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Effective: December 1, 2008

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[1] Material formerly on this page has been withdrawn from the Product Guide. CyberDS1 Service is withdrawn as of November 1, 2014. (N)
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ADVANCED DATA SERVICES

A. VIDEOCONNECT[sm] - 270 MBPS

1. General

VideoConnect[sm] - 270 Mbps service provides for the real time transport, management and control of moving pictures or video frames of information along with associated audio in a digital, uncompressed format, resulting in the highest quality signaling. VideoConnect[sm] - 270 Mbps offers the uncompressed digital delivery of high-end film, video, and images via fiber optics.

VideoConnect[sm] - 270 Mbps is offered as a switched configuration or a dedicated (non-switched) configuration. The switched configuration may be a point-to-point or multi-point arrangement that terminates on ports of the Company's video switch. The dedicated arrangement is a point-to-point service for the transmission of video without accessing the Company's video switch.

VideoConnect[sm] - 270 Mbps is available under a month-to-month arrangement, term commitment plan of 1, 2, 3 or 5 years, or on a daily basis. The month-to-month offering requires a minimum service period of three months. In addition, with the exception of daily rates, for the switched configuration there are two volume tier levels used in determing applicable rates, 1-4 switched access line connections and 5 or more line connections between the same locations. When ordering additional connections, the customer must advise the Company of the number of existing connections at the location.

VideoConnect[sm] - 270 Mbps is provided via fiber optic or other compatible facilities. Where appropriate facilities are not available, Special Construction charges may apply as set forth in the Verizon California Inc. Product Guide, Section 3, to provide such facilities required to meet the customer's request. (C) (C)

ADVANCED DATA SERVICES

A. VIDEOCONNECT[sm] - 270 MBPS

1. General

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VideoConnect[sm] - 270 Mbps is provided via fiber optic or other compatible facilities. Where appropriate facilities are not available, Special Construction charges may apply as set forth in Schedule Cal. P.U.C. No. C-1, Section IX to provide such facilities required to meet the customer's request.

ADVANCED DATA SERVICES

A. VIDEOCONNECT[sm] - 270 MBPS - Continued

2. Rate Elements

The rate elements for VideoConnect[sm] - 270 Mbps are described as follows:

(a) Switched Video Access Line (SVAL)

The Switched Video Access Line (SVAL) provides for the VideoConnect[sm] - 270 Mbps line connection between the customer designated locations and its serving wire center. The SVAL includes the appropriate video-enabling equipment, circuit equipment, and outside plant facilities to access the customer's serving wire center. The standard SVAL arrangement defines the technical characteristics associated with the type of facilities with which the video service will interconnect and the type of signaling capability, if any. The SVAL includes any video encoding device that may be necessary to provide the service if any is required.

The SVAL is available on a unidirectional or bi-directional basis.

(b) Switched Video Port

The Switched Video Port is the rate element that provides for the connection of an SVAL to the Company's video network switch. The Switched Video Port rate is applied per SVAL on a unidirectional or bi-directional basis as determined by the directionality of the SVAL associated with the port.

(c) Dedicated Video Line (DVL)

The Dedicated Video Line (DVL) provides for non-switched VideoConnect[sm] - 270 Mbps line connection between the customer dedicated location and its serving wire center for the purpose of point-to-point video transmission without connecting to a Company video switch.

ADVANCED DATA SERVICES

A. VIDEOCONNECT[sm] - 270 MBPS - Continued

2. Rate Elements - Continued

(d) VideoConnect[sm] - 270 Mbps Transport

The VideoConnect[sm] - 270 Mbps Transport rate element provides for the interoffice transmission facilities for service arrangements where the customer designated locations are not served by the same wire center and/or for switched video arrangments for interoffice transmission facilities between the serving wire center of the customer designated location and the video switch. Where a service is provided by more than one Company, transport will be measured to the meet point. Transport rates are applied under two rate elements, a per airline mile rate component and a fixed mileage component for each 20 miles of transport or fraction thereof.

(e) Optional Features - VideoConnect[sm] - 270 Mbps

(1) Audio

Audio channels are offered as an unbundled optional feature for VideoConnect[sm] - 270 Mbps, as not all 270 Mbps video service arrangment require audio. Audio is provided in pairs of stereo channels.

(2) Alternate Switching - Manual

Alternate Switching-Manual provides the customer the ability to call the Video Transmission Center (VTC) and request a video technician to establish or switch up a connection to another location. This optional feature applies on a per switching event basis.

ADVANCED DATA SERVICES

A. VIDEOCONNECT[sm] - 270 MBPS - Continued

2. Rate Elements - Continued

(d) VideoConnect[sm] - 270 Mbps Transport - Continued

(3) Conversion Services - Absolute Connect[sm]

Conversion services are offered to handle compatibility requirement between the end points of a video circuit. There are two conversion options available, Absolute Connect[sm] - Format Conversion and Absolute Connect[sm] - Codec Conversion.

a. Absolute Connect[sm] - Format Conversion provides for analog to digital, digital to analog, composite to component, component to composite, serial digital to composite, serial digital to component, composite to serial digital and component to serial digital conversions, as may be required.

b. Absolute Connect[sm] - Codec Conversion provides codec compatibility between the end points of the video circuit.

3. Term Commitment Plan (TCP)

(a) Termination Liability

One Year TCP - 50% of any remaining portion of the first year's recurring charges.

Two Year TCP - 50% of any remaining portion of the second year, the customer will be liable for 10% of the total monthly recurring charges in that time period.

ADVANCED DATA SERVICES

A. VIDEOCONNECT[sm] - 270 MBPS - Continued

3. Term Commitment Plan (TCP) - Continued

(a) Termination Liability - Continued

Three Year TCP - 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.

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

(b) Termination Without Liability

During a TCP period, should the currently effective rate for a customer's service increase, the customer may, at their option, terminate the TCP arrangement without penalty or liablity.

ADVANCED DATA SERVICES

A. VIDEOCONNECT[sm] - 270 MBPS - Continued

4. Types of Rates and Charges

(a) Nonrecurring Charges

Nonrecurring charges are one-time charges that apply for specific work activity.

(b) Monthly Rates

Monthly rates are recurring charges that apply each month or fraction thereof that service is provided. For billing purposes, each month is considered to have 30 days.

(c) Weekly Rates

Weekly rates are charges that apply to each seven day usage period or fraction thereof that service is provided, as requested by the customer. In no event will these part-time charges for continuous weekly usage, within the billing period, exceed the monthly rate.

(d) Daily Rates

Daily rates are recurring charges that apply to each 24 hour period or fraction thereof that service is provided. When part-time service is provided for ten or more consecutive days it will be treated as a full-time service and monthly rates will apply. In no event will the charges for continuous part-time service exceed the amount that would be charged in the same billing time period for full-time service.

(e) Hourly Rates

Hourly rate are recurring charges that apply to each 60 minute period, or fraction thereof, that 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. The maximum charge during any 30 day period will be that amount equal to 100 hours of use. In no event will the charges for continuous hourly usage exceed the daily rate.

ADVANCED DATA SERVICES

A. VIDEOCONNECT[sm] - 270 MBPS - Continued

5. Rates and Charges

(a) Nonrecurring Rates

Service	Unit	Maximum NRC *	Current NRC *
(1) Switched Video Access Line			
Unidirectional			
Volume 1 to 4			
Month-to-Month	per line	$750.00	$ 500.00
1 Year Term	per line	375.00	250.00
2 Year Term	per line	375.00	0.00
3 Year Term	per line	375.00	0.00
5 Year Term	per line	375.00	0.00
Volume 5 or More			
Month-to-Month	per line	375.00	250.00
1 Year Term	per line	375.00	0.00
2 Year Term	per line	375.00	0.00
3 Year Term	per line	375.00	0.00
5 Year Term	per line	375.00	0.00
Bi-directional			
Volume 1 to 4			
Month-to-Month	per line	1,125.00	750.00
1 Year Term	per line	750.00	500.00
2 Year Term	per line	750.00	0.00
3 Year Term	per line	750.00	0.00
5 Year Term	per line	750.00	0.00

* Section 3 Service Charges are not applicable.

ADVANCED DATA SERVICES

A. VIDEOCONNECT[sm] - 270 MBPS - Continued

5. Rates and Charges - Continued

(a) Nonrecurring Rates - Continued

Service	Unit	Maximum NRC *	Current NRC *
(1) Switched Video Access Line - Continued			
Bi-directional			
Volume 5 or More			
Month-to-Month	per line	$ 562.50	$ 375.00
1 Year Term	per line	562.50	0.00
2 Year Term	per line	562.50	0.00
3 Year Term	per line	562.50	0.00
5 Year Term	per line	562.50	0.00
(2) Switched Video Port			
Unidirectional			
Volume 1 to 4			
Month-to-Month	per port	750.00	500.00
1 Year Term	per port	375.00	250.00
2 Year Term	per port	375.00	0.00
3 Year Term	per port	375.00	0.00
5 Year Term	per port	375.00	0.00
Volume 5 or More			
Month-to-Month	per port	375.00	250.00
1 Year Term	per port	375.00	0.00
2 Year Term	per port	375.00	0.00
3 Year Term	per port	375.00	0.00
5 Year Term	per port	375.00	0.00

* Section 3 Service Charges are not applicable.

ADVANCED DATA SERVICES

A. VIDEOCONNECT[sm] - 270 MBPS - Continued

5. Rates and Charges - Continued

(a) Nonrecurring Rates - Continued

Service	Unit	Maximum NRC *	Current NRC *
(2) Switched Video Port - Continued			
Bi-directional			
Volume 1 to 4			
Month-to-Month	per port	$ 1,125.00	$ 750.00
1 Year Term	per port	750.00	500.00
2 Year Term	per port	750.00	0.00
3 Year Term	per port	750.00	0.00
5 Year Term	per port	750.00	0.00
Volume 5 or More			
Month-to-Month	per port	562.50	375.00
1 Year Term	per port	562.50	0.00
2 Year Term	per port	562.50	0.00
3 Year Term	per port	562.50	0.00
5 Year Term	per port	562.50	0.00
(3) Dedicated Video Line (DVL)			
Unidirectional			
Month-to-Month	per line	1,500.00	1,000.00
1 Year Term	per line	750.00	500.00
2 Year Term	per line	750.00	0.00
3 Year Term	per line	750.00	0.00
5 Year Term	per line	750.00	0.00

* Section 3 Service Charges are not applicable.

ADVANCED DATA SERVICES

A. VIDEOCONNECT[sm] - 270 MBPS - Continued

5. Rates and Charges - Continued

(a) Nonrecurring Rates - Continued

Service	Unit	Maximum NRC *	Current NRC *
(3) Dedicated Video Line (DVL) - Continued			
Bidirectional			
Month-to-Month	per line	$2,250.00	$1,500.00
1 Year Term	per line	1,500.00	1,000.00
2 Year Term	per line	1,500.00	0.00
3 Year Term	per line	1,500.00	0.00
5 Year Term	per line	1,500.00	0.00
(4) Optional Feature			
Two Stereo Channels		150.00	100.00
(5) Switched Arrangements - Daily			
Switched Video Port			
Unidirectional	per port	1,200.00	800.00
Bidirectional	per port	1,275.00	850.00
Switched Video Access Line			
Unidirectional	per line	1,200.00	800.00
Bidirectional	per line	1,275.00	850.00
(6) Dedicated Arrangements - Daily			
Dedicated Video Line			
Unidirectional	per line	2,400.00	1,600.00
Bidirectional	per line	2,550.00	1,700.00

* Section 3 Service Charges are not applicable.

ADVANCED DATA SERVICES

A. VIDEOCONNECT[sm] - 270 MBPS - Continued

5. Rates and Charges - Continued

(b) Monthly Rates

Service	Unit	Maximum Monthly Rates	Current Monthly Rates
(1) Switched Video Access Line			
Unidirectional			
Volume 1 to 4			
Month-to-Month	per line	$ 547.50	$ 365.00
1 Year Term	per line	540.00	360.00
2 Year Term	per line	532.50	355.00
3 Year Term	per line	525.00	350.00
5 Year Term	per line	517.50	345.00
Volume 5 or More			
Month-to-Month	per line	510.00	340.00
1 Year Term	per line	508.00	335.00
2 Year Term	per line	505.00	330.00
3 Year Term	per line	500.00	325.00
5 Year Term	per line	495.00	325.00
Bi-directional			
Volume 1 to 4			
Month-to-Month	per line	1,125.00	750.00
1 Year Term	per line	1,080.00	720.00
2 Year Term	per line	1,050.00	700.00
3 Year Term	per line	1,027.50	685.00
5 Year Term	per line	1,005.00	670.00

ADVANCED DATA SERVICES

A. VIDEOCONNECT℠ - 270 MBPS - Continued

5. Rates and Charges - Continued

(b) Monthly Rates - Continued

Service	Unit	Maximum Monthly Rates	Current Monthly Rates
(1) Switched Video Access Line - Continued			
Bi-directional			
Volume 5 or More			
Month-to-Month	per line	$ 1,110.00	$ 740.00
1 Year Term	per line	1,065.00	710.00
2 Year Term	per line	1,035.00	690.00
3 Year Term	per line	1,012.50	675.00
5 Year Term	per line	990.00	660.00
(2) Switched Video Port			
Unidirectional			
Volume 1 to 4			
Month-to-Month	per line	577.50	385.00
1 Year Term	per line	537.00	358.00
2 Year Term	per line	530.00	338.00
3 Year Term	per line	525.00	328.00
5 Year Term	per line	520.00	323.00
Volume 5 or More			
Month-to-Month	per line	561.00	374.00
1 Year Term	per line	535.00	348.00
2 Year Term	per line	530.00	328.00
3 Year Term	per line	525.00	318.00
5 Year Term	per line	520.00	313.00

ADVANCED DATA SERVICES

A. VIDEOCONNECT[sm] - 270 MBPS - Continued

5. Rates and Charges - Continued

(b) Monthly Rates - Continued

Service	Unit	Maximum Monthly Rates	Current Monthly Rates
(2) Switched Video Port - Continued			
Bi-directional			
Volume 1 to 4			
Month-to-Month	per line	$ 766.50	$ 511.00
1 Year Term	per line	705.00	463.00
2 Year Term	per line	700.00	438.00
3 Year Term	per line	695.00	428.00
5 Year Term	per line	690.00	418.00
Volume 5 or More			
Month-to-Month	per line	717.00	478.00
1 Year Term	per line	705.00	458.00
2 Year Term	per line	700.00	433.00
3 Year Term	per line	695.00	423.00
5 Year Term	per line	690.00	413.00
(3) Dedicated Video Line			
Unidirectional			
Month-to-Month	per line	577.50	385.00
1 Year Term	per line	562.50	375.00
2 Year Term	per line	547.50	365.00
3 Year Term	per line	532.50	355.00
5 Year Term	per line	530.00	345.00

ADVANCED DATA SERVICES

A. VIDEOCONNECT[sm] - 270 MBPS - Continued

5. Rates and Charges - Continued

(b) Monthly Rates – Continued

Service	Unit	Maximum Monthly Rates	Current Monthly Rates
(3) Dedicated Video Line - Continued			
Bi-directional			
Month-to-Month	per line	$1,155.00	$ 770.00
1 Year Term	per line	1,110.00	740.00
2 Year Term	per line	1,080.00	720.00
3 Year Term	per line	1,057.50	705.00
5 Year Term	per line	1,035.00	690.00
(4) Transport			
Per Mile			
Month-to-Month	per line	24.75	16.50
1 Year Term	per line	24.00	16.00
2 Year Term	per line	23.25	15.50
3 Year Term	per line	22.50	15.00
5 Year Term	per line	21.75	14.50
Per Each 20 Mile Increment			
Month-to-Month	per line	72.00	48.00
1 Year Term	per line	69.00	46.00
2 Year Term	per line	68.00	44.00
3 Year Term	per line	67.00	42.00
5 Year Term	per line	66.00	40.00

ADVANCED DATA SERVICES

A. VIDEOCONNECT[sm] - 270 MBPS - Continued

5. Rates and Charges - Continued

(b) Monthly Rates – Continued

Service	Unit	Maximum Monthly Rates	Current Monthly Rates
(5) Optional Features			
Two Stereo Channels		$ 285.00	$ 170.00
Alternate Switching Manual, Each Event		35.00	20.00
Absolute Connect, CODEC Conversion		1,971.00	1,314.00

(c) Weekly Rates[1]

Service	Unit	Maximum Weekly Rates	Current Weekly Rates
Absolute Connect - CODEC Conversion		$ 775.00	$ 475.00

(d) Daily Rates[2]

Service	Unit	Maximum Daily Rates	Current Daily Rates
(1) Switched Arrangements			
Switched Video Port			
Unidirectional	per port	247.50	165.00
Bi-directional	per port	328.50	219.00

1 In no event will charges for continuous weekly usage within the billing period, exceed the monthly rate.
2 When service is provided for ten or more consecutive days, it will be treated as full-time and monthly rates will apply.

ADVANCED DATA SERVICES

A. VIDEOCONNECT[sm] - 270 MBPS - Continued

5. Rates and Charges - Continued

(d) Daily Rates [1] – Continued

Service	Unit	Maximum Daily Rates	Current Daily Rates
(1) Switched Arrangements - Continued			
Switched Video Access Line			
Unidirectional	per line	$ 230.00	$ 145.00
Bi-directional	per line	435.00	290.00
(2) Dedicated Arrangements			
Unidirectional	per line	352.50	235.00
Bi-directional	per line	600.00	400.00
(3) Transport			
Per Mile	per mile	24.75	16.50
Fixed (Per 20 Mile)		72.00	48.00
(4) Optional Features			
Two Stereo Channels		22.50	15.00
Absolute Connect - CODEC Conversion		300.00	200.00

[1] When service is provided for ten or more consecutive days, it will be treated as full-time and monthly rates will apply.

ADVANCED DATA SERVICES

A. VIDEOCONNECT[sm] - 270 MBPS - Continued

5. Rates and Charges - Continued

(e) Hourly Rates [1]

Service	Unit	Maximum Hourly Rates	Current Hourly Rates
(1) Optional Features			
Absolute Connect Format Conversion		$ 132.00	$ 88.00
Absolute Connect, CODEC Conversion		132.00	88.00

[1] In no event will the charges for continuous hourly usage exceed the daily rate.

ADVANCED DATA SERVICES

B. ASYNCHRONOUS TRANSFER MODE (ATM) CELL RELAY SERVICE (CRS) [1] (T)

1. Application

This section contains definitions, charges, terms and conditions applicable to the provision of Asynchronous Transfer Mode (ATM) Cell Relay Service (CRS), a fully competitive Category III service furnished by the Company within the State of California. The Company, on its sole discretion, shall offer ATM CRS in locations where technical capabilities exist and market conditions warrant.

ATM CRS is available in all existing Verizon exchanges as listed in Section 4A, Sheets 3 and 4.
The Company concurs in all of the maps filed as part of Southwestern Bell Communications (SBC) Network and Exchange Services tariff, Schedule Cal. P.U.C. No. A5.1.A.

2. Definitions

Extended Service Plan (ESP) - The length of time for which a customer agrees to pay for ATM CRS service. One-, two-, three- or five-year ESPs are available to ATM CRS UNI Port With Access Line Connection, UNI Port Only, or UNI IMA Port With Access Line Connection customers.

Hub - A Company designated serving wire center that is equipped to provide service.

Maximum Burst Size - The term "Maximum Burst Size" (MBS) denotes the consecutive number of ATM cells that can enter the ATM CRS network above the Sustained Cell Rate level and below the Peak Cell Rate level.

3. Terms and Conditions

a. 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. ATM CRS consists of a User Network Interface (UNI) 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 customer's premises to one of the Company's ATM CRS hubs. UNIs are also provisioned as an Inverse Multiplexing ATM (IMA) Port With Access Line Connection as defined in B.3.b.(2), and as a Port Only Connection as defined in B.3.b.(3).

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.

[1] Effective February 15, 2013, ATM Cell Relay Service (ATMCRS) is grandfathered and is no longer available to new customers. Existing customers may maintain their service; however, term commitment plans may not be renewed. Moves or changes to subscribers' existing service are permissible, but the term commitment per circuit will not be extended. Upon expiration of the term commitment the service will lapse into a month-to-month service arrangement and will bill at the one-year rate. (N) (N)

ADVANCED DATA SERVICES

B. ASYNCHRONOUS TRANSFER MODE (ATM) CELL RELAY SERVICE (CRS)

1. Application

This section contains definitions, charges, terms and conditions applicable to the provision of Asynchronous Transfer Mode (ATM) Cell Relay Service (CRS), a fully competitive Category III service furnished by the Company within the State of California. The Company, on its sole discretion, shall offer ATM CRS in locations where technical capabilities exist and market conditions warrant.

