verification Report

Refer to Section 20.2.7 Snapshot List, NRC and Snapshot List, Per Listing for rates and charges.

* For the purpose of the Initial Lists customer and agent is defined in Section 2.6.

** For the Purpose of the Allocation list, a listing is defined as an end user or agent record eligible for a Primary Interexchange Carrier Selection.

*** For the purpose of the Snapshot list, a listing is defined as an end user or agent eligible for a Predesignated Interexchange Carrier Selection.

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.2 Rate Group #2 (Cont'd)

20.2.7 Miscellaneous Services (Cont'd)

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.2 Rate Group #2 (Cont'd)

20.2.8 Special Facilities Routing Access Service

The following rates and charges are in addition to all other rates and charges that may be applicable for other services that may be furnished under the provisions of this guide to operate in conjunction with this service.

| | | |
|-----|---|-----|
| (A) | Special Routing Access Service Area Plan-Setup and Removal, Per End Office or Tandem Office Switching System. (Note 1) (Note 2) | |
| | Recurring Charges | ICB |
| | Nonrecurring Charges | ICB |
| (B) | Special Routing Access Service Trunk Group Setup and Removal, Per End Office Switching System, Per Occurrence (Note 1) (Note 2) | |
| | Recurring Charges | ICB |
| | Nonrecurring Charges | ICB |
| (C) | Activation or Deactivation of Special Routing Access Service, Per End Office or Tandem Office Switching System, Per Occurrence | |
| | Recurring Charges | ICB |
| | Nonrecurring Charges | ICB |

(Note 1) The service setups will only be activated in offices that are specifically negotiated by the customer with the Telephone Company and are mutually agreeable between both parties.

(Note 2) End Offices will be updated for activation and/or deactivation annually.

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.2 Rate Group #2 (Cont'd)

20.2.8 Special Facilities Routing Access Service (Cont'd)

| | | |
|-----|--|------|
| (D) | Special Routing Access Service Trunk Usage, When Activated, Per Trunk, Per Initial Activation Hour | |
| | Recurring Charges | ICB* |
| | Nonrecurring Charges | ICB |
| (E) | Special Routing Access Service Trunk Usage, When Activated, Per Trunk, Per Subsequent 1/2 Hour | |
| | Recurring Charges | ICB* |
| | Nonrecurring Charges | ICB |
| (F) | Special Routing Access Service Maintenance and Administration. Per End Office or Tandem Office Switching System, Per Month | |
| | Recurring Charges | ICB |
| | Nonrecurring Charges | ICB |

* This rate is in addition to Trunk Side premium Access Service rates which may apply on an ongoing basis whether SRAS is activated or not

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.2 Rate Group #2 (Cont'd)

20.2.9 Reserved for future use

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.2 Rate Group #2 (Cont'd)

20.2.9 Reserved for future use (Cont'd)

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.2 Rate Group #2 (Cont'd)

20.2.9 Reserved for future use (Cont'd)

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.2 Rate Group #2 (Cont'd)

20.2.10 Reserved for future use

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.2 Rate Group #2 (Cont'd)

20.2.11 Frame Relay Service

Network to Network Interface (NNI) - Month To Month*

| | |
|----------------------|------------|
| DS1 Port 1.536 Mbps, | |
| Monthly Charge | \$475.00 |
| Nonrecurring Charge | \$400.00 |
| DS-3 Port | |
| Monthly Charge | \$1,000.00 |
| Nonrecurring Charge | \$1,050.00 |

Network to Network Interface NNI – 1 YR Term Payment Plan (TPP)*

| | |
|---------------------|------------|
| DS1 Port 1.536 Mbps | |
| Monthly Charge | \$404.00 |
| Nonrecurring Charge | \$400.00 |
| DS-3 Port | |
| Monthly Charge | \$850.00 |
| Nonrecurring Charge | \$1,050.00 |

Network to Network Interface NNI – 2 YR Term Payment Plan (TPP)*

| | |
|---------------------|------------|
| DS1 Port 1.536 Mbps | |
| Monthly Charge | \$390.00 |
| Nonrecurring Charge | \$400.00 |
| DS-3 Port | |
| Monthly Charge | \$820.00 |
| Nonrecurring Charge | \$1,050.00 |

Network to Network Interface NNI – 3 YR Term Payment Plan (TPP)*

| | |
|---------------------|------------|
| DS1 Port 1.536 Mbps | |
| Monthly Charge | \$356.00 |
| Nonrecurring Charge | \$400.00 |
| DS-3 Port | |
| Monthly Charge | \$750.00 |
| Nonrecurring Charge | \$1,050.00 |

Service Order Charge Per Order \$130.23

Administrative Charge \$50.00

Expedited Order Charge, \$250.00

* Frame Relay NNI services will be offered for LATA 980 (St. Michaels) and LATA 726 (Colusa, CA) only. Additional Special Access charges with meet-point billing arrangements could apply in addition to NNI port charge.

ACCESS SERVICE

20. Rates and Charges (Cont'd)20.2 Rate Group #2 (Cont'd)20.2.11 Frame Relay Service (Cont'd)Frame Relay Access Connection

| | | |
|------------|---------------------|------------|
| 56 Kbps | | |
| | Monthly Charge | \$110.00 |
| | Nonrecurring Charge | \$105.23 |
| 1.536 Mbps | | |
| | Monthly Charge | \$210.00 |
| | Nonrecurring Charge | \$600.12 |
| DS-3 | | |
| | Monthly Charge | \$1,800.00 |
| | Nonrecurring Charge | \$3,410.00 |

Channel Mileage Facility Per Mile, Per Month

| | |
|------------|----------|
| 56 Kbps | \$0.95 |
| 1.536 Mbps | \$15.00 |
| DS-3 | \$142.00 |

UNI Port Connection Month to Month

| | | |
|----------|---------------------|----------|
| 56 Kbps | | |
| | Monthly Charge | \$45.00 |
| | Nonrecurring Charge | \$200.00 |
| 64 Kbps | | |
| | Monthly Charge | \$45.00 |
| | Nonrecurring Charge | \$200.00 |
| 128 Kbps | | |
| | Monthly Charge | \$75.00 |
| | Nonrecurring Charge | \$200.00 |
| 256 Kbps | | |
| | Monthly Charge | \$85.00 |
| | Nonrecurring Charge | \$300.00 |
| 384 Kbps | | |
| | Monthly Charge | \$105.00 |
| | Nonrecurring Charge | \$300.00 |
| 512 Kbps | | |
| | Monthly Charge | \$115.00 |
| | Nonrecurring Charge | \$400.00 |

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.2 Rate Group #2 (Cont'd)

20.2.11 Frame Relay Service (Cont'd)

UNI Port Connection Month to Month (Cont'd)

| | | |
|------------|---------------------|------------|
| 768 Kbps | | |
| | Monthly Charge | \$125.00 |
| | Nonrecurring Charge | \$400.00 |
| 1.536 Mbps | | |
| | Monthly Charge | \$150.00 |
| | Nonrecurring Charge | \$400.00 |
| DS-3 | | |
| | Monthly Charge | \$700.00 |
| | Nonrecurring Charge | \$1,050.00 |

UNI Port Connection 1 YR Term Payment Plan (TPP)

| | | |
|------------|---------------------|------------|
| 56 Kbps | | |
| | Monthly Charge | \$41.00 |
| | Nonrecurring Charge | \$200.00 |
| 64 Kbps | | |
| | Monthly Charge | \$41.40 |
| | Nonrecurring Charge | \$200.00 |
| 128 Kbps | | |
| | Monthly Charge | \$69.00 |
| | Nonrecurring Charge | \$200.00 |
| 256 Kbps | | |
| | Monthly Charge | \$78.20 |
| | Nonrecurring Charge | \$300.00 |
| 384 Kbps | | |
| | Monthly Charge | \$96.60 |
| | Nonrecurring Charge | \$300.00 |
| 512 Kbps | | |
| | Monthly Charge | \$105.80 |
| | Nonrecurring Charge | \$400.00 |
| 768 Kbps | | |
| | Monthly Charge | \$115.00 |
| | Nonrecurring Charge | \$400.00 |
| 1.536 MBps | | |
| | Monthly Charge | \$128.00 |
| | Nonrecurring Charge | \$400.00 |
| DS-3 | | |
| | Monthly Charge | \$595.00 |
| | Nonrecurring Charge | \$1,050.00 |

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.2 Rate Group #2 (Cont'd)

20.2.11 Frame Relay Service (Cont'd)

UNI Port Connection 2 YR Term Payment Plan (TPP)

| | | |
|------------|---------------------|------------|
| 56 Kbps | | |
| | Monthly Charge | \$40.50 |
| | Nonrecurring Charge | \$200.00 |
| 64 Kbps | | |
| | Monthly Charge | \$40.50 |
| | Nonrecurring Charge | \$200.00 |
| 128 Kbps | | |
| | Monthly Charge | \$67.50 |
| | Nonrecurring Charge | \$200.00 |
| 256 Kbps | | |
| | Monthly Charge | \$76.50 |
| | Nonrecurring Charge | \$300.00 |
| 384 Kbps | | |
| | Monthly Charge | \$94.50 |
| | Nonrecurring Charge | \$300.00 |
| 512 Kbps | | |
| | Monthly Charge | \$103.50 |
| | Nonrecurring Charge | \$400.00 |
| 768 Kbps | | |
| | Monthly Charge | \$112.50 |
| | Nonrecurring Charge | \$400.00 |
| 1.536 MBps | | |
| | Monthly Charge | \$123.00 |
| | Nonrecurring Charge | \$400.00 |
| DS-3 | | |
| | Monthly Charge | \$574.00 |
| | Nonrecurring Charge | \$1,050.00 |

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.2 Rate Group #2 (Cont'd)

20.2.11 Frame Relay Service (Cont'd)

UNI Port Connection 3 YR Term Payment Plan (TPP)

| | | |
|------------|---------------------|------------|
| 56 Kbps | | |
| | Monthly Charge | \$38.70 |
| | Nonrecurring Charge | \$200.00 |
| 64 Kbps | | |
| | Monthly Charge | \$38.70 |
| | Nonrecurring Charge | \$200.00 |
| 128 Kbps | | |
| | Monthly Charge | \$64.50 |
| | Nonrecurring Charge | \$200.00 |
| 256 Kbps | | |
| | Monthly Charge | \$73.10 |
| | Nonrecurring Charge | \$300.00 |
| 384 Kbps | | |
| | Monthly Charge | \$90.30 |
| | Nonrecurring Charge | \$300.00 |
| 512 Kbps | | |
| | Monthly Charge | \$98.90 |
| | Nonrecurring Charge | \$400.00 |
| 768 Kbps | | |
| | Monthly Charge | \$107.50 |
| | Nonrecurring Charge | \$400.00 |
| 1.536 MBps | | |
| | Monthly Charge | \$113.00 |
| | Nonrecurring Charge | \$400.00 |
| DS-3 | | |
| | Monthly Charge | \$525.00 |
| | Nonrecurring Charge | \$1,050.00 |

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.2 Rate Group #2 (Cont'd)

20.2.11 Frame Relay Service (Cont'd)

Committed Information Rate, per PVC Month to Month

| | | |
|------------|---------------------|----------|
| 14 Kbps | | |
| | Monthly Charge | \$3.00 |
| | Nonrecurring Charge | \$12.00 |
| 16 Kbps | | |
| | Monthly Charge | \$4.00 |
| | Nonrecurring Charge | \$12.00 |
| 28 Kbps | | |
| | Monthly Charge | \$7.00 |
| | Nonrecurring Charge | \$12.00 |
| 32 Kbps | | |
| | Monthly Charge | \$8.00 |
| | Nonrecurring Charge | \$12.00 |
| 56/64 Kbps | | |
| | Monthly Charge | \$14.00 |
| | Nonrecurring Charge | \$12.00 |
| 128 Kbps | | |
| | Monthly Charge | \$32.00 |
| | Nonrecurring Charge | \$12.00 |
| 192 Kbps | | |
| | Monthly Charge | \$48.00 |
| | Nonrecurring Charge | \$12.00 |
| 256 Kbps | | |
| | Monthly Charge | \$64.00 |
| | Nonrecurring Charge | \$12.00 |
| 320 Kbps | | |
| | Monthly Charge | \$80.00 |
| | Nonrecurring Charge | \$12.00 |
| 384 Kbps | | |
| | Monthly Charge | \$96.00 |
| | Nonrecurring Charge | \$12.00 |
| 512 Kbps | | |
| | Monthly Charge | \$128.00 |
| | Nonrecurring Charge | \$12.00 |

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.2 Rate Group #2 (Cont'd)

20.2.11 Frame Relay Service (Cont'd)

Committed Information Rate, per PVC Month to Month (Cont'd)

| | | |
|---------------------|--|----------|
| 768 Kbps | | |
| Monthly Charge | | \$192.00 |
| Nonrecurring Charge | | \$12.00 |
| 1.024 MBps | | |
| Monthly Charge | | \$256.00 |
| Nonrecurring Charge | | \$12.00 |
| 1.536 MBps | | |
| Monthly Charge | | \$384.00 |
| Nonrecurring Charge | | \$12.00 |
| 5 Mbps | | |
| Monthly Charge | | \$300.00 |
| Nonrecurring Charge | | \$100.00 |
| 10 Mbps | | |
| Monthly Charge | | \$400.00 |
| Nonrecurring Charge | | \$100.00 |
| 15 Mbps | | |
| Monthly Charge | | \$475.00 |
| Nonrecurring Charge | | \$100.00 |
| 20 Mbps | | |
| Monthly Charge | | \$550.00 |
| Nonrecurring Charge | | \$100.00 |
| 25 Mbps | | |
| Monthly Charge | | \$600.00 |
| Nonrecurring Charge | | \$100.00 |
| 30 Mbps | | |
| Monthly Charge | | \$650.00 |
| Nonrecurring Charge | | \$100.00 |
| 35 Mbps | | |
| Monthly Charge | | \$700.00 |
| Nonrecurring Charge | | \$100.00 |

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.2 Rate Group #2 (Cont'd)

