

TITLE PAGE
RATES AND CHARGES
APPLICABLE TO
COMPETITIVE SERVICES
IN THE TERRITORY SERVED BY
FRONTIER COMMUNICATIONS NORTHWEST INC.

Reference No. OR-10-01

Issued: July 23, 2010
Issued by Frontier Communications Northwest Inc.
By Kenneth Mason, Vice President of Government and External Affairs

Effective: August 6, 2010

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Section 1

Original Sheet 1

ANCILLARY SERVICES

1. ANCILLARY SERVICES

Frontier Communications Northwest Inc. hereinafter referred to as the Company, will provide the following service for rates and charges established on this Price List.

Terms and conditions for the provision of these services may be found in the Company's P.U.C. OR. No. 12.

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Section 1

Original Sheet 2

ANCILLARY SERVICES

1. ANCILLARY SERVICES

1.1 General

1.1.1 Rates and Charges

Charge

(A) Billing and Collection Service

| | |
|---|---------|
| Program Development, per hour | \$94.00 |
| Program Implementation, per hour | 55.00 |
| Service Order Change Charge, per order | 4.00 |
| MTS/WATS/800/888/877 Services | |
| Call Recording Service, per message | .0150 |
| Message Processing Service, per message | .0100 |
| Assembly and Editing Service, per message | .0075 |
| Call Record Provision Service | |
| Via Magnetic Tape, per message Record Transmitted or Received | .0100 |
| Via Direct Interface, per message Record Transmitted or Received | .0020 |
| Message Bill Processing Service, per message | |
| 0 to 3,610,599 messages | .0762 |
| 3,610,600 to 4,814,099 messages | .0400 |
| 4,814,100 to 7,221,099 messages | .0200 |
| 7,221,100 to 10,831,699 messages | .0170 |
| 10,831,700 to 13,239,000 messages | .0160 |
| Greater than 13,239,000 messages | .0150 |
| Bulk-Billed, per message | .0200 |

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Section 1

Original Sheet 3

ANCILLARY SERVICES

1. ANCILLARY SERVICES

1.1 General (Cont'd)

1.1.1 Rates and Charges (Cont'd)

Charge

(A) Billing and Collection Service (Cont'd)

Bill Rendering Service, per bill

| | |
|----------------------------|----------|
| 0 to 85,500 bills | \$.3500 |
| 85,501 to 123,500 bills | .3000 |
| 123,501 to 529,999 bills | .2700 |
| 530,000 to 567,999 bills | .2500 |
| Greater than 568,000 bills | .2300 |

Message Investigation, per message 2.50

Online Bill Pay Service, per message .0938

Bulk-Billed, per message .0938

Destination Service, per message
Messages Per End User Account per month
1 - 10 messages .0310
Over 10 messages .0190

EC Memo, per account 10.00
Record Keeping, per account .0300

Centralized Message Dispersion Charge,
per message .0020

Inquiry Service
per message billed .0078
per adjustment 2.00

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Section 2

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Asynchronous Transfer Mode (ATM) Cell Relay Service (CRS)

(A) General

This section contains definitions, regulations and charges applicable to the provision of Asynchronous Transfer Mode (ATM) Cell Relay Service (CRS) furnished by the Company within the State of Oregon, where conditions and facilities permit.

(B) Description of Service

Asynchronous Transfer Mode (ATM) Cell Relay Service (CRS) is a telecommunications transport and switching service that provides for high-speed connectivity between Customer-designated locations (CDLs). ATM CRS consists of a User Network Interface (UNI) interface. This interface is available in various configurations including Port With Access Line Connection and Port Only Connection, with either incremental or full bandwidth.

The UNI Port With Access Line Connection is a dedicated digital line that provides a link from the CDL to one of Company's ATM CRS hubs¹. UNIs are also provisioned as a Port Only Connection as defined in section (C)(2) following.

ATM CRS is a fast-packet, cell-based technology that can support user applications requiring high-bandwidth, high-performance transport and switching. This connectivity is provided via Permanent Virtual Circuits (PVCs) and/or Switched Virtual Circuits (SVCs) that are implemented over access facilities and switches that are dedicated to high-speed telecommunications services.

UNI Port With Access Line Connections, UNI Port Only Connections, PVCs and SVCs are further described in section (C) below.

(C) Service Components

The major components of ATM CRS are:

UNI Port With Access Line Connection
UNI Port Only Connection
Permanent Virtual Circuit (PVC)
Switched Virtual Circuit (SVC)
Effective Bandwidth

¹ For Hub definition, see PUC OR.No.12

Asynchronous Transfer Mode (ATM) Cell Relay Service (CRS)

(C) Service Components (Cont'd)

(1) UNI Port With Access Line Connection

UNI Port With Access Line Connections are available at the DS1, DS3, OC3c, and OC12c levels and provide dedicated transport between a CDL and an ATM CRS hub. There are two types of UNIs: Full and Incremental. The Full UNI includes all available bandwidth in one rate, and the Incremental UNI is sold and provisioned with PVC and/or SVC bandwidth increments. The DS1 UNI is not offered in increments. UNI Port with Access Line Connection may be ordered under a One (1), Two (2), Three (3) or Five (5) year term commitment period.

In order for Customer traffic to be carried on the network, each Incremental UNI requires at least one 5 Mbps increment of either PVC or SVC bandwidth. The Customer may elect to subscribe to multiple PVCs. The SVC feature is established over the UNI via connection identifiers, which enables the Customer to have virtual connections to various locations.

UNIs are provided at nominal data rates of 1.5 Mbps (DS1), 45 Mbps (DS3), 155 Mbps (OC3c), or 622 Mbps (OC12c). OC3c and OC12c are provided as a concatenated signal in STS-3c and STS-12c (Synchronous Transport Signal) formats, respectively. The actual throughput into CRS is less than the line rate for the UNI provided.

The rates and charges for a UNI are differentiated by the capacity of the UNI, the location where the UNI originates (i.e., Customer-designated premises) and mileage ranges (expressed as tiers) associated with extending the UNI to the wire center designated as the ATM CRS hub.

The OC3c and OC12c UNI Port With Access Line Connections are provisioned on Protected or Protected Diverse Synchronous Optical Network (SONET). SONET is a standards-based fiber optic communication network that transports both asynchronous and synchronous digital signals using the Synchronous Transport Signal (STS) format. ATM OC3c and OC12c Protected SONET UNI Port With Access Line Connections are provisioned over SONET as a survivable service with a non-diverse alternate facility between the central office and the Customer premises. ATM OC3c and OC12c Protected Diverse SONET UNI Port With Access Line Connections are provisioned over SONET as a survivable service with an alternate and diverse path between the ATM CRS hub and the Customer premises.

Asynchronous Transfer Mode (ATM) Cell Relay Service (CRS)

(C) Service Components (Cont'd)

(2) UNI Port Only Connection

Port Only Connections can be established as a User Network Interface (UNI) arrangement. The UNI Port Only connection provides an ATM Cell Relay Network connection based on the port connection speeds of DS1, DS3, OC3c and OC12c. The ATM port speed will be consistent with the channel speed of the access channel. The actual throughput of Customer traffic cannot exceed the bandwidth of the access channel and port speed.

UNI Port Only Connections are available as either Incremental or Full. This refers to the bandwidth that is required to provision PVCs on the port. Incremental ports come with no bandwidth and bandwidth is purchased in increments based on Customer bandwidth requirements. Full ports come with all bandwidth included up to the maximum rate of the port. Each port can accommodate multiple PVCs or SVCs depending on the bandwidth purchased. UNI Port Only connections are available on a One (1), Two (2), Three (3) and Five (5) year term.

Customers may access Port Only Connections via Company-provided digital access facilities or via facilities provided by another carrier. When access facilities are provided by the Company, the associated regulations, rates and charges under the appropriate Company Tariff shall apply in addition to the regulations, rates and charges associated with ATM CRS. Company-provided access facilities may also be provisioned on an Individual Case Basis (ICB) where access facilities are not generally available under the applicable tariff. Interconnection charges to connect access line services provided by the Company or another carrier may apply and will be billed separately. Any special construction or nonstandard charges assessed by the carrier supplying the access facilities will be the responsibility of the Customer.