ATM CRS is available in all existing Verizon exchanges as listed in Section 4A, Sheets 3 and 4.
The Company concurs in all of the maps filed as part of Southwestern Bell Communications (SBC) Network and Exchange Services tariff, Schedule Cal. P.U.C. No. A5.1.A.

2. Definitions

Extended Service Plan (ESP) - The length of time for which a customer agrees to pay for ATM CRS service. One-, two-, three- or five-year ESPs are available to ATM CRS UNI Port With Access Line Connection, UNI Port Only, or UNI IMA Port With Access Line Connection customers.

Hub - A Company designated serving wire center that is equipped to provide service.

Maximum Burst Size - The term "Maximum Burst Size" (MBS) denotes the consecutive number of ATM cells that can enter the ATM CRS network above the Sustained Cell Rate level and below the Peak Cell Rate level.

3. Terms and Conditions

a. 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. ATM CRS consists of a User Network Interface (UNI) 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 customer's premises to one of the Company's ATM CRS hubs. UNIs are also provisioned as an Inverse Multiplexing ATM (IMA) Port With Access Line Connection as defined in B.3.b.(2), and as a Port Only Connection as defined in B.3.b.(3).

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.

ADVANCED DATA SERVICES

B. ASYNCHRONOUS TRANSFER MODE (ATM) CELL RELAY SERVICE (CRS) [1]Continued (T)

3. Terms and Conditions - Continued

b. Service Components

The major components of ATM CRS are:

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

(1) UNI Port With Access Line Connection

UNI Port With Access Line Connections, which are available at the DS1, DS3, OC3c, and OC12c levels, provide dedicated transport between a customer-designated premises 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.

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. This 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 1.536 Mbps (DS1), 44.21 Mbps (DS3), 149.76 Mbps (OC3c), or 599.04 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.

[1] Effective February 15, 2013, ATM Cell Relay Service (ATMCRS) is grandfathered and is no longer available to new customers. Existing customers may maintain their service; however, term commitment plans may not be renewed. Moves or changes to subscribers' existing service are permissible, but the term commitment per circuit will not be extended. Upon expiration of the term commitment the service will lapse into a month-to-month service arrangement and will bill at the one-year rate. (N)

ADVANCED DATA SERVICES

B. ASYNCHRONOUS TRANSFER MODE (ATM) CELL RELAY SERVICE (CRS) - Continued

3. Terms and Conditions - Continued

b. Service Components

The major components of ATM CRS are:

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

(1) UNI Port With Access Line Connection

UNI Port With Access Line Connections, which are available at the DS1, DS3, OC3c, and OC12c levels, provide dedicated transport between a customer-designated premises 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.

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. This 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 1.536 Mbps (DS1), 44.21 Mbps (DS3), 149.76 Mbps (OC3c), or 599.04 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.

ADVANCED DATA SERVICES

B. ASYNCHRONOUS TRANSFER MODE (ATM) CELL RELAY SERVICE (CRS) [1]- Continued (T)

3. Terms and Conditions - Continued

b. Service Components - Continued

(1) UNI Port With Access Line Connection - Continued

The OC3c and OC12c UNI Port With Access Line Connections are provisioned on Protected or Protected Diverse Synchronous Optical Network (SONET) facilities. 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 an alternate (not diverse) 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. DS3, OC3c, OC12c and other interfaces, both electrical and optical, are supported and defined to the technical specifications set forth in B.3.c.

(2) UNI Inverse Multiplexing ATM (IMA) Port With Access Line Connection

UNI IMA Port With Access Line Connection permits the provisioning of bandwidth greater than DS1 and less than DS3 by binding together multiple DS1 facilities. The inverse multiplexer at each end of the connection aggregates and de-aggregates multiple parallel DS1 leased lines into a single higher speed link. IMA will be offered as Full bandwidth only. Two to six DS1 facilities will be permitted in an IMA group providing nominal aggregated bandwidth from three to nine megabits per second. IMA allows for all class of service parameters up to the combined nominal line rate of the aggregated DS1s and all PVCs and/or SVCs that will fit within the bandwidth. Ordering of DS1s within an IMA group must be done in ascending order. Disconnecting DS1s within an IMA group must be done in a descending order. Customer must purchase a minimum of two IMA DS1s.

Requests to change existing UNI Port With Access Line Connections to UNI IMA Port With Access Line Connections will be treated as a disconnect and new install. Termination liability[2] charges, as set forth in Section 2.B.15 of this Product Guide, will apply. (T)

[1] Effective February 15, 2013, ATM Cell Relay Service (ATMCRS) is grandfathered and is no longer available to new customers. Existing customers may maintain their service; however, term commitment plans may not be renewed. Moves or changes to subscribers' existing service are permissible, but the term commitment per circuit will not be extended. Upon expiration of the term commitment the service will lapse into a month-to-month service arrangement and will bill at the one-year rate. (N)

[2] Effective February 15, 2013, Termination Liability will not apply to ATM Cell Relay Service (ATMCRS). (N)

ADVANCED DATA SERVICES

B. ASYNCHRONOUS TRANSFER MODE (ATM) CELL RELAY SERVICE (CRS) - Continued

3. Terms and Conditions - Continued

b. Service Components - Continued

(1) UNI Port With Access Line Connection - Continued

The OC3c and OC12c UNI Port With Access Line Connections are provisioned on Protected or Protected Diverse Synchronous Optical Network (SONET) facilities. 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 an alternate (not diverse) 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. DS3, OC3c, OC12c and other interfaces, both electrical and optical, are supported and defined to the technical specifications set forth in B.3.c.

(2) UNI Inverse Multiplexing ATM (IMA) Port With Access Line Connection

UNI IMA Port With Access Line Connection permits the provisioning of bandwidth greater than DS1 and less than DS3 by binding together multiple DS1 facilities. The inverse multiplexer at each end of the connection aggregates and de-aggregates multiple parallel DS1 leased lines into a single higher speed link. IMA will be offered as Full bandwidth only. Two to six DS1 facilities will be permitted in an IMA group providing nominal aggregated bandwidth from three to nine megabits per second. IMA allows for all class of service parameters up to the combined nominal line rate of the aggregated DS1s and all PVCs and/or SVCs that will fit within the bandwidth. Ordering of DS1s within an IMA group must be done in ascending order. Disconnecting DS1s within an IMA group must be done in a descending order. Customer must purchase a minimum of two IMA DS1s.

Requests to change existing UNI Port With Access Line Connections to UNI IMA Port With Access Line Connections will be treated as a disconnect and new install. Termination liability charges, as set forth in Section 2.B.15 of this Product Guide, will apply.

ADVANCED DATA SERVICES

B. ASYNCHRONOUS TRANSFER MODE (ATM) CELL RELAY SERVICE (CRS) [1] - Continued (T)

3. Terms and Conditions - Continued

b. Service Components - Continued

(3) UNI Port Only Connection

UNI 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 is available on a one-year, three-year and five-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 or Product Guide shall apply in addition to the rates, charges, terms and conditions 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 or Product Guide. 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.

(4) Permanent Virtual Circuit (PVC)

The PVC defines a virtual connection across a UNI between the customer premises and the 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 a Company-provided ATM CRS switch(es). 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 the Company based on information contained on a service order rather than by dial-up signaling.

[1] Effective February 15, 2013, ATM Cell Relay Service (ATMCRS) is grandfathered and is no longer available to new customers. Existing customers may maintain their service; however, term commitment plans may not be renewed. Moves or changes to subscribers' existing service are permissible, but the term commitment per circuit will not be extended. Upon expiration of the term commitment the service will lapse into a month-to-month service arrangement and will bill at the one-year rate. (N) (N)

ADVANCED DATA SERVICES

B. ASYNCHRONOUS TRANSFER MODE (ATM) CELL RELAY SERVICE (CRS) - Continued

3. Terms and Conditions - Continued

b. Service Components - Continued

(3) UNI Port Only Connection

UNI 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 is available on a one-year, three-year and five-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 or Product Guide shall apply in addition to the rates, charges, terms and conditions 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 or Product Guide. 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.

(4) Permanent Virtual Circuit (PVC)

The PVC defines a virtual connection across a UNI between the customer premises and the 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 a Company-provided ATM CRS switch(es). 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 the Company based on information contained on a service order rather than by dial-up signaling.

ADVANCED DATA SERVICES

B. ASYNCHRONOUS TRANSFER MODE (ATM) CELL RELAY SERVICE (CRS) [1] Continued (T)

3. Terms and Conditions - Continued

b. Service Components - Continued

(4) Permanent Virtual Circuit (PVC) - Continued

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 service order, and cannot be altered by the customer without additional service order activity. A VPC is a type of PVC with defined service parameters that is provisioned via service order. 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.

(5) 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.

(6) 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, and the class of service parameters selected, i.e., CBR, VBRrt (Variable Bit Rate real time), VBRnrt (Variable Bit Rate non-real time), or UBR (Unspecified Bit Rate). 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] Effective February 15, 2013, ATM Cell Relay Service (ATMCRS) is grandfathered and is no longer available to new customers. Existing customers may maintain their service; however, term commitment plans may not be renewed. Moves or changes to subscribers' existing service are permissible, but the term commitment per circuit will not be extended. Upon expiration of the term commitment the service will lapse into a month-to-month service arrangement and will bill at the one-year rate. (N)

ADVANCED DATA SERVICES

B. ASYNCHRONOUS TRANSFER MODE (ATM) CELL RELAY SERVICE (CRS) - Continued

3. Terms and Conditions - Continued

b. Service Components - Continued

(4) Permanent Virtual Circuit (PVC) - Continued

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 service order, and cannot be altered by the customer without additional service order activity. A VPC is a type of PVC with defined service parameters that is provisioned via service order. 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.

(5) 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.

(6) 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, and the class of service parameters selected, i.e., CBR, VBRrt (Variable Bit Rate real time), VBRnrt (Variable Bit Rate non-real time), or UBR (Unspecified Bit Rate). 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.

ADVANCED DATA SERVICES

B. ASYNCHRONOUS TRANSFER MODE (ATM) CELL RELAY SERVICE (CRS) [1]- Continued (T)

3. Terms and Conditions - Continued

c. 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.

d. Provision of Service

ATM CRS includes:

(1) A minimum of one UNI Port With Access Line, or UNI Port Only, or two UNI IMA Port With Access Lines, which has a maximum nominal capacity for either DS1 (1.536Mbps), DS3 (44.21 Mbps), OC3c (149.76Mbps), or OC12c (599.04 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.

[1] Effective February 15, 2013, ATM Cell Relay Service (ATMCRS) is grandfathered and is no longer available to new customers. Existing customers may maintain their service; however, term commitment plans may not be renewed. Moves or changes to subscribers' existing service are permissible, but the term commitment per circuit will not be extended. Upon expiration of the term commitment the service will lapse into a month-to-month service arrangement and will bill at the one-year rate. (N)

ADVANCED DATA SERVICES

B. ASYNCHRONOUS TRANSFER MODE (ATM) CELL RELAY SERVICE (CRS) - Continued

3. Terms and Conditions - Continued

c. 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.

d. Provision of Service

ATM CRS includes:

(1) A minimum of one UNI Port With Access Line, or UNI Port Only, or two UNI IMA Port With Access Lines, which has a maximum nominal capacity for either DS1 (1.536Mbps), DS3 (44.21 Mbps), OC3c (149.76Mbps), or OC12c (599.04 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.

ADVANCED DATA SERVICES

B. ASYNCHRONOUS TRANSFER MODE (ATM) CELL RELAY SERVICE (CRS) [1] - Continued (T)

3. Terms and Conditions - Continued

d. Provision of Service - Continued

ATM CRS includes: - Continued

(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)

e. Tier Structure for Local Serving Offices

Locations (wire centers) that provide ATM CRS have been designated 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.

f. 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.

g. 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

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ADVANCED DATA SERVICES

B. ASYNCHRONOUS TRANSFER MODE (ATM) CELL RELAY SERVICE (CRS) - Continued

3. Terms and Conditions - Continued

d. Provision of Service - Continued

ATM CRS includes: - Continued

(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)

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(b) Non-conforming cells:

Discarded

(c) Cell Delay Variation Tolerance (CDVT):

DS1 = 600 microseconds
DS3 = 600 microseconds
OC3c = 600 microseconds
OC12c = 600 microseconds

ADVANCED DATA SERVICES

B. ASYNCHRONOUS TRANSFER MODE (ATM) CELL RELAY SERVICE (CRS) [1]- Continued (T)

3. Terms and Conditions - Continued

g. Class of Service Parameters - Continued

(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 Customer Premises Equipment [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

h. Special Conditions

(1) ATM CRS is available where facilities and conditions permit. For locations where the customer requests ATM CRS and 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. These 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.

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ADVANCED DATA SERVICES

B. ASYNCHRONOUS TRANSFER MODE (ATM) CELL RELAY SERVICE (CRS) - Continued

3. Terms and Conditions - Continued

g. Class of Service Parameters - Continued

(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 Customer Premises Equipment [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

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ADVANCED DATA SERVICES

B. ASYNCHRONOUS TRANSFER MODE (ATM) CELL RELAY SERVICE (CRS) [1] - Continued (T)

3. Terms and Conditions - Continued

i. Responsibility 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.

j. Responsibility 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.

k. Application of Rates and Charges

(1) Rate Elements

The following rate elements are applicable to ATM CRS:

- UNI Port With Access Line Connection
- UNI Inverse Multiplexing ATM (IMA) Port With Access Line Connection
- UNI Port Only Connection
- Permanent Virtual Circuits (PVCs)
- Effective Bandwidth for Incremental UNIs
- Closed User Groups (CUG)
- Administrative Charge

[1] Effective February 15, 2013, ATM Cell Relay Service (ATMCRS) is grandfathered and is no longer available to new customers. Existing customers may maintain their service; however, term commitment plans may not be renewed. Moves or changes to subscribers' existing service are permissible, but the term commitment per circuit will not be extended. Upon expiration of the term commitment the service will lapse into a month-to-month service arrangement and will bill at the one-year rate. (N)

ADVANCED DATA SERVICES

B. ASYNCHRONOUS TRANSFER MODE (ATM) CELL RELAY SERVICE (CRS) - Continued

3. Terms and Conditions - Continued

i. Responsibility 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.

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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.

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- UNI Port Only Connection
- Permanent Virtual Circuits (PVCs)
- Effective Bandwidth for Incremental UNIs
- Closed User Groups (CUG)
- Administrative Charge

ADVANCED DATA SERVICES

B. ASYNCHRONOUS TRANSFER MODE (ATM) CELL RELAY SERVICE (CRS) [1] - Continued (T)

3. Terms and Conditions - Continued

k. Application of Rates and Charges - Continued

(1) Rate Elements - Continued

(a) UNI Port With Access Line Connection

A monthly rate applies 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 year, two year, three year or five year Extended Service Plan (ESP) only. Nonrecurring charges from this Product Guide or any other tariff of the Company do not apply.

(b) UNI Inverse Multiplexing ATM (IMA) Port With Access Line Connection

A monthly rate applies on a per DS1 basis for each sequential DS1 ordered up to the desired bandwidth (i.e., 3 Mbps, 4.5 Mbps, 6 Mbps, 7.5 Mbps, or 9 Mbps). IMA is offered as a one year, two year, three year or five year Extended Service Plan (ESP). DS1s within an IMA group added subsequent to the initial installation of the first two DS1s will have their own term period. Nonrecurring charges from this Product Guide or any other tariff of the Company do not apply.

(c) 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 year, two year, three year or five year Extended Service Plan (ESP) only. Nonrecurring charges from this Product Guide or any other tariff of the Company do not apply.

(d) Permanent Virtual Circuits (PVCs)

A nonrecurring charge applies per order for Virtual Channel Connection (VCC) or Virtual Path Connection (VPC). PVCs are ordered per UNI. If multiple UNIs are involved, a nonrecurring charge will apply to each UNI Port on which the virtual connections will reside. The nonrecurring charge does not apply when PVCs are installed at the same time as the respective UNIs.

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ADVANCED DATA SERVICES

B. ASYNCHRONOUS TRANSFER MODE (ATM) CELL RELAY SERVICE (CRS) - Continued

3. Terms and Conditions - Continued

k. Application of Rates and Charges - Continued

(1) Rate Elements - Continued

(a) UNI Port With Access Line Connection

A monthly rate applies 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 year, two year, three year or five year Extended Service Plan (ESP) only. Nonrecurring charges from this Product Guide or any other tariff of the Company do not apply.

(b) UNI Inverse Multiplexing ATM (IMA) Port With Access Line Connection

A monthly rate applies on a per DS1 basis for each sequential DS1 ordered up to the desired bandwidth (i.e., 3 Mbps, 4.5 Mbps, 6 Mbps, 7.5 Mbps, or 9 Mbps). IMA is offered as a one year, two year, three year or five year Extended Service Plan (ESP). DS1s within an IMA group added subsequent to the initial installation of the first two DS1s will have their own term period. Nonrecurring charges from this Product Guide or any other tariff of the Company do not apply.

(c) 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 year, two year, three year or five year Extended Service Plan (ESP) only. Nonrecurring charges from this Product Guide or any other tariff of the Company do not apply.

(d) Permanent Virtual Circuits (PVCs)

A nonrecurring charge applies per order for Virtual Channel Connection (VCC) or Virtual Path Connection (VPC). PVCs are ordered per UNI. If multiple UNIs are involved, a nonrecurring charge will apply to each UNI Port on which the virtual connections will reside. The nonrecurring charge does not apply when PVCs are installed at the same time as the respective UNIs.

ADVANCED DATA SERVICES

B. ASYNCHRONOUS TRANSFER MODE (ATM) CELL RELAY SERVICE (CRS) [1] - Continued (T)

3. Terms and Conditions - Continued

k. Application of Rates and Charges - Continued

(1) Rate Elements - Continued

(e) Effective Bandwidth for Incremental UNIs

A monthly rate applies for incremental UNIs for CBR or VBR PVC and SVC bandwidth at 5 Mbps for DS3 or OC3c and at 15 Mbps for OC12c. A monthly rate also applies for incremental UNIs for UBR PVC and SVC bandwidth for DS3, OC3c and OC12c. Nonrecurring charges from this Product Guide or any other tariff of the Company do not apply.

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 from this Product Guide or any other tariff of the Company do not apply.

(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.

(g) Administrative Charge

A nonrecurring charge applies (per order, per UNI) when the customer initiates a change to one or more of the following: UNI bandwidth, PVCs, class of service parameters, and/or other service parameters that do not require changes in physical facilities and that can be provisioned by the Company without the dispatch of a technician to the customer location. For each service order 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 service order with the installation of a UNI.

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ADVANCED DATA SERVICES

B. ASYNCHRONOUS TRANSFER MODE (ATM) CELL RELAY SERVICE (CRS) - Continued

3. Terms and Conditions - Continued

k. Application of Rates and Charges - Continued

(1) Rate Elements - Continued

(e) Effective Bandwidth for Incremental UNIs

A monthly rate applies for incremental UNIs for CBR or VBR PVC and SVC bandwidth at 5 Mbps for DS3 or OC3c and at 15 Mbps for OC12c. A monthly rate also applies for incremental UNIs for UBR PVC and SVC bandwidth for DS3, OC3c and OC12c. Nonrecurring charges from this Product Guide or any other tariff of the Company do not apply.

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 from this Product Guide or any other tariff of the Company do not apply.

(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.

(g) Administrative Charge

A nonrecurring charge applies (per order, per UNI) when the customer initiates a change to one or more of the following: UNI bandwidth, PVCs, class of service parameters, and/or other service parameters that do not require changes in physical facilities and that can be provisioned by the Company without the dispatch of a technician to the customer location. For each service order 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 service order with the installation of a UNI.

ADVANCED DATA SERVICES

B. ASYNCHRONOUS TRANSFER MODE (ATM) CELL RELAY SERVICE (CRS) [1] - Continued (T)

3. Terms and Conditions - Continued

k. Application of Rates and Charges - Continued

(2) Minimum Charge

The minimum charge for ATM CRS will not be less than one Monthly Recurring Charge (MRC) for the applicable service and term selected, plus Termination Liability[2] as described in B.3.k.(3)(a) below. (T)

(3) Extended Service Plan

The ATM CRS UNI Port With Access Line Connection, UNI IMA Port With Access Line Connection and UNI Port Only Connection rate elements are available under an ESP.

Term commitments of one-, two-, three- and five-years are available to ATM CRS UNI Port With Access Line Connection, UNI Port Only, or UNI IMA Port With Access Line Connection customers at the applicable rates set forth in B.4, regardless of when they subscribe to an ESP arrangement.

(a) Termination Liability [2] (T)

If ATM CRS is terminated by the customer prior to the anniversary date of the initial term commitment period, termination liability charges, as set forth in Section 2.B.15 of this Product Guide, will apply.

(4) Moves

When the customer requests a move or relocation of the UNI, the move or relocation will be treated as a termination of the existing service and the establishment of a new service.

(5) Special Facilities Routing

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

(6) 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.