20.2.11 Frame Relay Service (Cont'd)

Committed Information Rate, per PVC 1 YR Term Payment Plan (TPP)

| | | |
|------------|---------------------|----------|
| 14 Kbps | | |
| | Monthly Charge | \$2.76 |
| | Nonrecurring Charge | \$12.00 |
| 16 Kbps | | |
| | Monthly Charge | \$3.68 |
| | Nonrecurring Charge | \$12.00 |
| 28 Kbps | | |
| | Monthly Charge | \$6.44 |
| | Nonrecurring Charge | \$12.00 |
| 32 Kbps | | |
| | Monthly Charge | \$7.36 |
| | Nonrecurring Charge | \$12.00 |
| 56/64 Kbps | | |
| | Monthly Charge | \$12.88 |
| | Nonrecurring Charge | \$12.00 |
| 128 Kbps | | |
| | Monthly Charge | \$29.44 |
| | Nonrecurring Charge | \$12.00 |
| 192 Kbps | | |
| | Monthly Charge | \$44.16 |
| | Nonrecurring Charge | \$12.00 |
| 256 Kbps | | |
| | Monthly Charge | \$58.88 |
| | Nonrecurring Charge | \$12.00 |
| 320 Kbps | | |
| | Monthly Charge | \$73.60 |
| | Nonrecurring Charge | \$12.00 |
| 384 Kbps | | |
| | Monthly Charge | \$88.32 |
| | Nonrecurring Charge | \$12.00 |
| 512 Kbps | | |
| | Monthly Charge | \$117.76 |
| | Nonrecurring Charge | \$12.00 |

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.2 Rate Group #2 (Cont'd)

20.2.11 Frame Relay Service (Cont'd)

Committed Information Rate, per PVC 1 YR Term Payment Plan (TPP) (Cont'd)

| | | |
|---------------------|--|----------|
| 768 Kbps | | |
| Monthly Charge | | \$176.64 |
| Nonrecurring Charge | | \$12.00 |
| 1.024 MBps | | |
| Monthly Charge | | \$235.32 |
| Nonrecurring Charge | | \$12.00 |
| 1.536 MBps | | |
| Monthly Charge | | \$326.00 |
| Nonrecurring Charge | | \$12.00 |
| 5 Mbps | | |
| Monthly Charge | | \$255.00 |
| Nonrecurring Charge | | \$100.00 |
| 10 Mbps | | |
| Monthly Charge | | \$340.00 |
| Nonrecurring Charge | | \$100.00 |
| 15 Mbps | | |
| Monthly Charge | | \$404.00 |
| Nonrecurring Charge | | \$100.00 |
| 20 Mbps | | |
| Monthly Charge | | \$468.00 |
| Nonrecurring Charge | | \$100.00 |
| 25 Mbps | | |
| Monthly Charge | | \$510.00 |
| Nonrecurring Charge | | \$100.00 |
| 30 Mbps | | |
| Monthly Charge | | \$553.00 |
| Nonrecurring Charge | | \$100.00 |
| 35 Mbps | | |
| Monthly Charge | | \$595.00 |
| Nonrecurring Charge | | \$100.00 |

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.2 Rate Group #2 (Cont'd)

20.2.11 Frame Relay Service (Cont'd)

Committed Information Rate, per PVC 2 YR Term Payment Plan (TPP)

| | | |
|------------|---------------------|----------|
| 14 Kbps | | |
| | Monthly Charge | \$2.70 |
| | Nonrecurring Charge | \$12.00 |
| 16 Kbps | | |
| | Monthly Charge | \$3.60 |
| | Nonrecurring Charge | \$12.00 |
| 28 Kbps | | |
| | Monthly Charge | \$6.30 |
| | Nonrecurring Charge | \$12.00 |
| 32 Kbps | | |
| | Monthly Charge | \$7.20 |
| | Nonrecurring Charge | \$12.00 |
| 56/64 Kbps | | |
| | Monthly Charge | \$12.60 |
| | Nonrecurring Charge | \$12.00 |
| 128 Kbps | | |
| | Monthly Charge | \$28.80 |
| | Nonrecurring Charge | \$12.00 |
| 192 Kbps | | |
| | Monthly Charge | \$43.20 |
| | Nonrecurring Charge | \$12.00 |
| 256 Kbps | | |
| | Monthly Charge | \$57.60 |
| | Nonrecurring Charge | \$12.00 |
| 320 Kbps | | |
| | Monthly Charge | \$72.00 |
| | Nonrecurring Charge | \$12.00 |
| 384 Kbps | | |
| | Monthly Charge | \$86.40 |
| | Nonrecurring Charge | \$12.00 |
| 512 Kbps | | |
| | Monthly Charge | \$115.20 |
| | Nonrecurring Charge | \$12.00 |

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.2 Rate Group #2 (Cont'd)

20.2.11 Frame Relay Service (Cont'd)

Committed Information Rate, per PVC 2 YR Term Payment Plan (TPP) (Cont'd)

| | | |
|---------------------|--|----------|
| 768 Kbps | | |
| Monthly Charge | | \$172.80 |
| Nonrecurring Charge | | \$12.00 |
| 1.024 MBps | | |
| Monthly Charge | | \$230.40 |
| Nonrecurring Charge | | \$12.00 |
| 1.536 MBps | | |
| Monthly Charge | | \$315.00 |
| Nonrecurring Charge | | \$12.00 |
| 5 Mbps | | |
| Monthly Charge | | \$246.00 |
| Nonrecurring Charge | | \$100.00 |
| 10 Mbps | | |
| Monthly Charge | | \$328.00 |
| Nonrecurring Charge | | \$100.00 |
| 15 Mbps | | |
| Monthly Charge | | \$390.00 |
| Nonrecurring Charge | | \$100.00 |
| 20 Mbps | | |
| Monthly Charge | | \$451.00 |
| Nonrecurring Charge | | \$100.00 |
| 25 Mbps | | |
| Monthly Charge | | \$492.00 |
| Nonrecurring Charge | | \$100.00 |
| 30 Mbps | | |
| Monthly Charge | | \$533.00 |
| Nonrecurring Charge | | \$100.00 |
| 35 Mbps | | |
| Monthly Charge | | \$574.00 |
| Nonrecurring Charge | | \$100.00 |

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.2 Rate Group #2 (Cont'd)

20.2.11 Frame Relay Service (Cont'd)

Committed Information Rate, per PVC 3 YR Term Payment Plan (TPP)

| | | |
|------------|---------------------|----------|
| 14 Kbps | | |
| | Monthly Charge | \$2.58 |
| | Nonrecurring Charge | \$12.00 |
| 16 Kbps | | |
| | Monthly Charge | \$3.44 |
| | Nonrecurring Charge | \$12.00 |
| 28 Kbps | | |
| | Monthly Charge | \$6.02 |
| | Nonrecurring Charge | \$12.00 |
| 32 Kbps | | |
| | Monthly Charge | \$6.88 |
| | Nonrecurring Charge | \$12.00 |
| 56/64 Kbps | | |
| | Monthly Charge | \$12.04 |
| | Nonrecurring Charge | \$12.00 |
| 128 Kbps | | |
| | Monthly Charge | \$27.52 |
| | Nonrecurring Charge | \$12.00 |
| 192 Kbps | | |
| | Monthly Charge | \$41.28 |
| | Nonrecurring Charge | \$12.00 |
| 256 Kbps | | |
| | Monthly Charge | \$55.04 |
| | Nonrecurring Charge | \$12.00 |
| 320 Kbps | | |
| | Monthly Charge | \$68.80 |
| | Nonrecurring Charge | \$12.00 |
| 384 Kbps | | |
| | Monthly Charge | \$82.56 |
| | Nonrecurring Charge | \$12.00 |
| 512 Kbps | | |
| | Monthly Charge | \$110.08 |
| | Nonrecurring Charge | \$12.00 |

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.2 Rate Group #2 (Cont'd)

20.2.11 Frame Relay Service (Cont'd)

Committed Information Rate, per PVC 3 YR Term Payment Plan (TPP) (Cont'd)

| | | |
|---------------------|--|----------|
| 768 Kbps | | |
| Monthly Charge | | \$165.12 |
| Nonrecurring Charge | | \$12.00 |
| 1.024 MBps | | |
| Monthly Charge | | \$220.16 |
| Nonrecurring Charge | | \$12.00 |
| 1.536 MBps | | |
| Monthly Charge | | \$288.00 |
| Nonrecurring Charge | | \$12.00 |
| 5 Mbps | | |
| Monthly Charge | | \$225.00 |
| Nonrecurring Charge | | \$100.00 |
| 10 Mbps | | |
| Monthly Charge | | \$300.00 |
| Nonrecurring Charge | | \$100.00 |
| 15 Mbps | | |
| Monthly Charge | | \$356.00 |
| Nonrecurring Charge | | \$100.00 |
| 20 Mbps | | |
| Monthly Charge | | \$413.00 |
| Nonrecurring Charge | | \$100.00 |
| 25 Mbps | | |
| Monthly Charge | | \$450.00 |
| Nonrecurring Charge | | \$100.00 |
| 30 Mbps | | |
| Monthly Charge | | \$488.00 |
| Nonrecurring Charge | | \$100.00 |
| 35 Mbps | | |
| Monthly Charge | | \$525.00 |
| Nonrecurring Charge | | \$100.00 |

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.2 Rate Group #2 (Cont'd)

20.2.12 Internet Digital Access Service (IDAS)

(A) Nonrecurring Charges

(1) Internet Digital Access Service

| | |
|----------------------------|------------|
| Initial Order, per request | \$1,000.00 |
| Change Order, per request | \$130.26 |

(B) Monthly Recurring Charges

(1) Internet Digital Access Transport (IDAT)**

This is the rate per Facility.

4 to 7 Facilities

| | |
|----------------|----------|
| Month to Month | \$760.00 |
| 1 Year Term | \$680.00 |
| 2 Year Term | \$650.00 |
| 3 Year Term | \$600.00 |

8 to 9 Facilities

| | |
|----------------|----------|
| Month to Month | \$730.00 |
| 1 Year Term | \$650.00 |
| 2 Year Term | \$620.00 |
| 3 Year Term | \$565.00 |

10 or More Facilities

| | |
|----------------|----------|
| Month to Month | \$710.00 |
| 1 Year Term | \$630.00 |
| 2 Year Term | \$600.00 |
| 3 Year Term | \$565.00 |

** The rate per facility is based on the total number of facilities being billed at any location, at the time of the bill, even if the facilities were ordered at different times.

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.2 Rate Group #2 (Cont'd)

20.2.12 Internet Digital Access Service (IDAS) (Cont'd)

(B) Monthly Recurring Charges (Cont'd)

(2) Internet Digital Access Port (IDAP)**

This is the rate per Facility.

4 to 7 Facilities

| | |
|----------------|----------|
| Month to Month | \$730.00 |
| 1 Year Term | \$620.00 |
| 2 Year Term | \$570.00 |
| 3 Year Term | \$520.00 |

8 to 9 Facilities

| | |
|----------------|----------|
| Month to Month | \$710.00 |
| 1 Year Term | \$590.00 |
| 2 Year Term | \$540.00 |
| 3 Year Term | \$470.00 |

10 or More Facilities

| | |
|----------------|----------|
| Month to Month | \$690.00 |
| 1 Year Term | \$570.00 |
| 2 Year Term | \$520.00 |
| 3 Year Term | \$470.00 |

(3) Internet Digital Access Foreign Exchange Service (IDAS-FX)

Rates applicable to IDAS-FX service can be found in Section 20.2.5 of this guide for DS-1 Channel Mileage Facility and Channel Mileage Termination. These rates are in addition to the rates for IDAT or IDAP as shown above.

** The rate per facility is based on the total number of facilities being billed at any location, at the time of the bill, even if the facilities were ordered at different times.

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.3 Rate Group #3

For a list of Carriers included in Rate Group 3, refer to Title Page 7.

20.3.1 Reserved for future use

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.3 Rate Group #3 (Cont'd)

20.3.1 Reserved for future use (Cont'd)

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.3 Rate Group #3 (Cont'd)

20.3.2 Reserved for future use (Cont'd)

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.3 Rate Group #3 (Cont'd)

20.3.2 Reserved for future use (Cont'd)

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.3 Rate Group #3 (Cont'd)

20.3.2 Reserved for future use (Cont'd)

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.3 Rate Group #3 (Cont'd)

20.3.3 Access Ordering

Regulations concerning Access Ordering are set forth in Section 5 preceding.

| <u>Service Date Change Charge</u> | <u>Nonrecurring Charge</u> | |
|-----------------------------------|----------------------------|-----|
| - Per Order | \$150.00 | |
| | | |
| <u>Design Change Charge</u> | | |
| - Per order, per occurrence | \$4,624.99 | (C) |
| | | |
| <u>Cancellation Charge</u> | | |
| - Per order, per occurrence | \$10,798.37 | (C) |
| | | |
| <u>Expedited Order Charge</u> | | |
| - Per Order, per day expedited | \$300.00 | |

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.3 Rate Group #3 (Cont'd)

20.3.4 Reserved for future use (Cont'd)

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.3 Rate Group #3 (Cont'd)

20.3.4 Reserved for future use (Cont'd)

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.3 Rate Group #3 (Cont'd)

20.3.4 Reserved for future use (Cont'd)

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.3 Rate Group #3 (Cont'd)

20.3.4 Reserved for future use (Cont'd)

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.3 Rate Group #3 (Cont'd)

20.3.4 Reserved for future use (Cont'd)

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.3 Rate Group #3 (Cont'd)

20.3.4 Reserved for future use (Cont'd)

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.3 Rate Group #3 (Cont'd)

20.3.4 Reserved for future use (Cont'd)

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.3 Rate Group #3 (Cont'd)

20.3.4 Reserved for future use (Cont'd)

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.3 Rate Group #3 (Cont'd)

20.3.5 Special Access Service

Regulations concerning Special Access are set forth in Section 7 preceding.

Metallic Service

Channel Termination

| | | |
|---|--------------------------------------|------------|
| - | per Order | \$110.00 |
| - | per Termination, per month | \$150.00 |
| - | per Termination, nonrecurring charge | \$1,000.00 |

Channel Mileage

| | | |
|---|--|---------|
| - | Channel Mileage Facility, per Mile, per month | \$3.00 |
| - | Channel Mileage Termination, per termination, per month | \$16.79 |

Optional Features & Functions

Bridging

Three premises bridging, per port *

Series bridging, per port *

* No demand - rates available on request.