Asynchronous Transfer Mode (ATM) Cell Relay Service (CRS)

(C) Service Components (Cont'd)

(3) Permanent Virtual Circuit (PVC)

The PVC defines a virtual connection across a UNI between the Customer premises and Company's ATM CRS hub. Each UNI requires at least one PVC in order for Customer traffic to traverse the network. Each ATM cell carries a unique tag which identifies that ATM CRS cell as belonging to a particular PVC. A PVC is a logical channel connecting two or more Customer-designated premises with virtual connections through Company provided ATM CRS switch(s). The PVCs may be provided on a point-to-point or point-to-multipoint basis. When a PVC is provided as a point-to-point virtual connection, transmission is bi-directional allowing for ATM CRS cells to be transmitted or received over the same PVC. For point-to-multipoint virtual connections, transmission is provided as transmit only. The virtual connection is set up by Company based on information contained on a Telecommunications Service Request (TSR) rather than by dial-up signaling.

PVCs consist of two types: Virtual Channel Connections (VCCs) and Virtual Path Connections (VPCs). A VCC is a type of PVC with independent identity and defined service parameters that are provisioned via TSR and cannot be altered by the Customer without additional TSR activity. A VPC is a type of PVC with defined service parameters that is provisioned via a TSR. Customers may provision their own virtual channels within the VPC, provided that the sum of the service parameters of all of the virtual channels does not exceed the aggregate service parameters of the VPC.

If the information provided by the Customer for requested PVCs results in an interstate arrangement, the PVC falls under federal jurisdiction subject to the rates, and conditions from the Private Carriage Contract.

Asynchronous Transfer Mode (ATM) Cell Relay Service (CRS)

(C) Service Components (Cont'd)

(4) Switched Virtual Circuit (SVC)

SVCs are similar in structure to PVCs, but SVCs are provisioned on demand by Customer premises equipment that signals the ATM cell relay network to set up and tear down logical connections. The network will respond to these requests by provisioning a virtual connection across the network based on the class of service parameters requested, provided that sufficient network resources are available to establish the connection. Each UNI that is SVC signal enabled will be provided with a SVC International Code Designator (ICD) prefix that will uniquely identify the UNI. Customers must use this Company assigned prefix when requesting SVC virtual connections across the Company Cell Relay Network. Each Constant Bit Rate (CBR) and Variable Bit Rate (VBR) SVC will be limited to a maximum Peak Cell Rate of 20 Mbps and a maximum Sustained Cell Rate of 20 Mbps.

Closed User Group (CUG) capability is a feature associated with SVCs. A CUG provides the ability to contain SVC calls between certain UNIs. A CUG functionally groups UNIs into logical associations and allows calling privileges to be specified network wide. A CUG provides a network-wide mechanism for access control. CUGs provide a logical grouping of UNIs, creating a SVC community of interest.

(5) Effective Bandwidth

Effective bandwidth is the bandwidth reserved for each logical connection (PVC or SVC) that is set up across a UNI. It is based on the Peak Cell Rate (PCR), Sustained Cell Rate (SCR), Maximum Burst Size (MBS), and the class of service parameters selected, i.e. Constant Bit Rate (CBR), Variable Bit Rate real time (VBRrt), Variable Bit Rate non-real time (VBRnrt), or Unspecified Bit Rate (UBR). The total effective bandwidth of all the logical connections on a UNI cannot exceed the total bandwidth available on the UNI. Effective bandwidth prices do not vary by class of service level selected. However, effective bandwidth is consumed in varying degrees based on the class of service parameters selected. The higher the class of service, the more bandwidth will be reserved. A CBR PVC with the same PCR as a VBR PVC will reserve more effective bandwidth.

¹ For definition, see P.U.C. OR. No. 12

Asynchronous Transfer Mode (ATM) Cell Relay Service (CRS)

(D) Technical Specifications

The technical specifications for ATM CRS are delineated in Technical References TR-NWT-001112, GR-1110-CORE, GR-1248-CORE, and SR-3330.

The technical specifications for DS1 and DS3 signals are delineated in TR-INS-000342.

The technical specifications for OC3c and OC12c signals are delineated in GR-253-CORE, Issue 2.

The technical specifications for UNIs are delineated in ATM Forum ATM User Network Interface Specifications V3.0, af-uni-0010.001, and V3.1, af-uni-0010.002. Interface specifications for Customer-provided ATM CRS compatible premises equipment or devices must also be in accordance with the specifications defined in these documents.

(E) Provision of Service

ATM CRS includes:

- (1) A minimum of one UNI Port With Access Line or UNI Port Only which has a maximum nominal capacity for either DS1 (1.5 Mbps), DS3 (45 Mbps), OC3c (155 Mbps), or OC12c (622 Mbps). The OC3c and OC12c UNIs are provisioned over Protected or Protected Diverse SONET. The Protected and Protected Diverse SONET facilities provide a backup facility that automatically switches in the event of a failure on the primary facility.
- (2) Unlimited usage on purchased bandwidth.
- (3) Incremental UNIs must have at least one increment of effective bandwidth (either PVC or SVC) in order for traffic to traverse the network. The DS1, DS3, OC3c, and OC12c Full UNIs are equipped with the full effective bandwidth.
- (4) Either one or more PVCs. When PVC bandwidth is purchased, one or more PVCs must be selected for Customer traffic to traverse the network.
- (5) Two types of PVCs, (i) Virtual Channel Connections (VCCs) and (ii) Virtual Path Connections (VPCs), which support the following Classes of Service:
 - (a) Constant Bit Rate (CBR)
 - (b) Variable Bit Rate real time (VBRrt)
 - (c) Variable Bit Rate non-real time (VBRnrt)
 - (d) Unspecified Bit Rate (UBR)

Asynchronous Transfer Mode (ATM) Cell Relay Service (CRS)

(F) Tier Structure for Local Serving Offices

Wire centers that provide ATM CRS have been designated by the Company as ATM hubs. Each local serving office has been placed in a Tier 1, 2 or 3, based on its location relative to the closest ATM hub.

(G) Service Functionality

The ATM CRS functionality consists of transporting 53-byte cells of information from the Customer location to a Company ATM hub over a UNI. The traffic is routed in the switch to another UNI, or other suitable network connection.

(H) Class of Service Parameters

(1) Constant Bit Rate (CBR)

(a) Peak/Sustained Cell Rate:

Customer specified in increments of 64 Kbps up to the maximum speed of the UNI.

(b) Non-conforming cells:

Discarded

(c) Cell Delay Variation Tolerance (CDVT):

DS1 = 600 microseconds

DS3 = 600 microseconds

OC3c = 600 microseconds

OC12c = 600 microseconds

Asynchronous Transfer Mode (ATM) Cell Relay Service (CRS)

(H) Class of Service Parameters (Cont'd)

(2) Variable Bit Rate (VBR) Real Time/Non-Real Time

(a) Sustained Cell Rate (SCR):

Customer specified in increments of 64 Kbps up to the maximum speed of the UNI.

(b) Peak Cell Rate (PCR):

Customer selectable in increments of 64 Kbps up to line rate. Default is 200% of SCR for PVCs. (The ratio of PCR to SCR will be signaled by CPE for SVCs. Therefore, there is no default value.)

(c) Non-conforming cells:

Discarded

(d) Cell Delay Variation Tolerance (CDVT):

DS1 = 600 microseconds

DS3 = 600 microseconds

OC3c = 600 microseconds

OC12c = 600 microseconds

(I) Conditions

(1) ATM CRS is available where facilities and conditions permit. For locations where the Customer requests ATM CRS, but digital or SONET facilities are not available, special construction charges may apply.

(2) Maintenance Window

To meet the Customers' requirements, occasional network upgrades must be performed. Network upgrades are needed to provide improved performance and new features. Generally these upgrades will be performed between the hours of 11 PM and 8 AM. Network upgrades are planned to provide Customers reasonable and timely notification in order to minimize any impact on the Customers' service.

Asynchronous Transfer Mode (ATM) Cell Relay Service (CRS)

(J) Obligations of the Customer

The Customer must provide the necessary compatible premises equipment or ATM CRS device capable of interfacing with the Company's ATM CRS.

(K) Obligations of the Company

The Company is responsible for service up to and including the network interface. The Company's responsibility is limited to the furnishing of communications facilities and switches suitable for ATM CRS.

ATM CRS is supported by the Company's Single Point of Contact (SPOC) center, which provides continuous support for ATM CRS 24 hours per day, seven days per week (24x7) with the ability to manage all of the Customer's ATM CRS as a single network. The SPOC performs maintenance, trouble resolution and network management functions on a 24x7 basis. Service order processing and network installation functions are performed only during normal business hours.