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[2] Effective February 15, 2013, Termination Liability will not apply to ATM Cell Relay Service (ATMCRS). (N)

ADVANCED DATA SERVICES

B. ASYNCHRONOUS TRANSFER MODE (ATM) CELL RELAY SERVICE (CRS) - Continued

3. Terms and Conditions - Continued

k. Application of Rates and Charges - Continued

(2) Minimum Charge

The minimum charge for ATM CRS will not be less than one Monthly Recurring Charge (MRC) for the applicable service and term selected, plus Termination Liability as described in B.3.k.(3)(a) below.

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ADVANCED DATA SERVICES

B. ASYNCHRONOUS TRANSFER MODE (ATM) CELL RELAY SERVICE (CRS) [1] - Continued (T)

4. Rates and Charges

a. UNI Port with Access Line Connection

	Monthly Rate
(1) DS1, each	
Full	
Tier 1 (0 to 5 Miles)	
One Year	$ 805.00
Two Year	765.00
Three Year	684.00
Five Year	644.00
Tier 2 (Over 5 to 25 Miles)	
One Year	805.00
Two Year	765.00
Three Year	684.00
Five Year	644.00
Tier 3 (Over 25 to 50 Miles)	
One Year	805.00
Two Year	765.00
Three Year	684.00
Five Year	644.00

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ADVANCED DATA SERVICES

B. ASYNCHRONOUS TRANSFER MODE (ATM) CELL RELAY SERVICE (CRS) - Continued

4. Rates and Charges

a. UNI Port with Access Line Connection

	Monthly Rate	
(1) DS1, each		
Full		
Tier 1 (0 to 5 Miles)		
One Year	$ 805.00	(I)
Two Year	765.00	|
Three Year	684.00	|
Five Year	644.00	|
Tier 2 (Over 5 to 25 Miles)		|
One Year	805.00	|
Two Year	765.00	|
Three Year	684.00	|
Five Year	644.00	|
Tier 3 (Over 25 to 50 Miles)		|
One Year	805.00	|
Two Year	765.00	|
Three Year	684.00	|
Five Year	644.00	(I)

ADVANCED DATA SERVICES

B. ASYNCHRONOUS TRANSFER MODE (ATM) CELL RELAY SERVICE (CRS) [1] - Continued (T)

4. Rates and Charges - Continued

a. UNI Port with Access Line Connection - Continued

	Monthly Rate
(2) DS3, each	
Full	
Tier 1 (0 to 5 Miles)	
One Year	$ 4,060.00
Two Year	3,857.00
Three Year	3,451.00
Five Year	3,247.00
Tier 2 (Over 5 to 25 Miles)	
One Year	4,776.00
Two Year	4,538.00
Three Year	4,060.00
Five Year	3,821.00
Tier 3 (Over 25 to 50 Miles)	
One Year	5,731.00
Two Year	5,444.00
Three Year	4,872.00
Five Year	4,585.00
Incremental	
Tier 1 (0 to 5 Miles)	
One Year	$ 3,407.00
Two Year	3,235.00
Three Year	2,895.00
Five Year	2,725.00
Tier 2 (Over 5 to 25 Miles)	
One Year	4,007.00
Two Year	3,807.00
Three Year	3,407.00
Five Year	3,205.00
Tier 3 (Over 25 to 50 Miles)	
One Year	4,808.00
Two Year	4,568.00
Three Year	4,088.00
Five Year	3,847.00

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ADVANCED DATA SERVICES

B. ASYNCHRONOUS TRANSFER MODE (ATM) CELL RELAY SERVICE (CRS) - Continued

4. Rates and Charges - Continued

a. UNI Port with Access Line Connection - Continued

(2) DS3, each

	Monthly Rate	
Full		
Tier 1 (0 to 5 Miles)		
One Year	$ 4,060.00	(I)
Two Year	3,857.00	|
Three Year	3,451.00	|
Five Year	3,247.00	|
Tier 2 (Over 5 to 25 Miles)		|
One Year	4,776.00	|
Two Year	4,538.00	|
Three Year	4,060.00	|
Five Year	3,821.00	|
Tier 3 (Over 25 to 50 Miles)		|
One Year	5,731.00	|
Two Year	5,444.00	|
Three Year	4,872.00	|
Five Year	4,585.00	(I)
Incremental		
Tier 1 (0 to 5 Miles)		
One Year	$ 3,407.00	(I)
Two Year	3,235.00	|
Three Year	2,895.00	|
Five Year	2,725.00	|
Tier 2 (Over 5 to 25 Miles)		|
One Year	4,007.00	|
Two Year	3,807.00	|
Three Year	3,407.00	|
Five Year	3,205.00	|
Tier 3 (Over 25 to 50 Miles)		|
One Year	4,808.00	|
Two Year	4,568.00	|
Three Year	4,088.00	|
Five Year	3,847.00	(I)

ADVANCED DATA SERVICES

B. ASYNCHRONOUS TRANSFER MODE (ATM) CELL RELAY SERVICE (CRS) [1] - Continued (T)

4. Rates and Charges - Continued

a. UNI Port with Access Line Connection - Continued

(3) OC3c, each - Continued

	Monthly Rate
SONET	
Full, Protected	
Tier 1 (0 to 5 Miles)	
One Year	$ 7,659.00
Two Year	7,277.00
Three Year	6,511.00
Five Year	6,127.00
Tier 2 (Over 5 to 25 Miles)	
One Year	9,011.00
Two Year	8,561.00
Three Year	7,659.00
Five Year	7,209.00
Tier 3 (Over 25 to 50 Miles)	
One Year	10,813.00
Two Year	10,272.00
Three Year	9,192.00
Five Year	8,650.00
Full, Protected Diverse	
Tier 1 (0 to 5 Miles)	
One Year	$ 9,353.00
Two Year	8,886.00
Three Year	7,951.00
Five Year	7,482.00
Tier 2 (Over 5 to 25 Miles)	
One Year	11,003.00
Two Year	10,453.00
Three Year	9,353.00
Five Year	8,803.00
Tier 3 (Over 25 to 50 Miles)	
One Year	13,204.00
Two Year	12,544.00
Three Year	11,224.00
Five Year	10,563.00

[1] Effective February 15, 2013, ATM Cell Relay Service (ATMCRS) is grandfathered and is no longer available to new customers. Existing customers may maintain their service; however, term commitment plans may not be renewed. Moves or changes to subscribers' existing service are permissible, but the term commitment per circuit will not be extended. Upon expiration of the term commitment the service will lapse into a month-to-month service arrangement and will bill at the one-year rate. (N)

ADVANCED DATA SERVICES

B. ASYNCHRONOUS TRANSFER MODE (ATM) CELL RELAY SERVICE (CRS) - Continued

4. Rates and Charges - Continued

a. UNI Port with Access Line Connection - Continued

(3) OC3c, each - Continued

SONET

	Monthly Rate	
Full, Protected		
Tier 1 (0 to 5 Miles)		
One Year	$ 7,659.00	(I)
Two Year	7,277.00	
Three Year	6,511.00	
Five Year	6,127.00	
Tier 2 (Over 5 to 25 Miles)		
One Year	9,011.00	
Two Year	8,561.00	
Three Year	7,659.00	
Five Year	7,209.00	
Tier 3 (Over 25 to 50 Miles)		
One Year	10,813.00	
Two Year	10,272.00	
Three Year	9,192.00	
Five Year	8,650.00	(I)
Full, Protected Diverse		
Tier 1 (0 to 5 Miles)		
One Year	$ 9,353.00	(I)
Two Year	8,886.00	
Three Year	7,951.00	
Five Year	7,482.00	
Tier 2 (Over 5 to 25 Miles)		
One Year	11,003.00	
Two Year	10,453.00	
Three Year	9,353.00	
Five Year	8,803.00	
Tier 3 (Over 25 to 50 Miles)		
One Year	13,204.00	
Two Year	12,544.00	
Three Year	11,224.00	
Five Year	10,563.00	(I)

ADVANCED DATA SERVICES

B. ASYNCHRONOUS TRANSFER MODE (ATM) CELL RELAY SERVICE (CRS) [1] – Continued (T)

4. Rates and Charges - Continued

a. UNI Port with Access Line Connection – Continued

(3) OC3c, each – Continued

SONET - Continued

	Monthly Rate
Incremental, Protected	
Tier 1 (0 to 5 Miles)	
One Year	$ 5,336.00
Two Year	5,070.00
Three Year	4,536.00
Five Year	4,269.00
Tier 2 (Over 5 to 25 Miles)	
One Year	6,278.00
Two Year	5,964.00
Three Year	5,336.00
Five Year	5,023.00
Tier 3 (Over 25 to 50 Miles)	
One Year	7,534.00
Two Year	7,158.00
Three Year	6,403.00
Five Year	6,027.00
Incremental, Protected Diverse	
Tier 1 (0 to 5 Miles)	
One Year	$ 7,030.00
Two Year	6,679.00
Three Year	5,976.00
Five Year	5,624.00
Tier 2 (Over 5 to 25 Miles)	
One Year	8,271.00
Two Year	7,856.00
Three Year	7,030.00
Five Year	6,617.00
Tier 3 (Over 25 to 50 Miles)	
One Year	9,924.00
Two Year	9,428.00
Three Year	8,436.00
Five Year	7,940.00

[1] Effective February 15, 2013, ATM Cell Relay Service (ATMCRS) is grandfathered and is no longer available to new customers. Existing customers may maintain their service; however, term commitment plans may not be renewed. Moves or changes to subscribers' existing service are permissible, but the term commitment per circuit will not be extended. Upon expiration of the term commitment the service will lapse into a month-to-month service arrangement and will bill at the one-year rate. (N)

ADVANCED DATA SERVICES

B. ASYNCHRONOUS TRANSFER MODE (ATM) CELL RELAY SERVICE (CRS) – Continued

4. Rates and Charges - Continued

a. UNI Port with Access Line Connection – Continued

(4) OC3c, each – Continued

SONET - Continued

	Monthly Rate	
Incremental, Protected		
Tier 1 (0 to 5 Miles)		
One Year	$ 5,336.00	(I)
Two Year	5,070.00	|
Three Year	4,536.00	|
Five Year	4,269.00	|
Tier 2 (Over 5 to 25 Miles)		|
One Year	6,278.00	|
Two Year	5,964.00	|
Three Year	5,336.00	|
Five Year	5,023.00	|
Tier 3 (Over 25 to 50 Miles)		|
One Year	7,534.00	|
Two Year	7,158.00	|
Three Year	6,403.00	|
Five Year	6,027.00	(I)

Incremental, Protected Diverse		
Tier 1 (0 to 5 Miles)		
One Year	$ 7,030.00	(I)
Two Year	6,679.00	|
Three Year	5,976.00	|
Five Year	5,624.00	|
Tier 2 (Over 5 to 25 Miles)		|
One Year	8,271.00	|
Two Year	7,856.00	|
Three Year	7,030.00	|
Five Year	6,617.00	|
Tier 3 (Over 25 to 50 Miles)		|
One Year	9,924.00	|
Two Year	9,428.00	|
Three Year	8,436.00	|
Five Year	7,940.00	(I)

ADVANCED DATA SERVICES

B. ASYNCHRONOUS TRANSFER MODE (ATM) CELL RELAY SERVICE (CRS) [1] - Continued (T)

4. Rates and Charges - Continued

a. UNI Port with Access Line Connection - Continued

	Monthly Rate
(4) OC12c, each - Continued	
SONET	
Full, Protected	
Tier 1 (0 to 5 Miles)	
One Year	$ 23,668.00
Two Year	22,484.00
Three Year	20,118.00
Five Year	18,934.00
Tier 2 (Over 5 to 25 Miles)	
One Year	27,844.00
Two Year	26,452.00
Three Year	23,668.00
Five Year	22,275.00
Tier 3 (Over 25 to 50 Miles)	
One Year	33,413.00
Two Year	31,742.00
Three Year	28,401.00
Five Year	26,730.00
Full, Protected Diverse	
Tier 1 (0 to 5 Miles)	
One Year	$ 25,604.00
Two Year	24,323.00
Three Year	21,764.00
Five Year	20,483.00
Tier 2 (Over 5 to 25 Miles)	
One Year	30,121.00
Two Year	28,615.00
Three Year	25,604.00
Five Year	24,098.00
Tier 3 (Over 25 to 50 Miles)	
One Year	36,146.00
Two Year	34,339.00
Three Year	30,724.00
Five Year	28,917.00

[1] Effective February 15, 2013, ATM Cell Relay Service (ATMCRS) is grandfathered and is no longer available to new customers. Existing customers may maintain their service; however, term commitment plans may not be renewed. Moves or changes to subscribers' existing service are permissible, but the term commitment per circuit will not be extended. Upon expiration of the term commitment the service will lapse into a month-to-month service arrangement and will bill at the one-year rate. (N)

ADVANCED DATA SERVICES

B. ASYNCHRONOUS TRANSFER MODE (ATM) CELL RELAY SERVICE (CRS) - Continued

4. Rates and Charges - Continued

a. UNI Port with Access Line Connection - Continued

(4) OC12c, each - Continued

SONET

	Monthly Rate	
Full, Protected		
Tier 1 (0 to 5 Miles)		
One Year	$ 23,668.00	(I)
Two Year	22,484.00	|
Three Year	20,118.00	|
Five Year	18,934.00	|
Tier 2 (Over 5 to 25 Miles)		|
One Year	27,844.00	|
Two Year	26,452.00	|
Three Year	23,668.00	|
Five Year	22,275.00	|
Tier 3 (Over 25 to 50 Miles)		|
One Year	33,413.00	|
Two Year	31,742.00	|
Three Year	28,401.00	|
Five Year	26,730.00	(I)
Full, Protected Diverse		
Tier 1 (0 to 5 Miles)		
One Year	$ 25,604.00	(I)
Two Year	24,323.00	|
Three Year	21,764.00	|
Five Year	20,483.00	|
Tier 2 (Over 5 to 25 Miles)		|
One Year	30,121.00	|
Two Year	28,615.00	|
Three Year	25,604.00	|
Five Year	24,098.00	|
Tier 3 (Over 25 to 50 Miles)		|
One Year	36,146.00	|
Two Year	34,339.00	|
Three Year	30,724.00	|
Five Year	28,917.00	(I)

ADVANCED DATA SERVICES

B. ASYNCHRONOUS TRANSFER MODE (ATM) CELL RELAY SERVICE (CRS) [1] – Continued (T)

4. Rates and Charges - Continued

a. UNI Port with Access Line Connection – Continued

	Monthly Rate
(4) OC12c, each – Continued	
SONET - Continued	
Incremental, Protected	
Tier 1 (0 to 5 Miles)	
One Year	$ 15,730.00
Two Year	14,944.00
Three Year	13,371.00
Five Year	12,584.00
Tier 2 (Over 5 to 25 Miles)	
One Year	18,505.00
Two Year	17,580.00
Three Year	15,730.00
Five Year	14,805.00
Tier 3 (Over 25 to 50 Miles)	
One Year	22,207.00
Two Year	21,097.00
Three Year	18,876.00
Five Year	17,765.00
Incremental, Protected Diverse	
Tier 1 (0 to 5 Miles)	
One Year	$ 17,666.00
Two Year	16,783.00
Three Year	15,016.00
Five Year	14,133.00
Tier 2 (Over 5 to 25 Miles)	
One Year	20,783.00
Two Year	19,744.00
Three Year	17,666.00
Five Year	16,627.00
Tier 3 (Over 25 to 50 Miles)	
One Year	24,940.00
Two Year	23,693.00
Three Year	21,199.00
Five Year	19,952.00

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ADVANCED DATA SERVICES

B. ASYNCHRONOUS TRANSFER MODE (ATM) CELL RELAY SERVICE (CRS) – Continued

4. Rates and Charges - Continued

a. UNI Port with Access Line Connection – Continued

(4) OC12c, each – Continued

SONET - Continued

	Monthly Rate	
Incremental, Protected		
Tier 1 (0 to 5 Miles)		
One Year	$ 15,730.00	(I)
Two Year	14,944.00	|
Three Year	13,371.00	|
Five Year	12,584.00	|
Tier 2 (Over 5 to 25 Miles)		|
One Year	18,505.00	|
Two Year	17,580.00	|
Three Year	15,730.00	|
Five Year	14,805.00	|
Tier 3 (Over 25 to 50 Miles)		|
One Year	22,207.00	|
Two Year	21,097.00	|
Three Year	18,876.00	|
Five Year	17,765.00	(I)
Incremental, Protected Diverse		
Tier 1 (0 to 5 Miles)		
One Year	$ 17,666.00	(I)
Two Year	16,783.00	|
Three Year	15,016.00	|
Five Year	14,133.00	|
Tier 2 (Over 5 to 25 Miles)		|
One Year	20,783.00	|
Two Year	19,744.00	|
Three Year	17,666.00	|
Five Year	16,627.00	|
Tier 3 (Over 25 to 50 Miles)		|
One Year	24,940.00	|
Two Year	23,693.00	|
Three Year	21,199.00	|
Five Year	19,952.00	(I)

ADVANCED DATA SERVICES

B. ASYNCHRONOUS TRANSFER MODE (ATM) CELL RELAY SERVICE (CRS) [1]– Continued (T)

4. Rates and Charges - Continued

b. UNI Inverse Multiplexing ATM (IMA)

	Monthly Rate
(1) First DS1, each (1.5 Mbps total bandwidth)	
Full	
Tier 1 (0 to 5 Miles)	
One Year	$ 828.00
Two Year	788.00
Three Year	704.00
Five Year	663.00
Tier 2 (Over 5 to 25 Miles)	
One Year	828.00
Two Year	788.00
Three Year	704.00
Five Year	663.00
Tier 3 (Over 25 to 50 Miles)	
One Year	828.00
Two Year	788.00
Three Year	704.00
Five Year	663.00
(2) **Second DS1,** each (3 Mbps total bandwidth)	
Full	
Tier 1 (0 to 5 Miles)	
One Year	$ 787.00
Two Year	747.00
Three Year	684.00
Five Year	644.00
Tier 2 (Over 5 to 25 Miles)	
One Year	787.00
Two Year	747.00
Three Year	684.00
Five Year	644.00
Tier 3 (Over 25 to 50 Miles)	
One Year	787.00
Two Year	747.00
Three Year	684.00
Five Year	644.00

[1] Effective February 15, 2013, ATM Cell Relay Service (ATMCRS) is grandfathered and is no longer available to new customers. Existing customers may maintain their service; however, term commitment plans may not be renewed. Moves or changes to subscribers' existing service are permissible, but the term commitment per circuit will not be extended. Upon expiration of the term commitment the service will lapse into a month-to-month service arrangement and will bill at the one-year rate. (N)

ADVANCED DATA SERVICES

B. ASYNCHRONOUS TRANSFER MODE (ATM) CELL RELAY SERVICE (CRS) – Continued

4. Rates and Charges - Continued

b. UNI Inverse Multiplexing ATM (IMA)

	Monthly Rate
(1) First DS1, each (1.5 Mbps total bandwidth)	
Full	
Tier 1 (0 to 5 Miles)	
One Year	$ 828.00
Two Year	788.00
Three Year	704.00
Five Year	663.00
Tier 2 (Over 5 to 25 Miles)	
One Year	828.00
Two Year	788.00
Three Year	704.00
Five Year	663.00
Tier 3 (Over 25 to 50 Miles)	
One Year	828.00
Two Year	788.00
Three Year	704.00
Five Year	663.00
(2) **Second DS1,** each (3 Mbps total bandwidth)	
Full	
Tier 1 (0 to 5 Miles)	
One Year	$ 787.00
Two Year	747.00
Three Year	684.00
Five Year	644.00
Tier 2 (Over 5 to 25 Miles)	
One Year	787.00
Two Year	747.00
Three Year	684.00
Five Year	644.00
Tier 3 (Over 25 to 50 Miles)	
One Year	787.00
Two Year	747.00
Three Year	684.00
Five Year	644.00

ADVANCED DATA SERVICES

B. ASYNCHRONOUS TRANSFER MODE (ATM) CELL RELAY SERVICE (CRS) [1]– Continued (T)

4. Rates and Charges - Continued

b. UNI Inverse Multiplexing ATM (IMA) – Continued

	Monthly Rate
(3) Third DS1, each (4.5 Mbps total bandwidth)	
Full	
Tier 1 (0 to 5 Miles)	
One Year	$ 757.00
Two Year	718.00
Three Year	642.00
Five Year	605.00
Tier 2 (Over 5 to 25 Miles)	
One Year	757.00
Two Year	718.00
Three Year	642.00
Five Year	605.00
Tier 3 (Over 25 to 50 Miles)	
One Year	757.00
Two Year	718.00
Three Year	642.00
Five Year	605.00
(4) **Fourth DS1,** each (6 Mbps total bandwidth)	
Full	
Tier 1 (0 to 5 Miles)	
One Year	$ 757.00
Two Year	718.00
Three Year	642.00
Five Year	605.00
Tier 2 (Over 5 to 25 Miles)	
One Year	757.00
Two Year	718.00
Three Year	642.00
Five Year	605.00
Tier 3 (Over 25 to 50 Miles)	
One Year	757.00
Two Year	718.00
Three Year	642.00
Five Year	605.00