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.3 Rate Group #3 (Cont'd)

20.3.5 Special Access Service (Cont'd)

Voice Grade Service

Service Order Charge – per order \$3,391.64 (C)

Channel Termination

| | | | |
|---|--|------------|--|
| - | per Two Wire Termination, per month | \$382.34 | |
| - | per Two Wire Termination, nonrecurring charge | \$7,708.32 | |
| - | per Four Wire Termination, per month | \$612.99 | |
| - | per Four Wire Termination, nonrecurring charge | \$7,708.32 | |

Channel Mileage

| | | | |
|---|--|----------|-----|
| - | Channel Mileage Facility, per Mile, per month | \$61.67 | |
| - | Channel Mileage Termination, per termination, per month | \$370.04 | (C) |

Discontinuance Non-Recurring Charge – per Circuit \$975.00

Optional Features & Functions

Monthly
Rate

Central Office Bridging Capability
Two-Wire or Four-Wire, per Port

| | | | |
|---|-------------------|--------|--|
| - | Data | \$6.15 | |
| - | Voice | \$6.15 | |
| - | Telephoto | * | |
| - | DATAPHONE | * | |
| - | Telemetry & Alarm | * | |

Conditioning, per Termination

| | | | |
|---|--------------------------------------|---|--|
| - | C Type | * | |
| - | Improved Attenuation Distortion** | * | |
| - | Improved Envelope Delay Distortion** | * | |
| - | Data Capability | * | |
| - | Sealing Current | * | |

* No demand rates available on request.

** Improved Attenuation Distortion and Improved Envelope Delay Distortion will continue to be provided to all customers who were provided with either or both of these optional features in conjunction with C-Type Conditioning prior to May 4, 1988.

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.3 Rate Group #3 (Cont'd)

20.3.5 Special Access Service (Cont'd)

Voice Grade Service (Cont'd)

Optional Features & Functions (Cont'd)

Monthly
Rate

Improved Return Loss for Effective
Two-Wire or Four-Wire Transmission
- per Termination

*

Customer Specified Receive Level,
- per Termination

*

Signaling Capability
- per Termination
- Loop Signaling Range Extension
- Loop or E&M to SF
- E&M to DX
- E&M to Loop
- Loop or E&M to PCM
- Automatic Ringdown

*

Selective Signaling Arrangement

*

Transfer Arrangement
(Key Activated ** or Dial Up)***

- Per Four Port Arrangement
including control circuit termination****

*

- Per Five Port Arrangement
including control circuit termination****

*

* No demand rates available on request.

** The key activated control circuit is rated as a Metallic Circuit Termination and Circuit Mileage, if applicable.

*** The Dial Up option requires the customer to purchase the Controller Arrangement from Section 20.1.7.

**** An additional Channel Termination charge will apply whenever a space circuit is configured as a leg to the customer's premises. Additional circuit mileage charges will apply when the transfer arrangement is not located in the customer premises serving wire center.

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.3 Rate Group #3 (Cont'd)

20.3.5 Special Access Service (Cont'd)

Voice Grade Service (Cont'd)

Optional Features & Functions (Cont'd)

Monthly
Rate

Voice Grade Facility Switching Arrangement

Echo Control

- Echo Suppression, per Circuit

*

- Echo Canceller, per Circuit

*

Improved Termination Option, per Termination

*

Improved Equal Level Echo Path Loss,
per Termination

Telephoto Capability
per Termination

* No demand rates available on request.

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.3 Rate Group #3 (Cont'd)

20.3.5 Special Access Service (Cont'd)

Program Audio Service

Channel Termination

| | | | |
|---|-------------------------------------|----------|---|
| - | per Order | \$110.00 | |
| - | 200 to 3500 Hz, monthly rate | | * |
| - | 100 to 5000 Hz, monthly rate | | * |
| - | 50 to 8000 Hz, monthly rate | | * |
| - | 50 to 15000 Hz, monthly rate | | * |
| - | 200 to 3500 Hz, daily rate | | * |
| - | 100 to 5000 Hz, daily rate | | * |
| - | 50 to 8000 Hz, daily rate | | * |
| - | 50 to 15000 Hz, daily rate | | * |
| - | 200 to 3500 Hz, Nonrecurring Charge | | * |
| - | 100 to 5000 Hz, Nonrecurring Charge | | * |
| - | 50 to 8000 Hz, Nonrecurring Charge | | * |
| - | 50 to 15000 Hz, Nonrecurring Charge | | * |

Channel Mileage

| | | | |
|---|--|--|---|
| - | Channel Mileage Facility, per Mile | | |
| - | 200 to 3500 Hz, monthly rate | | * |
| - | 100 to 5000 Hz, monthly rate | | * |
| - | 50 to 8000 Hz, monthly rate | | * |
| - | 50 to 15000 Hz, monthly rate | | * |
| - | 200 to 3500 Hz, daily rate | | * |
| - | 100 to 5000 Hz, daily rate | | * |
| - | 50 to 8000 Hz, daily rate | | * |
| - | 50 to 15000 Hz, daily rate | | * |
| - | Channel Mileage Termination, per Termination | | |
| - | 200 to 3500 Hz, monthly rate | | * |
| - | 100 to 5000 Hz, monthly rate | | * |
| - | 50 to 8000 Hz, monthly rate | | * |
| - | 50 to 15000 Hz, monthly rate | | * |
| - | 200 to 3500 Hz, daily rate | | * |
| - | 100 to 5000 Hz, daily rate | | * |
| - | 50 to 8000 Hz, daily rate | | * |
| - | 50 to 15000 Hz, daily rate | | * |

* No demand rates available on request.

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.3 Rate Group #3 (Cont'd)

20.3.5 Special Access Service (Cont'd)

Program Audio Service (Cont'd)

Optional Features and Functions

| | |
|---|---|
| Bridging Distribution Amplifier, per Port, monthly rate | * |
| Bridging Distribution Amplifier, per Port, daily rate | * |
| Gain Conditioning per Service, monthly rate | * |
| Gain Conditioning per Service, daily rate | * |
| Stereo, per Service, monthly rate | * |
| Stereo, per Service, daily rate | * |

* No demand rates available on request.

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.3 Rate Group #3 (Cont'd)

20.3.5 Special Access Service (Cont'd)

Video Service

Channel Termination

| | | |
|---|--------------------------------------|----------|
| - | per Order | \$110.00 |
| - | per Termination, monthly rate | |
| | TV-1 or 2 | * |
| | 4TV-5 | * |
| | 6TV-5 | * |
| | TV-15 | * |
| - | per Termination, daily rate | |
| | TV-1 or 2 | ** |
| | 4TV-5 | ** |
| | 6TV-5 | ** |
| | TV-15 | ** |
| - | per Termination, Nonrecurring Charge | |
| | TV-1 or 2 | * |
| | 4TV-5 | * |
| | 6TV-5 | * |
| | TV-15 | * |

Channel Mileage

| | | |
|---|---|----|
| - | Channel Mileage Facility, per Mile, monthly rate | * |
| | per Mile, daily rate | ** |
| - | Channel Mileage Termination, per termination, monthly rate | * |
| | per termination, daily rate | ** |

* No demand - rates available on request.

** Daily rates will be topped and maximum rates derived as set forth in Section 7 preceding.

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.3 Rate Group #3 (Cont'd)

20.3.5 Special Access Service (Cont'd)

Digital Data Service

Service Order Charge – per order \$3,391.64 (C)

Channel Termination

- per Termination, monthly rate
All Speeds \$710.69

- per Termination, Nonrecurring Charge
All Speeds \$7,708.32

Channel Mileage

- Channel Mileage Facility,
Per mile, per month
2.4 kbps \$92.55
4.8 kbps \$92.55
9.6 kbps \$92.55
19.2 kbps \$92.55

56.0 & 64.0 kbps \$185.01

- Channel Mileage Termination,
Per termination, per month
2.4 kbps \$517.72
4.8 kbps \$517.72
9.6 kbps \$517.72
19.2 kbps \$517.72

56.0 & 64.0 kbps \$1,036.01 (C)

Discontinuance Non-Recurring Charge – per Circuit
All Speeds \$975.00

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.3 Rate Group #3 (Cont'd)

20.3.5 Special Access Service (Cont'd)

Digital Data Service (Cont'd)

Optional Features and Functions

Central Office Bridging
per Port, per month *

Secondary Channel
per Station *

Multiplexing
Digital Data Carrier, per month *
Digital Data Carrier, Nonrecurring Charge *

Loop Transfer Arrangement
(Key Activated** or Dial Up***)
Per Four Port Arrangement, including
control circuit termination****
monthly rate ICB
Nonrecurring Charge ICB

* No demand- rate available on request.

** The key activated control circuit is rated as a Metallic Circuit Termination and Circuit mileage, if applicable.

*** The Dial Up option requires the customer to purchase the Controller Arrangement from Section 20.1.7

**** An additional Circuit Termination charge will apply whenever a space circuit is configured as a leg to the customer's premises. Additional circuit mileage charges will apply when the transfer arrangement is not located in the customer premises serving wire center.

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.3 Rate Group #3 (Cont'd)

20.3.5 Special Access Service (Cont'd)

High Capacity Service

Service Order Charge- per Order

| | | |
|----------------------|-------------|-----|
| DS-1 - 1.544 Mbps | \$4,026.53 | (C) |
| DS-3 - 44.736 Mbps | \$12,795.83 | |
| OC-3 - 155.520 Mbps | \$12,795.83 | |
| OC-3c - 155.520 Mbps | \$12,795.83 | |

Channel Termination

| | | | |
|---|---|--------------|--|
| - | per Termination, monthly rate <u>Competitive End User & IC CDL</u> | | |
| | DS-1 1.544 Mbps | \$5,087.50 | |
| | DS-3 - 44.736 Mbps | \$40,699.95 | |
| | OC-3 - 155.520 Mbps | \$98,666.56 | |
| | OC-3c - 155.520 Mbps | \$92,499.88 | |
| - | per Termination, Nonrecurring Charge | | |
| | DS-1 - 1.544 Mbps | \$21,583.29 | |
| | DS-3 - 44.736 Mbps | \$105,141.53 | |
| | OC-3 - 155.520 Mbps | \$110,999.86 | |
| | OC-3c - 155.520 Mbps | \$110,999.86 | |

Channel Mileage

| | | | |
|---|--|-------------|-----|
| - | Channel Mileage Facility, Per Mile, per month | | |
| | DS-1 - 1.544 Mbps | \$619.74 | |
| | DS-3 - 44.736 Mbps | \$3,323.82 | |
| | OC-3 - 155.520 Mbps | \$8,633.37 | |
| | OC-3c - 155.520 Mbps | \$8,633.37 | |
| - | Channel Mileage Termination, Per termination, per month | | |
| | DS-1 - 1.544 Mbps | \$2,035.00 | |
| | DS-3 - 44.736 Mbps | \$28,829.15 | |
| | OC-3 - 155.520 Mbps | \$61,666.56 | |
| | OC-3c - 155.520 Mbps | \$61,666.56 | (C) |

Discontinuance Non-Recurring Charge – per Circuit

| | |
|----------------------|----------|
| DS-1 - 1.544 Mbps | \$975.00 |
| DS-3 - 44.736 Mbps | \$975.00 |
| OC-3 - 155.520 Mbps | \$975.00 |
| OC-3c - 155.520 Mbps | \$975.00 |

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.3 Rate Group #3 (Cont'd)

20.3.5 Special Access Service (Cont'd)

High Capacity Service (Cont'd)

Optional Features and Functions

Multiplexing

| | | | |
|---|---|----------------------------|-----|
| - | OC-3 to DS-3 per month Nonrecurring Charge | \$46,249.93 \$39,990.78 | (C) |
| - | OC-3 to DS-1 per month Nonrecurring Charge | \$55,499.95 \$39,990.78 | |
| - | DS-3 to DS-1 per month Nonrecurring Charge | \$43,166.66 \$39,990.78 | |
| - | DS-1 to Voice per month Nonrecurring Charge | \$8,109.18 \$12,857.51 | |
| - | DS-1 to DS0 per month Nonrecurring Charge | \$8,109.18 \$12,857.51 | (C) |

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.3 Rate Group #3 (Cont'd)

20.3.5 Special Access Service (Cont'd)

High Capacity Service (Cont'd)

Optional Features and Functions (Cont'd)

Multiplexing (Cont'd)

| | | | |
|---|--|-------------|-----|
| - | Digital DS3 Cross Connect | | |
| | per month | | * |
| | Nonrecurring Charge | | * |
| - | Digital Data Subrate | | |
| | One DSO to Twenty 2.4 Kbps | | |
| | monthly rate | | ICB |
| | Nonrecurring Charge | | ICB |
| | One DSO to Ten 4.8 Kbps | | |
| | monthly rate | | ICB |
| | Nonrecurring Charge | | ICB |
| | One DSO to Five 9.6 Kbps | | |
| | monthly rate | | ICB |
| | Nonrecurring Charge | | ICB |
| | Automatic Loop transfer** | | |
| - | per Arrangement | | ICB |
| - | per Termination | | * |
| | Automatic Protection Switching per DS1 | | |
| | monthly rate | | * |
| | Nonrecurring Charge | | * |
| | Clear Channel Capability, per DS1 circuit arranged | | |
| | monthly rate | \$0.00 | |
| | Nonrecurring Charge | \$16,594.19 | (C) |

* No demand - rates available on request.

** An additional Channel Termination charge will apply whenever the space channel is configured as a leg to the customer designated premises. Additional Channel Mileage charges will also apply when the transfer arrangement is not located in the customer designated premises serving wire center.