(L) Application of Rates and Charges

(1) Rate Elements

The following rate elements are applicable to ATM CRS:

UNI Port With Access Line Connection
UNI Port Only Connection
Permanent Virtual Circuits (PVCs)
Switched Virtual Circuits (SVCs)
Effective Bandwidth for Incremental UNIs
Closed User Groups (CUG)
Administrative Charge

(a) UNI Port With Access Line Connection

A monthly rate apply on a per Port With Access Line basis, based on the speed (i.e., DS1, DS3, OC3c or OC12c) and/or type (i.e., Full or Incremental, SONET - Protected or Protected Diverse) of the access connection. UNI Port and Access is offered as a One (1), Two (2), Three (3) or Five (5) year term commitment period. Nonrecurring charges are not applicable.

Asynchronous Transfer Mode (ATM) Cell Relay Service (CRS)

(L) Application of Rates and Charges (Cont'd)

(1) Rate Elements (Cont'd)

(b) UNI Port Only Connection

A monthly rate applies on a per Port Only basis, based on the speed (i.e., DS1, DS3, OC3c or OC12c) and/or type (i.e., Full or Incremental) of the port only connection. UNI Port Only is offered as a One (1), Two (2), Three (3) or Five (5) year term commitment period. Nonrecurring charges are not applicable.

(c) Permanent Virtual Circuits (PVCs)

An Administrative charge applies per order. The Administrative charge does not apply when PVCs are installed at the same time as the respective UNIs.

If the information provided by the Customer for the requested PVCs results in an interstate arrangement, the PVC falls under the federal jurisdiction, subject to the rates, terms and conditions from the Private Carriage Contract.

(d) Switched Virtual Circuits (SVCs)

An Administrative charge applies per order. The Administrative charge does not apply when SVCs are installed at the same time as the respective UNIs.

If the information provided by the Customer for the requested SVCs results in an interstate arrangement, the SVC falls under the federal jurisdiction, subject to the rates, terms and conditions from the Private Carriage Contract.

(e) Effective Bandwidth for Incremental UNIs

A monthly rate applies for incremental UNIs for CBR, VBR or UBR PVC and SVC bandwidth at 5 Mbps for DS3 or OC3c and at 15 Mbps for OC12c. Nonrecurring charges are not applicable.

The monthly rate for PVC and/or SVC UBR bandwidth will be waived when the combined VBR and CBR effective bandwidth purchased (either SVC or PVC or any combination) is equal to at least 50% of the effective bandwidth capacity of the UNI. When UBR bandwidth is made available, it is available for both PVCs and SVCs. Nonrecurring charges are not applicable.

(f) Closed User Groups (CUG)

A nonrecurring charge applies per order and per UNI for each CUG established and for each subsequent CUG member added to a CUG. The nonrecurring charge does not apply when a CUG is installed at the same time as the respective UNI.

Asynchronous Transfer Mode (ATM) Cell Relay Service (CRS)

(L) Application of Rates and Charges (Cont'd)

(1) Rate Elements (Cont'd)

(g) Administrative Charge

A nonrecurring charge applies when Customer initiates a change to one or more of the following: UNI bandwidth, PVCs, SVCs, class of service parameters, and/or other service parameters that do not require changes in physical facilities and that can be provisioned by Company without the dispatch of a technician to Customer location. For each TSR issued, the charge will be one Administrative Charge regardless of the number of changes made. The Administrative Charge does not apply for those items ordered on the same TSR with the installation of a UNI.

(2) Minimum Period

The minimum period for ATM CRS is one month.

(3) Term Commitment Period

The ATM CRS UNI Port With Access Line Connection and UNI Port Only Connection rate elements are available under a Term Commitment Period.

Term commitments of One (1), Two (2), Three (3) and Five (5) years are available to all Customers at the applicable rates set forth in section (M) Rates and Charges following.

Rate elements must be ordered under the same commitment period.

(a) Termination Liability

In the event ATM CRS is terminated by the Customer prior to completion of the initial term commitment period, Termination Liability charges, as set forth in General Regulations section 2.4.5 of the P.U.C. OR. No. 12, will apply.

Asynchronous Transfer Mode (ATM) Cell Relay Service (CRS)

(L) Application of Rates and Charges (Cont'd)

(4) Moves

When the Customer requests a move or relocation of the UNI requiring the circuit design to changes Central Office, the move or relocation will be treated as a termination of the existing service and the establishment of a new service. Service and a new term commitment period will commence. All other coordinated moves will resume the same term commitment period contingent upon retaining the design of the moving ATM CRS port.

(5) Special Facilities Routing

The Customer may request that the facilities used to provide ATM CRS be specially routed. Additional charges may apply under an ICB contract arrangement; see Section 10 Special Construction for terms and conditions in the P.U.C. OR. No. 12.

(6) Acceptance Testing

Upon the Customer's request, the Company will cooperatively test, at the time of installation at no additional charge. Acceptance tests will include tests for the parameters applicable to the Service as specified in the order for Service.

Asynchronous Transfer Mode (ATM) Cell Relay Service (CRS)

(M) Rates and Charges

(1) UNI Port With Access Line Connection

| | <u>One-Year Monthly Rate</u> | <u>Two-Year Monthly Rate</u> | <u>Three-Year Monthly Rate</u> | <u>Five-Year Monthly Rate</u> |
|------------------------------|--------------------------------------|--------------------------------------|--|---------------------------------------|
| (a) DS1, each | | | | |
| Full | | | | |
| Tier 1 (0 to 5 Miles) | \$ 665.00 | \$ 632.00 | \$ 565.00 | \$ 532.00 |
| Tier 2 (Over 5 to 25 Miles) | 665.00 | 632.00 | 565.00 | 532.00 |
| Tier 3 (Over 25 to 50 Miles) | 665.00 | 632.00 | 565.00 | 532.00 |
| (b) DS3, each | | | | |
| Full | | | | |
| Tier 1 (0 to 5 Miles) | 3,355.00 | 3,187.00 | 2,852.00 | 2,684.00 |
| Tier 2 (Over 5 to 25 Miles) | 3,947.00 | 3,750.00 | 3,355.00 | 3,158.00 |
| Tier 3 (Over 25 to 50 Miles) | 4,736.00 | 4,499.00 | 4,026.00 | 3,789.00 |
| Incremental | | | | |
| Tier 1 (0 to 5 Miles) | 2,815.00 | 2,674.00 | 2,393.00 | 2,252.00 |
| Tier 2 (Over 5 to 25 Miles) | 3,312.00 | 3,146.00 | 2,815.00 | 2,649.00 |
| Tier 3 (Over 25 to 50 Miles) | 3,974.00 | 3,775.00 | 3,378.00 | 3,179.00 |

Asynchronous Transfer Mode (ATM) Cell Relay Service (CRS)

(M) Rates and Charges (Cont'd)

(1) UNI Port With Access Line Connection (Cont'd)

| | <u>One-Year Monthly Rate</u> | <u>Two-Year Monthly Rate</u> | <u>Three-Year Monthly Rate</u> | <u>Five-Year Monthly Rate</u> |
|--------------------------------|--------------------------------------|--------------------------------------|--|---------------------------------------|
| (c) OC3c, each | | | | |
| SONET | | | | |
| Full, Protected | | | | |
| Tier 1 (0 to 5 Miles) | \$ 6,330.00 | \$ 6,014.00 | \$ 5,381.00 | \$ 5,064.00 |
| Tier 2 (Over 5 to 25 Miles) | 7,447.00 | 7,075.00 | 6,330.00 | 5,958.00 |
| Tier 3 (Over 25 to 50 Miles) | 8,936.00 | 8,489.00 | 7,596.00 | 7,149.00 |
| Full, Protected Diverse | | | | |
| Tier 1 (0 to 5 Miles) | 7,730.00 | 7,344.00 | 6,571.00 | 6,184.00 |
| Tier 2 (Over 5 to 25 Miles) | 9,094.00 | 8,639.00 | 7,730.00 | 7,275.00 |
| Tier 3 (Over 25 to 50 Miles) | 10,913.00 | 10,367.00 | 9,276.00 | 8,730.00 |
| Incremental, Protected | | | | |
| Tier 1 (0 to 5 Miles) | 4,410.00 | 4,190.00 | 3,749.00 | 3,528.00 |
| Tier 2 (Over 5 to 25 Miles) | 5,188.00 | 4,929.00 | 4,410.00 | 4,151.00 |
| Tier 3 (Over 25 to 50 Miles) | 6,226.00 | 5,915.00 | 5,292.00 | 4,981.00 |
| Incremental, Protected Diverse | | | | |
| Tier 1 (0 to 5 Miles) | 5,810.00 | 5,520.00 | 4,939.00 | 4,648.00 |
| Tier 2 (Over 5 to 25 Miles) | 6,835.00 | 6,493.00 | 5,810.00 | 5,468.00 |
| Tier 3 (Over 25 to 50 Miles) | 8,202.00 | 7,792.00 | 6,972.00 | 6,562.00 |