[1] Effective February 15, 2013, ATM Cell Relay Service (ATMCRS) is grandfathered and is no longer available to new customers. Existing customers may maintain their service; however, term commitment plans may not be renewed. Moves or changes to subscribers' existing service are permissible, but the term commitment per circuit will not be extended. Upon expiration of the term commitment the service will lapse into a month-to-month service arrangement and will bill at the one-year rate. (N)

ADVANCED DATA SERVICES

B. ASYNCHRONOUS TRANSFER MODE (ATM) CELL RELAY SERVICE (CRS) – Continued

4. Rates and Charges - Continued

b. UNI Inverse Multiplexing ATM (IMA) – Continued

	Monthly Rate
(3) Third DS1, each (4.5 Mbps total bandwidth)	
Full	
Tier 1 (0 to 5 Miles)	
One Year	$ 757.00
Two Year	718.00
Three Year	642.00
Five Year	605.00
Tier 2 (Over 5 to 25 Miles)	
One Year	757.00
Two Year	718.00
Three Year	642.00
Five Year	605.00
Tier 3 (Over 25 to 50 Miles)	
One Year	757.00
Two Year	718.00
Three Year	642.00
Five Year	605.00
(4) **Fourth DS1,** each (6 Mbps total bandwidth)	
Full	
Tier 1 (0 to 5 Miles)	
One Year	$ 757.00
Two Year	718.00
Three Year	642.00
Five Year	605.00
Tier 2 (Over 5 to 25 Miles)	
One Year	757.00
Two Year	718.00
Three Year	642.00
Five Year	605.00
Tier 3 (Over 25 to 50 Miles)	
One Year	757.00
Two Year	718.00
Three Year	642.00
Five Year	605.00

ADVANCED DATA SERVICES

B. ASYNCHRONOUS TRANSFER MODE (ATM) CELL RELAY SERVICE (CRS) [1]– Continued (T)

4. Rates and Charges - Continued

b. UNI Inverse Multiplexing ATM (IMA) – Continued

	Monthly Rate
(5) Fifth DS1, each (7.5 Mbps total bandwidth)	
Full	
Tier 1 (0 to 5 Miles)	
One Year	$ 757.00
Two Year	718.00
Three Year	642.00
Five Year	605.00
Tier 2 (Over 5 to 25 Miles)	
One Year	757.00
Two Year	718.00
Three Year	642.00
Five Year	605.00
Tier 3 (Over 25 to 50 Miles)	
One Year	757.00
Two Year	718.00
Three Year	642.00
Five Year	605.00
(6) **Sixth DS1,** each (9 Mbps total bandwidth)	
Full	
Tier 1 (0 to 5 Miles)	
One Year	$ 757.00
Two Year	718.00
Three Year	642.00
Five Year	605.00
Tier 2 (Over 5 to 25 Miles)	
One Year	757.00
Two Year	718.00
Three Year	642.00
Five Year	605.00
Tier 3 (Over 25 to 50 Miles)	
One Year	757.00
Two Year	718.00
Three Year	642.00
Five Year	605.00

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ADVANCED DATA SERVICES

B. ASYNCHRONOUS TRANSFER MODE (ATM) CELL RELAY SERVICE (CRS) – Continued

4. Rates and Charges - Continued

b. UNI Inverse Multiplexing ATM (IMA) – Continued

	Monthly Rate
(5) Fifth DS1, each (7.5 Mbps total bandwidth)	
Full	
Tier 1 (0 to 5 Miles)	
One Year	$ 757.00
Two Year	718.00
Three Year	642.00
Five Year	605.00
Tier 2 (Over 5 to 25 Miles)	
One Year	757.00
Two Year	718.00
Three Year	642.00
Five Year	605.00
Tier 3 (Over 25 to 50 Miles)	
One Year	757.00
Two Year	718.00
Three Year	642.00
Five Year	605.00
(6) **Sixth DS1,** each (9 Mbps total bandwidth)	
Full	
Tier 1 (0 to 5 Miles)	
One Year	$ 757.00
Two Year	718.00
Three Year	642.00
Five Year	605.00
Tier 2 (Over 5 to 25 Miles)	
One Year	757.00
Two Year	718.00
Three Year	642.00
Five Year	605.00
Tier 3 (Over 25 to 50 Miles)	
One Year	757.00
Two Year	718.00
Three Year	642.00
Five Year	605.00

ADVANCED DATA SERVICES

B. ASYNCHRONOUS TRANSFER MODE (ATM) CELL RELAY SERVICE (CRS) [1] - Continued (T)

4. Rates and Charges - Continued

c. UNI Port Only Connection

	Monthly Rate
(1) DS1, each	
Full	
One Year	$ 420.00
Two Year	399.00
Three Year	358.00
Five Year	337.00
(2) **DS3, each**	
Full	
One Year	$ 1,481.00
Two Year	1,407.00
Three Year	1,258.00
Five Year	1,185.00
Incremental	
One Year	$ 712.00
Two Year	677.00
Three Year	605.00
Five Year	570.00

[1] Effective February 15, 2013, ATM Cell Relay Service (ATMCRS) is grandfathered and is no longer available to new customers. Existing customers may maintain their service; however, term commitment plans may not be renewed. Moves or changes to subscribers' existing service are permissible, but the term commitment per circuit will not be extended. Upon expiration of the term commitment the service will lapse into a month-to-month service arrangement and will bill at the one-year rate. (N)

ADVANCED DATA SERVICES

B. ASYNCHRONOUS TRANSFER MODE (ATM) CELL RELAY SERVICE (CRS) - Continued

4. Rates and Charges - Continued

c. UNI Port Only Connection

	Monthly Rate
(1) DS1, each	
Full	
One Year	$ 420.00
Two Year	399.00
Three Year	358.00
Five Year	337.00
(2) **DS3, each**	
Full	
One Year	$ 1,481.00
Two Year	1,407.00
Three Year	1,258.00
Five Year	1,185.00
Incremental	
One Year	$ 712.00
Two Year	677.00
Three Year	605.00
Five Year	570.00

ADVANCED DATA SERVICES

B. ASYNCHRONOUS TRANSFER MODE (ATM) CELL RELAY SERVICE (CRS) [1] - Continued (T)

4. Rates and Charges - Continued

c. UNI Port Only Connection - Continued

	Monthly Rate
(3) OC3c, each	
Full	
One Year	$ 3,872.00
Two Year	3,678.00
Three Year	3,291.00
Five Year	3,098.00
Incremental	
One Year	$ 1,139.00
Two Year	1,081.00
Three Year	968.00
Five Year	911.00
(4) **OC12c, each**	
Full	
One Year	$ 13,609.00
Two Year	12,929.00
Three Year	11,568.00
Five Year	10,888.00
Incremental	
One Year	$ 4,270.00
Two Year	4,057.00
Three Year	3,630.00
Five Year	3,417.00

[1] Effective February 15, 2013, ATM Cell Relay Service (ATMCRS) is grandfathered and is no longer available to new customers. Existing customers may maintain their service; however, term commitment plans may not be renewed. Moves or changes to subscribers' existing service are permissible, but the term commitment per circuit will not be extended. Upon expiration of the term commitment the service will lapse into a month-to-month service arrangement and will bill at the one-year rate. (N)

ADVANCED DATA SERVICES

B. ASYNCHRONOUS TRANSFER MODE (ATM) CELL RELAY SERVICE (CRS) - Continued

4. Rates and Charges - Continued

c. UNI Port Only Connection - Continued

	Monthly Rate
(3) OC3c, each	
Full	
One Year	$ 3,872.00
Two Year	3,678.00
Three Year	3,291.00
Five Year	3,098.00
Incremental	
One Year	$ 1,139.00
Two Year	1,081.00
Three Year	968.00
Five Year	911.00
(4) **OC12c, each**	
Full	
One Year	$ 13,609.00
Two Year	12,929.00
Three Year	11,568.00
Five Year	10,888.00
Incremental	
One Year	$ 4,270.00
Two Year	4,057.00
Three Year	3,630.00
Five Year	3,417.00

ADVANCED DATA SERVICES

B. ASYNCHRONOUS TRANSFER MODE (ATM) CELL RELAY SERVICE (CRS) [2] - Continued (T)

4. Rates and Charges - Continued

d. Permanent Virtual Circuits (PVCs), per order

	Nonrecurring Charge [1]
(1) 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
(2) 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 and in lieu of service charges found elsewhere in this section or in Section 3, Service Charges. If multiple UNIs are involved, a nonrecurring charge will apply to each UNI Port on which the virtual connections will reside. The nonrecurring charge does not apply when PVCs are installed at the same time as the respective UNIs.

[2] Effective February 15, 2013, ATM Cell Relay Service (ATMCRS) is grandfathered and is no longer available to new customers. Existing customers may maintain their service; however, term commitment plans may not be renewed. Moves or changes to subscribers' existing service are permissible, but the term commitment per circuit will not be extended. Upon expiration of the term commitment the service will lapse into a month-to-month service arrangement and will bill at the one-year rate. (N)

ADVANCED DATA SERVICES

B. ASYNCHRONOUS TRANSFER MODE (ATM) CELL RELAY SERVICE (CRS) - Continued

4. Rates and Charges - Continued

d. Permanent Virtual Circuits (PVCs), per order

	Nonrecurring Charge [1]
(1) 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
(2) 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 and in lieu of service charges found elsewhere in this section or in Section 3, Service Charges. If multiple UNIs are involved, a nonrecurring charge will apply to each UNI Port on which the virtual connections will reside. The nonrecurring charge does not apply when PVCs are installed at the same time as the respective UNIs.

ADVANCED DATA SERVICES

B. ASYNCHRONOUS TRANSFER MODE (ATM) CELL RELAY SERVICE (CRS) [2]- Continued (T)

4. Rates and Charges - Continued

e. Effective Bandwidth for Incremental UNIs

	Nonrecurring Charge	Monthly Rate
(1) CBR or VBR PVC Bandwidth		
DS3 or OC3c - 5 Mbps	--	$ 97.00
OC12c - 15 Mbps	--	242.00
(2) **CBR or VBR SVC Bandwidth**		
DS3 or OC3c – 5 Mbps	--	97.00
OC12c – 15 Mbps	--	242.00
(3) **UBR PVC and SVC Bandwidth,** Bandwidth up to the UNI line rate		
DS3	--	484.00
OC3c	--	1,452.00
OC12c	--	4,840.00

f. Closed User Groups (CUG) [1], per order, per UNI

(1) Each CUG	$ 75.00	--
(2) Each subsequent CUG member added to a CUG	75.00	--

g. Administrative Charge [1], per order, per UNI 75.00 --

[1] Applies per order, per UNI, and in lieu of service charges found elsewhere in this section or in Section 3, Service Charges. The nonrecurring charge does not apply for those items ordered on the same service order with the installation of a UNI.

[2] Effective February 15, 2013, ATM Cell Relay Service (ATMCRS) is grandfathered and is no longer available to new customers. Existing customers may maintain their service; however, term commitment plans may not be renewed. Moves or changes to subscribers' existing service are permissible, but the term commitment per circuit will not be extended. Upon expiration of the term commitment the service will lapse into a month-to-month service arrangement and will bill at the one-year rate. (N)

ADVANCED DATA SERVICES

B. ASYNCHRONOUS TRANSFER MODE (ATM) CELL RELAY SERVICE (CRS) - Continued

4. Rates and Charges - Continued

e. Effective Bandwidth for Incremental UNIs

	Nonrecurring Charge	Monthly Rate
(1) CBR or VBR PVC Bandwidth		
DS3 or OC3c - 5 Mbps	--	$ 97.00
OC12c - 15 Mbps	--	242.00
(2) **CBR or VBR SVC Bandwidth**		
DS3 or OC3c – 5 Mbps	--	97.00
OC12c – 15 Mbps	--	242.00
(3) **UBR PVC and SVC Bandwidth,** Bandwidth up to the UNI line rate		
DS3	--	484.00
OC3c	--	1,452.00
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f. Closed User Groups (CUG) [1], per order, per UNI

(1) Each CUG	$ 75.00	--
(2) Each subsequent CUG member added to a CUG	75.00	--

g. Administrative Charge [1], per order, per UNI 75.00 --

[1] Applies per order, per UNI, and in lieu of service charges found elsewhere in this section or in Section 3, Service Charges. The nonrecurring charge does not apply for those items ordered on the same service order with the installation of a UNI.

ADVANCED DATA SERVICES

C. FRAME RELAY SERVICE (FRS) [1] (T)

1. APPLICATION

This section contains definitions, charges, terms and conditions applicable to the provision of Frame Relay Service (FRS), a fully competitive Category III service furnished by the Company within the State of California. The Company, on its sole discretion, shall offer FRS in locations where technical capabilities exist and market conditions warrant.

FRS is available in all existing Verizon exchanges as listed in Section 4A, Sheets 3 and 4.
The Company concurs in all of the maps filed as part of Southwestern Bell Communications (SBC) Network and Exchange Services tariff, Schedule Cal. P.U.C. No. A5.1.A.

2. DEFINITIONS

In addition to the General Definitions set forth in Section 1, 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.

[1] Effective February 15, 2013, Frame Relay Service is grandfathered and is no longer available to new customers. Existing customers may maintain their service; however, term commitment plans may not be renewed. Moves or changes to subscribers' existing service are permissible, but the term commitment per circuit will not be extended. Upon expiration of the term commitment the service will lapse into a month-to-month service arrangement (N)

ADVANCED DATA SERVICES

C. FRAME RELAY SERVICE (FRS)

1. APPLICATION

This section contains definitions, charges, terms and conditions applicable to the provision of Frame Relay Service (FRS), a fully competitive Category III service furnished by the Company within the State of California. The Company, on its sole discretion, shall offer FRS in locations where technical capabilities exist and market conditions warrant.

FRS is available in all existing Verizon exchanges as listed in Section 4A, Sheets 3 and 4.
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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.

ADVANCED DATA SERVICES

C. FRAME RELAY SERVICE (FRS) [1] - Continued (T)

2. DEFINITIONS - Continued

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.

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.

[1] Effective February 15, 2013, Frame Relay Service is grandfathered and is no longer available to new customers. Existing customers may maintain their service; however, term commitment plans may not be renewed. Moves or changes to subscribers' existing service are permissible, but the term commitment per circuit will not be extended. Upon expiration of the term commitment the service will lapse into a month-to-month service arrangement. (N) (N)

ADVANCED DATA SERVICES

C. FRAME RELAY SERVICE (FRS) - Continued

2. DEFINITIONS - Continued

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).

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ADVANCED DATA SERVICES

C. FRAME RELAY SERVICE (FRS) [1] - Continued (T)

3. TERMS AND CONDITIONS

The rates, terms and conditions specified herein are in addition to the applicable rates, terms and conditions specified in other sections of this Product Guide and other Tariffs of the Company.

a. Description of Service

(1) 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.

(2) 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.

(3) 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.

(4) 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.

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

(6) 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.

(7) FRS, as provided for in this Section, is offered for intrastate use only.

[1] Effective February 15, 2013, Frame Relay Service is grandfathered and is no longer available to new customers. Existing customers may maintain their service; however, term commitment plans may not be renewed. Moves or changes to subscribers' existing service are permissible, but the term commitment per circuit will not be extended. Upon expiration of the term commitment the service will lapse into a month-to-month service arrangement. (N) (N)

ADVANCED DATA SERVICES

C. FRAME RELAY SERVICE (FRS) - Continued

3. TERMS AND CONDITIONS

The rates, terms and conditions specified herein are in addition to the applicable rates, terms and conditions specified in other sections of this Product Guide and other Tariffs of the Company.

a. Description of Service

(1) 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.

(2) 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.

(3) 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.

(4) 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.

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

(6) 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.

(7) FRS, as provided for in this Section, is offered for intrastate use only.

ADVANCED DATA SERVICES

C. FRAME RELAY SERVICE (FRS) [1]- Continued (T)

3. REGULATIONS - Continued

b. Service Components

The major components of FRS are:

User-to-Network Interface (UNI) Port and Access Line
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 or Product Guide 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 or Product Guide. 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.

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ADVANCED DATA SERVICES

C. FRAME RELAY SERVICE (FRS) - Continued

3. REGULATIONS - Continued

b. Service Components

The major components of FRS are:

User-to-Network Interface (UNI) Port and Access Line
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 or Product Guide 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 or Product Guide. 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.

ADVANCED DATA SERVICES

C. FRAME RELAY SERVICE (FRS) [1] - Continued (T)

3. TERMS AND CONDITIONS - Continued

b. Service Components - Continued

(2) Port Only - Continued

(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.

(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 j.(1)(f). 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 appropriate Company Tariff are applicable.

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ADVANCED DATA SERVICES

C. FRAME RELAY SERVICE (FRS) - Continued

3. TERMS AND CONDITIONS - Continued

b. Service Components - Continued

(2) Port Only - Continued

(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.

(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 j.(1)(f). 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 appropriate Company Tariff are applicable.

ADVANCED DATA SERVICES

C. FRAME RELAY SERVICE (FRS) [1] - Continued (T)

3. REGULATIONS - Continued

b. Service Components - Continued

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

(c) The following types of PVC CIR are available: - Continued

iii) Public NNI – A Public NNI PVC is a logical channel path between a customer Frame Relay port and a Public NNI port, both located within the same Frame Relay zone. A Public NNI Port is a Frame Relay Port provided to serve multiple users and is owned and controlled by the Company.

(4) PVC CIR Optional Features

(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 4.e.(1).

(b) Frame Relay to ATM Service Interworking - Frame Relay to ATM Service Interworking 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 Interworking is available with Intrazone and Multi-jurisdictional PVC CIR at no additional charge.

(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).

[1] Effective February 15, 2013, Frame Relay Service is grandfathered and is no longer available to new customers. Existing customers may maintain their service; however, term commitment plans may not be renewed. Moves or changes to subscribers' existing service are permissible, but the term commitment per circuit will not be extended. Upon expiration of the term commitment the service will lapse into a month-to-month service arrangement. (N) (N)

ADVANCED DATA SERVICES

C. FRAME RELAY SERVICE (FRS) - Continued

3. REGULATIONS - Continued

b. Service Components - Continued

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

(c) The following types of PVC CIR are available: - Continued

iii) Public NNI – A Public NNI PVC is a logical channel path between a customer Frame Relay port and a Public NNI port, both located within the same Frame Relay zone. A Public NNI Port is a Frame Relay Port provided to serve multiple users and is owned and controlled by the Company.

(4) PVC CIR Optional Features

(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 4.e.(1).

(b) Frame Relay to ATM Service Interworking - Frame Relay to ATM Service Interworking 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 Interworking is available with Intrazone and Multi-jurisdictional PVC CIR at no additional charge.

(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).

ADVANCED DATA SERVICES

C. FRAME RELAY SERVICE (FRS) [1] - Continued (T)

3. REGULATIONS - Continued

c. 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

d. Provision of Service

(1) 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.

(2) 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.

(3) 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 44.736 Mbps, the maximum CIR allowed is 50% of the lower of the two port speeds.

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ADVANCED DATA SERVICES

C. FRAME RELAY SERVICE (FRS) - Continued

3. REGULATIONS - Continued

c. 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

d. Provision of Service

(1) 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.

(2) 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.

(3) 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 44.736 Mbps, the maximum CIR allowed is 50% of the lower of the two port speeds.

ADVANCED DATA SERVICES

C. FRAME RELAY SERVICE (FRS) [1] - Continued (T)

3. REGULATIONS - Continued

d. Provision of Service - Continued

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

(5) 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.

(6) 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.

(7) 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.

(8) FRS is available where facilities and conditions permit.

e. Special Conditions

(1) Maintenance Window

(a) 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 11:00p.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.

[1] Effective February 15, 2013, Frame Relay Service is grandfathered and is no longer available to new customers. Existing customers may maintain their service; however, term commitment plans may not be renewed. Moves or changes to subscribers' existing service are permissible, but the term commitment per circuit will not be extended. Upon expiration of the term commitment the service will lapse into a month-to-month service arrangement. (N) (N)

ADVANCED DATA SERVICES

C. FRAME RELAY SERVICE (FRS) - Continued

3. REGULATIONS - Continued

d. Provision of Service - Continued

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

(5) 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.

(6) 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.

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ADVANCED DATA SERVICES

C. FRAME RELAY SERVICE (FRS) [1] - Continued (T)

3. TERMS AND CONDITIONS - Continued

f. Obligations of the Customer

(1) 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.

(2) 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 terms and conditions contained herein.

(3) 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 terms and conditions specified in this section.

(4) 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.

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

(6) 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.