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.3 Rate Group #3 (Cont'd)

20.3.6 Reserved for future use (Cont'd)

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.3 Rate Group #3 (Cont'd)

20.3.6 Reserved for future use (Cont'd)

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.3 Rate Group #3 (Cont'd)

20.3.7 Miscellaneous Services

Additional Engineering and Additional Labor

Charges for Additional Engineering
per Engineer, 1/2 hour or Fraction thereof

| | |
|---------------|---------|
| Basic Time | \$40.00 |
| Overtime | \$60.00 |
| Premium Time* | \$80.00 |

Charges for Additional Labor
per Technician, 1/2 hour or Fraction thereof

| | |
|---------------|---------|
| Basic Time | \$30.00 |
| Overtime | \$45.00 |
| Premium Time* | \$60.00 |

Charges for Additional Testing
per Technician, 1/2 hour or Fraction thereof

| | |
|---------------|---------|
| Basic Time | \$30.00 |
| Overtime | \$45.00 |
| Premium Time* | \$60.00 |

Charges for Standby
per Technician, 1/2 hour or Fraction thereof

| | |
|---------------|---------|
| Basic Time | \$30.00 |
| Overtime | \$45.00 |
| Premium Time* | \$60.00 |

Charges for Programming
per Programmer, 1/2 hour or Fraction thereof

| | |
|---------------|---------|
| Basic Time | \$30.00 |
| Overtime | \$45.00 |
| Premium Time* | \$60.00 |

NID Replacement

| | |
|---|---------|
| Nonrecurring Charge per 2 pairs of capacity | \$99.00 |
|---|---------|

* Subject to Minimum Charge of Four Hours.

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.3 Rate Group #3 (Cont'd)

20.3.7 Miscellaneous Services (Cont'd)

Additional Testing

Charges for Additional Testing
per Transmission Path, First Point
of Switching, per Month

- Automated Scheduled Testing
 - monthly rate *
 - Nonrecurring Charge *

- Additional Cooperative Scheduled Testing
 - Basic Offering
 - monthly rate *
 - Nonrecurring Charge *

 - Gain Slope
 - monthly rate *
 - Nonrecurring Charge *

- Additional Manual Scheduled Testing
 - Basic Offering
 - monthly rate *
 - Nonrecurring Charge *

 - Gain Slope
 - monthly rate *
 - Nonrecurring Charge *

Controller Agreement

- Per Arrangement
 - monthly rate *
 - Nonrecurring Charge *

* No demand - rates available on request.

ACCESS SERVICE

20. Rates and Charges (Cont'd)20.3 Rate Group #3 (Cont'd)20.3.7 Miscellaneous Services (Cont'd)

- Paper or fax LOA processing
Per telephone number \$0.75

Special Access Surcharge
monthly rate \$25.00

ACCESS SERVICE

20. Rates and Charges (Cont'd)20.3 Rate Group #3 (Cont'd)20.3.7 Miscellaneous Services (Cont'd)Telecommunications Service Priority

| | | |
|---|--|----------|
| - | Establishment of TSP System Nonrecurring Service Charge | \$54.63 |
| - | Restoration Priority, monthly rate | \$100.00 |

End User Validation List

| | | |
|--|--|--------|
| | Standard Sort, Per Record Provided | \$0.00 |
| | Administrative Fee--Paper Report, Electronic Transmission or Magnetic Tape, Per Request | \$0.00 |
| | Special Sort, Per Record Provided | \$0.00 |

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.3 Rate Group #3 (Cont'd)

20.3.7 Reserved for future use (Cont'd)

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.3 Rate Group #3 (Cont'd)

20.3.8 Special Facilities Routing Access Service

The following rates and charges are in addition to all other rates and charges that may be applicable for other services that may be furnished under the provisions of this guide to operate in conjunction with this service.

| | | |
|-----|---|-----|
| (A) | Special Routing Access Service Area Plan-Setup and Removal, Per End Office or Tandem Office Switching System. (Note 1) (Note 2) | |
| | Recurring Charges | ICB |
| | Nonrecurring Charges | ICB |
| (B) | Special Routing Access Service Trunk Group Setup and Removal, Per End Office Switching System, Per Occurrence (Note 1) (Note 2) | |
| | Recurring Charges | ICB |
| | Nonrecurring Charges | ICB |
| (C) | Activation or Deactivation of Special Routing Access Service, Per End Office or Tandem Office Switching System, Per Occurrence | |
| | Recurring Charges | ICB |
| | Nonrecurring Charges | ICB |

(Note 1) The service setups will only be activated in offices that are specifically negotiated by the customer with the Telephone Company and are mutually agreeable between both parties.

(Note 2) End Offices will be updated for activation and/or deactivation annually.

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.3 Rate Group #3 (Cont'd)

20.3.8 Special Facilities Routing Access Service (Cont'd)

| | | |
|-----|--|------|
| (D) | Special Routing Access Service Trunk Usage, When Activated, Per Trunk, Per Initial Activation Hour | |
| | Recurring Charges | ICB* |
| | Nonrecurring Charges | ICB |
| (E) | Special Routing Access Service Trunk Usage, When Activated, Per Trunk, Per Subsequent 1/2 Hour | |
| | Recurring Charges | ICB* |
| | Nonrecurring Charges | ICB |
| (F) | Special Routing Access Service Maintenance and Administration. Per End Office or Tandem Office Switching System, Per Month | |
| | Recurring Charges | ICB |
| | Nonrecurring Charges | ICB |

* This rate is in addition to Trunk Side premium Access Service rates which may apply on an ongoing basis whether SRAS is activated or not

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.3 Rate Group #3 (Cont'd)

20.3.9 Reserved for future use (Cont'd)

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.3 Rate Group #3 (Cont'd)

20.3.10 Reserved for future use (Cont'd)

ACCESS SERVICE

20. Rates and Charges

20.4 Rate Group #4

For a list of Carriers included in Rate Group 4, refer to Title Page 8.

20.4.1 Reserved for future use

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.4 Rate Group #4 (Cont'd)

20.4.1 Reserved for future use (Cont'd)

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.4 Rate Group #4 (Cont'd)

20.4.2 Reserved for future use

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.4 Rate Group #4 (Cont'd)

20.4.2 Reserved for future use (Cont'd)

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.4 Rate Group #4 (Cont'd)

20.4.3 Access Ordering

Regulations concerning Access Ordering are set forth in Section 5 preceding.

| <u>Service Date Change Charge</u> | <u>Nonrecurring Charge</u> | |
|-----------------------------------|----------------------------|-----|
| - Per Order | \$50.00 | |
| | | |
| <u>Design Change Charge</u> | | |
| - Per order, per occurrence | \$808.13 | (C) |
| | | |
| <u>Cancellation Charge</u> | | |
| - Per Order | \$10,798.37 | (C) |
| | | |
| <u>Expedited Order Charge</u> | | |
| - Per Order, per day expedited | \$300.00 | |

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.4 Rate Group #4 (Cont'd)

20.4.4 Reserved for future use

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.4 Rate Group #4 (Cont'd)

20.4.4 Reserved for future use (Cont'd)

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.4 Rate Group #4 (Cont'd)

20.4.4 Reserved for future use (Cont'd)

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.4 Rate Group #4 (Cont'd)

20.4.4 Reserved for future use (Cont'd)

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.4 Rate Group #4 (Cont'd)

20.4.4 Reserved for future use (Cont'd)

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.4 Rate Group #4 (Cont'd)

20.4.4 Reserved for future use (Cont'd)

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.4 Rate Group #4 (Cont'd)

20.4.4 Reserved for future use (Cont'd)

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.4 Rate Group #4 (Cont'd)

20.4.5 Special Access Service

Regulations concerning Special Access are set forth in Section 7 preceding.

Metallic Service

Channel Termination

| | | |
|---|--------------------------------------|------------|
| - | per Order | \$130.23 |
| - | per Termination, per month | \$150.00 |
| - | per Termination, nonrecurring charge | \$1,000.00 |

Channel Mileage

| | | |
|---|--|---------|
| - | Channel Mileage Facility, per Mile, per month | \$2.45 |
| - | Channel Mileage Termination, per termination, per month | \$28.77 |

Optional Features & Functions

Bridging

Three premises bridging, per port *

Series bridging, per port *

* No demand - rates available on request.

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.4 Rate Group #4 (Cont'd)

20.4.5 Special Access Service (Cont'd)

Voice Grade Service

Service Order Charge – per Order \$4,015.43 (C)

Channel Termination

| | | | |
|---|--|-------------|--|
| - | per Two Wire Termination, per month | \$999.34 | |
| - | per Two Wire Termination, nonrecurring charge | \$6,166.68 | |
| - | per Four Wire Termination, per month | \$1,557.05 | |
| - | per Four Wire Termination, nonrecurring charge | \$15,054.06 | |

Channel Mileage

| | | | |
|---|--|----------|-----|
| - | Channel Mileage Facility, per Mile, per month | \$75.56 | |
| - | Channel Mileage Termination, per termination, per month | \$887.10 | (C) |

Discontinuance Non-Recurring Charge – per Circuit \$975.00

Optional Features & Functions Monthly Rate

Central Office Bridging Capability

Two-Wire or Four-Wire, per Port

| | | | |
|---|-------------------|--------|--|
| - | Data | \$5.59 | |
| - | Voice | \$5.59 | |
| - | Telephoto | * | |
| - | DATAPHONE | * | |
| - | Telemetry & Alarm | * | |

Conditioning, per Termination

| | | | |
|---|------------------------------------|--------|--|
| - | C Type | \$1.00 | |
| - | Improved Attenuation Distortion | \$1.00 | |
| - | Improved Envelope Delay Distortion | \$1.00 | |
| - | Data Capability | \$1.00 | |
| - | Sealing Current | * | |

* No demand rates available on request.

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.4 Rate Group #4 (Cont'd)

20.4.5 Special Access Service (Cont'd)

Voice Grade Service (Cont'd)

Optional Features & Functions (Cont'd)

Monthly
Rate

Improved Return Loss for Effective
Two-Wire or Four-Wire Transmission
- per Termination

\$1.00

Customer Specified Receive Level,
- per Termination

\$6.74

Signaling Capability

- per Termination
- Loop Signaling Range Extension
- Loop or E&M to SF
- E&M to DX
- E&M to Loop
- Loop or E&M to PCM
- Automatic Ringdown

\$1.00

Selective Signaling Arrangement

\$35.42

Transfer Arrangement
(Key Activated or Dial Up)

- Per Four Port Arrangement
including control circuit termination

*

- Per Five Port Arrangement
including control circuit termination

*

* No demand rates available on request.

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.4 Rate Group #4 (Cont'd)

20.4.5 Special Access Service (Cont'd)

Voice Grade Service (Cont'd)

Optional Features & Functions (Cont'd)

Monthly
Rate

Voice Grade Facility Switching Arrangement

Echo Control

- Echo Suppression, per Circuit

*

- Echo Canceller, per Circuit

*

Improved Termination Option, per Termination

\$1.00

Improved Equal Level Echo Path Loss,
per Termination

*

Telephoto Capability
per Termination

*

* No demand rates available on request.

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.4 Rate Group #4 (Cont'd)

20.4.5 Special Access Service (Cont'd)

Program Audio Service

Channel Termination

| | | |
|---|-------------------------------------|----------|
| - | per Order | \$130.23 |
| - | 200 to 3500 Hz, monthly rate | \$25.68 |
| - | 100 to 5000 Hz, monthly rate | \$47.00 |
| - | 50 to 8000 Hz, monthly rate | \$38.51 |
| - | 50 to 15000 Hz, monthly rate | \$38.51 |
| - | 200 to 3500 Hz, daily rate | \$2.77 |
| - | 100 to 5000 Hz, daily rate | \$4.70 |
| - | 50 to 8000 Hz, daily rate | \$3.85 |
| - | 50 to 15000 Hz, daily rate | \$3.85 |
| - | 200 to 3500 Hz, Nonrecurring Charge | \$200.00 |
| - | 100 to 5000 Hz, Nonrecurring Charge | \$200.00 |
| - | 50 to 8000 Hz, Nonrecurring Charge | \$200.00 |
| - | 50 to 15000 Hz, Nonrecurring Charge | \$200.00 |

Channel Mileage

| | | |
|---|--|---------|
| - | Channel Mileage Facility, per Mile | |
| - | 200 to 3500 Hz, monthly rate | \$0.80 |
| - | 100 to 5000 Hz, monthly rate | \$1.55 |
| - | 50 to 8000 Hz, monthly rate | \$6.70 |
| - | 50 to 15000 Hz, monthly rate | \$6.70 |
| - | 200 to 3500 Hz, daily rate | \$0.08 |
| - | 100 to 5000 Hz, daily rate | \$0.16 |
| - | 50 to 8000 Hz, daily rate | \$0.67 |
| - | 50 to 15000 Hz, daily rate | \$0.67 |
| - | Channel Mileage Termination, per Termination | |
| - | 200 to 3500 Hz, monthly rate | \$45.00 |
| - | 100 to 5000 Hz, monthly rate | \$45.00 |
| - | 50 to 8000 Hz, monthly rate | \$45.00 |
| - | 50 to 15000 Hz, monthly rate | \$45.00 |
| - | 200 to 3500 Hz, daily rate | \$4.50 |
| - | 100 to 5000 Hz, daily rate | \$4.50 |
| - | 50 to 8000 Hz, daily rate | \$4.50 |
| - | 50 to 15000 Hz, daily rate | \$4.50 |

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.4 Rate Group #4 (Cont'd)

20.4.5 Special Access Service (Cont'd)

Program Audio Service (Cont'd)

Optional Features and Functions

| | |
|---|---------|
| Bridging Distribution Amplifier, per Port, monthly rate | * |
| Bridging Distribution Amplifier, per Port, daily rate | * |
| Gain Conditioning per Service, monthly rate | \$12.00 |
| Gain Conditioning per Service, daily rate | \$1.20 |
| Stereo, per Service, monthly rate | * |
| Stereo, per Service, daily rate | * |

* No demand rates available on request.

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.4 Rate Group #4 (Cont'd)

20.4.5 Special Access Service (Cont'd)

Video Service

Channel Termination

| | | |
|---|--------------------------------------|----------|
| - | per Order | \$132.00 |
| - | per Termination, monthly rate | |
| | TV-1 or 2 | * |
| | 4TV-5 | * |
| | 6TV-5 | * |
| | TV-15 | * |
| - | per Termination, daily rate | |
| | TV-1 or 2 | ** |
| | 4TV-5 | ** |
| | 6TV-5 | ** |
| | TV-15 | ** |
| - | per Termination, Nonrecurring Charge | |
| | TV-1 or 2 | * |
| | 4TV-5 | * |
| | 6TV-5 | * |
| | TV-15 | * |

Channel Mileage

| | | |
|---|-------------------------------|----|
| - | Channel Mileage Facility, | |
| | per Mile, monthly rate | * |
| | per Mile, daily rate | ** |
| - | Channel Mileage Termination, | |
| | per termination, monthly rate | * |
| | per termination, daily rate | ** |

* No demand - rates available on request.