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Asynchronous Transfer Mode (ATM) Cell Relay Service (CRS)

(M) Rates and Charges (Cont'd)

(1) UNI Port With Access Line Connection (Cont'd)

| | <u>One-Year Monthly Rate</u> | <u>Two-Year Monthly Rate</u> | <u>Three-Year Monthly Rate</u> | <u>Five-Year Monthly Rate</u> |
|--------------------------------|--------------------------------------|--------------------------------------|--|---------------------------------------|
| (d) OC12c, each | | | | |
| SONET | | | | |
| Full, Protected | | | | |
| Tier 1 (0 to 5 Miles) | \$ 19,560.00 | \$ 18,582.00 | \$ 16,626.00 | \$ 15,648.00 |
| Tier 2 (Over 5 to 25 Miles) | 23,012.00 | 21,861.00 | 19,560.00 | 18,409.00 |
| Tier 3 (Over 25 to 50 Miles) | 27,614.00 | 26,233.00 | 23,472.00 | 22,091.00 |
| Full, Protected Diverse | | | | |
| Tier 1 (0 to 5 Miles) | 21,160.00 | 20,102.00 | 17,986.00 | 16,928.00 |
| Tier 2 (Over 5 to 25 Miles) | 24,894.00 | 23,649.00 | 21,160.00 | 19,915.00 |
| Tier 3 (Over 25 to 50 Miles) | 29,873.00 | 28,379.00 | 25,392.00 | 23,898.00 |
| Incremental, Protected | | | | |
| Tier 1 (0 to 5 Miles) | 13,000.00 | 12,350.00 | 11,050.00 | 10,400.00 |
| Tier 2 (Over 5 to 25 Miles) | 15,294.00 | 14,529.00 | 13,000.00 | 12,235.00 |
| Tier 3 (Over 25 to 50 Miles) | 18,353.00 | 17,435.00 | 15,600.00 | 14,682.00 |
| Incremental, Protected Diverse | | | | |
| Tier 1 (0 to 5 Miles) | 14,600.00 | 13,870.00 | 12,410.00 | 11,680.00 |
| Tier 2 (Over 5 to 25 Miles) | 17,176.00 | 16,317.00 | 14,600.00 | 13,741.00 |
| Tier 3 (Over 25 to 50 Miles) | 20,612.00 | 19,581.00 | 17,520.00 | 16,489.00 |

Asynchronous Transfer Mode (ATM) Cell Relay Service (CRS)

(M) Rates and Charges (Cont'd)

(2) UNI Port Only Connection

| | | <u>One-Year Monthly Rate</u> | <u>Two-Year Monthly Rate</u> | <u>Three-Year Monthly Rate</u> | <u>Five-Year Monthly Rate</u> |
|-----|-------------|--------------------------------------|--------------------------------------|--|---------------------------------------|
| (a) | DS1, each | | | | |
| | Full | \$347.00 | \$330.00 | \$295.00 | \$278.00 |
| (b) | DS3, each | | | | |
| | Full | 1,224.00 | 1,163.00 | 1,040.00 | 979.00 |
| | Incremental | 588.00 | 559.00 | 500.00 | 471.00 |
| (c) | OC3c, each | | | | |
| | Full | 3,200.00 | 3,040.00 | 2,720.00 | 2,560.00 |
| | Incremental | 941.00 | 894.00 | 800.00 | 753.00 |
| (d) | OC12c, each | | | | |
| | Full | 11,247.00 | 10,685.00 | 9,560.00 | 8,998.00 |
| | Incremental | 3,529.00 | 3,353.00 | 3,000.00 | 2,824.00 |

Asynchronous Transfer Mode (ATM) Cell Relay Service (CRS)

(M) Rates and Charges (Cont'd)

(3) Permanent Virtual Circuits (PVCs), per order

| | <u>Nonrecurring Charge¹</u> |
|--|--|
| (a) Virtual Channel Connections (VCCs) | |
| Constant Bit Rate (CBR) | \$ 75.00 |
| Variable Bit Rate real time (VBRrt) | 75.00 |
| Variable Bit Rate non-real time (VBRnrt) | 75.00 |
| Unspecified Bit Rate (UBR) | 75.00 |
| (b) Virtual Path Connections (VPCs) | |
| Constant Bit Rate (CBR) | 75.00 |
| Variable Bit Rate real time (VBRrt) | 75.00 |
| Variable Bit Rate non-real time (VBRnrt) | 75.00 |
| Unspecified Bit Rate (UBR) | 75.00 |

¹ Applies per order, per UNI, and in lieu of service charges found elsewhere in this Price List or other Company Tariffs. The nonrecurring charge does not apply for those items ordered on the same service order with the installation of a UNI.

Asynchronous Transfer Mode (ATM) Cell Relay Service (CRS)

(M) Rates and Charges (Cont'd)

(4) Effective Bandwidth for Incremental UNIs

| | <u>Monthly Rate</u> | <u>Nonrecurring Charge</u> |
|---|-------------------------|--------------------------------|
| (a) CBR or VBR PVC Bandwidth | | |
| DS3, OC3c – 5 Mbps | \$80.00 | N/A |
| OC12c – 15 Mbps | 200.00 | N/A |
| (b) CBR or VBR SVC Bandwidth | | |
| DS3, OC3c – 5 Mbps | 80.00 | N/A |
| OC12c – 15 Mbps | 200.00 | N/A |
| (c) UBR PVC and SVC Bandwidth, Bandwidth up to the UNI line rate | | |
| DS3 | 400.00 | N/A |
| OC3c | 1,200.00 | N/A |
| OC12c | 4,000.00 | N/A |

(5) Closed User Groups (CUG) ¹, per order, per UNI

| | | |
|--|-----|---------|
| (a) Each CUG | N/A | \$75.00 |
| (b) Each subsequent CUG member added to a CUG | N/A | 75.00 |

(6) Administrative Charge², per TSR Order

| | |
|-----|-------|
| N/A | 75.00 |
|-----|-------|

¹ Applies per order, per UNI, and in lieu of service charges found elsewhere in this Price List or other Company Tariffs. The nonrecurring charge does not apply when a CUG is installed at the same time as the respective UNI.

² Applies per order, per UNI, and in lieu of service charges found elsewhere in this Price List or other Company Tariffs. The nonrecurring charge does not apply for those items ordered on the same service order with the installation of a UNI.

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Frame Relay Service (FRS)

(A) Service Description

Frame Relay Service (FRS) is a data communications service that provides for data connectivity between/among widely distributed locations. This connectivity is provided via Permanent Virtual Circuit (PVC) connections implemented over access facilities utilizing a switch dedicated to high-speed data services.

FRS is a transport service that facilitates the exchange of variable length information units (frames) between end user connections by way of PVCs. Each frame is passed to the Frame Relay network with an address that specifies the permanent virtual circuit.

Variable frame length capability is useful in communications between asynchronous Local Area Networks (LAN) and for transport of synchronous data traffic. FRS is capable of handling the requirements of bursty data sources because of the ability of the service to allocate additional bandwidth when not in use by other sources.

In operation of FRS, Customer Premises Equipment (CPE), such as routers, encapsulate arriving data into variable length frames. These frames contain information identifying which PVC in the network should be used to forward the frame to the proper destination. The CPE then sends the frame into the Frame Relay network. The Frame Relay switch reads identifying information and routes the frame to the proper destination based on a pre-established PVC path.

The statistical multiplexing Frame Relay switches are able to provide shared network resources to end users of this service.

The Committed Information Rate (CIR) and Excess Burst Size B(e) are traffic management parameters that allow the customer to fine tune implementation of FRS.

FRS, as provided for in this Price List, is offered for intrastate use only.

Original Sheet 2

Frame Relay Service (FRS)

(B) Definitions

In addition to the definitions in Section 2.6 of the Company's P.U.C. OR. No. 12 tariff, the following definitions apply:

Committed Information Rate (CIR) - The maximum information rate at which customer traffic will be admitted to the network without being designated eligible for discard.