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

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ADVANCED DATA SERVICES

C. FRAME RELAY SERVICE (FRS) - Continued

3. TERMS AND CONDITIONS - Continued

f. Obligations of the Customer

(1) 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.

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ADVANCED DATA SERVICES

C. FRAME RELAY SERVICE (FRS) [1] - Continued (T)

3. TERMS AND CONDITIONS - Continued

f. Obligations of the Customer - Continued

(8) 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.

g. Obligations of the Company

(1) 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.

(2) 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.

(3) 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.

(4) Local Frame Relay circuits impacted by the transition of assets to Frontier Communications effective July 1, 2010 will be provided as currently configured through September 2011. These existing Local Frame Relay circuits receive service from Verizon California Inc. switches and terminate within Frontier Communications territory. Due to operational constraints, as of July 1, 2010 (the Frontier Communications Sales Transaction Closing Date), MAC activity (Moves, Adds or Changes) will no longer be provided.

Changes to the Local Frame Relay service circuits or continuation of service after September 2011 will be addressed by Frontier Communications, the service provider for the impacted circuits, following the Transaction Closing Date.

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ADVANCED DATA SERVICES

C. FRAME RELAY SERVICE (FRS) - Continued

3. TERMS AND CONDITIONS - Continued

f. Obligations of the Customer - Continued

(8) 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.

g. Obligations of the Company

(1) 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.

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ADVANCED DATA SERVICES

C. FRAME RELAY SERVICE (FRS) - Continued

3. TERMS AND CONDITIONS - Continued

f. Obligations of the Customer - Continued

(8) 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).

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ADVANCED DATA SERVICES

C. FRAME RELAY SERVICE (FRS) [1] - Continued (T)

3. TERMS AND CONDITIONS - Continued

g. Obligations of the Company - Continued

(4) 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.

(5) 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.

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

h. Special Facilities Routing

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

i. 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.

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ADVANCED DATA SERVICES

C. FRAME RELAY SERVICE (FRS) - Continued

3. TERMS AND CONDITIONS - Continued

g. Obligations of the Company - Continued

(4) 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.

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ADVANCED DATA SERVICES

C. FRAME RELAY SERVICE (FRS) [1] - Continued (T)

3. TERMS AND CONDITIONS - Continued

j. Application of Rates

(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 3.b.(2) for the terms and conditions associated with Port Only digital access facilities.

[1] Effective February 15, 2013, Frame Relay Service is grandfathered and is no longer available to new customers. Existing customers may maintain their service; however, term commitment plans may not be renewed. Moves or changes to subscribers' existing service are permissible, but the term commitment per circuit will not be extended. Upon expiration of the term commitment the service will lapse into a month-to-month service arrangement. (N)

ADVANCED DATA SERVICES

C. FRAME RELAY SERVICE (FRS) - Continued

3. TERMS AND CONDITIONS - Continued

j. Application of Rates

(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 3.b.(2) for the terms and conditions associated with Port Only digital access facilities.

ADVANCED DATA SERVICES

C. FRAME RELAY SERVICE (FRS) [1] - Continued (T)

3. TERMS AND CONDITIONS - Continued

j. Application of Rates - Continued

(1) Rate Elements (Continued)

(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 Verizon Telephone Companies FCC Tariff No. 20 are applicable.

iii) Public NNI – A monthly recurring charge, based on CIR capacity, applies for each PVC requested by the customer.

(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 Interworking - Frame Relay to ATM Service Interworking 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.

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ADVANCED DATA SERVICES

C. FRAME RELAY SERVICE (FRS) - Continued

3. TERMS AND CONDITIONS - Continued

j. Application of Rates - Continued

(1) Rate Elements (Continued)

(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 Verizon Telephone Companies FCC Tariff No. 20 are applicable.

iii) Public NNI – A monthly recurring charge, based on CIR capacity, applies for each PVC requested by the customer.

(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 Interworking - Frame Relay to ATM Service Interworking 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.

ADVANCED DATA SERVICES

C. FRAME RELAY SERVICE (FRS) [2] - Continued (T)

3. TERMS AND CONDITIONS - Continued

j. Application of Rates - Continued

(1) Rate Elements - Continued

(f) Frame Relay Zones

Zone	Office
Los Angeles	Covina
	Lancaster
	Long Beach
	Ontario
	Oxnard
	Perris
	Redondo Beach
	San Bernardino
	Santa Monica
	Sepulveda
	Thousand Oaks
	Victorville
	Whittier
Manteca [1]	Manteca
Novato [1]	Los Gatos
	Novato
Palm Springs	Palm Springs
Santa Barbara/Santa Maria	Santa Barbara
	Santa Maria
Taft [1]	Taft

(g) 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.

(h) Software Change Charge
A nonrecurring charge applies per order 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 per UNI or Private NNI, the charge will be one Software Change Charge regardless of the number of changes made.

[1] Interzone transport optional feature not available.

[2] Effective February 15, 2013, Frame Relay Service is grandfathered and is no longer available to new customers. Existing customers may maintain their service; however, term commitment plans may not be renewed. Moves or changes to subscribers' existing service are permissible, but the term commitment per circuit will not be extended. Upon expiration of the term commitment the service will lapse into a month-to-month service arrangement. (N) (N)

ADVANCED DATA SERVICES

C. FRAME RELAY SERVICE (FRS) - Continued

3. TERMS AND CONDITIONS - Continued

j. Application of Rates - Continued

(1) Rate Elements - Continued

(f) Frame Relay Zones

Zone	Office
Los Angeles	Covina
	Lancaster
	Long Beach
	Ontario
	Oxnard
	Perris
	Redondo Beach
	San Bernardino
	Santa Monica
	Sepulveda
	Thousand Oaks
	Victorville
	Whittier
Manteca [1]	Manteca
Novato [1]	Los Gatos
	Novato
Palm Springs	Palm Springs
Santa Barbara/Santa Maria	Santa Barbara
	Santa Maria
Taft [1]	Taft

(g) 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.

(h) Software Change Charge
A nonrecurring charge applies per order 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 per UNI or Private NNI, the charge will be one Software Change Charge regardless of the number of changes made.

[1] Interzone transport optional feature not available.

ADVANCED DATA SERVICES

C. FRAME RELAY SERVICE (FRS) [1] - Continued (T)

3. TERMS AND CONDITIONS - Continued

j. Application of Rates - Continued

(2) Service Charges

Unless otherwise stated in this Section, nonrecurring charges applicable to FRS are in lieu of service charges found elsewhere in this Product Guide or other Company Tariffs.

(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 CIR and PVC CIR Optional Features 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 4.RATES following, regardless of when they subscribe to a TPP arrangement.

(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 [2] charges, as set forth in Section 2.B.15 of this Product Guide, will apply. (T)

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.

[1] Effective February 15, 2013, Frame Relay Service is grandfathered and is no longer available to new customers. Existing customers may maintain their service; however, term commitment plans may not be renewed. Moves or changes to subscribers' existing service are permissible, but the term commitment per circuit will not be extended. Upon expiration of the term commitment the service will lapse into a month-to-month service arrangement. (N)

[2] Effective February 15, 2013, Termination Liability will not apply to Frame Relay Service. (N)

ADVANCED DATA SERVICES

C. FRAME RELAY SERVICE (FRS) - Continued

3. TERMS AND CONDITIONS - Continued

j. Application of Rates - Continued

(2) Service Charges

Unless otherwise stated in this Section, nonrecurring charges applicable to FRS are in lieu of service charges found elsewhere in this Product Guide or other Company Tariffs.

(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 CIR and PVC CIR Optional Features 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 4.RATES following, regardless of when they subscribe to a TPP arrangement.

(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 Section 2.B.15 of this Product Guide, 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.

ADVANCED DATA SERVICES

C. FRAME RELAY SERVICE (FRS) [1]- Continued (T)

3. TERMS AND CONDITIONS - Continued

j. Application of Rates - Continued

(4) Term Payment Plan (TPP) - Continued

(d) Termination Liability [2] (T)

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 Section 2.B.15 of this Product Guide, will apply.

(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.

[1] Effective February 15, 2013, Frame Relay Service is grandfathered and is no longer available to new customers. Existing customers may maintain their service; however, term commitment plans may not be renewed. Moves or changes to subscribers' existing service are permissible, but the term commitment per circuit will not be extended. Upon expiration of the term commitment the service will lapse into a month-to-month service arrangement. (N)

[2] Effective February 15, 2013, Termination Liability will not apply to Frame Relay Service. (N)

ADVANCED DATA SERVICES

C. FRAME RELAY SERVICE (FRS) - Continued

3. TERMS AND CONDITIONS - Continued

j. Application of Rates - Continued

(4) Term Payment Plan (TPP) - Continued

(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 Section 2.B.15 of this Product Guide, will apply.

(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.

ADVANCED DATA SERVICES

C. FRAME RELAY SERVICE (FRS) [1] - Continued (T)

3. TERMS AND CONDITIONS - Continued

j. Application of Rates - Continued

(5) Service Rearrangements - Continued

(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, nonrecurring 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, the move or relocation will be treated as a termination of the existing service and the establishment of a new service.

(e) Upgrade to Higher Speed Service

The customer may elect to upgrade service(s) to a higher speed during a TPP period without incurring termination liability[2], subject to the following conditions: (T)

- 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 provided at the same customer location as the discontinued service.

[1] Effective February 15, 2013, Frame Relay Service is grandfathered and is no longer available to new customers. Existing customers may maintain their service; however, term commitment plans may not be renewed. Moves or changes to subscribers' existing service are permissible, but the term commitment per circuit will not be extended. Upon expiration of the term commitment the service will lapse into a month-to-month service arrangement. (N)

[2] Effective February 15, 2013, Termination Liability will not apply to Frame Relay Service. (N)

ADVANCED DATA SERVICES

C. FRAME RELAY SERVICE (FRS) - Continued

3. TERMS AND CONDITIONS - Continued

j. Application of Rates - Continued

(5) Service Rearrangements - Continued

(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, nonrecurring 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, the move or relocation will be treated as a termination of the existing service and the establishment of a new service.

(e) Upgrade to Higher Speed Service

The customer may elect to upgrade service(s) to a higher speed during a TPP period without incurring termination liability, 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 provided at the same customer location as the discontinued service.

ADVANCED DATA SERVICES

C. FRAME RELAY SERVICE (FRS) [2] - Continued (T)

4. RATES

a. UNI Port and Access Line, each

	Nonrecurring Charge [1]	Monthly Rate
56 Kbps		
Month-to-Month	$ 595.00	$ 206.00
One Year	0.00	200.00
Three Years	0.00	188.00
Five Years	0.00	169.00
128 Kbps		
Month-to-Month	595.00	387.00
One Year	0.00	375.00
Three Years	0.00	351.00
Five Years	0.00	321.00
256 Kbps		
Month-to-Month	595.00	496.00
One Year	0.00	484.00
Three Years	0.00	454.00
Five Years	0.00	424.00
384 Kbps		
Month-to-Month	695.00	503.00
One Year	0.00	484.00
Three Years	0.00	454.00
Five Years	0.00	424.00
1.536 Mbps		
Month-to-Month	695.00	714.00
One Year	0.00	678.00
Three Years	0.00	636.00
Five Years	0.00	581.00

[1] Applies in lieu of service charges found elsewhere in this Product Guide or other Company Tariffs.

[2] Effective February 15, 2013, Frame Relay Service is grandfathered and is no longer available to new customers. Existing customers may maintain their service; however, term commitment plans may not be renewed. Moves or changes to subscribers' existing service are permissible, but the term commitment per circuit will not be extended. Upon expiration of the term commitment the service will lapse into a month-to-month service arrangement. (N)

ADVANCED DATA SERVICES

C. FRAME RELAY SERVICE (FRS) - Continued

4. RATES

a. UNI Port and Access Line, each

	Nonrecurring Charge [1]	Monthly Rate
56 Kbps		
Month-to-Month	$ 595.00	$ 206.00
One Year	0.00	200.00
Three Years	0.00	188.00
Five Years	0.00	169.00
128 Kbps		
Month-to-Month	595.00	387.00
One Year	0.00	375.00
Three Years	0.00	351.00
Five Years	0.00	321.00
256 Kbps		
Month-to-Month	595.00	496.00
One Year	0.00	484.00
Three Years	0.00	454.00
Five Years	0.00	424.00
384 Kbps		
Month-to-Month	695.00	503.00
One Year	0.00	484.00
Three Years	0.00	454.00
Five Years	0.00	424.00
1.536 Mbps		
Month-to-Month	695.00	714.00
One Year	0.00	678.00
Three Years	0.00	636.00
Five Years	0.00	581.00

[1] Applies in lieu of service charges found elsewhere in this Product Guide or other Company Tariffs.

ADVANCED DATA SERVICES

C. FRAME RELAY SERVICE (FRS) [2] - Continued (T)

4. RATES - Continued

a. UNI Port and Access Line, each - Continued

	Nonrecurring Charge [1]	Monthly Rate
4 Mbps		
Month-to-Month	$ 795.00	$3,872.00
One Year	0.00	3,751.00
Three Years	0.00	3,630.00
Five Years	0.00	3,509.00
6 Mbps		
Month-to-Month	795.00	3,993.00
One Year	0.00	3,872.00
Three Years	0.00	3,751.00
Five Years	0.00	3,630.00
10 Mbps		
Month-to-Month	795.00	4,235.00
One Year	0.00	4,114.00
Three Years	0.00	3,993.00
Five Years	0.00	3,751.00
22 Mbps		
Month-to-Month	795.00	4,598.00
One Year	0.00	4,356.00
Three Years	0.00	4,114.00
Five Years	0.00	3,872.00
44.736 Mbps		
Month-to-Month	795.00	5,082.00
One Year	0.00	4,719.00
Three Years	0.00	4,356.00
Five Years	0.00	3,993.00

[1] Applies in lieu of service charges found elsewhere in this Product Guide or other Company Tariffs.

[2] Effective February 15, 2013, Frame Relay Service is grandfathered and is no longer available to new customers. Existing customers may maintain their service; however, term commitment plans may not be renewed. Moves or changes to subscribers' existing service are permissible, but the term commitment per circuit will not be extended. Upon expiration of the term commitment the service will lapse into a month-to-month service arrangement (N) (N)

ADVANCED DATA SERVICES

C. FRAME RELAY SERVICE (FRS) - Continued

4. RATES - Continued

a. UNI Port and Access Line, each - Continued

	Nonrecurring Charge [1]	Monthly Rate
4 Mbps		
Month-to-Month	$ 795.00	$3,872.00
One Year	0.00	3,751.00
Three Years	0.00	3,630.00
Five Years	0.00	3,509.00
6 Mbps		
Month-to-Month	795.00	3,993.00
One Year	0.00	3,872.00
Three Years	0.00	3,751.00
Five Years	0.00	3,630.00
10 Mbps		
Month-to-Month	795.00	4,235.00
One Year	0.00	4,114.00
Three Years	0.00	3,993.00
Five Years	0.00	3,751.00
22 Mbps		
Month-to-Month	795.00	4,598.00
One Year	0.00	4,356.00
Three Years	0.00	4,114.00
Five Years	0.00	3,872.00
44.736 Mbps		
Month-to-Month	795.00	5,082.00
One Year	0.00	4,719.00
Three Years	0.00	4,356.00
Five Years	0.00	3,993.00

[1] Applies in lieu of service charges found elsewhere in this Product Guide or other Company Tariffs.

ADVANCED DATA SERVICES

C. FRAME RELAY SERVICE (FRS) [3] - Continued (T)

4. RATES - Continued

b. UNI Port Only [1], each

	Nonrecurring Charge [2]	Monthly Rate
56 Kbps		
Month-to-Month	$ 150.00	$ 61.00
One Year	0.00	58.00
Three Years	0.00	51.00
Five Years	0.00	45.00
128 Kbps		
Month-to-Month	150.00	107.00
One Year	0.00	101.00
Three Years	0.00	94.00
Five Years	0.00	83.00
256 Kbps		
Month-to-Month	150.00	167.00
One Year	0.00	160.00
Three Years	0.00	152.00
Five Years	0.00	140.00
384 Kbps		
Month-to-Month	150.00	212.00
One Year	0.00	204.00
Three Years	0.00	189.00
Five Years	0.00	172.00
1.536 Mbps		
Month-to-Month	295.00	327.00
One Year	0.00	315.00
Three Years	0.00	297.00
Five Years	0.00	276.00

1 Refer to 3.B.2. for the terms and conditions associated with Port Only digital access facilities.

2 Applies in lieu of service charges found elsewhere in this Product Guide or other Company Tariffs.

3 Effective February 15, 2013, Frame Relay Service is grandfathered and is no longer available to new customers. Existing customers may maintain their service; however, term commitment plans may not be renewed. Moves or changes to subscribers' existing service are permissible, but the term commitment per circuit will not be extended. Upon expiration of the term commitment the service will lapse into a month-to-month service arrangement (N) (N)

ADVANCED DATA SERVICES

C. FRAME RELAY SERVICE (FRS) - Continued

4. RATES - Continued

b. UNI Port Only [1], each

	Nonrecurring Charge [2]	Monthly Rate
56 Kbps		
Month-to-Month	$ 150.00	$ 61.00
One Year	0.00	58.00
Three Years	0.00	51.00
Five Years	0.00	45.00
128 Kbps		
Month-to-Month	150.00	107.00
One Year	0.00	101.00
Three Years	0.00	94.00
Five Years	0.00	83.00
256 Kbps		
Month-to-Month	150.00	167.00
One Year	0.00	160.00
Three Years	0.00	152.00
Five Years	0.00	140.00
384 Kbps		
Month-to-Month	150.00	212.00
One Year	0.00	204.00
Three Years	0.00	189.00
Five Years	0.00	172.00
1.536 Mbps		
Month-to-Month	295.00	327.00
One Year	0.00	315.00
Three Years	0.00	297.00
Five Years	0.00	276.00

1 Refer to 3.B.2. for the terms and conditions associated with Port Only digital access facilities.
2 Applies in lieu of service charges found elsewhere in this Product Guide or other Company Tariffs.

ADVANCED DATA SERVICES

C. FRAME RELAY SERVICE (FRS) [3] - Continued (T)

4. RATES - Continued

b. UNI Port Only [1], each - Continued

	Nonrecurring Charge [2]	Monthly Rate
4 Mbps		
Month-to-Month	$ 395.00	$ 1,059.00
One Year	0.00	999.00
Three Years	0.00	920.00
Five Years	0.00	847.00
6 Mbps		
Month-to-Month	395.00	1,089.00
One Year	0.00	1,029.00
Three Years	0.00	938.00
Five Years	0.00	878.00
10 Mbps		
Month-to-Month	395.00	1,120.00
One Year	0.00	1,059.00
Three Years	0.00	968.00
Five Years	0.00	908.00
22 Mbps		
Month-to-Month	395.00	1,150.00
One Year	0.00	1,089.00
Three Years	0.00	999.00
Five Years	0.00	938.00
44.736 Mbps		
Month-to-Month	395.00	1,210.00
One Year	0.00	1,120.00
Three Years	0.00	1,059.00
Five Years	0.00	968.00

1 Refer to 3.B.2. for the terms and conditions associated with Port Only digital access facilities.

2 Applies in lieu of service charges found elsewhere in this Product Guide or other Company Tariffs.

3 Effective February 15, 2013, Frame Relay Service is grandfathered and is no longer available to new customers. Existing customers may maintain their service; however, term commitment plans may not be renewed. Moves or changes to subscribers' existing service are permissible, but the term commitment per circuit will not be extended. Upon expiration of the term commitment the service will lapse into a month-to-month service arrangement (N) (N)

ADVANCED DATA SERVICES

C. FRAME RELAY SERVICE (FRS) - Continued

4. RATES - Continued

b. UNI Port Only [1], each - Continued

	Nonrecurring Charge [2]	Monthly Rate
4 Mbps		
Month-to-Month	$ 395.00	$ 1,059.00
One Year	0.00	999.00
Three Years	0.00	920.00
Five Years	0.00	847.00
6 Mbps		
Month-to-Month	395.00	1,089.00
One Year	0.00	1,029.00
Three Years	0.00	938.00
Five Years	0.00	878.00
10 Mbps		
Month-to-Month	395.00	1,120.00
One Year	0.00	1,059.00
Three Years	0.00	968.00
Five Years	0.00	908.00
22 Mbps		
Month-to-Month	395.00	1,150.00
One Year	0.00	1,089.00
Three Years	0.00	999.00
Five Years	0.00	938.00
44.736 Mbps		
Month-to-Month	395.00	1,210.00
One Year	0.00	1,120.00
Three Years	0.00	1,059.00
Five Years	0.00	968.00

1 Refer to 3.B.2. for the terms and conditions associated with Port Only digital access facilities.
2 Applies in lieu of service charges found elsewhere in this Product Guide or other Company Tariffs.