** Daily rates will be topped and maximum rates derived as set forth in Section 7 preceding.

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.4 Rate Group #4 (Cont'd)

20.4.5 Special Access Service (Cont'd)

Digital Data Service

Service Order Charge- per order \$4,015.43 (C)

Channel Termination

- per Termination, monthly rate
All Speeds \$1,541.68

- per Termination, Nonrecurring Charge
All Speeds \$7,708.32

Channel Mileage

- Channel Mileage Facility,
Per mile, per month

| | |
|-----------|----------|
| 2.4 kbps | \$147.99 |
| 4.8 kbps | \$147.99 |
| 9.6 kbps | \$147.99 |
| 19.2 kbps | \$117.84 |
| 56.0 kbps | \$117.84 |
| 64.0 kbps | \$117.84 |

- Channel Mileage Termination,
Per termination, per month
All Speeds \$953.97 (C)

Discontinuance Non-Recurring Charge – per Circuit
All Speeds \$975.00

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.4 Rate Group #4 (Cont'd)

20.4.5 Special Access Service (Cont'd)

Digital Data Service (Cont'd)

Optional Features and Functions

| | |
|---|---------|
| Central Office Bridging per Port, per month | \$11.00 |
| Secondary Channel per Station | * |
| Multiplexing | |
| Digital Data Carrier, per month | * |
| Digital Data Carrier, Nonrecurring Charge | * |
| Loop Transfer Arrangement (Key Activated** or Dial Up***) | |
| Per Four Port Arrangement, including control circuit termination**** | |
| monthly rate | ICB |
| Nonrecurring Charge | ICB |

* No demand- rate available on request.

** The key activated control circuit is rated as a Metallic Circuit Termination and Circuit mileage, if applicable.

*** The Dial Up option requires the customer to purchase the Controller Arrangement from Section 20.4.7

**** An additional Circuit Termination charge will apply whenever a space circuit is configured as a leg to the customer's premises. Additional circuit mileage charges will apply when the transfer arrangement is not located in the customer premises serving wire center.

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.4 Rate Group #4 (Cont'd)

20.4.5 Special Access Service (Cont'd)

High Capacity Service

Service Order Charge – per order

| | | |
|----------------------|-------------|-----|
| DS-1 - 1.544 Mbps | \$4,026.53 | (C) |
| DS-3 - 44.736 Mbps | \$12,795.83 | |
| OC-3 - 155.520 Mbps | \$12,795.83 | |
| OC-3c - 155.520 Mbps | \$12,795.83 | |

Channel Termination

per Termination, monthly rate

Competitive End User & IC CDL

| | |
|----------------------|-------------|
| DS-1 1.544 Mbps | \$8,309.57 |
| DS-3 - 44.736 Mbps | \$47,483.31 |
| OC-3 - 155.520 Mbps | \$98,666.56 |
| OC-3c - 155.520 Mbps | \$92,499.88 |

- per Termination, Nonrecurring Charge

| | |
|----------------------|--------------|
| DS-1 - 1.544 Mbps | \$21,583.29 |
| DS-3 - 44.736 Mbps | \$105,141.53 |
| OC-3 - 155.520 Mbps | \$110,999.86 |
| OC-3c - 155.520 Mbps | \$110,999.86 |

Channel Mileage

- Channel Mileage Facility,
Per mile, per month

| | |
|----------------------|------------|
| DS-1 - 1.544 Mbps | \$508.76 |
| DS-3 - 44.736 Mbps | \$1,695.86 |
| OC-3 - 155.520 Mbps | \$8,633.37 |
| OC-3c - 155.520 Mbps | \$8,633.37 |

- Channel Mileage Termination,
Per termination, per month

| | | |
|----------------------|-------------|-----|
| DS-1 - 1.544 Mbps | \$1,332.94 | |
| DS-3 - 44.736 Mbps | \$16,958.32 | |
| OC-3 - 155.520 Mbps | \$61,666.56 | |
| OC-3c - 155.520 Mbps | \$61,666.56 | (C) |

Discontinuance Non-Recurring Charge – per Circuit

| | |
|----------------------|----------|
| DS-1 - 1.544 Mbps | \$975.00 |
| DS-3 - 44.736 Mbps | \$975.00 |
| OC-3 - 155.520 Mbps | \$975.00 |
| OC-3c - 155.520 Mbps | \$975.00 |

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.4 Rate Group #4 (Cont'd)

20.4.5 Special Access Service (Cont'd)

High Capacity Service (Cont'd)

Optional Features and Functions

Multiplexing

| | | | |
|---|---|----------------------------|-----|
| - | OC-3 to DS-3 per month Nonrecurring Charge | \$46,249.93 \$39,990.78 | (C) |
| - | OC-3 to DS-1 per month Nonrecurring Charge | \$55,499.95 \$39,990.78 | |
| - | DS-3 to DS-1 per month Nonrecurring Charge | \$43,166.66 \$39,990.78 | |
| - | DS-1 to Voice per month Nonrecurring Charge | \$5,772.32 \$24,666.63 | |
| - | DS-1 to DS0 per month Nonrecurring Charge | \$5,772.32 \$24,666.63 | (C) |

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.4 Rate Group #4 (Cont'd)

20.4.5 Special Access Service (Cont'd)

High Capacity Service (Cont'd)

Optional Features and Functions (Cont'd)

Multiplexing (Cont'd)

| | | | |
|---|--|-------------|-----|
| - | Digital DS3 Cross Connect per month | | * |
| | Nonrecurring Charge | | * |
| - | Digital Data Subrate | | |
| | One DSO to Twenty 2.4 Kbps monthly rate | | ICB |
| | Nonrecurring Charge | | ICB |
| | One DSO to Ten 4.8 Kbps monthly rate | | ICB |
| | Nonrecurring Charge | | ICB |
| | One DSO to Five 9.6 Kbps monthly rate | | ICB |
| | Nonrecurring Charge | | ICB |
| | Automatic Loop transfer** | | |
| - | per Arrangement | | ICB |
| - | per Termination | | ICB |
| | Automatic Protection Switching per DS1 monthly rate | | * |
| | Nonrecurring Charge | | * |
| | Clear Channel Capability, per DS1 circuit arranged monthly rate | \$0.00 | |
| | Nonrecurring Charge | \$16,594.19 | (C) |

* No demand - rates available on request.

** An additional Channel Termination charge will apply whenever the space channel is configured as a leg to the customer designated premises. Additional Channel Mileage charges will also apply when the transfer arrangement is not located in the customer designated premises serving wire center.

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.4 Rate Group #4 (Cont'd)

20.4.6 Reserved for future use (Cont'd)

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.4 Rate Group #4 (Cont'd)

20.4.6 Reserved for future use (Cont'd)

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.4 Rate Group #4 (Cont'd)

20.4.7 Miscellaneous Services

Additional Engineering and Additional Labor

Charges for Additional Engineering
per Engineer, 1/2 hour or Fraction thereof

| | |
|---------------|---------|
| Basic Time | \$40.00 |
| Overtime | \$60.00 |
| Premium Time* | \$80.00 |

Charges for Additional Labor
per Technician, 1/2 hour or Fraction thereof

| | |
|---------------|---------|
| Basic Time | \$30.00 |
| Overtime | \$45.00 |
| Premium Time* | \$60.00 |

Charges for Additional Testing
per Technician, 1/2 hour or Fraction thereof

| | |
|---------------|---------|
| Basic Time | \$30.00 |
| Overtime | \$45.00 |
| Premium Time* | \$60.00 |

Charges for Standby
per Technician, 1/2 hour or Fraction thereof

| | |
|---------------|---------|
| Basic Time | \$30.00 |
| Overtime | \$45.00 |
| Premium Time* | \$60.00 |

Charges for Programming
per Programmer, 1/2 hour or Fraction thereof

| | |
|---------------|---------|
| Basic Time | \$30.00 |
| Overtime | \$45.00 |
| Premium Time* | \$60.00 |

NID Replacement

| | |
|---|---------|
| Nonrecurring Charge per 2 pairs of capacity | \$99.00 |
|---|---------|

* Subject to Minimum Charge of Four Hours.

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.4 Rate Group #4 (Cont'd)

20.4.7 Miscellaneous Services (Cont'd)

Additional Testing

Charges for Additional Testing
per Transmission Path, First Point
of Switching, per Month

- Automated Scheduled Testing
 - monthly rate *
 - Nonrecurring Charge *

- Additional Cooperative Scheduled Testing
 - Basic Offering
 - monthly rate *
 - Nonrecurring Charge *

 - Gain Slope
 - monthly rate *
 - Nonrecurring Charge *

- Additional Manual Scheduled Testing
 - Basic Offering
 - monthly rate *
 - Nonrecurring Charge *

 - Gain Slope
 - monthly rate *
 - Nonrecurring Charge *

Controller Agreement

- Per Arrangement
 - monthly rate *
 - Nonrecurring Charge *

* No demand - rates available on request.

ACCESS SERVICE

20. Rates and Charges (Cont'd)20.4 Rate Group #4 (Cont'd)20.4.7 Miscellaneous Services (Cont'd)

- Paper or fax LOA processing
Per telephone number \$0.75

Special Access Surcharge
monthly rate \$25.00

Billing Name and Address Service (BNA)

- Billing Name and Address per Order \$28.00
- Billing Name and Address Found/Each \$0.40
- Billing Name and Address Not Found/Each \$0.40

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.4 Rate Group #4 (Cont'd)

20.4.7 Miscellaneous Services (Cont'd)

End User/Agents List

| | | |
|---|--|---------|
| - | Agent List, Nonrecurring Charge per State, per Order | \$50.00 |
| - | Agent List, Initial per Customer Account* | \$0.03 |
| - | Agent List, Allocation, per Listing** | \$0.03 |
| - | Snapshot List, NRC per State, per Order | \$75.00 |
| - | Snapshot List, per Listing*** | \$0.05 |

Telecommunications Service Priority

| | | |
|---|--|---------|
| - | Establishment of TSP System Nonrecurring Service Charge | \$14.50 |
| - | Restoration Priority, monthly rate | \$4.90 |

End User Validation List

| | | |
|--|--|---------|
| | Standard Sort. Per Record Provided | \$0.034 |
| | Administrative Fee--Paper Report, Electronic Transmission or Magnetic Tape, Per Request | \$78.00 |
| | Special Sort, Per Record Provided | \$0.054 |

PIC Freeze Verification Report

Refer to Section 20.4.7 Snapshot List, NRC and Snapshot List, Per Listing for rates and charges.

* For the purpose of the Initial Lists customer and agent is defined in Section 2.6.

** For the Purpose of the Allocation list, a listing is defined as an end user or agent record eligible for a Primary Interexchange Carrier Selection.

*** For the purpose of the Snapshot list, a listing is defined as an end user or agent eligible for a Predesignated Interexchange Carrier Selection.

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.4 Rate Group #4 (Cont'd)

20.4.7 Reserved for future use (Cont'd)

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.4 Rate Group #4 (Cont'd)

20.4.8 Special Facilities Routing Access Service

The following rates and charges are in addition to all other rates and charges that may be applicable for other services that may be furnished under the provisions of this guide to operate in conjunction with this service.

| | | |
|-----|---|-----|
| (A) | Special Routing Access Service Area Plan-Setup and Removal, Per End Office or Tandem Office Switching System. (Note 1) (Note 2) | |
| | Recurring Charges | ICB |
| | Nonrecurring Charges | ICB |
| (B) | Special Routing Access Service Trunk Group Setup and Removal, Per End Office Switching System, Per Occurrence (Note 1) (Note 2) | |
| | Recurring Charges | ICB |
| | Nonrecurring Charges | ICB |
| (C) | Activation or Deactivation of Special Routing Access Service, Per End Office or Tandem Office Switching System, Per Occurrence | |
| | Recurring Charges | ICB |
| | Nonrecurring Charges | ICB |

(Note 1) The service setups will only be activated in offices that are specifically negotiated by the customer with the Telephone Company and are mutually agreeable between both parties.

(Note 2) End Offices will be updated for activation and/or deactivation annually.