Customer Designated Location (CDL)

The geographic location designated by the customer at which an access component of the customer's service is first considered to enter the Company's network.

Data Link Connection Identifier (DLCI) - The Frame Relay virtual circuit number corresponding to a particular destination which is part of the frame relay header and is usually ten bits long.

Excess Burst Size B(e) - The data rate above the Committed Information Rate (CIR), but less than the port size, at which customer data will be admitted to the Frame Relay network. All Excess Burst data B(e) admitted to the network will be designated as eligible for discard.

Frame - A group of data bits, in a specific format, with a flag at either end to indicate the beginning and end of the frame. The defined format enables network equipment to recognize the meaning and purpose of specific bits.

Frame Relay Service - A connection oriented fast packet network service that permits the transmission of data at speeds of 56 Kbps to 44.736 Mbps using Permanent Virtual Connections (PVCs).

Local Area Network (LAN) - A network permitting the interconnection of multiple computers, typically within a single building or campus.

Logical Channel - A communications channel that allows two-way simultaneous transmission of data packets through the network. Capacity is made available as the data is transmitted. Each permanent virtual circuit is one logical channel.

Maximum Burst Rate (MBR) - The maximum information rate at which customer traffic will be admitted to the network. Traffic rates in excess of MBR will automatically be discarded on ingress to the network. The Maximum Burst Rate is equal to the sum of the Committed Information Rate (CIR) and Excess Burst Size B(e).

Network-to-Network Interface (NNI) - A standard interface used to connect two frame relay services, and includes elements such as bi-directional polling to assist the network services providers in gaining information on the status of the networks being connected.

Frame Relay Service (FRS)

(B) Definitions

Permanent Virtual Circuit (PVC) - A logical channel, defined in software that establishes a path from one customer port to another.

Port - The entry point on the switch to which the customer is connected. Ports are available which allow connection to the Frame Relay network at speeds of 56 Kbps to 44.736 Mbps.

Statistical Multiplexing - A multiplexing technique in which time slots are dynamically allocated on the basis of need rather than being predetermined. The data is typically transmitted on a first come, first served basis.

Term Payment Plan (TPP) - The length of time for which a customer agrees to pay for Frame Relay Service. Payment periods of one year, three years and five years are available for the UNI Port and Access Line, UNI Port Only and Private NNI Port Only rate elements. PVC CIR and PVC CIR Optional Features are not offered under a TPP.

User-to-Network Interface (UNI) - A standard interface used to connect the end user to the Frame Relay Service network. It receives the data frame from the customer's Local Area Network (LAN) or other customer-provided equipment (CPE) devices and verifies that the Data Link Connection Identifier (DLCI) is valid before relaying the frame to the destination end point. The DLCI is a Frame Relay term defining a 10-bit field of the address field, and it identifies data links and their service parameters.

Frame Relay Service (FRS)

(C) Service Components

The major components of FRS are:

User-to-Network Interface (UNI) Port and Access Line Port Only
Port Only

- UNI Port Only
- Private Network-to-Network (NNI) Port Only

Permanent Virtual Circuit (PVC) Committed Information Rate (CIR)

PVC CIR Optional Features

Backup UNI

- (1) User-to-Network Interface (UNI) Port and Access Line - The UNI Port and Access Line forms the component which provides the customer access to the customer's serving wire center and interoffice transport from the customer's serving wire center to the Frame Relay switch. The UNI Port and Access Line is provided for use only with FRS and where facilities and conditions permit.
- (2) Port Only - Customers may access Port Only connections via Company-provided digital access facilities or via facilities provided by another carrier. The channel speed of the access channel must be sufficient to accommodate the Frame Relay port speed. When access facilities are provided by the Company, the associated regulations, rates and charges under the appropriate Company tariff and/or Price List shall apply in addition to the regulations, rates and charges associated with FRS. Company-provided access facilities may also be provisioned on an Individual Case Basis (ICB) where access facilities are not generally available under the applicable tariff and/or Price List. Interconnection charges to connect access line services provided by the Company or another carrier may apply and will be billed separately. Any special construction or nonstandard charges assessed by the carrier supplying the access facilities will be the responsibility of the customer.
 - (a) UNI Port Only - The UNI Port Only provides for a user to carrier connection (i.e., end user customer to the Company).
 - (b) Private Network-to-Network (NNI) Port Only - The Private NNI port configuration is used for connecting two networks together for bi-directional messaging and is available on a private basis only. A Private NNI is a NNI port sold for the exclusive use of the customer.

Frame Relay Service (FRS)

(C) Service Components (Cont'd)

(3) Permanent Virtual Circuit (PVC) Committed Information Rate (CIR)

- (a) Permanent Virtual Circuits (PVCs) are logical circuits that define a specific path for data sent by the customer to another location. These circuits are virtual because they are established in software tables and do not tie up capacity when not in use. This also allows multiple paths (PVCs) to be defined on any given port, thereby providing a single access line the capability to transmit data to multiple destinations.
- (b) Since multiple PVCs may be defined on one physical port, it is possible for the cumulative Committed Information Rates (CIRs) to exceed the physical bandwidth of that port. This is referred to as over-subscription and when this occurs, the aggregate CIR defined for that port and PVC will not be available at any point in time.
- (c) The following types of PVC CIR are available:
 - (i) Intrazone - An Intrazone PVC is a logical channel path between two customer Frame Relay ports within the same zone. Frame Relay zones are found in (K)(1)(h) following.
 - (ii) Multi-jurisdictional - A Multi-jurisdictional PVC is a logical channel path between two customer Frame Relay ports, one being an interstate port and the other an intrastate port both located within the same Frame Relay zone. A Multi-jurisdictional PVC falls under federal jurisdiction and the PVC CIR rates, rules and regulations from the Company's FCC Frame Relay tariff are applicable.

(4) PVC CIR Optional Features

Intrazone PVC CIR may be ordered with the following option:

- (a) Interzone Transport - Interzone transport provides the mapping of a Frame Relay Intrazone PVC across one or more Frame Relay zone boundaries. Interzone Transport is available only with Intrazone PVC CIR at the rates set forth in L.4.a.
- (b) Frame Relay to ATM Service Internetworking - Frame Relay to ATM Service Internetworking provides for the conversion of Frame Relay packets to ATM cells and the conversion of ATM cells to Frame Relay packets. Frame Relay to ATM Service Internetworking is available with Intrazone and Multi-jurisdictional PVC CIR at no additional charge.

Frame Relay Service (FRS)

(C) Service Components (Cont'd)

(5) Backup UNI

Backup UNI service is a disaster avoidance and disaster recovery feature that consists of a Primary UNI and a Backup UNI, and incorporates PVC remapping capabilities of the Frame Relay network. The Primary UNI is terminated at the primary customer host location and in normal operation serves PVCs between the primary host location and various customer remote locations. A second UNI, which is designated by the customer as a Backup UNI, is installed and terminated at the customer's backup host location. During normal operations no PVCs are mapped to the Backup UNI. The customer will be required to purchase both UNIs.

In the event of a Primary UNI, primary digital access line or, customer primary host location failure, the predefined PVC configuration can be remapped to the Backup UNI at the customer's request. Upon restoral of the Primary UNI service the customer must contact the Company to initiate remapping of PVCs from the Backup UNI back to the Primary UNI. A Backup UNI, which may serve as a backup to one or more Primary UNIs, can only backup one Primary UNI at a time. A Backup UNI must be the same port speed or greater than the Primary UNI(s).

Frame Relay Service (FRS)

(D) Technical Specifications

FRS conforms to the transmission specification standards in the following references:

- ANSI T1.602 Integrated Services Digital Network (ISDN) – Data Link Layer Signaling Specification for Application at the User-Network Interface – Issued 1989
- ANSI T1.606 Frame Relay Bearer Service, Architectural Framework and Service Description – Issued 1990
- ANSI T1.617 Integrated Services Digital Network (ISDN) – Digital Subscriber Signaling Specification for Frame Relay Bearer Service – Issued 1991
- ANSI T1.618 Integrated Services Digital Network (ISDN) – Core Aspects of Frame Relay Bearer Service – Issued 1991

(E) Service Provisioning

FRS is available where facilities and conditions permit.

FRS is provided to the customer in the form of the UNI Port and Access Line, UNI Port Only, Private NNI Port Only and CIR based PVCs. The UNI Port and Access Line forms the local access component to the customer's serving central office. The UNI Port Only and Private NNI Port Only include the electronic equipment necessary to interface the access line to the Frame Relay switch.