ADVANCED DATA SERVICES

C. FRAME RELAY SERVICE (FRS) [3] - Continued (T)

4. RATES

c. NNI Port Only [1], each

	Nonrecurring Charge [2]	Monthly Rate
384Kbps		
Month-to-Month	$150.00	$ 212.00
One Year	0.00	204.00
Three Years	0.00	189.00
Five Years	0.00	172.00
1.536 Mbps		
Month-to-Month	295.00	327.00
One Year	0.00	315.00
Three Years	0.00	297.00
Five Years	0.00	276.00
44.736 Mbps		
Month-to-Month	395.00	1,210.00
One Year	0.00	1,120.00
Three Years	0.00	999.00
Five Years	0.00	968.00

1 Refer to 3.B.2. for the terms and conditions associated with Port Only digital access facilities.

2 Applies in lieu of service charges found elsewhere in the Product Guide or other Company Tariffs.

3 Effective February 15, 2013, Frame Relay Service is grandfathered and is no longer available to new customers. Existing customers may maintain their service; however, term commitment plans may not be renewed. Moves or changes to subscribers' existing service are permissible, but the term commitment per circuit will not be extended. Upon expiration of the term commitment the service will lapse into a month-to-month service arrangement. (N)

ADVANCED DATA SERVICES

C. FRAME RELAY SERVICE (FRS) - Continued

4. RATES

c. NNI Port Only [1], each

	Nonrecurring Charge [2]	Monthly Rate
384Kbps		
Month-to-Month	$150.00	$ 212.00
One Year	0.00	204.00
Three Years	0.00	189.00
Five Years	0.00	172.00
1.536 Mbps		
Month-to-Month	295.00	327.00
One Year	0.00	315.00
Three Years	0.00	297.00
Five Years	0.00	276.00
44.736 Mbps		
Month-to-Month	395.00	1,210.00
One Year	0.00	1,120.00
Three Years	0.00	999.00
Five Years	0.00	968.00

1 Refer to 3.B.2. for the terms and conditions associated with Port Only digital access facilities.
2 Applies in lieu of service charges found elsewhere in the Product Guide or other Company Tariffs.

ADVANCED DATA SERVICES

C. FRAME RELAY SERVICE (FRS) [1] - Continued (T)

4. RATES - Continued

d. PVC CIR, per PVC

(1) Intrazone

	Monthly Rate
4 Kbps	$ 5.00
8 Kbps	7.00
16 Kbps	8.00
28 Kbps	9.00
32 Kbps	10.00
42 Kbps	13.00
48 Kbps	15.00
64 Kbps	19.00
96 Kbps	26.00
128 Kbps	33.00
192 Kbps	44.00
256 Kbps	51.00
288 Kbps	58.00
384 Kbps	65.00
512 Kbps	73.00
576 Kbps	79.00
768 Kbps	85.00
1152 Kbps	97.00
1536 Kbps	109.00

[1] Effective February 15, 2013, Frame Relay Service is grandfathered and is no longer available to new customers. Existing customers may maintain their service; however, term commitment plans may not be renewed. Moves or changes to subscribers' existing service are permissible, but the term commitment per circuit will not be extended. Upon expiration of the term commitment the service will lapse into a month-to-month service arrangement. (N)

ADVANCED DATA SERVICES

C. FRAME RELAY SERVICE (FRS) - Continued

4. RATES - Continued

d. PVC CIR, per PVC

(1) Intrazone

	Monthly Rate
4 Kbps	$ 5.00
8 Kbps	7.00
16 Kbps	8.00
28 Kbps	9.00
32 Kbps	10.00
42 Kbps	13.00
48 Kbps	15.00
64 Kbps	19.00
96 Kbps	26.00
128 Kbps	33.00
192 Kbps	44.00
256 Kbps	51.00
288 Kbps	58.00
384 Kbps	65.00
512 Kbps	73.00
576 Kbps	79.00
768 Kbps	85.00
1152 Kbps	97.00
1536 Kbps	109.00

ADVANCED DATA SERVICES

C. FRAME RELAY SERVICE (FRS) [2] - Continued (T)

4. RATES - Continued

d. PVC CIR, per PVC - Continued

(1) Intrazone - Continued

	Monthly Rate
2 Mbps	$ 116.00
3 Mbps	121.00
4 Mbps	145.00
5 Mbps	172.00
6 Mbps	198.00
7 Mbps	226.00
8 Mbps	251.00
9 Mbps	277.00
10 Mbps	303.00
11 Mbps	322.00
12 Mbps	341.00
13 Mbps	361.00
14 Mbps	380.00
15 Mbps	399.00
16 Mbps	419.00
17 Mbps	438.00
18 Mbps	458.00
19 Mbps	476.00
20 Mbps	496.00
21 Mbps	516.00
22 Mbps	535.00

(2) Multi-jurisdictional [1]

[1] A Multi-jurisdictional PVC falls under federal jurisdiction and the PVC CIR rates, rules and regulations from the Verizon Telephone Companies FCC Tariff No. 20 are applicable.

[2] Effective February 15, 2013, Frame Relay Service is grandfathered and is no longer available to new customers. Existing customers may maintain their service; however, term commitment plans may not be renewed. Moves or changes to subscribers' existing service are permissible, but the term commitment per circuit will not be extended. Upon expiration of the term commitment the service will lapse into a month-to-month service arrangement. (N) (N)

ADVANCED DATA SERVICES

C. FRAME RELAY SERVICE (FRS) - Continued

4. RATES - Continued

d. PVC CIR, per PVC - Continued

(1) Intrazone - Continued

	Monthly Rate
2 Mbps	$ 116.00
3 Mbps	121.00
4 Mbps	145.00
5 Mbps	172.00
6 Mbps	198.00
7 Mbps	226.00
8 Mbps	251.00
9 Mbps	277.00
10 Mbps	303.00
11 Mbps	322.00
12 Mbps	341.00
13 Mbps	361.00
14 Mbps	380.00
15 Mbps	399.00
16 Mbps	419.00
17 Mbps	438.00
18 Mbps	458.00
19 Mbps	476.00
20 Mbps	496.00
21 Mbps	516.00
22 Mbps	535.00

(2) Multi-jurisdictional [1]

[1] A Multi-jurisdictional PVC falls under federal jurisdiction and the PVC CIR rates, rules and regulations from the Verizon Telephone Companies FCC Tariff No. 20 are applicable.

ADVANCED DATA SERVICES

C. FRAME RELAY SERVICE (FRS) [1] - Continued (T)

4. RATES - Continued

d. PVC CIR, per PVC - Continued

(3) Public NNI

	Monthly Rate
4 Kbps	$ 17.00
8 Kbps	19.00
16 Kbps	20.00
28 Kbps	21.00
32 Kbps	22.00
42 Kbps	25.00
48 Kbps	28.00
64 Kbps	31.00
96 Kbps	36.00
128 Kbps	43.00
192 Kbps	48.00
256 Kbps	61.00
288 Kbps	67.00
384 Kbps	73.00
512 Kbps	85.00
576 Kbps	91.00
768 Kbps	97.00
1152 Kbps	109.00
1536 Kbps	128.00

[1] Effective February 15, 2013, Frame Relay Service is grandfathered and is no longer available to new customers. Existing customers may maintain their service; however, term commitment plans may not be renewed. Moves or changes to subscribers' existing service are permissible, but the term commitment per circuit will not be extended. Upon expiration of the term commitment the service will lapse into a month-to-month service arrangement. (N)

ADVANCED DATA SERVICES

C. FRAME RELAY SERVICE (FRS) - Continued

4. RATES - Continued

d. PVC CIR, per PVC - Continued

(3) Public NNI

	Monthly Rate
4 Kbps	$ 17.00
8 Kbps	19.00
16 Kbps	20.00
28 Kbps	21.00
32 Kbps	22.00
42 Kbps	25.00
48 Kbps	28.00
64 Kbps	31.00
96 Kbps	36.00
128 Kbps	43.00
192 Kbps	48.00
256 Kbps	61.00
288 Kbps	67.00
384 Kbps	73.00
512 Kbps	85.00
576 Kbps	91.00
768 Kbps	97.00
1152 Kbps	109.00
1536 Kbps	128.00

ADVANCED DATA SERVICES

C. FRAME RELAY SERVICE (FRS) [1] - Continued (T)

4. RATES

d. PVC CIR, per PVC - Continued

(3) Public NNI - Continued

	Monthly Rate
2 Mbps	$ 140.00
3 Mbps	152.00
4 Mbps	164.00
5 Mbps	194.00
6 Mbps	224.00
7 Mbps	254.00
8 Mbps	285.00
9 Mbps	315.00
10 Mbps	345.00
11 Mbps	375.00
12 Mbps	406.00
13 Mbps	436.00
14 Mbps	466.00
15 Mbps	496.00
16 Mbps	520.00
17 Mbps	545.00
18 Mbps	569.00
19 Mbps	593.00
20 Mbps	617.00
21 Mbps	641.00
22 Mbps	666.00

[1] Effective February 15, 2013, Frame Relay Service is grandfathered and is no longer available to new customers. Existing customers may maintain their service; however, term commitment plans may not be renewed. Moves or changes to subscribers' existing service are permissible, but the term commitment per circuit will not be extended. Upon expiration of the term commitment the service will lapse into a month-to-month service arrangement. (N) (N)

ADVANCED DATA SERVICES

C. FRAME RELAY SERVICE (FRS) - Continued

4. RATES

d. PVC CIR, per PVC - Continued

(3) Public NNI - Continued

	Monthly Rate
2 Mbps	$ 140.00
3 Mbps	152.00
4 Mbps	164.00
5 Mbps	194.00
6 Mbps	224.00
7 Mbps	254.00
8 Mbps	285.00
9 Mbps	315.00
10 Mbps	345.00
11 Mbps	375.00
12 Mbps	406.00
13 Mbps	436.00
14 Mbps	466.00
15 Mbps	496.00
16 Mbps	520.00
17 Mbps	545.00
18 Mbps	569.00
19 Mbps	593.00
20 Mbps	617.00
21 Mbps	641.00
22 Mbps	666.00

ADVANCED DATA SERVICES

C. FRAME RELAY SERVICE (FRS) [2] - Continued (T)

4. RATES - Continued

e. PVC CIR Optional Features, per PVC

(1) Interzone Transport [1]

	Monthly Rate
4 Kbps	$ 14.00
8 Kbps	15.00
16 Kbps	17.00
28 Kbps	18.00
32 Kbps	19.00
42 Kbps	22.00
48 Kbps	28.00
64 Kbps	33.00
96 Kbps	42.00
128 Kbps	47.00
192 Kbps	65.00
256 Kbps	80.00
288 Kbps	90.00
384 Kbps	100.00
512 Kbps	121.00
576 Kbps	127.00
768 Kbps	138.00
1152 Kbps	160.00
1536 Kbps	176.00

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

[2] Effective February 15, 2013, Frame Relay Service is grandfathered and is no longer available to new customers. Existing customers may maintain their service; however, term commitment plans may not be renewed. Moves or changes to subscribers' existing service are permissible, but the term commitment per circuit will not be extended. Upon expiration of the term commitment the service will lapse into a month-to-month service arrangement. (N) (N)

ADVANCED DATA SERVICES

C. FRAME RELAY SERVICE (FRS) - Continued

4. RATES - Continued

e. PVC CIR Optional Features, per PVC

(1) Interzone Transport [1]

	Monthly Rate
4 Kbps	$ 14.00
8 Kbps	15.00
16 Kbps	17.00
28 Kbps	18.00
32 Kbps	19.00
42 Kbps	22.00
48 Kbps	28.00
64 Kbps	33.00
96 Kbps	42.00
128 Kbps	47.00
192 Kbps	65.00
256 Kbps	80.00
288 Kbps	90.00
384 Kbps	100.00
512 Kbps	121.00
576 Kbps	127.00
768 Kbps	138.00
1152 Kbps	160.00
1536 Kbps	176.00

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

ADVANCED DATA SERVICES

C. FRAME RELAY SERVICE (FRS) [2] - Continued (T)

4. RATES - Continued

e. PVC CIR Optional Features, per PVC

(1) Interzone Transport [1]

	Monthly Rate
2 Mbps	$ 198.00
3 Mbps	215.00
4 Mbps	226.00
5 Mbps	267.00
6 Mbps	315.00
7 Mbps	362.00
8 Mbps	410.00
9 Mbps	458.00
10 Mbps	506.00
11 Mbps	552.00
12 Mbps	598.00
13 Mbps	645.00
14 Mbps	691.00
15 Mbps	737.00
16 Mbps	774.00
17 Mbps	812.00
18 Mbps	849.00
19 Mbps	887.00
20 Mbps	924.00
21 Mbps	956.00
22 Mbps	988.00

(2) Frame Relay to ATM Service Interworking — No Charge

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

[2] Effective February 15, 2013, Frame Relay Service is grandfathered and is no longer available to new customers. Existing customers may maintain their service; however, term commitment plans may not be renewed. Moves or changes to subscribers' existing service are permissible, but the term commitment per circuit will not be extended. Upon expiration of the term commitment the service will lapse into a month-to-month service arrangement. (N) (N)

ADVANCED DATA SERVICES

C. FRAME RELAY SERVICE (FRS) - Continued

4. RATES - Continued

e. PVC CIR Optional Features, per PVC

(1) Interzone Transport [1]

	Monthly Rate
2 Mbps	$ 198.00
3 Mbps	215.00
4 Mbps	226.00
5 Mbps	267.00
6 Mbps	315.00
7 Mbps	362.00
8 Mbps	410.00
9 Mbps	458.00
10 Mbps	506.00
11 Mbps	552.00
12 Mbps	598.00
13 Mbps	645.00
14 Mbps	691.00
15 Mbps	737.00
16 Mbps	774.00
17 Mbps	812.00
18 Mbps	849.00
19 Mbps	887.00
20 Mbps	924.00
21 Mbps	956.00
22 Mbps	988.00

(2) Frame Relay to ATM Service Interworking — No Charge

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

ADVANCED DATA SERVICES

C. FRAME RELAY SERVICE (FRS) [2] - Continued (T)

4. RATES - Continued

	Nonrecurring Charge [1]
f. Subsequent PVC CIR Charge, per PVC CIR	$ 40.00
g. Backup UNI, Per Activation	200.00
h. Software Change Charge, Per Order for UNI or Private NNI	40.00

[1] Applies in lieu of service charges found elsewhere in this Product Guide or other Company Tariffs.

[2] Effective February 15, 2013, Frame Relay Service is grandfathered and is no longer available to new customers. Existing customers may maintain their service; however, term commitment plans may not be renewed. Moves or changes to subscribers' existing service are permissible, but the term commitment per circuit will not be extended. Upon expiration of the term commitment the service will lapse into a month-to-month service arrangement. (N) (N)

ADVANCED DATA SERVICES

C. FRAME RELAY SERVICE (FRS) - Continued

4. RATES - Continued

	Nonrecurring Charge [1]
f. Subsequent PVC CIR Charge, per PVC CIR	$ 40.00
g. Backup UNI, Per Activation	200.00
h. Software Change Charge, Per Order for UNI or Private NNI	40.00

[1] Applies in lieu of service charges found elsewhere in this Product Guide or other Company Tariffs.

ADVANCED DATA SERVICES

D. VERIZON DEDICATED SONET RING (DSR)

1. APPLICATION

This section contains definitions, charges, terms and conditions applicable to the provision of Dedicated SONET Ring (DSR) Service furnished by the Company within the State of California, where conditions and facilities permit.

In addition to the terms and conditions set forth in this section, DSR is also subject to the provisions of tariff Schedule Cal. P.U.C. No. C-1, except that, in the event of conflict, the provisions of this section shall take precedence. DSR may be resold but no resale discount from the Company shall be required or shall apply.

Verizon Dedicated SONET Ring (DSR) is available where facilities and conditions permit in all existing Verizon exchanges as listed in Section 4A, Sheets 3 and 4. The Company concurs in all of the maps filed as part of Southwestern Bell Communications (SBC) Network and Exchange Services tariff, Schedule Cal. P.U.C. No. A5.1.A.

2. DEFINITIONS

In addition to the General Definitions set forth in Section 1, the following definitions apply:

Add/Drop Multiplexing, (ADM) - a multiplexing function that allows lower level signals to be added or dropped from an optical carrier channel.

Node - a DSR rate element and a designation of either a customer location or CO on a SONET ring that has ADM capability. It is also the address of where a lower speed service originates or terminates on a ring.

Fiber Path Diversity - the provision of service using at least two fibers placed on physically separate paths, i.e., different conduit runs that do not pass through the same manhole(s). The cable paths are separated by at least 25 feet.

GigE - an Ethernet circuit offered at the port level over DSR. Ethernet frames are mapped into STS1, STS-N, STS-Nv or STS-Nc SONET frames.

GigE Channel	Transport Bandwidth	Approximate Throughput	Effective SONET Payload Capacity
GigE-1	(1) STS1 or STS1-1v	50 Mbps	49.536 Mbps
GigE-3	(1) STS-3 or STS1-3v	150 Mbps	149.760 Mbps
GigE-6	(1) STS-6 or STS1-6v	300 Mbps	299.520 Mbps
GigE-9	(1) STS-9 or STS1-9v	450 Mbps	449.280 Mbps
GigE-12	(1) STS-12 or STS1-12v	600 Mbps	599.040 Mbps
GigE-24	(1) STS1-21v	1000 Mbps	984.960 Mbps
GigE-24	(1) STS-24	1000 Mbps	1,198.080 Mbps

ADVANCED DATA SERVICES

D. VERIZON DEDICATED SONET RING (DSR) - Continued

2. DEFINITIONS - Continued

Optical Carrier Rate, (OC #) - a SONET transmission signal/speed, line rate, or service. The rates are in multiples of an OC1, which is equivalent to a STS1 (51.84 Mbps), SONET's basic rate.

OC(#) Rate	Bandwidth Capacity
3	155.52 Mbps
12	622.08 Mbps
48	2.488 Gbps
192	9.952 Gbps

Optical Carrier Rate Concatenated (OC#c) - a "clear channel" SONET transmission using only one framing format. Generally, an OC3 signal provides three STS1 frame formats with 3 overheads for a total capacity of 2268 bytes per Synchronous Payload Envelope (SPE) frame. For example, in an OC3c signal, one STS3c frame format is used with one overhead, increasing the total payload capacity to 2340 bytes per SPE frame.

DSR Port (Port) - a DSR rate element that denotes the interface at which a lower speed service terminates or originates at a DSR node. The port charge applies both at the entrance to and the exit from the ring.

Port Node - An arrangement on a DSR that interconnects the main DSR ring with a subtending DSR ring.

Subtending Ring - A DSR service that subtends (interconnects with) a DSR main ring.

Synchronous Optical Network (SONET) - an international standard for the transmission of high capacity bandwidth over optical facilities. This synchronous transmission platform utilizes a modular multiplexing approach. Because of the large bandwidth, some of the payload is used to monitor, protect, manage and improve the transmission of the signal.

Synchronous Transport Signal Level (STS1) - a 51.84 Mbps signal that is the electrical equivalent of the OC1 or a DS3 with additional Mbps devoted to SONET overhead information. An STS1 can carry a DS3 or 28 DS1s when specifically formatted (mapped). These DS1s may be accessed off-ring using the tariffed DS3 to DS1 multiplexing optional service or via a DS3 Transmux port.

Transmuxing - the function of a DSR DS3 Transmux port that performs a DS3 to DS1 conversion at a DSR Node. The DS3 to DS1 conversion allows a single DSR DS3 Transmux port to be associated with up to twenty-eight (28) VT1.5 mapped DSR DS1 ports. Transmuxing within the DSR network retains DS1 visibility, allowing for proactive maintenance capability of DS1 signals.

Virtual Tributary (VT) - a SONET structure designed for transport of sub-STS1 payloads. A DS1 is mapped into the SONET format using a VT1.5 as a packaging mechanism that is internal to the SONET signal.

ADVANCED DATA SERVICES

D. VERIZON DEDICATED SONET RING (DSR) - Continued

3. TERMS AND CONDITIONS

a. Description of Service

Verizon Dedicated SONET Ring (DSR) is an optical high-capacity service using SONET-based technology.

DSR provides the customer a dedicated, high-capacity customized network. The network is a ring architecture that provides connectivity to multiple customer locations. Full rings may subtend (interconnect with) each other as described in D.3.c.(2) following.

A full ring must have a minimum of three nodes. At least one of the nodes must be located in a Company Central Office (CO) and one at a customer premises. The fiber path is such that when traversing the ring, the starting node and the end node are the same.