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.4 Rate Group #4 (Cont'd)

20.4.8 Special Facilities Routing Access Service (Cont'd)

| | | |
|-----|--|------|
| (D) | Special Routing Access Service Trunk Usage, When Activated, Per Trunk, Per Initial Activation Hour | |
| | Recurring Charges | ICB* |
| | Nonrecurring Charges | ICB |
| (E) | Special Routing Access Service Trunk Usage, When Activated, Per Trunk, Per Subsequent 1/2 Hour | |
| | Recurring Charges | ICB* |
| | Nonrecurring Charges | ICB |
| (F) | Special Routing Access Service Maintenance and Administration. Per End Office or Tandem Office Switching System, Per Month | |
| | Recurring Charges | ICB |
| | Nonrecurring Charges | ICB |

* This rate is in addition to Trunk Side premium Access Service rates which may apply on an ongoing basis whether SRAS is activated or not

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.4 Rate Group #4 (Cont'd)

20.4.9 Reserved for future use (Cont'd)

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.4 Rate Group #4 (Cont'd)

20.4.9 Reserved for future use (Cont'd)

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.4 Rate Group #4 (Cont'd)

20.4.9 Reserved for future use (Cont'd)

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.4 Rate Group #4 (Cont'd)

20.4.10 Reserved for future use

ACCESS SERVICE

20. Rates and Charges (Cont'd)20.4 Rate Group #4 (Cont'd)20.4.11 Frame Relay ServiceNetwork to Network Interface (NNI) - Month To Month*

| | |
|----------------------|------------|
| DS1 Port 1.536 Mbps, | |
| Monthly Charge | \$520.00 |
| Nonrecurring Charge | \$400.00 |
| DS-3 Port | |
| Monthly Charge | \$1,020.00 |
| Nonrecurring Charge | \$700.00 |

Network to Network Interface NNI – 1 YR Term Payment Plan (TPP)*

| | |
|---------------------|----------|
| DS1 Port 1.536 Mbps | |
| Monthly Charge | \$452.40 |
| Nonrecurring Charge | \$400.00 |
| DS-3 Port | |
| Monthly Charge | \$887.40 |
| Nonrecurring Charge | \$700.00 |

Network to Network Interface NNI – 2 YR Term Payment Plan (TPP)*

| | |
|---------------------|----------|
| DS1 Port 1.536 Mbps | |
| Monthly Charge | \$442.00 |
| Nonrecurring Charge | \$400.00 |
| DS-3 Port | |
| Monthly Charge | \$867.00 |
| Nonrecurring Charge | \$700.00 |

Network to Network Interface NNI – 3 YR Term Payment Plan (TPP)*

| | |
|---------------------|----------|
| DS1 Port 1.536 Mbps | |
| Monthly Charge | \$431.60 |
| Nonrecurring Charge | \$400.00 |
| DS-3 Port | |
| Monthly Charge | \$846.60 |
| Nonrecurring Charge | \$700.00 |

| | |
|--------------------------------|----------|
| Service Order Charge Per Order | \$130.23 |
|--------------------------------|----------|

| | |
|-----------------------|---------|
| Administrative Charge | \$50.00 |
|-----------------------|---------|

| | |
|-------------------------|----------|
| Expedited Order Charge, | \$250.00 |
|-------------------------|----------|

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.4 Rate Group #4 (Cont'd)

20.4.11 Frame Relay Service (Cont'd)

Frame Relay Access Connection

| | | |
|------------|---------------------|------------|
| 56 Kbps | | |
| | Monthly Charge | \$135.00 |
| | Nonrecurring Charge | \$204.23 |
| 1.536 Mbps | | |
| | Monthly Charge | \$200.00 |
| | Nonrecurring Charge | \$916.12 |
| DS-3 | | |
| | Monthly Charge | \$1,800.00 |
| | Nonrecurring Charge | \$3,410.00 |

UNI Port Connection Month to Month

| | | |
|------------|---------------------|----------|
| 56/64 Kbps | | |
| | Monthly Charge | \$25.00 |
| | Nonrecurring Charge | \$95.00 |
| 128 Kbps | | |
| | Monthly Charge | \$81.50 |
| | Nonrecurring Charge | \$150.00 |
| 256 Kbps | | |
| | Monthly Charge | \$119.50 |
| | Nonrecurring Charge | \$150.00 |
| 384 Kbps | | |
| | Monthly Charge | \$163.00 |
| | Nonrecurring Charge | \$150.00 |
| 512 Kbps | | |
| | Monthly Charge | \$195.50 |
| | Nonrecurring Charge | \$150.00 |

ACCESS SERVICE

20. Rates and Charges (Cont'd)20.4 Rate Group #4 (Cont'd)20.4.11 Frame Relay Service (Cont'd)UNI Port Connection Month to Month (Cont'd)

| | | |
|---------------------|--|------------|
| 768 Kbps | | |
| Monthly Charge | | \$217.50 |
| Nonrecurring Charge | | \$150.00 |
| 1.536 Mbps | | |
| Monthly Charge | | \$277.00 |
| Nonrecurring Charge | | \$395.00 |
| DS-3 | | |
| Monthly Charge | | \$1,530.00 |
| Nonrecurring Charge | | \$395.00 |

UNI Port Connection 1 YR Term Payment Plan (TPP)

| | | |
|---------------------|--|------------|
| 56/64 Kbps | | |
| Monthly Charge | | \$23.00 |
| Nonrecurring Charge | | \$95.00 |
| 128 Kbps | | |
| Monthly Charge | | \$75.00 |
| Nonrecurring Charge | | \$150.00 |
| 256 Kbps | | |
| Monthly Charge | | \$110.00 |
| Nonrecurring Charge | | \$150.00 |
| 384 Kbps | | |
| Monthly Charge | | \$150.00 |
| Nonrecurring Charge | | \$150.00 |
| 512 Kbps | | |
| Monthly Charge | | \$180.00 |
| Nonrecurring Charge | | \$150.00 |
| 768 Kbps | | |
| Monthly Charge | | \$200.00 |
| Nonrecurring Charge | | \$150.00 |
| 1.536 MBps | | |
| Monthly Charge | | \$230.00 |
| Nonrecurring Charge | | \$395.00 |
| DS-3 | | |
| Monthly Charge | | \$1,270.00 |
| Nonrecurring Charge | | \$395.00 |

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.4 Rate Group #4 (Cont'd)

20.4.11 Frame Relay Service (Cont'd)

UNI Port Connection 2 YR Term Payment Plan (TPP)

| | | |
|---------------------|--|------------|
| 56/64 Kbps | | |
| Monthly Charge | | \$22.00 |
| Nonrecurring Charge | | \$95.00 |
| 128 Kbps | | |
| Monthly Charge | | \$70.00 |
| Nonrecurring Charge | | \$150.00 |
| 256 Kbps | | |
| Monthly Charge | | \$105.00 |
| Nonrecurring Charge | | \$150.00 |
| 384 Kbps | | |
| Monthly Charge | | \$140.00 |
| Nonrecurring Charge | | \$150.00 |
| 512 Kbps | | |
| Monthly Charge | | \$170.00 |
| Nonrecurring Charge | | \$150.00 |
| 768 Kbps | | |
| Monthly Charge | | \$190.00 |
| Nonrecurring Charge | | \$150.00 |
| 1.536 MBps | | |
| Monthly Charge | | \$220.00 |
| Nonrecurring Charge | | \$395.00 |
| DS-3 | | |
| Monthly Charge | | \$1,230.00 |
| Nonrecurring Charge | | \$395.00 |

ACCESS SERVICE

20. Rates and Charges (Cont'd)20.4 Rate Group #4 (Cont'd)20.4.11 Frame Relay Service (Cont'd)UNI Port Connection 3 YR Term Payment Plan (TPP)

| | | |
|---------------------|--|------------|
| 56/64 Kbps | | |
| Monthly Charge | | \$21.00 |
| Nonrecurring Charge | | \$95.00 |
| 128 Kbps | | |
| Monthly Charge | | \$68.00 |
| Nonrecurring Charge | | \$150.00 |
| 256 Kbps | | |
| Monthly Charge | | \$100.00 |
| Nonrecurring Charge | | \$150.00 |
| 384 Kbps | | |
| Monthly Charge | | \$130.00 |
| Nonrecurring Charge | | \$150.00 |
| 512 Kbps | | |
| Monthly Charge | | \$160.00 |
| Nonrecurring Charge | | \$150.00 |
| 768 Kbps | | |
| Monthly Charge | | \$180.00 |
| Nonrecurring Charge | | \$150.00 |
| 1.536 MBps | | |
| Monthly Charge | | \$210.00 |
| Nonrecurring Charge | | \$395.00 |
| DS-3 | | |
| Monthly Charge | | \$1,200.00 |
| Nonrecurring Charge | | \$395.00 |

ACCESS SERVICE

20. Rates and Charges (Cont'd)20.4 Rate Group #4 (Cont'd)20.4.11 Frame Relay Service (Cont'd)Committed Information Rate, per PVC Month to Month

| | | |
|------------|---------------------|---------|
| 32 Kbps | | |
| | Monthly Charge | \$7.50 |
| | Nonrecurring Charge | \$12.00 |
| 56/64 Kbps | | |
| | Monthly Charge | \$13.00 |
| | Nonrecurring Charge | \$12.00 |
| 128 Kbps | | |
| | Monthly Charge | \$25.00 |
| | Nonrecurring Charge | \$12.00 |
| 256 Kbps | | |
| | Monthly Charge | \$34.75 |
| | Nonrecurring Charge | \$12.00 |
| 384 Kbps | | |
| | Monthly Charge | \$41.50 |
| | Nonrecurring Charge | \$12.00 |
| 512 Kbps | | |
| | Monthly Charge | \$54.50 |
| | Nonrecurring Charge | \$12.00 |
| 768 Kbps | | |
| | Monthly Charge | \$58.50 |
| | Nonrecurring Charge | \$12.00 |

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.4 Rate Group #4 (Cont'd)

20.4.11 Frame Relay Service (Cont'd)

Committed Information Rate, per PVC Month to Month (Cont'd)

| | | |
|------------|---------------------|----------|
| 1.536 MBps | | |
| | Monthly Charge | \$82.50 |
| | Nonrecurring Charge | \$100.00 |
| 5 Mbps | | |
| | Monthly Charge | \$103.50 |
| | Nonrecurring Charge | \$100.00 |
| 10 Mbps | | |
| | Monthly Charge | \$139.50 |
| | Nonrecurring Charge | \$100.00 |
| 15 Mbps | | |
| | Monthly Charge | \$293.50 |
| | Nonrecurring Charge | \$100.00 |
| 20 Mbps | | |
| | Monthly Charge | \$392.50 |
| | Nonrecurring Charge | \$100.00 |
| 25 Mbps | | |
| | Monthly Charge | \$489.00 |
| | Nonrecurring Charge | \$100.00 |
| 30 Mbps | | |
| | Monthly Charge | \$585.50 |
| | Nonrecurring Charge | \$100.00 |
| 35 Mbps | | |
| | Monthly Charge | \$706.00 |
| | Nonrecurring Charge | \$100.00 |
| 40 Mbps | | |
| | Monthly Charge | \$778.50 |
| | Nonrecurring Charge | \$100.00 |
| 45 Mbps | | |
| | Monthly Charge | \$934.50 |
| | Nonrecurring Charge | \$100.00 |

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.4 Rate Group #4 (Cont'd)

20.4.11 Frame Relay Service (Cont'd)

Committed Information Rate, per PVC 1 YR Term Payment Plan (TPP)

| | | |
|------------|---------------------|---------|
| 32 Kbps | | |
| | Monthly Charge | \$7.00 |
| | Nonrecurring Charge | \$12.00 |
| 56/64 Kbps | | |
| | Monthly Charge | \$12.00 |
| | Nonrecurring Charge | \$12.00 |
| 128 Kbps | | |
| | Monthly Charge | \$23.00 |
| | Nonrecurring Charge | \$12.00 |
| 256 Kbps | | |
| | Monthly Charge | \$32.00 |
| | Nonrecurring Charge | \$12.00 |
| 384 Kbps | | |
| | Monthly Charge | \$38.00 |
| | Nonrecurring Charge | \$12.00 |
| 512 Kbps | | |
| | Monthly Charge | \$50.00 |
| | Nonrecurring Charge | \$12.00 |
| 768 Kbps | | |
| | Monthly Charge | \$54.00 |
| | Nonrecurring Charge | \$12.00 |

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.4 Rate Group #4 (Cont'd)

20.4.11 Frame Relay Service (Cont'd)

Committed Information Rate, per PVC 1 YR Term Payment Plan (TPP) (Cont'd)

| | | |
|------------|---------------------|----------|
| 1.536 MBps | | |
| | Monthly Charge | \$76.00 |
| | Nonrecurring Charge | \$100.00 |
| 5 Mbps | | |
| | Monthly Charge | \$86.00 |
| | Nonrecurring Charge | \$100.00 |
| 10 Mbps | | |
| | Monthly Charge | \$116.00 |
| | Nonrecurring Charge | \$100.00 |
| 15 Mbps | | |
| | Monthly Charge | \$244.00 |
| | Nonrecurring Charge | \$100.00 |
| 20 Mbps | | |
| | Monthly Charge | \$326.00 |
| | Nonrecurring Charge | \$100.00 |
| 25 Mbps | | |
| | Monthly Charge | \$406.00 |
| | Nonrecurring Charge | \$100.00 |
| 30 Mbps | | |
| | Monthly Charge | \$486.00 |
| | Nonrecurring Charge | \$100.00 |
| 35 Mbps | | |
| | Monthly Charge | \$586.00 |
| | Nonrecurring Charge | \$100.00 |
| 40 Mbps | | |
| | Monthly Charge | \$646.00 |
| | Nonrecurring Charge | \$100.00 |
| 45 Mbps | | |
| | Monthly Charge | \$776.00 |
| | Nonrecurring Charge | \$100.00 |

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.4 Rate Group #4 (Cont'd)

20.4.11 Frame Relay Service (Cont'd)

Committed Information Rate, per PVC 2 YR Term Payment Plan (TPP)

| | | |
|------------|---------------------|---------|
| 32 Kbps | | |
| | Monthly Charge | \$6.51 |
| | Nonrecurring Charge | \$12.00 |
| 56/64 Kbps | | |
| | Monthly Charge | \$11.16 |
| | Nonrecurring Charge | \$12.00 |
| 128 Kbps | | |
| | Monthly Charge | \$21.39 |
| | Nonrecurring Charge | \$12.00 |
| 256 Kbps | | |
| | Monthly Charge | \$29.76 |
| | Nonrecurring Charge | \$12.00 |
| 384 Kbps | | |
| | Monthly Charge | \$35.34 |
| | Nonrecurring Charge | \$12.00 |
| 512 Kbps | | |
| | Monthly Charge | \$46.50 |
| | Nonrecurring Charge | \$12.00 |
| 768 Kbps | | |
| | Monthly Charge | \$50.22 |
| | Nonrecurring Charge | \$12.00 |

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.4 Rate Group #4 (Cont'd)

20.4.11 Frame Relay Service (Cont'd)

Committed Information Rate, per PVC 2 YR Term Payment Plan (TPP) (Cont'd)

| | | |
|---------------------|--|----------|
| 1.536 MBps | | |
| Monthly Charge | | \$70.68 |
| Nonrecurring Charge | | \$100.00 |
| 5 Mbps | | |
| Monthly Charge | | \$79.98 |
| Nonrecurring Charge | | \$100.00 |
| 10 Mbps | | |
| Monthly Charge | | \$107.88 |
| Nonrecurring Charge | | \$100.00 |
| 15 Mbps | | |
| Monthly Charge | | \$226.96 |
| Nonrecurring Charge | | \$100.00 |
| 20 Mbps | | |
| Monthly Charge | | \$303.18 |
| Nonrecurring Charge | | \$100.00 |
| 25 Mbps | | |
| Monthly Charge | | \$377.58 |
| Nonrecurring Charge | | \$100.00 |
| 30 Mbps | | |
| Monthly Charge | | \$451.98 |
| Nonrecurring Charge | | \$100.00 |
| 35 Mbps | | |
| Monthly Charge | | \$544.98 |
| Nonrecurring Charge | | \$100.00 |
| 40 Mbps | | |
| Monthly Charge | | \$600.78 |
| Nonrecurring Charge | | \$100.00 |
| 45 Mbps | | |
| Monthly Charge | | \$721.68 |
| Nonrecurring Charge | | \$100.00 |