PVCs are provisioned on a specified speed and CIR basis, depending upon the customer's request. The actual throughput of aggregated PVC bandwidths in use at the same time on the same port cannot exceed the port speed.

The maximum CIR allowed is determined by the lower of the two port speeds connected by the PVC. The maximum CIR allowed for port speeds at 1.536 Mbps and below is 75% of the lower of the two port speeds. For port speeds above 1.536 Mbps to 44.7136 Mbps, the maximum CIR allowed is 50% of the lower of the two port speeds.

The PVC must be associated with at least one Frame Relay port. A Frame Relay port can be associated with multiple PVCs.

Frame Relay Service (FRS)

(E) Service Provisioning (Cont'd)

The customer subscribing to a Port Only or Port and Access Line will be referred to as the controller of the Frame Relay port. A separate entity may, with written authorization from the controller, subscribe to a PVC that allows communication between entities. A disconnect of a PVC does not result in the disconnect of the underlying access line and port. Only the controller may order the disconnect of the FRS.

The Frame Relay port with PVC CIR capacity may be ordered and billed separately from an associated Frame Relay port and PVC, and can have different customers as controllers.

4 Mbps, 6 Mbps, 10 Mbps and 22 Mbps speeds are provisioned utilizing 44.736 Mbps of transport bandwidth; no other service(s) may utilize the remaining bandwidth.

(F) Special Conditions

Maintenance Window - Occasionally, in order to perform software updates and other maintenance, it may be necessary to take the Frame Relay switch out of service, during the predetermined maintenance window of 11:00 p.m. to 8:00 a.m. In these cases, all attempts will be made to notify the customer in advance as to the time and duration of these outages. The Company reserves the right to temporarily interrupt the FRS at other times in emergency situations.

Frame Relay Service (FRS)

(G) Obligations of the Customer

Where FRS is available for use in connection with communications systems or equipment provided by a customer or user, the operating characteristics of such systems or equipment shall be such as not to interfere with any services offered by the Company. Such use is subject to the further provisions that the equipment provided by the customer or user does not endanger the safety of the Company's employees or the public; damage, harm, require change in or alteration of the equipment or other services of the Company; interfere with the proper operation of the Company's equipment or otherwise injure the public in its use of the Company's services. Upon notice from the Company that the equipment provided by the customer or user is causing, or is likely to cause, such hazard or interference, the customer shall take such steps as shall be necessary to remove or prevent such hazard or interference.

The customer, upon request, shall furnish such information as may be required to permit the Company to design and maintain the FRS it offers and to assure that the service arrangement is in compliance with the regulations contained herein.

It shall be the responsibility of the customer to ensure the continuing compatibility of the customer-provided equipment that is used in conjunction with the FRS. The CPE shall be in compliance with the rules and regulations specified in this Price List.

The customer shall be responsible for obtaining permission for the Company's agents or employees to enter the premises of the customer at any reasonable hour for the purpose of installing, inspecting, repairing, or, upon termination of the service, removing the service components of the Company.

At service subscription, the customer must specify the CIR and is expected to provide the DLCI and the B(e) for each PVC ordered.

Error correction is the responsibility of the customer's terminal equipment and/or applications. If the FRS network experiences congestion or failures, customer data may be discarded. In addition, frames that are received in excess of the Maximum Burst Rate (MBR), with bad addresses, or other errors will be discarded on ingress to the network. The customer's Frame Relay terminal equipment has the responsibility for retransmitting frames that are discarded due to errors or network congestion.

The customer is responsible for provisioning the inside wire from the network interface to the Frame Relay compatible equipment.

Frame Relay Service (FRS)

(G) Obligations of the Customer (Cont'd)

A customer ordering Backup UNI service is responsible for the following:

- Determining network configuration before and after the activation of Backup UNI service.
- Providing the Company with the appropriate information required for joint development of the Backup UNI database.
- Maintaining its own port configurations and router tables (for seamless changes from the Primary UNI to the Backup UNI, the customer must use the same addressing scheme on routers connected to the primary and backup sites).
- Contacting the Company to request all activations and deactivations of Backup UNI service.

Frame Relay Service (FRS)

(H) Obligations of the Company

The responsibility of the Company shall be limited to furnishing network equipment suitable for FRS and to the maintenance and operation of such equipment in a manner proper for such service. Subject to this responsibility, the Company shall not be responsible for the through transmission of signals generated by the customer-provided equipment or system, or for the quality of, or defects in, such transmission or the reception of signals by such equipment or systems.

The Company shall not be responsible for installation, operation or maintenance of any terminal equipment, data unit or communications system provided by a customer or user. The Company is not responsible for adapting FRS to the technological requirements of any specific customer equipment.

When a customer orders FRS which is relayed to Frame Relay networks of other carriers, the Company will provide advisory assistance as a part of the establishment of this service.

The Company shall not be responsible to the customer or user if changes in any of the equipment, operations or procedures of the Company used in the provision of FRS render any facilities provided by the customer or user obsolete or require modification or alteration of such equipment or system or otherwise affect its use or performance, provided the Company has met any applicable information disclosure requirements otherwise required by law.

The Company undertakes the responsibility to maintain and repair the service that it furnishes. Network equipment installed by the Company on the customer's premises shall be and remain the property of the Company. The customer or user may not rearrange, disconnect, remove, attempt to repair, remote test, or interface with any network equipment installed by the Company without prior written consent by the Company.

The Company, by written notice to the customer, may immediately discontinue the furnishing of FRS without incurring liability upon nonpayment of any sum due to the Company or a violation of any condition governing the furnishing of service.

The Company has the service responsibility up to and including the network interface.

(I) Special Facilities Routing

The customer may request that the facilities used to provide FRS be specially routed. Additional charges will apply based on cost.

(J) Acceptance Testing

At the customer's request, the Company will cooperatively test at the time of installation at no additional charge. Acceptance tests will include tests for the parameters applicable to the service as specified in the order for service.

Frame Relay Service (FRS)

(K) Application of Rates and Charges

(1) Rate Elements

The following rate elements are applicable to FRS:

UNI Port and Access Line
Port Only
- UNI Port Only
- Private NNI Port Only
PVC CIR
PVC CIR Optional Features
Subsequent PVC CIR Charge
Backup UNI
Software Change Charge

(a) UNI Port and Access Line

A monthly recurring charge based on the speed of the port connection applies per port for each physical connection to the network supporting FRS. In addition, a nonrecurring charge applies to the month-to-month plan. Nonrecurring charges do not apply to UNI Port and Access Line offered on a Term Payment Plan (TPP). UNI Port and Access Line is offered on a month-to-month basis or as a TPP of one year, three years, or five years.

(b) Port Only – UNI Port Only and Private NNI Port Only

A monthly recurring charge based on the speed of the port connection applies per port for each Port Only interface. In addition, a nonrecurring charge applies to the month-to-month plan. Nonrecurring charges do not apply to Port Only offered on a TPP. Port Only is offered on a month-to-month basis or as a TPP of one year, three years, or five years.

Refer to (C)(2) preceding for the rules and regulations associated with Port Only digital access facilities.

Frame Relay Service (FRS)

(K) Application of Rates and Charges (Cont'd)

(1) Rate Elements (Cont'd)

(c) Permanent Virtual Circuit (PVC) Committed Information Rate (CIR)

- (i) Intrazone - A monthly recurring charge, based on CIR capacity, applies for each PVC requested by the customer. Frame Relay zones are found in (f) following.
- (ii) Multi-jurisdictional - A Multi-jurisdictional PVC falls under federal jurisdiction and the PVC CIR rates, rules and regulations from the Company's FCC Frame Relay tariff are applicable.

(d) PVC CIR Optional Features

- (i) Interzone Transport – A monthly recurring charge, based on CIR capacity, applies for each application of Interzone Transport and is in addition to the applicable charges for Intrazone PVC CIR. Interzone Transport is available only with Intrazone PVC CIR.
- (ii) Frame Relay to ATM Service Internetworking – Frame Relay to ATM Service Internetworking is available with Intrazone and Multi-jurisdictional PVC CIR at no additional charge.

(e) Subsequent PVC CIR Charge

A nonrecurring charge applies when a customer orders additional PVC CIR subsequent to the initial port installation.

(f) Backup UNI

A nonrecurring charge applies when a customer requests an activation of the Backup UNI service. No additional charges are applied upon deactivation of Backup UNI service.