DSR is an alternative to basic High Capacity point-to-point service between multiple customer locations. Monthly rate elements include ports, nodes, mileage and optional features (e.g., Customer Network Management capabilities). Rates are specified in Section D.4 following.

b. Technical Specifications

Technical specifications are delineated in the following publications:

- Telcordia Document GR-253-CORE; Issue 2, December 1995; Revision 1, December 1997 "Synchronous Optical Network (SONET) Transport Systems: Common Generic Criteria;"

- Telcordia Document GR-1374-CORE; Issue 1, December 1994; "SONET Inter-Carrier Interface Physical Layer Generic Criteria for Carriers;"

- American National Standard, ANSI T1.105-1995; "Synchronous Optical Network (SONET) - Basic Description including Multiplex Structure, Rates and Formats;"

- Telcordia Document GR-1377-CORE; Issue 5, December 1998; “SONET OC192 Transport System Generic Criteria;”

- American National Standard, ANSI X3.802.3, Telecommunications and information exchange between systems-Local and Metropolitan Areas Networks-Specific Requirements-Part 3, Released 1998; and,

- American National Standard, ANSI X3.802.3z, Supplement to Standard for Information Technology-Local and Metropolitan Area Networks, Part 3, Released 1998.

ADVANCED DATA SERVICES

D. VERIZON DEDICATED SONET RING (DSR) - Continued

3. TERMS AND CONDITIONS - Continued

c. Provision of Service

(1) All Rings

When a customer premises node is located in the same building as a Central Office node, there may not be diversity between the two nodes.

Generally, a transmission of twenty (20) or more miles or a transmission through six (6) or more COs will be subject to loss of signal integrity. Additional nodes may be added to maintain signal integrity.

The customer specifies the ring capacity in terms of optical carrier rates. DSR is available in capacities of OC3, OC12, OC48 and OC192. Lower speed services are provided between nodes via ports.

DSR is deployed upon customer request, and is available based on negotiated installation intervals. Where suitable SONET facilities are not available, Special Construction rates and charges may apply.

The customer must provide, at no cost to the Company, suitable and secure space, suitable environmental conditions**,** and uninterrupted power supply, building entrance facilities, and conduit for placement of the facilities and network equipment at its locations as necessary to provide the service.

The customer will be billed additional charges for any charges levied to the Company for space and power required to place ADMs on the Company's side of the network interface.

The customer may provide a single node and associated port equipment at one of its premises subject to compatibility with the Company's equipment in the COs. This compatibility requires that the customer, at its own expense, uses matching vendor's equipment and maintains the same vintage in software release as the Company. Upon written notification from the Company, the customer has 60 days in which to complete the change out of software. In addition, the customer must configure the node to limit access to the data communications channel of the node.

The Company cannot ensure the performance monitoring of the ring when it is equipped with customer provided nodes.

One or more lower speed node(s) may subtend a higher speed node (e.g., an OC12 node may subtend an OC192 node). Rates and charges apply for both the higher speed node and for each subtending lower speed node provided. Additionally, the appropriate port charge will apply to connect the higher speed node to the subtending lower speed node.

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ADVANCED DATA SERVICES

D. VERIZON DEDICATED SONET RING (DSR) - Continued

3. TERMS AND CONDITIONS - Continued

c. Provision of Service

(1) All Rings- Continued

More than one lower speed enhanced node may subtend the same higher speed enhanced node.

The connection between the higher and lower speed nodes is a SONET facility (Subtending Node Facility) between an OCn port on the higher speed node and the lower speed node. OCn ports arranged in this asymmetrical configuration are provided in accordance with D.3.c(2) following and must be of the same optical carrier rate as the OCn port on the higher speed node.

When the higher speed enhanced node is located at a customer designated premises, the subtending node(s) must be located at the same customer designated premises

When the higher speed enhanced node is located at a Company wire center, the subtending node(s) may be located within that same wire center or extended to a customer designated premises that is served by that wire center or by a different wire center. When extending the subtending node to a customer designated premises, the SNF is subject to a channel extension charge. When the customer designated premises is not served by the same wire center where the higher speed enhanced node is located, mileage applies between the wire centers involved. Mileage applies in addition to the channel extension charge.

When High Capacity DS1 and DS3 services from Schedule Cal. P.U.C. No. C-1, or the Company's FCC Tariffs No. 14 or No. 16, are connected to a DSR from an off-ring location, applicable port charges will be assessed in lieu of SALs for the on-ring portion of the circuit. The off-ring portion of the circuit will be covered by the applicable rates, terms and conditions of Schedule No. C-1, FCC No. 14 or FCC No. 16. The applicable rates, terms and conditions are based on the tariff jurisdiction of the circuit.

ADVANCED DATA SERVICES

D. VERIZON DEDICATED SONET RING (DSR) - Continued

3. TERMS AND CONDITIONS - Continued

c. Provision of Service - Continued

(1) All Rings - Continued

Ethernet services are provided on a point-to-point basis between two suitably equipped DSR nodes.

Connection of ethernet or optical private line services to a DSR will be provided on an Individual Case Basis (ICB). When connected to a DSR, such services will be charged as ports and will be subject to terms and conditions in Section D.3.c.(5) following.

When DSR is ordered under a meet point billing arrangement in which the Company acts as an intermediate carrier as set forth in the Company's FCC Tariff No. 14, at least one node of the DSR ring must be in a Company central office.

The rates, terms and conditions contained in this section for the provision of DSR are applicable to customers whose interstate traffic on the service constitutes 10% or less of the total traffic on that service.

With the order for DSR service, the customer will provide to the Company an estimate of whether the interstate traffic will comprise more than 10%, or less than 10% of total traffic. For existing services, the Company will ask the customer to provide the data the customer uses to determine the percentages of the jurisdiction of their services. See Schedule Cal. P.U.C. No. C-1, Section VI for conditions.

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

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

(2) Subtending Rings

The customer may interconnect two or more full rings in a subtending ring configuration subject to the following:

(a) One of the DSR full rings must be designated as the main ring from which the other DSR full ring(s) will subtend. The main ring must be of equal or greater capacity than each DSR full ring that subtends the main ring. For example, a main ring that is an OC12 DSR can have an OC3 and/or OC12 subtending ring but cannot have an OC48 subtending ring. The number of rings that can subtend a main ring may be limited by the type and capacity of the nodes and port configuration specific to the customer’s overall DSR service configuration.

ADVANCED DATA SERVICES

D. VERIZON DEDICATED SONET RING (DSR) - Continued

3. TERMS AND CONDITIONS - Continued

c. Provision of Service - Continued

(2) Subtending Rings - Continued

(b) Interconnection between the main ring and the subtending ring requires a port node. A port node provides high speed interconnection between an enhanced node on the main ring and the high speed facilities of the subtending ring. Each subtending ring requires one port node where the subtending ring is interconnected to an enhanced node on the main ring. Interconnection between the main ring and a subtending ring may occur at a customer designated premises or within a Company wire center where such nodes are located. A maximum of two (2) interconnection points with the main ring are allowed per subtending ring.

(c) Only DSR full rings that utilize suitably equipped enhanced nodes can be arranged in subtending ring configurations. DSR full rings that utilize nodes that are not enhanced will not be arranged in a subtending ring configuration(s).

(d) Each DSR full ring included in a subtending ring configuration must be arranged as a unidirectional path switched ring (UPSR) and must use nodes that are enhanced. Bidirectional path switched rings (BLSR) may not be arranged in subtending ring configurations.

(e) Where two (2) points of interconnection between the subtending ring and the main ring are provided, circuits originating on the main ring may be mapped to the subtending ring and circuits originating on the subtending ring may be mapped to the main ring. Channels mapped across the two interconnecting nodes are subject to Dual Node Cross-connect Channel Mapping charges as described in (I) following.

(f) The main ring and any subtending rings associated with the main ring must individually meet the minimum requirement of three nodes. However, only one node for the entire service configuration must be located in a Company wire center. For example, if the main ring has one node located in a Company wire center and two nodes located at customer designated premises, the subtending ring(s) need not have a node that is located in a Company wire center.

i. When determining if the minimum number of nodes on a subtending ring has been met, the port node providing interconnection to the main ring is included in the count.

ii. When determining if the minimum number of nodes on a subtending ring has been met, the enhanced node on the main ring that interconnects with the subtending ring is not included in the count.

ADVANCED DATA SERVICES

D. VERIZON DEDICATED SONET RING (DSR) - Continued

3. TERMS AND CONDITIONS - Continued

c. Provision of Service - Continued

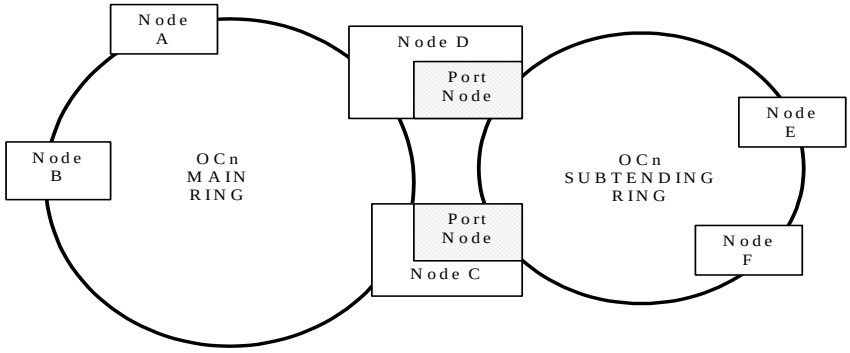
(2) Subtending Rings - Continued

(g) Each subtending ring may only interconnect with one main ring.

(h) Subtending ring configurations may be established using new DSR full rings, existing DSR full rings, or a combination of new and existing DSR full rings.

(i) All DSR rings in the same subtending ring configuration must be for the same customer of record.

(j) An example of a subtending ring configuration with two (2) points of interconnection to the main ring is diagrammed below:



Applicable rate elements:

- Nodes (6)
- Port Node (2)
- Mileage for circumference of Main Ring
- Mileage for circumference of Subtending Ring

ADVANCED DATA SERVICES

D. VERIZON DEDICATED SONET RING (DSR) - Continued

3. TERMS AND CONDITIONS - Continued

c. Provision of Service - Continued

(2) Subtending Rings - Continued

(k) Lower speed services provided over DSR must ingress at a node on either ring (the main ring or the subtending ring) and egress DSR at a node on either ring (the subtending ring or the main ring). A single port charge applies at the point of ingress and a single port charge applies at the point of egress, unless the ingress and/or egress occurs via an asymmetrical port facility, in which case a separate port charge will not apply for each such ingress or egress.

(l) At the customer's option, a lower level service may interconnect the main and one or more of the subtending rings through two separate points of interconnection with each subtending ring. In this case, a Dual Node Cross-connect Charge applies per lower level service provided across the two interconnecting port nodes, regardless of the number of subtending rings involved. The Dual Node Cross-connect Charge does not apply when a lower level service interconnects the main and subtending rings through a single point of interconnection.

(m) In the event that the customer elects to remove the subtending arrangement ring configuration and make the subtending ring a full DSR that is independent from the main ring, the independent ring must meet all of the requirements for a DSR full ring as set forth in D.3.c.(1) preceding. This may require the addition of an additional node in order to satisfy the minimum node requirement for a single, independent ring.

(3) Mileage

DSR Mileage on a full ring is the total of airline miles between nodes rounded up to the nearest mile.

The mileage rate is based on total ring capacity and not on individual services between nodes. For example, the mileage charge for a four-node OC3 ring with 5.1 miles between each node (20.4 total miles) would be calculated by multiplying the OC3 mileage rate by 21 miles. This mileage calculation applies regardless of the number of services (e.g., DS3s) on the ring.

(4) Port Node

A port node allows interconnection between two full DSR rings. One of the rings will be designated as the main ring and the other ring is designated as a subtending ring.

ADVANCED DATA SERVICES

D. VERIZON DEDICATED SONET RING (DSR) - Continued

3. TERMS AND CONDITIONS - Continued

c. Provision of Service - Continued

(5) DSR Ports

When a lower capacity service is provided between two separate asymmetric port facilities (APF) on the same DSR, the Company must map the facility assignment on the first APF to the facility assignment on the second APF for which an Asymmetrical Port Mapping Nonrecurring Charge applies per lower capacity service mapped.

When a customer transmits STS1, the mapping feature must be designated. The customer must indicate mapping of either individual STSs or concatenated STSs on the ASR.

Ethernet services are provided on a point-to-point basis between two suitably equipped DSR nodes.

Extended Superframe Format (ESF) is required on all DS1 circuits.

Ports may be ordered in a symmetrical arrangement (e.g., DS3 Port to DS3 Port), an asymmetrical arrangement (see table following) or in certain transmuxing arrangements as specified following.

When DS3 transmuxing arrangements are ordered, the following conditions apply:

- The DS3 Transmux Port may connect to Special Access DS3 service as specified in Schedule Cal. P.U.C. No. C-1, FCC No. 14, and FCC No. 16 for Special Access.

- The DS3 Transmux Port performs a DS3 to a DS1 conversion at a DSR node. The DS3 to DS1 conversion allows a single DSR DS3 Transmux port (which includes a DS3 Transmux Facility to which the DS1 circuits are mapped) to be a facility associated with up to twenty-eight (28) VT1.5 mapped DSR DS1 circuits.

- A DS1 port associated with a DS3 Transmux port may not coexist as a separate DS1 port within the same DSR node.

- An end-to-end DS1 service provided over DSR may not be associated with more than one DS3 Transmux port.

- DS3 Transmux ports are available at customer premises nodes only.

- DS3 Transmux Ports utilize a DS3 Transmux Facility to which VT1.5 mapped DS1 services are associated. Such DS1 services will be provisioned after ordering the associated DS3 Transmux port facility. Transmuxing is only available where suitable facilities and equipment exist to provide the DS3 Transmux Port.

ADVANCED DATA SERVICES

D. VERIZON DEDICATED SONET RING (DSR) - Continued

3. TERMS AND CONDITIONS - Continued

c. Provision of Service - Continued

(5) DSR Ports - Continued

Asymmetrical ports allow lower level services to be added to, and dropped from DSR, using ports with different transmission rates. For example, a DS1 channel can be added to the ring via a DS3 port and dropped from the ring via a DS1 port. These lower level services may originate and/or terminate at locations that are on or off of the DSR.

For OCn ports, the port with the higher transmission rate provides a facility (Asymmetrical Port Facility or APF, also referred to as a Stub Hub) which is channelized to individual services requiring lower capacity facilities and lower capacity ports. Only one such higher transmission rate OCn port applies per asymmetrical port facility. The number of lower capacity services that can utilize the same APF is limited by the total STS1 capacity of the connecting services. Available transmission rates for the APF are dependent on the capacity of the port to which it is connected. For example, an OC12 APF cannot be established on an OC3 Port. Additionally, the capacity of the port is dependent on the capacity of the node involved.

The APF provides a two-point channelized facility between a customer designated premises or Expanded Interconnection arrangement and the higher transmission rate port of the asymmetrical port combination. Such port may be associated with a node that is located at either the customer designated premises or within a Company wire center.

(a) When the APF is located at the customer's designated premises, the APF facility is provided between the customer's designated premises and the port on the associated node located at that same premises. Rates and charges for the port apply in accordance with the terms and conditions set forth in D.3.e., following.

(b) When the APF is located in a Company wire center and the APF connects to a customer designated premises that is served by the same wire center, an asymmetrical port channel extension applies to extend the APF to the customer designated premises. Rates and charges for the asymmetrical port channel extension apply in addition to the rates and charges for the port under D.4, following.

(c) When the APF is located in a Company wire center and the APF connects to a customer designated premises that is served by a different wire center, an asymmetrical port channel extension and mileage applies to extend the APF to the customer designated premises. Rates and charges for the asymmetrical port channel extension and mileage apply in addition to the rates and charges for the port under D.4, following.

ADVANCED DATA SERVICES

D. VERIZON DEDICATED SONET RING (DSR) - Continued

3. TERMS AND CONDITIONS - Continued

c. Provision of Service - Continued

(5) DSR Ports - Continued

Asymmetrical ports are available in the following combinations:

Ring Capacity	Node Speeds	APF Rate	Asymmetrical Port Combination
OC3 DSR Ring	OC3 – OC3	STS1	STS1 – DS3 STS1 – DS1
OC12 DSR Ring	OC12 – OC12	OC3	OC3 – STS1 OC3 – DS3 OC3 – DS1 OC3 – GigE3 OC3 – GigE1
OC48 DSR Ring	OC48 – OC48	OC12	OC12 – OC3 OC12 – OC3c OC12 – STS1 OC12 – DS3 OC12 – DS1 OC12 – GigE12* OC12 – GigE9* OC12 – GigE6* OC12 – GigE3* OC12 – GigE1*
		OC3	OC3 – STS1 OC3 – DS3 OC3 – DS1 OC3 – GigE3* OC3 – GigE1*

* For Ethernet (GigE) port options, the associated Ethernet Service must be SONET mapped.

ADVANCED DATA SERVICES

D. VERIZON DEDICATED SONET RING (DSR) - Continued

3. TERMS AND CONDITIONS - Continued

c. Provision of Service - Continued

(5) DSR Ports - Continued

Asymmetrical ports - Continued

Ring Capacity	Node Speeds	APF Rate	Asymmetrical Port Combination
OC192 DSR Ring	OC192 – OC192	OC48	OC48 – OC12 OC48 – OC12c OC48 – OC3 OC48 – OC3c OC48 – STS1 OC48 – DS3 OC48 – DS1* OC48 – GigE24* OC48 – GigE12* OC48 – GigE9* OC48 – GigE6* OC48 – GigE3* OC48 – GigE1*
		OC12	OC12 – OC3 OC12 – OC3c OC12 – STS1 OC12 – DS3 OC12 - DS1* OC12 – GigE12* OC12 – GigE9* OC12 – GigE6* OC12 – GigE3* OC12 – GigE1*
		OC3	OC3 – STS1 OC3 – DS3 OC3 – DS1* OC3 – GigE3* OC3 – GigE1*

* For Ethernet (GigE) port options, the associated Ethernet Service must be SONET mapped.

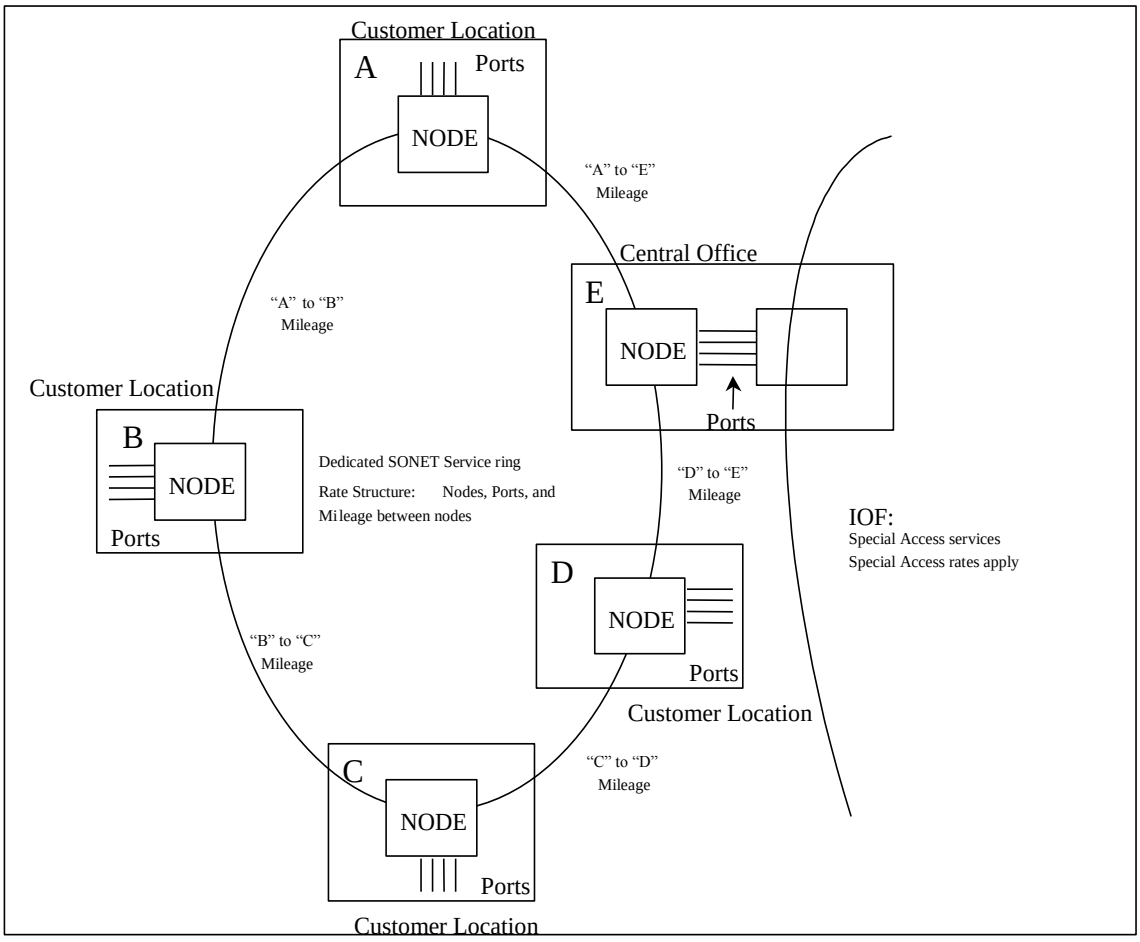
ADVANCED DATA SERVICES

D. VERIZON DEDICATED SONET RING (DSR) - Continued

3. TERMS AND CONDITIONS - Continued

c. Provision of Service - Continued

(6) An example of an Verizon Dedicated SONET Ring (DSR) ring is diagrammed below:



ADVANCED DATA SERVICES

D. VERIZON DEDICATED SONET RING (DSR) - Continued

3. TERMS AND CONDITIONS - Continued

d. Optional Feature - Customer Network Management

(1) Description of Service

The customer has the option of purchasing Customer Network Management for use with DSR service provided by the Company. In order to purchase an Optional Feature, the customer must be subscribed to a DSR service and must use such DSR service in conjunction with the selected Optional Feature.