ACCESS SERVICE

20. Rates and Charges (Cont'd)20.4 Rate Group #4 (Cont'd)20.4.11 Frame Relay Service (Cont'd)Committed Information Rate, per PVC 3 YR Term Payment Plan (TPP)

| | | |
|------------|---------------------|---------|
| 32 Kbps | | |
| | Monthly Charge | \$6.30 |
| | Nonrecurring Charge | \$12.00 |
| 56/64 Kbps | | |
| | Monthly Charge | \$10.80 |
| | Nonrecurring Charge | \$12.00 |
| 128 Kbps | | |
| | Monthly Charge | \$20.70 |
| | Nonrecurring Charge | \$12.00 |
| 256 Kbps | | |
| | Monthly Charge | \$28.80 |
| | Nonrecurring Charge | \$12.00 |
| 384 Kbps | | |
| | Monthly Charge | \$34.20 |
| | Nonrecurring Charge | \$12.00 |
| 512 Kbps | | |
| | Monthly Charge | \$45.00 |
| | Nonrecurring Charge | \$12.00 |
| 768 Kbps | | |
| | Monthly Charge | \$48.60 |
| | Nonrecurring Charge | \$12.00 |

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.4 Rate Group #4 (Cont'd)

20.4.11 Frame Relay Service (Cont'd)

Committed Information Rate, per PVC 3 YR Term Payment Plan (TPP) (Cont'd)

| | | |
|---------------------|--|----------|
| 1.536 MBps | | |
| Monthly Charge | | \$68.40 |
| Nonrecurring Charge | | \$100.00 |
| 5 Mbps | | |
| Monthly Charge | | \$77.40 |
| Nonrecurring Charge | | \$100.00 |
| 10 Mbps | | |
| Monthly Charge | | \$104.40 |
| Nonrecurring Charge | | \$100.00 |
| 15 Mbps | | |
| Monthly Charge | | \$219.60 |
| Nonrecurring Charge | | \$100.00 |
| 20 Mbps | | |
| Monthly Charge | | \$293.40 |
| Nonrecurring Charge | | \$100.00 |
| 25 Mbps | | |
| Monthly Charge | | \$365.40 |
| Nonrecurring Charge | | \$100.00 |
| 30 Mbps | | |
| Monthly Charge | | \$437.40 |
| Nonrecurring Charge | | \$100.00 |
| 35 Mbps | | |
| Monthly Charge | | \$527.40 |
| Nonrecurring Charge | | \$100.00 |
| 40 Mbps | | |
| Monthly Charge | | \$581.40 |
| Nonrecurring Charge | | \$100.00 |
| 45 Mbps | | |
| Monthly Charge | | \$698.40 |
| Nonrecurring Charge | | \$100.00 |

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.4 Rate Group #4 (Cont'd)

20.4.12 Internet Digital Access Service (IDAS)

(A) Nonrecurring Charges

(1) Internet Digital Access Service

| | |
|----------------------------|------------|
| Initial Order, per request | \$1,000.00 |
| Change Order, per request | \$130.26 |

(B) Monthly Recurring Charges

(1) Internet Digital Access Transport (IDAT)**

This is the rate per Facility.

4 to 7 Facilities

| | |
|----------------|----------|
| Month to Month | \$760.00 |
| 1 Year Term | \$690.00 |
| 2 Year Term | \$675.00 |
| 3 Year Term | \$600.00 |

8 to 9 Facilities

| | |
|----------------|----------|
| Month to Month | \$730.00 |
| 1 Year Term | \$660.00 |
| 2 Year Term | \$635.00 |
| 3 Year Term | \$550.00 |

10 or More Facilities

| | |
|----------------|----------|
| Month to Month | \$710.00 |
| 1 Year Term | \$640.00 |
| 2 Year Term | \$615.00 |
| 3 Year Term | \$550.00 |

** The rate per facility is based on the total number of facilities being billed at any location, at the time of the bill, even if the facilities were ordered at different times.

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.4 Rate Group #4 (Cont'd)

20.4.12 Internet Digital Access Service (IDAS) (Cont'd)

(B) Monthly Recurring Charges (Cont'd)

(2) Internet Digital Access Port (IDAP)**

This is the rate per Facility.

4 to 7 Facilities

| | |
|----------------|----------|
| Month to Month | \$730.00 |
| 1 Year Term | \$600.00 |
| 2 Year Term | \$550.00 |
| 3 Year Term | \$500.00 |

8 to 9 Facilities

| | |
|----------------|----------|
| Month to Month | \$710.00 |
| 1 Year Term | \$570.00 |
| 2 Year Term | \$520.00 |
| 3 Year Term | \$450.00 |

10 or More Facilities

| | |
|----------------|----------|
| Month to Month | \$690.00 |
| 1 Year Term | \$550.00 |
| 2 Year Term | \$500.00 |
| 3 Year Term | \$450.00 |

(3) Internet Digital Access Foreign Exchange Service (IDAS-FX)

Rates applicable to IDAS-FX service can be found in Section 20.4.5 of this guide for DS-1 Channel Mileage Facility and Channel Mileage Termination. These rates are in addition to the rates for IDAT or IDAP as shown above.

** The rate per facility is based on the total number of facilities being billed at any location, at the time of the bill, even if the facilities were ordered at different times.

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.4 Rate Group #4 (Cont'd)

20.4.13 Dial Internet Aggregation Access Service (DIAAS)*

(A) Analog/ISDN TCP/IP Access – 4 Year Rate Plan

Combined Analog and ISDN Nationwide Channels, Per Month, Per Channel

| | |
|---------------------------|---------|
| 1000 Min. Billed Channels | |
| 4 Yr. Plan | \$46.00 |
| Month to Month | \$58.00 |
| 100 Min. Billed Channels | |
| 4 Yr. Plan | \$76.00 |
| Month to Month | \$95.00 |

Note: A DS1 has 24 channels. Therefore, a DS1-level service with 24 channels on the 4 Year Plan with a minimum of 1000 channels would bill at the rate of \$1,104.00 per month.

* DIAAS is a grandfathered service available to UUNet only.

ACCESS SERVICE

20. Rates and Charges

20.5 Rate Group #5

For a list of Carriers included in Rate Group 5, refer to Title Page 8.

20.5.1 Reserved for future use (Cont'd)

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.5 Rate Group #5 (Cont'd)

20.5.1 Reserved for future use (Cont'd)

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.5 Rate Group #5 (Cont'd)

20.5.2 Reserved for future use

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.5 Rate Group #5 (Cont'd)

20.5.2 Reserved for future use (Cont'd)

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.5 Rate Group #5 (Cont'd)

20.5.2 Reserved for future use (Cont'd)

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.5 Rate Group #5 (Cont'd)

20.5.3 Access Ordering

Regulations concerning Access Ordering are set forth in Section 5 preceding.

| <u>Service Date Change Charge</u> | <u>Nonrecurring Charge</u> | |
|-----------------------------------|----------------------------|-----|
| - Per Order | \$50.00 | |
| | | |
| <u>Design Change Charge</u> | | |
| - Per order, per occurrence | \$1,175.15 | (C) |
| | | |
| <u>Cancellation Charge</u> | | |
| - Per Order | \$12,958.03 | (C) |
| | | |
| <u>Expedited Order Charge</u> | | |
| - Per Order, per day expedited | \$300.00 | |

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.5 Rate Group #5 (Cont'd)

20.5.4 Reserved for future use (Cont'd)

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.5 Rate Group #5 (Cont'd)

20.5.4 Reserved for future use (Cont'd)

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.5 Rate Group #5 (Cont'd)

20.5.4 Reserved for future use (Cont'd)

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.5 Rate Group #5 (Cont'd)

20.5.4 Reserved for future use (Cont'd)

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.5 Rate Group #5 (Cont'd)

20.5.4 Reserved for future use (Cont'd)

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.5 Rate Group #5 (Cont'd)

20.5.4 Reserved for future use (Cont'd)

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.5 Rate Group #5 (Cont'd)

20.5.4 Reserved for future use (Cont'd)

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.5 Rate Group #5 (Cont'd)

20.5.4 Reserved for future use (Cont'd)

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.5 Rate Group #5 (Cont'd)

20.5.5 Special Access Service

Regulations concerning Special Access are set forth in Section 7 preceding.

Metallic Service

Channel Termination

| | | |
|---|--------------------------------------|------------|
| - | per Order | \$130.23 |
| - | per Termination, per month | \$150.00 |
| - | per Termination, nonrecurring charge | \$1,000.00 |

Channel Mileage

| | | |
|---|--|---------|
| - | Channel Mileage Facility, per Mile, per month | \$0.75 |
| - | Channel Mileage Termination, per termination, per month | \$42.00 |

Optional Features & Functions

Bridging

Three premises bridging, per port *

Series bridging, per port *

* No demand - rates available on request.

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.5 Rate Group #5 (Cont'd)

20.5.5 Special Access Service (Cont'd)

Voice Grade Service

Service Order Charge – per order \$4,015.43 (C)

Channel Termination

| | | | |
|----|--|-------------|--|
| -- | per Two Wire Termination, per month | \$1,724.50 | |
| - | per Two Wire Termination, nonrecurring charge | \$15,054.06 | |
| - | per Four Wire Termination, per month | \$2,805.81 | |
| - | per Four Wire Termination, nonrecurring charge | \$15,054.06 | |

Channel Mileage

| | | | |
|---|--|------------|-----|
| - | Channel Mileage Facility, per Mile, per month | \$18.81 | |
| - | Channel Mileage Termination, per termination, per month | \$1,202.50 | (C) |

Discontinuance Non-Recurring Charge – per Circuit \$975.00

Optional Features & Functions

Monthly
Rate

Central Office Bridging Capability
Two-Wire or Four-Wire, per Port

| | | | |
|---|-------------------|--------|--|
| - | Data | \$1.00 | |
| - | Voice | \$1.00 | |
| - | Telephoto | * | |
| - | DATAPHONE | * | |
| - | Telemetry & Alarm | * | |

Conditioning, per Termination

| | | | |
|---|------------------------------------|--------|--|
| - | C Type | \$1.00 | |
| - | Improved Attenuation Distortion | \$1.00 | |
| - | Improved Envelope Delay Distortion | \$7.74 | |
| - | Data Capability | \$1.00 | |
| - | Sealing Current | * | |

* No demand rates available on request.

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.5 Rate Group #5 (Cont'd)

20.5.5 Special Access Service (Cont'd)

Voice Grade Service (Cont'd)

Optional Features & Functions (Cont'd)

Monthly
Rate

Improved Return Loss for Effective
Two-Wire or Four-Wire Transmission
- per Termination

\$1.00

Customer Specified Receive Level,
- per Termination

\$1.00

Signaling Capability
- per Termination
- Loop Signaling Range Extension
- Loop or E&M to SF
- E&M to DX
- E&M to Loop
- Loop or E&M to PCM
- Automatic Ringdown

\$1.00

Selective Signaling Arrangement

\$1.00

Transfer Arrangement
(Key Activated ** or Dial Up)***

- Per Four Port Arrangement
including control circuit termination****

*

- Per Five Port Arrangement
including control circuit termination****

*

* No demand rates available on request.

** The key activated control circuit is rated as a Metallic Circuit Termination and Circuit Mileage, if applicable.

*** The Dial Up option requires the customer to purchase the Controller Arrangement from Section 20.5.7.

**** An additional Channel Termination charge will apply whenever a space circuit is configured as a leg to the customer's premises. Additional circuit mileage charges will apply when the transfer arrangement is not located in the customer premises serving wire center.

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.5 Rate Group #5 (Cont'd)

20.5.5 Special Access Service (Cont'd)

Voice Grade Service (Cont'd)

Optional Features & Functions (Cont'd)

Monthly
Rate

Voice Grade Facility Switching Arrangement

Echo Control

- Echo Suppression, per Circuit

*

- Echo Canceller, per Circuit

*

Improved Termination Option, per Termination

\$1.00

Improved Equal Level Echo Path Loss,
per Termination

Telephoto Capability
per Termination

* No demand rates available on request.

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.5 Rate Group #5 (Cont'd)

20.5.5 Special Access Service (Cont'd)

Program Audio Service

Channel Termination

| | | |
|---|-------------------------------------|----------|
| - | per Order | \$130.23 |
| - | 200 to 3500 Hz, monthly rate | \$37.52 |
| - | 100 to 5000 Hz, monthly rate | \$37.95 |
| - | 50 to 8000 Hz, monthly rate | \$37.95 |
| - | 50 to 15000 Hz, monthly rate | \$37.95 |
| - | 200 to 3500 Hz, daily rate | \$5.20 |
| - | 100 to 5000 Hz, daily rate | \$5.20 |
| - | 50 to 8000 Hz, daily rate | \$5.20 |
| - | 50 to 15000 Hz, daily rate | \$5.20 |
| - | 200 to 3500 Hz, Nonrecurring Charge | \$741.01 |
| - | 100 to 5000 Hz, Nonrecurring Charge | \$741.01 |
| - | 50 to 8000 Hz, Nonrecurring Charge | \$741.01 |
| - | 50 to 15000 Hz, Nonrecurring Charge | \$741.01 |

Channel Mileage

| | | |
|---|------------------------------------|--------|
| - | Channel Mileage Facility, per Mile | |
| - | 200 to 3500 Hz, monthly rate | \$0.80 |
| - | 100 to 5000 Hz, monthly rate | \$1.55 |
| - | 50 to 8000 Hz, monthly rate | \$2.40 |
| - | 50 to 15000 Hz, monthly rate | \$3.10 |
| - | 200 to 3500 Hz, daily rate | \$0.08 |
| - | 100 to 5000 Hz, daily rate | \$0.16 |
| - | 50 to 8000 Hz, daily rate | \$0.24 |
| - | 50 to 15000 Hz, daily rate | \$0.32 |

- Channel Mileage Termination, per Termination

| | | |
|---|------------------------------|---------|
| - | 200 to 3500 Hz, monthly rate | \$37.95 |
| - | 100 to 5000 Hz, monthly rate | \$37.95 |
| - | 50 to 8000 Hz, monthly rate | \$37.95 |
| - | 50 to 15000 Hz, monthly rate | \$37.95 |
| - | 200 to 3500 Hz, daily rate | \$4.57 |
| - | 100 to 5000 Hz, daily rate | \$4.57 |
| - | 50 to 8000 Hz, daily rate | \$4.57 |
| - | 50 to 15000 Hz, daily rate | \$4.57 |

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.5 Rate Group #5 (Cont'd)

20.5.5 Special Access Service (Cont'd)

Program Audio Service (Cont'd)

Optional Features and Functions

| | |
|---|---------|
| Bridging Distribution Amplifier, per Port, monthly rate | * |
| Bridging Distribution Amplifier, per Port, daily rate | * |
| Gain Conditioning per Service, monthly rate | \$12.00 |
| Gain Conditioning per Service, daily rate | \$1.20 |
| Stereo, per Service, monthly rate | * |
| Stereo, per Service, daily rate | * |

* No demand rates available on request.