(g) Software Change Charge

A nonrecurring charge applies per order, per UNI or Private NNI, when a customer requests a PVC parameter change (i.e., CIR, burst, DLCI re-map to a different host or remote). For each service order issued, the charge will be one Software Change Charge regardless of the number of changes made.

Frame Relay Service (FRS)

(K) Application of Rates and Charges (Cont'd)

(1) Rate Elements (Cont'd)

(h) Frame Relay Zones

| <u>Zone</u> | <u>Office</u> |
|-------------|---------------|
| Coos Bay | Coos Bay |
| Beaverton | Beaverton |
| | Gresham |
| | La Grande |
| | Silverton |

(2) Service Charges

Unless otherwise stated in this Price List, nonrecurring charges applicable to FRS are in lieu of service charges found elsewhere in this Price List or other Company tariffs. However, miscellaneous order modification charges may be applicable.

(3) Minimum Period

The minimum period for FRS is one month except when the customer subscribes to a TPP. When PVCs are added to existing FRS, the minimum period for the PVC is one month.

(4) Term Payment Plan (TPP)

- (a) The UNI Port and Access Line, UNI Port Only and Private NNI Port Only rate elements are available under a TPP. PVC CIRs are not offered under a TPP.
- (b) Payment periods of one year, three years and five years are available to all customers at the applicable rates set forth in (L) Rates and Charges following, regardless of when they subscribe to a TPP arrangement.

Frame Relay Service (FRS)

(K) Application of Rates and Charges (Cont'd)

(4) Term Payment Plan (TPP) (Cont'd)

(c) Changes to a TPP period

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

- No credit toward the new payment period will be given for payments made under the original TPP arrangement.
- Nonrecurring charges will not be reapplied for existing service(s).
- If the value of the new TPP is less than the remaining value of current TPP, the change to the new TPP period constitutes a disconnect of the existing TPP service and termination liability charges as set forth in General Regulations, of P.U.C. OR. No. 12 will apply.

Conversion to a different TPP or to a month-to-month option will require the customer to submit an order. If no other changes are requested, no nonrecurring charges will apply.

(d) Termination Liability

In the event FRS is terminated by the customer prior to completion of the initial term commitment period, Termination Liability Charges, as set forth in General Regulations, of P.U.C. OR. No. 12 will apply.

Frame Relay Service (FRS)

(K) Application of Rates and Charges (Cont'd)

(5) Service Rearrangements

(a) Additions to Service

- (i) With the exception of PVCs, when service elements are added to an existing service, the added elements must meet the minimum period requirements associated with the service to which they are added. When PVCs are added to an existing FRS, the minimum period for the added PVCs is one month.
- (ii) Nonrecurring charges will apply for all additions to existing services or optional features for which nonrecurring charges normally apply at installation.
- (iii) Related monthly rates and nonrecurring charges for addition(s) to service are the rate and charges in effect at the time of the addition(s).

(b) Administrative Changes

Administrative changes to existing service will be made without charge(s) to the customer. Administrative changes may include but are not limited to the following:

- Change of customer name, i.e., the customer or record does not change but rather the customer of record changes its name, e.g., XYZ Company to XYZ Communications;
- Change of customer premises address when the change of address is not a result of a physical relocation of facilities;
- Change in billing data (name, address, or contact name or telephone number); and,
- Change of customer contact name or telephone number.

Frame Relay Service (FRS)

(K) Application of Rates and Charges (Cont'd)

(5) Service Rearrangements (Cont'd)

(c) Conversion of service to another jurisdiction will be treated as a disconnect of service and establishment of new service. However, if no other changes are ordered, no installation charges will apply.

(d) Moves

When the customer requests a move or relocation of the UNI Port and Access Line, UNI Port Only or Private NNI Port Only requiring the circuit design to change Central Offices, the move or relocation will be treated as a termination of the existing service and the establishment of a new service. All other coordinated moves will resume the same term commitment period contingent upon retaining the design of the moving UNI Port and Access Line, UNI Port Only or Private NNI Port Only.

(e) Upgrade to Higher Speed Service

The customer may elect to upgrade service(s) to a higher speed during a TPP period, subject to the following conditions:

- Both the existing and the new service are provided solely by the Company.
- The order to discontinue service at an existing speed or capacity and the order for the upgraded service are received by the Company at the same time.
- The new service will be provided at the same customer location as the discontinued service.

Frame Relay Service (FRS)

(L) Rates and Charges

| | <u>Nonrecurring Charge</u> ¹ | <u>Monthly Rate</u> |
|---|---|-------------------------|
| (1) <u>UNI Port and Access Line, each</u> | | |
| 56 Kbps | | |
| Month-to-Month | \$495.00 | \$ 150.00 |
| One Year | 0.00 | 150.00 |
| Three Years | 0.00 | 130.00 |
| Five Years | 0.00 | 120.00 |
| 128 Kbps | | |
| Month-to-Month | 495.00 | 210.00 |
| One Year | 0.00 | 205.00 |
| Three Years | 0.00 | 185.00 |
| Five Years | 0.00 | 170.00 |
| 256 Kbps | | |
| Month-to-Month | 595.00 | 300.00 |
| One Year | 0.00 | 300.00 |
| Three Years | 0.00 | 270.00 |
| Five Years | 0.00 | 250.00 |
| 384 Kbps | | |
| Month-to-Month | 595.00 | 350.00 |
| One Year | 0.00 | 350.00 |
| Three Years | 0.00 | 335.00 |
| Five Years | 0.00 | 315.00 |
| DS1 (1.536 Mbps) | | |
| Month-to-Month | 595.00 | 530.00 |
| One Year | 0.00 | 510.00 |
| Three Years | 0.00 | 480.00 |
| Five Years | 0.00 | 450.00 |

¹ Applies in lieu of service charges found elsewhere in this Price List or other Company tariffs.

Frame Relay Service (FRS)

(L) Rates and Charges (Cont'd)

| | <u>Nonrecurring Charge</u> ¹ | <u>Monthly Rate</u> |
|--|---|-------------------------|
| (1) <u>UNI Port and Access Line, each</u> (Cont'd) | | |
| 4 Mbps | | |
| Month-to-Month | \$795.00 | \$2,650.00 |
| One Year | 0.00 | 2,540.00 |
| Three Years | 0.00 | 2,300.00 |
| Five Years | 0.00 | 2,100.00 |
| 6 Mbps | | |
| Month-to-Month | 795.00 | 3,000.00 |
| One Year | 0.00 | 2,875.00 |
| Three Years | 0.00 | 2,600.00 |
| Five Years | 0.00 | 2,400.00 |
| 10 Mbps | | |
| Month-to-Month | 795.00 | 3,325.00 |
| One Year | 0.00 | 3,180.00 |
| Three Years | 0.00 | 2,850.00 |
| Five Years | 0.00 | 2,650.00 |
| 22 Mbps | | |
| Month-to-Month | 795.00 | 3,500.00 |
| One Year | 0.00 | 3,350.00 |
| Three Years | 0.00 | 3,000.00 |
| Five Years | 0.00 | 2,800.00 |
| DS3 (44.736 Mbps) | | |
| Month-to-Month | 795.00 | 3,750.00 |
| One Year | 0.00 | 3,550.00 |
| Three Years | 0.00 | 3,175.00 |
| Five Years | 0.00 | 2,950.00 |

¹ Applies in lieu of service charges found elsewhere in this Price List or other Company tariffs.

Frame Relay Service (FRS)

(L) Rates and Charges (Cont'd)

| | <u>Nonrecurring Charge</u> ¹ | <u>Monthly Rate</u> |
|--|---|-------------------------|
| (2) <u>Port Only</u> | | |
| (a) <u>UNI Port Only</u> ² , each | | |
| 56 Kbps | | |
| Month-to-Month | \$95.00 | \$42.00 |
| One Year | 0.00 | 40.00 |
| Three Years | 0.00 | 35.00 |
| Five Years | 0.00 | 32.00 |
| 128 Kbps | | |
| Month-to-Month | 150.00 | 75.00 |
| One Year | 0.00 | 70.00 |
| Three Years | 0.00 | 65.00 |
| Five Years | 0.00 | 60.00 |
| 256 Kbps | | |
| Month-to-Month | 150.00 | 115.00 |
| One Year | 0.00 | 110.00 |
| Three Years | 0.00 | 105.00 |
| Five Years | 0.00 | 100.00 |
| 384 Kbps | | |
| Month-to-Month | 150.00 | 150.00 |
| One Year | 0.00 | 145.00 |
| Three Years | 0.00 | 140.00 |
| Five Years | 0.00 | 130.00 |
| DS1 (1.536 Mbps) | | |
| Month-to-Month | 295.00 | 225.00 |
| One Year | 0.00 | 220.00 |
| Three Years | 0.00 | 210.00 |
| Five Years | 0.00 | 200.00 |

¹ Applies in lieu of service charges found elsewhere in this Price List or other Company tariffs.