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.5 Rate Group #5 (Cont'd)

20.5.5 Special Access Service (Cont'd)

Digital Data Service

Service Order Charge – per order \$4,015.43 (C)

Channel Termination

- per Termination, monthly rate

| | |
|-----------|------------|
| 2.4 kbps | \$3,103.41 |
| 4.8 kbps | \$3,103.41 |
| 9.6 kbps | \$3,103.41 |
| 19.2 kbps | \$3,103.41 |
| 56.0 kbps | \$1,418.35 |
| 64.0 kbps | \$1,418.35 |

- per Termination, Nonrecurring Charge
 All Speeds \$16,005.26

Channel Mileage

- Channel Mileage Facility,
 Per mile, per month

| | |
|-----------|---------|
| 2.4 kbps | \$10.80 |
| 4.8 kbps | \$10.80 |
| 9.6 kbps | \$10.80 |
| 19.2 kbps | \$10.80 |
| 20 | |
| 56.0 kbps | \$9.28 |
| 64.0 kbps | \$9.28 |

- Channel Mileage Termination,
 Per termination, per month

| | |
|-----------|------------|
| 2.4 kbps | \$1,449.16 |
| 4.8 kbps | \$1,449.16 |
| 9.6 kbps | \$1,449.16 |
| 19.2 kbps | \$1,449.16 |
| 56.0 kbps | \$986.32 |
| 64.0 kbps | \$986.32 |

(C)

Discontinuance Non-Recurring Charge – per Circuit
 All Speeds \$975.00

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.5 Rate Group #5 (Cont'd)

20.5.5 Special Access Service (Cont'd)

Digital Data Service (Cont'd)

Optional Features and Functions

| | |
|---|---------|
| Central Office Bridging per Port, per month | \$12.53 |
| Secondary Channel per Station | * |
| Multiplexing | |
| Digital Data Carrier, per month | * |
| Digital Data Carrier, Nonrecurring Charge | * |
| Loop Transfer Arrangement (Key Activated** or Dial Up***) | |
| Per Four Port Arrangement, including control circuit termination**** | |
| monthly rate | ICB |
| Nonrecurring Charge | ICB |

* No demand- rate available on request.

** The key activated control circuit is rated as a Metallic Circuit Termination and Circuit mileage, if applicable.

*** The Dial Up option requires the customer to purchase the Controller Arrangement from Section 20.5.7

**** An additional Circuit Termination charge will apply whenever a space circuit is configured as a leg to the customer's premises. Additional circuit mileage charges will apply when the transfer arrangement is not located in the customer premises serving wire center.

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.5 Rate Group #5 (Cont'd)

20.5.5 Special Access Service (Cont'd)

High Capacity Service

Service Order Charge – per order

| | | |
|----------------------|-------------|-----|
| DS-1 - 1.544 Mbps | \$4,026.53 | (C) |
| DS-3 - 44.736 Mbps | \$12,795.83 | |
| OC-3 - 155.520 Mbps | \$12,795.83 | |
| OC-3c - 155.520 Mbps | \$12,795.83 | |

Channel Termination

- per Termination, monthly rate

Competitive End User & IC CDL

| | |
|----------------------|-------------|
| DS-1 1.544 Mbps | \$2,790.44 |
| DS-3 - 44.736 Mbps | \$23,284.03 |
| OC-3 - 155.520 Mbps | \$98,666.56 |
| OC-3c - 155.520 Mbps | \$92,499.88 |

- per Termination, Nonrecurring Charge

| | |
|----------------------|--------------|
| DS-1 - 1.544 Mbps | \$21,583.29 |
| DS-3 - 44.736 Mbps | \$105,141.53 |
| OC-3 - 155.520 Mbps | \$110,999.86 |
| OC-3c - 155.520 Mbps | \$110,999.86 |

Channel Mileage

- Channel Mileage Facility,
Per mile, per month

| | |
|----------------------|------------|
| DS-1 - 1.544 Mbps | \$155.14 |
| DS-3 - 44.736 Mbps | \$1,860.48 |
| OC-3 - 155.520 Mbps | \$8,633.37 |
| OC-3c - 155.520 Mbps | \$8,633.37 |

- Channel Mileage Termination,
Per termination, per month

| | | |
|----------------------|-------------|-----|
| DS-1 - 1.544 Mbps | \$2,991.44 | (C) |
| DS-3 - 44.736 Mbps | \$13,952.06 | |
| OC-3 - 155.520 Mbps | \$61,666.56 | |
| OC-3c - 155.520 Mbps | \$61,666.56 | |

Discontinuance Non-Recurring Charge – per Circuit

| | |
|----------------------|----------|
| DS-1 - 1.544 Mbps | \$975.00 |
| DS-3 - 44.736 Mbps | \$975.00 |
| OC-3 - 155.520 Mbps | \$975.00 |
| OC-3c - 155.520 Mbps | \$975.00 |

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.5 Rate Group #5 (Cont'd)

20.5.5 Special Access Service (Cont'd)

High Capacity Service (Cont'd)

Optional Features and Functions

Multiplexing

| | | | |
|---|----------------------------|-------------|-----|
| - | OC-3 to DS-3 per month | \$46,249.93 | (C) |
| | Nonrecurring Charge | \$39,990.78 | |
| - | OC-3 to DS-1 per month | \$55,499.95 | |
| | Nonrecurring Charge | \$39,990.78 | |
| - | DS-3 to DS-1 per month | \$43,166.66 | |
| | Nonrecurring Charge | \$39,990.78 | |
| - | DS-1 to Voice per month | \$8,109.18 | |
| | Nonrecurring Charge | \$12,857.51 | |
| - | DS-1 to DS0 per month | \$8,109.18 | (C) |
| | Nonrecurring Charge | \$12,857.51 | |

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.5 Rate Group #5 (Cont'd)

20.5.5 Special Access Service (Cont'd)

High Capacity Service (Cont'd)

Optional Features and Functions (Cont'd)

Multiplexing (Cont'd)

| | | | |
|---|--|--|-----------------|
| - | Digital DS3 Cross Connect per month | | * |
| | Nonrecurring Charge | | * |
| - | Digital Data Substrate | | |
| | One DSO to Twenty 2.4 Kbps monthly rate | | ICB |
| | Nonrecurring Charge | | ICB |
| | One DSO to Ten 4.8 Kbps monthly rate | | ICB |
| | Nonrecurring Charge | | ICB |
| | One DSO to Five 9.6 Kbps monthly rate | | ICB |
| | Nonrecurring Charge | | ICB |
| | Automatic Loop transfer** | | |
| - | per Arrangement | | ICB |
| - | per Termination | | \$143.05 |
| | Automatic Protection Switching per DS1 monthly rate | | * |
| | Nonrecurring Charge | | * |
| | Clear Channel Capability, per DS1 circuit arranged monthly rate | | \$0.00 |
| | Nonrecurring Charge | | \$16,594.19 (C) |

* No demand - rates available on request.

** An additional Channel Termination charge will apply whenever the space channel is configured as a leg to the customer designated premises. Additional Channel Mileage charges will also apply when the transfer arrangement is not located in the customer designated premises serving wire center.

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.5 Rate Group #5 (Cont'd)

20.5.6 Reserved for future use (Cont'd)

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.5 Rate Group #5 (Cont'd)

20.5.6 Reserved for future use (Cont'd)

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.5 Rate Group #5 (Cont'd)

20.5.7 Miscellaneous Services

Additional Engineering and Additional Labor

Charges for Additional Engineering
per Engineer, 1/2 hour or Fraction thereof

| | |
|---------------|---------|
| Basic Time | \$40.00 |
| Overtime | \$60.00 |
| Premium Time* | \$80.00 |

Charges for Additional Labor
per Technician, 1/2 hour or Fraction thereof

| | |
|---------------|---------|
| Basic Time | \$30.00 |
| Overtime | \$45.00 |
| Premium Time* | \$60.00 |

Charges for Additional Testing
per Technician, 1/2 hour or Fraction thereof

| | |
|---------------|---------|
| Basic Time | \$30.00 |
| Overtime | \$45.00 |
| Premium Time* | \$60.00 |

Charges for Standby
per Technician, 1/2 hour or Fraction thereof

| | |
|---------------|---------|
| Basic Time | \$30.00 |
| Overtime | \$45.00 |
| Premium Time* | \$60.00 |

Charges for Programming
per Programmer, 1/2 hour or Fraction thereof

| | |
|---------------|---------|
| Basic Time | \$30.00 |
| Overtime | \$45.00 |
| Premium Time* | \$60.00 |

NID Replacement

| | |
|---|---------|
| Nonrecurring Charge per 2 pairs of capacity | \$99.00 |
|---|---------|

* Subject to Minimum Charge of Four Hours.

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.5 Rate Group #5 (Cont'd)

20.5.7 Miscellaneous Services (Cont'd)

Additional Testing

Charges for Additional Testing
per Transmission Path, First Point
of Switching, per Month

- Automated Scheduled Testing
 - monthly rate *
 - Nonrecurring Charge *

- Additional Cooperative Scheduled Testing
 - Basic Offering
 - monthly rate *
 - Nonrecurring Charge *

 - Gain Slope
 - monthly rate *
 - Nonrecurring Charge *

- Additional Manual Scheduled Testing
 - Basic Offering
 - monthly rate *
 - Nonrecurring Charge *

 - Gain Slope
 - monthly rate *
 - Nonrecurring Charge *

Controller Agreement

- Per Arrangement
 - monthly rate *
 - Nonrecurring Charge *

* No demand - rates available on request.

ACCESS SERVICE

20. Rates and Charges (Cont'd)20.5 Rate Group #5 (Cont'd)20.5.7 Miscellaneous Services (Cont'd)

- Paper or fax LOA processing
Per telephone number \$0.75

Special Access Surcharge
monthly rate \$25.00

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.5 Rate Group #5 (Cont'd)

20.5.7 Miscellaneous Services (Cont'd)

End User/Agents List

| | | |
|---|--|---------|
| - | Agent List, Nonrecurring Charge per State, per Order | \$50.00 |
| - | Agent List, Initial per Customer Account* | \$0.03 |
| - | Agent List, Allocation, per Listing** | \$0.03 |
| - | Snapshot List, NRC per State, per Order | \$75.00 |
| - | Snapshot List, per Listing*** | \$0.05 |

Telecommunications Service Priority

| | | |
|---|--|---------|
| - | Establishment of TSP System Nonrecurring Service Charge | \$14.50 |
| - | Restoration Priority, monthly rate | \$4.90 |

End User Validation List

| | | |
|--|--|---------|
| | Standard Sort. Per Record Provided | \$0.034 |
| | Administrative Fee--Paper Report, Electronic Transmission or Magnetic Tape, Per Request | \$78.00 |
| | Special Sort, Per Record Provided | \$0.054 |

PIC Freeze Verification Report

Refer to Section 20.1.7 Snapshot List, NRC and Snapshot List, Per Listing for rates and charges.

* For the purpose of the Initial Lists customer and agent is defined in Section 2.6.

** For the Purpose of the Allocation list, a listing is defined as an end user or agent record eligible for a Primary Interexchange Carrier Selection.

*** For the purpose of the Snapshot list, a listing is defined as an end user or agent eligible for a Predesignated Interexchange Carrier Selection.

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.5 Rate Group #5 (Cont'd)

20.5.7 Reserved for future use (Cont'd)

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.5 Rate Group #5 (Cont'd)

20.5.8 Special Facilities Routing Access Service

The following rates and charges are in addition to all other rates and charges that may be applicable for other services that may be furnished under the provisions of this guide to operate in conjunction with this service.

| | | |
|-----|---|-----|
| (A) | Special Routing Access Service Area Plan-Setup and Removal, Per End Office or Tandem Office Switching System. (Note 1) (Note 2) | |
| | Recurring Charges | ICB |
| | Nonrecurring Charges | ICB |
| (B) | Special Routing Access Service Trunk Group Setup and Removal, Per End Office Switching System, Per Occurrence (Note 1) (Note 2) | |
| | Recurring Charges | ICB |
| | Nonrecurring Charges | ICB |
| (C) | Activation or Deactivation of Special Routing Access Service, Per End Office or Tandem Office Switching System, Per Occurrence | |
| | Recurring Charges | ICB |
| | Nonrecurring Charges | ICB |

(Note 1) The service setups will only be activated in offices that are specifically negotiated by the customer with the Telephone Company and are mutually agreeable between both parties.

(Note 2) End Offices will be updated for activation and/or deactivation annually.

ACCESS SERVICE

20. Rates and Charges (Cont'd)

20.5 Rate Group #5 (Cont'd)

20.5.8 Special Facilities Routing Access Service (Cont'd)

| | | |
|-----|--|------|
| (D) | Special Routing Access Service Trunk Usage, When Activated, Per Trunk, Per Initial Activation Hour | |
| | Recurring Charges | ICB* |
| | Nonrecurring Charges | ICB |
| (E) | Special Routing Access Service Trunk Usage, When Activated, Per Trunk, Per Subsequent 1/2 Hour | |
| | Recurring Charges | ICB* |
| | Nonrecurring Charges | ICB |
| (F) | Special Routing Access Service Maintenance and Administration. Per End Office or Tandem Office Switching System, Per Month | |
| | Recurring Charges | ICB |
| | Nonrecurring Charges | ICB |

* This rate is in addition to Trunk Side premium Access Service rates which may apply on an ongoing basis whether SRAS is activated or not

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