² Refer to (C)(2) for the regulations associated with Port Only digital access facilities.

Frame Relay Service (FRS)

(L) Rates and Charges (Cont'd)

| | <u>Nonrecurring Charge</u> ¹ | <u>Monthly Rate</u> |
|--|---|-------------------------|
| (2) <u>Port Only</u> (Cont'd) | | |
| (a) <u>UNI Port Only</u> ² , each | | |
| 4 Mbps | | |
| Month-to-Month | \$395.00 | \$500.00 |
| One Year | 0.00 | 450.00 |
| Three Years | 0.00 | 385.00 |
| Five Years | 0.00 | 360.00 |
| 6 Mbps | | |
| Month-to-Month | 395.00 | 550.00 |
| One Year | 0.00 | 495.00 |
| Three Years | 0.00 | 420.00 |
| Five Years | 0.00 | 395.00 |
| 10 Mbps | | |
| Month-to-Month | 395.00 | 600.00 |
| One Year | 0.00 | 540.00 |
| Three Years | 0.00 | 460.00 |
| Five Years | 0.00 | 432.00 |
| 22 Mbps | | |
| Month-to-Month | 395.00 | 750.00 |
| One Year | 0.00 | 675.00 |
| Three Years | 0.00 | 575.00 |
| Five Years | 0.00 | 540.00 |
| DS3 (44.736 Mbps) | | |
| Month-to-Month | 395.00 | 900.00 |
| One Year | 0.00 | 810.00 |
| Three Years | 0.00 | 690.00 |
| Five Years | 0.00 | 650.00 |

¹ Applies in lieu of service charges found elsewhere in this Price List or other Company tariffs

² Refer to (C)(2) for the regulations associated with Port Only digital access facilities.

Frame Relay Service (FRS)

(L) Rates and Charges (Cont'd)

| | Nonrecurring Charge ¹ | Monthly Rate |
|---|-------------------------------------|-----------------|
| (2) <u>Port Only</u> | | |
| (b) Private NNI Port Only ² , each | | |
| 384 Kbps | | |
| Month-to-Month | \$150.00 | \$150.00 |
| One Year | 0.00 | 145.00 |
| Three Years | 0.00 | 140.00 |
| Five Years | 0.00 | 130.00 |
| DS1 (1.536 Mbps) | | |
| Month-to-Month | 295.00 | 225.00 |
| One Year | 0.00 | 220.00 |
| Three Years | 0.00 | 210.00 |
| Five Years | 0.00 | 200.00 |
| DS3 (44.736Mbps) | | |
| Month-to-Month | 395.00 | 900.00 |
| One Year | 0.00 | 810.00 |
| Three Years | 0.00 | 690.00 |
| Five Years | 0.00 | 650.00 |

¹ Applies in lieu of service charges found elsewhere in this Price List or other Company tariffs

² Refer to (C)(2) for the regulations associated with Port Only digital access facilities.

Frame Relay Service (FRS)

(L) Rates and Charges (Cont'd)

(3) PVC CIR , per PVC

| (a) <u>Intrazone</u> | <u>Monthly Rate</u> |
|----------------------|---------------------|
| 4 Kbps | \$4.00 |
| 8 Kbps | 5.00 |
| 16 Kbps | 6.00 |
| 28 Kbps | 7.00 |
| 32 Kbps | 8.00 |
| 42 Kbps | 11.00 |
| 48 Kbps | 13.00 |
| 64 Kbps | 15.00 |
| 96 Kbps | 22.00 |
| 128 Kbps | 27.00 |
| 192 Kbps | 36.00 |
| 256 Kbps | 42.00 |
| 288 Kbps | 48.00 |
| 384 Kbps | 54.00 |
| 512 Kbps | 60.00 |
| 576 Kbps | 65.00 |
| 768 Kbps | 70.00 |
| 1152 Kbps | 80.00 |
| 1536 Kbps | 90.00 |

Frame Relay Service (FRS)

(L) Rates and Charges (Cont'd)

(3) PVC CIR , per PVC (Cont'd)

| (a) <u>Intrazone</u> (Cont'd) | <u>Monthly Rate</u> |
|-------------------------------|---------------------|
| 2 Mbps | \$95.00 |
| 3 Mbps | 100.00 |
| 4 Mbps | 120.00 |
| 5 Mbps | 142.00 |
| 6 Mbps | 164.00 |
| 7 Mbps | 186.00 |
| 8 Mbps | 207.00 |
| 9 Mbps | 229.00 |
| 10 Mbps | 250.00 |
| 11 Mbps | 266.00 |
| 12 Mbps | 282.00 |
| 13 Mbps | 298.00 |
| 14 Mbps | 314.00 |
| 15 Mbps | 330.00 |
| 16 Mbps | 346.00 |
| 17 Mbps | 362.00 |
| 18 Mbps | 378.00 |
| 19 Mbps | 394.00 |
| 20 Mbps | 410.00 |
| 21 Mbps | 426.00 |
| 22 Mbps | 442.00 |

(b) Multi-jurisdictional ¹

¹ A Multi-jurisdictional PVC falls under federal jurisdiction and the PVC CIR rates, rules and regulations from the Company's FCC Frame Relay tariff are applicable.

Frame Relay Service (FRS)

(L) Rates and Charges (Cont'd)

(4) PVC CIR Optional Feature, per PVC

(a) Interzone Transport ¹

Monthly Rate

| | |
|-----------|---------|
| 4 Kbps | \$13.00 |
| 8 Kbps | 14.00 |
| 16 Kbps | 15.00 |
| 28 Kbps | 16.00 |
| 32 Kbps | 17.00 |
| 42 Kbps | 20.00 |
| 48 Kbps | 25.00 |
| 64 Kbps | 30.00 |
| 96 Kbps | 38.00 |
| 128 Kbps | 43.00 |
| 192 Kbps | 59.00 |
| 256 Kbps | 73.00 |
| 288 Kbps | 82.00 |
| 384 Kbps | 91.00 |
| 512 Kbps | 110.00 |
| 576 Kbps | 115.00 |
| 768 Kbps | 125.00 |
| 1152 Kbps | 145.00 |
| 1536 Kbps | 160.00 |

¹ The monthly rate applies in addition to applicable rates for Intrazone PVC CIR.

Frame Relay Service (FRS)

(L) Rates and Charges (Cont'd)

(4) PVC CIR Optional Feature, per PVC (Cont'd)

| (a) <u>Interzone Transport</u> ¹ | <u>Monthly Rate</u> |
|--|---|
| 2 Mbps | \$180.00 |
| 3 Mbps | 195.00 |
| 4 Mbps | 205.00 |
| 5 Mbps | 243.00 |
| 6 Mbps | 286.00 |
| 7 Mbps | 329.00 |
| 8 Mbps | 373.00 |
| 9 Mbps | 416.00 |
| 10 Mbps | 460.00 |
| 11 Mbps | 502.00 |
| 12 Mbps | 544.00 |
| 13 Mbps | 586.00 |
| 14 Mbps | 628.00 |
| 15 Mbps | 670.00 |
| 16 Mbps | 704.00 |
| 17 Mbps | 738.00 |
| 18 Mbps | 772.00 |
| 19 Mbps | 806.00 |
| 20 Mbps | 840.00 |
| 21 Mbps | 869.00 |
| 22 Mbps | 898.00 |
| (b) Frame Relay to ATM Service Internetworking | No Charge |
| | <u>Nonrecurring Charge</u> ² |
| (5) <u>Subsequent PVC CIR Charge</u> , each | \$20.00 |

¹ The monthly rate applies in addition to applicable rates for Intrazone PVC CIR.

² Applies in lieu of service charges found elsewhere in this Price List or other Company tariffs.

Frame Relay Service (FRS)

(L) Rates and Charges (Cont'd)

| | Nonrecurring <u>Charge</u> ¹ |
|--|--|
| (6) <u>Backup UNI</u> | \$200.00 |
| (7) <u>Software Change Charge</u> , per order, per UNI or Private NNI | 30.00 |

¹ Applies in lieu of service charges found elsewhere in this Price List or other Company tariffs.