Optional Feature Customer Service Management (CSM) provides a customer with real-time information about the operational status of its DSR network and the ability to reconfigure lower level services riding the DSR ring. Three (3) Service Levels of support are offered for CSM. Each Service Level provides different functionalities to which the customer may gain access. These functionalities are described in the following paragraphs, and include access to real-time information about the customer's DSR network, the ability to generate reports, and the ability to reconfigure lower level services riding the DSR ring.

(2) Provision of Service

The customer must utilize Internet web access to connect its customer-provided terminal equipment to the Company's CSM management system. Access to the Internet and any associated rates and charges are the responsibility of the customer. The customer is also responsible for obtaining communications software that is compatible with the software the Company utilizes to provide CSM. The Company will work cooperatively with the customer to determine compatibility of its communications software.

CSM may be installed at the same time as the associated DSR ring or may be added to an existing ring, subject to the provisions set forth in D.3.d(3), Application of Rates and Charges.

The customer may subscribe to CSM only if the Company provides all nodes on the ring.

When ordering CSM, the customer must specify the level of CSM support as one of the following three (3) Service Levels.

Level 1 support provides a network view of real-time detection and reporting of network alarm conditions within the customer's DSR network.

Level 2 support provides the same support described in Level 1 along with the ability for the customer to generate basic network performance reports for its DSR network. Basic reports are available at no additional charge to the customer. The customer may also request network performance reports that are customized to meet their specific needs. Rates and charges for customized reports are provided on an individual case basis (ICB) only.

ADVANCED DATA SERVICES

D. VERIZON DEDICATED SONET RING (DSR) - Continued

3. TERMS AND CONDITIONS - Continued

d. Optional Feature - Customer Network Management - Continued

(2) Provision of Service - Continued

Level 3 support provides the same support described in Levels 1 and 2 along with the ability to reconfigure (re-map) the end points of lower level services riding the ring.

Reconfiguration using CSM consists of re-mapping the end point of a primary circuit to its preplanned (backup) port location. The customer must specify a preplanned port location for each primary circuit installed. The preplanned port location is a backup location that is activated and de-activated when a primary circuit is reconfigured at the request of the customer via the CSM platform. A reconfiguration is limited to the mapping of one primary circuit to its assigned preplanned location. For each pre-planned port location, a monthly recurring rate and a nonrecurring installation charge apply per port.

A Company Performed Reconfiguration charge will apply when the customer requests that the Company perform a reconfiguration of service on its behalf. This charge does not apply when a customer performs its own service reconfiguration.

Reconfiguration is not permitted on services arranged in the following service configurations:
Switched Access Service;
Service provided under a shared use arrangement;
Service associated with CentraNet-CO or Primary Rate ISDN service; or
Primary circuits for which the customer has not specified a preplanned backup location.

The type of nodes deployed within the DSR network may limit reconfiguration capability.

When CSM is added to an existing ring, the customer must designate which existing circuits are being made reconfigurable. Nonrecurring charges as set forth in D.4.e will apply. The Company's ability to provide CSM on a particular ring may be limited by the overall configuration of that ring. Reconfiguration is limited to those circuits that originate and/or terminate on the ring (i.e., at locations served by a node on the ring) and utilize ports that are symmetrical. For circuits that originate or terminate off the ring (i.e., at locations not served by a node on the ring), the reconfiguration is limited to customer premises node locations on the ring.

(3) Application of Rates and Charges

CSM rates and charges apply in addition to any applicable DSR rates and charges. Unless otherwise indicated below, CSM rates and charges apply regardless of the Service Level selected by the customer.

ADVANCED DATA SERVICES

D. VERIZON DEDICATED SONET RING (DSR) - Continued

3. TERMS AND CONDITIONS - Continued

d. Optional Feature - Customer Network Management - Continued

(3) Application of Rates and Charges - Continued

Monthly Recurring Charges

A CSM Service Level rate applies for each DSR ring provided with CSM.

For customers subscribing to Service Level 3 support, a preplanned port rate applies in addition to the DSR port rate for each preplanned port location established.

Nonrecurring Charges

A Node Setup charge applies for each node that is equipped with CSM at the time that CSM is initially established on the ring.

An Initial CSM Setup charge applies for establishment of the customer's initial CSM database partition. The initial CSM database partition includes setup for up to six (6) users. A database partition is a dedicated portion of the CSM platform that can only be accessed by a specific set of users designated by the customer.

A Setup of Additional Partition or Change in CSM Service Level charge applies for the setup of an additional CSM database partition created for the same customer or to change from one CSM service level to another (e.g., change Service Level 2 to Service Level 3). Each additional CSM database provides for the setup of up to six (6) additional users.

A Setup of Additional Users charge applies for the setup of up to six (6) additional users beyond those provided with the initial database setup when CSM is initially established on the ring.

An Add/Remove Node charge applies for each node that is subsequently added to, or removed from, a ring that has already been equipped to provide CSM.

A Company Performed Reconfiguration charge applies for Service Level 3 customers only when the customer requests that the Company perform a reconfiguration based on its pre-mapping instructions.

A Consultation and Support charge applies for each thirty (30) minutes or fraction thereof that the customer requests Company consultation and support of its CSM network. This charge does not apply during initial setup of CSM on the ring.

A Preplanned Port charge applies for Service Level 3 customers only for each preplanned port location that is established during the initial establishment of CSM on the ring.

ADVANCED DATA SERVICES

D. VERIZON DEDICATED SONET RING (DSR) - Continued

3. TERMS AND CONDITIONS - Continued

d. Optional Feature - Customer Network Management - Continued

(3) Application of Rates and Charges - Continued

CSM Service Level is provided under a term plan of 3 years or 5 years.

The duration of the term plan for CSM Service Level must be the same duration as the term plan for the DSR nodes provided with CSM.

The customer has the option of subscribing to Preplanned Ports on a month-to-month basis or under a term plan of 3 or 5 years. At the expiration of its 3- or 5-Year term plans for CSM Service Levels or Preplanned Ports, the customer has the option of extending CSM Service Level or Preplanned Ports with a coterminous end date.

The expiration date of each CSM Service Level added subsequent to the initial installation must be coterminous to the expiration date of the associated DSR service, provided that the addition is prior to the 21st month for a 3-Year plan, or prior to the 36th month for a 5-Year plan. A CSM added after the aforementioned periods requires extension of the commitment period for the associated DSR service. Such extension results in the establishment of a new plan that includes both the DSR and the CSM under the same plan with the same expiration date.

CSM is subject to termination liability if CSM is removed prior to completion of the existing commitment period. The terms and conditions in D.3.e(3) following, apply to removal of CSM prior to completion of the existing commitment period.

ADVANCED DATA SERVICES

D. VERIZON DEDICATED SONET RING (DSR) - Continued

3. TERMS AND CONDITIONS - Continued

e. Application of Rates and Charges

(1) Commitment Periods

DSR is available for 3 or 5-year term commitment periods. Ports and asymmetrical port facilities are also available on a month-to-month basis. Ports, nodes, port nodes, optional features, subtending node facilities, and asymmetrical port facilities added subsequent to the initial installation may be coterminous to the expiration date of the DSR provided the addition is prior to the 21st month for a 3-year plan, or prior to the 36th month for a 5-year plan. Ports, nodes, port nodes, optional features, subtending node facilities, and asymmetrical port facilities added after the aforementioned periods require extending the commitment period for an additional one-year for a 3-year plan, or an additional 2 years for a 5-year plan. Ports and asymmetrical port facilities in a month-to-month plan may be added at anytime. The added nodes must be at the same or lower speed as the existing nodes.

Monthly recurring rates apply for the ports, port nodes, nodes, mileage, optional features, subtending node facilities and asymmetrical port facilities. Once a term period expires, the rates of the customer's existing plan will continue until the customer cancels service or requests a new term plan.

(2) Nonrecurring charges for DSR apply as follows:

(a) First and Additional charges apply for the initial installation of ports provided on a Month-to-Month term. The First Nonrecurring Charge applies to the first of each port type and speed installed at a node. The Additional Nonrecurring Charge applies for each additional port of the same type and same speed added at the same node on the same order. For example, if a customer places an order for (10) GigE3 Ports at the same OC48 node, one First Nonrecurring Charge and nine Additional Nonrecurring Charges will apply for the GigE3 Ports. A port is charged at each location.

(b) First and Additional charges apply for the subsequent installation of all ports (whether on a Month-to-Month term or a term pricing plan).

(c) Subsequent installation of a node or port node.

(d) Installation of a CSM optional feature. These charges are described in D.3.d(3).

(e) An Asymmetrical Port Mapping nonrecurring charge applies for each channel which the Company must map across two separate asymmetrical port facilities on the same DSR. These charges are set forth in D.4 following.

ADVANCED DATA SERVICES

D. VERIZON DEDICATED SONET RING (DSR) - Continued

3. TERMS AND CONDITIONS - Continued

e. Application of Rates and Charges - Continued

(2) Nonrecurring charges - Continued

(f) A Dual Node Cross-connect Charge applies per lower level service provided across the interconnecting port nodes of a subtending ring(s) configuration, regardless of the number of subtending rings involved. Dual Node Cross-connect charges as set forth in D.4 following apply for each channel which the Company must cross-connect between the two port nodes of the interconnecting ring(s).

Changes in Month-to-Month billed ports, port nodes, and asymmetrical port facilities are treated as disconnects and subsequent installations.

When a lower capacity service is dropped from a DSR, the associated ports will be billed to the lower capacity service. Lower capacity services may not be dropped at locations utilizing a pass-through interface. However, a Channel Mapping charge will apply for each lower capacity service that originates at and terminates to devices that are not within the partial ring provided by the Company. The Channel Mapping Charge is billed to the lower capacity service.

When a lower capacity service is provided between two separate asymmetric port facilities (APF) on the same DSR, the Company must map the facility assignment on the first APF to the facility assignment on the second APF for which an Asymmetrical Port Mapping Nonrecurring Charge applies per lower capacity service mapped.

For Storage Interface Ports purchased on a month-to-month basis, nonrecurring charges apply to the installation of ports on a first and additional basis regardless of whether the installation of such Storage Interface Port is in connection with the initial or subsequent installation of DSR.

Where an Ethernet signal is mapped to a SONET service, and that SONET service is provided in a symmetrical port arrangement, two OCn ports apply (one where the mapped signal enters the ring and one where the mapped signal exits the ring).

Where one or more Ethernet signals are mapped to a SONET service, and that SONET service utilizes an asymmetrical port combination (e.g., the signals enter the ring mapped to an OC12 SONET service and exit the ring via an OC48 port associated with an asymmetrical port facility), only one OCn port applies per mapped signal to enter the ring and the signal exits the ring over the asymmetrical port facility. The total number of such mapped Ethernet signals that can be associated with the OCn Port of the asymmetrical port facility is limited by the STS1 capacity required to map each signal into the SONET service. For example, assume that an OC48 APF is ordered for which an OC48 port, OC48 mileage, and, when applicable, an OC48 Extension applies (an OC48 has a capacity of 48 STS1s).

ADVANCED DATA SERVICES

D. VERIZON DEDICATED SONET RING (DSR) - Continued

3. TERMS AND CONDITIONS - Continued

e. Application of Rates and Charges - Continued

(3) Termination Liability

Unless otherwise set forth in this section, termination liability will apply if the customer terminates DSR service or a Customer Network Management Optional Feature prior to the expiration of the selected term commitment period. Termination liability, as set forth in Section 2.B.15 of this Product Guide, is charged per monthly rate element on all nodes, ports (other than month-to-month billed ports for which the one month minimum service charge applies), port nodes, optional features, subtending node facilities, and asymmetrical port facilities. A separate termination liability charge is assessed for each rate element associated with the disconnected DSR or Customer Network Management Optional Feature.

DSR service or a Customer Network Management Optional Feature may be canceled without termination liability when cancellation of the service occurs within thirty (30) days of the effective date of a Company initiated rate increase of eight percent (8%) or more on any rate applicable to DSR service or a Customer Network Management Optional Feature.

ADVANCED DATA SERVICES

D. VERIZON DEDICATED SONET RING (DSR) - Continued

3. TERMS AND CONDITIONS - Continued

e. Application of Rates and Charges - Continued

(3) Termination Liability - Continued

Termination liability will not apply for any DSR service or Customer Network Management Optional Feature if a customer changes to a longer-term commitment period for the same service, or upgrades to a higher capacity DSR service [1], if all of the following conditions are met: [2]

a) A new commitment period commences with the upgrade.

b) The new expiration date must extend beyond the discontinued plan date.

c) The upgrade consists of either one (1) DSR being upgraded to a higher capacity DSR, or two (2) existing DSR being upgraded into a single, higher capacity DSR.

d) The new DSR has at least one customer premises node and one CO node in common with the discontinued DSR.

e) When two (2) existing DSR are being upgraded into a single, higher capacity DSR, the aggregate amount of all monthly charges for the nodes and ports included under the new commitment period is at least 25% greater than the aggregate amount of the monthly charges remaining in the commitment period for the nodes and ports being disconnected.

(4) Moves of Service

A customer can move a node (customer node or CO node) from one location to another location without incurring termination liability providing that all of the following conditions are met:

a) A new commitment period commences with the move.

b) The new expiration date must extend beyond the discontinued plan date.

c) The customer accepts a temporary interruption of the existing service in order to establish the new service.

d) The new service is ordered at the same time as the order for disconnection is received.

e) A nonrecurring charge will apply to install the node at each new location added to the DSR.

1 Upgrades are further subject to the terms and conditions set forth in D.3.e.1 preceding.
2 These conditions do not apply to Customer Network Management Optional Features.

ADVANCED DATA SERVICES

D. VERIZON DEDICATED SONET RING (DSR) - Continued

3. TERMS AND CONDITIONS - Continued

e. Application of Rates and Charges - Continued

(5) Conversions of Service

Customers who wish to convert existing point-to-point services (e.g. High Capacity DS1 and DS3 services, Custom Connect services) to the Company's DSR may do so without conversion charges (termination liability for the existing service) as long as the total capacity of services purchased by the customer does not decrease.

(6) Extension of a Commitment Period

For DSR, the customer also has the option, within sixty (60) days prior to the expiration date of the commitment period, to extend the expiring term plan to a plan with a longer commitment period. The commitment period selected for the extended plan must be longer than the commitment period of the expiring plan, i.e., an expiring 3-Year Term may be extended to a 5-Year Term Plan.

Time-in-service credit on the expiring plan will be granted and applied towards the new extended plan. For example, an expiring 3-Year term plan will allow for 3 years of time-in-service credit towards a 5-Year extended plan.

The discount associated with the extended plan will apply effective with the first bill date following expiration of the commitment period for the existing plan and will continue through the remainder of the commitment period associated with the extended plan. No adjustment for the increased discount percentage associated with the extended plan will be made to the monthly rates on the expiring plan.

For DSR with a commitment period extended under these terms and conditions, termination liability is calculated as the difference between the monthly rates for the highest commitment period that could have been satisfied prior to disconnection of the service or cancellation of the plan and the monthly rates for the extended commitment period for the period of time the service was in effect.

(7) Service Interruption

a) Credit Allowance Application

Verizon Dedicated SONET Ring (DSR) is interrupted when it becomes unusable to the customer because of a failure of a component used to furnish service as set forth in this section, or when the service is preempted as a result of invoking National Security Emergency Preparedness (NSEP Treatment) or when the application of protective controls interrupt all transmission paths as set forth in Cal. P.U.C. No. C-1, Section A.9.

ADVANCED DATA SERVICES

D. VERIZON DEDICATED SONET RING (DSR) - Continued

3. TERMS AND CONDITIONS - Continued

e. Application of Rates and Charges - Continued

(7) Service Interruption - Continued

a) Credit Allowance Application - Continued

An interruption period starts when Company personnel are notified by the customer that the service is inoperable. The credit allowance(s) for an interruption or for a series of interruptions will be computed based upon the billing method, which applies to the service being credited. In no case will the credit allowance for service interruptions exceed the applicable charges for the billing period during which the interruption occurred.

For DSR, any outage greater than one (1) minute and due solely to a Company facility failure will result in a credit of 100% of the monthly rate for the applicable rate elements of the affected service. Only one such credit is allowed in a single month's billing period.

b) A Credit Allowance Does Not Apply for Service Interruptions:

- of less than one minute;
- caused by the negligence of the customer or authorized user;
- resulting from the failure of equipment or systems provided by the customer or authorized user;
- during any period in which the Company is not afforded access to a premises for testing and/or repair of service;
- for a negotiated time period during which the customer has released the service to the Company for maintenance purposes, to make rearrangements, or for the implementation of an order for a change in the service. Should the time to perform the maintenance, rearrangement or order for change extend beyond the agreed upon time period, credit allowance will apply for the extended time;
- which continue due to the failure of the customer to authorize replacement of any element of Special Construction. The period during which no credit allowance will be made begins on the seventh day after the customer receives the Company's notification of the need for replacement and ends on the day after the Company receives the customer's authorization for replacement; or
- during periods when the customer elects not to release the service for testing and/or repair, and continues to use it on an impaired basis.

ADVANCED DATA SERVICES

D. VERIZON DEDICATED SONET RING (DSR) - Continued

3. TERMS AND CONDITIONS - Continued

e. Application of Rates and Charges - Continued

(8) Cancellation Charges

a) The order date for DSR is the date on which the customer provides the Company with a complete and accurate Access Service Request (ASR) for the service. In the event that the customer cancels the request, or part of the request, for construction of the ring, cancellation charges as set forth below will apply.

b) Cancellation Charges Which Apply After Issuance of the order: per Node or Port Node

	Within the first 30 days of ordering	31st to 60th day after ordering	61st day after ordering to completion of construction
Per OC3 Node	None	$565.00	$1,130
Per OC12 Node	None	962.00	1,924
Per OC48 Node	None	2,159	4,318
Per OC192 Node	None	7,010	14,020

c) Termination Liability as set forth in D.3.e.(3) preceding will apply after the customer has received notification that construction is complete, and the ring has been turned up and accepted by the customer.

ADVANCED DATA SERVICES

D. VERIZON DEDICATED SONET RING (DSR) - Continued

4. RATES

a. DSR Node, each

	Maximum Monthly Rate	Current Monthly Rate
OC3		
Three Years	$ 2,660.00	$ 1,330.00
Five Years	2,580.00	1,290.00
OC12		
Three Years	$ 5,800.00	$ 2,900.00
Five Years	5,400.00	2,700.00
OC48		
Three Years	$ 9,600.00	$ 4,800.00
Five Years	9,208.00	4,604.00
OC192		
Three Years	$ 20,000.00	$ 10,000.00
Five Years	18,400.00	9,200.00

	Nonrecurring Charge w/ Term Plans
Subsequent Installations, per node or port node	$ 1,599.00

ADVANCED DATA SERVICES

D. VERIZON DEDICATED SONET RING (DSR) - Continued

4. RATES

b. Subtending Node Facility (SNF)

(1) Monthly rate, per port node Port Node Type -	Maximum Monthly Rate	Current Monthly Rate
OC3 at OC3 Node		
Three Years	$ 1,200.00	$ 600.00
Five Years	1,000.00	500.00
OC3 at OC12 Node		
Three Years	$ 1,200.00	$ 600.00
Five Years	1,000.00	500.00
OC3 at OC48 Node		
Three Years	$ 1,200.00	$ 600.00
Five Years	1,000.00	500.00
OC3 at OC192 Node		
Three Years	$ 1,200.00	$ 600.00
Five Years	1,000.00	500.00
OC12 at OC12 Node		
Three Years	$ 1,700.00	$ 850.00
Five Years	1,500.00	750.00
OC12 at OC48 Node		
Three Years	$ 1,700.00	$ 850.00
Five Years	1,500.00	750.00
OC12 at OC192 Node		
Three Years	$ 1,700.00	$ 850.00
Five Years	1,500.00	750.00
OC48 at OC48 Node		
Three Years	$ 3,600.00	$ 1,800.00
Five Years	3,200.00	1,600.00
OC48 at OC192 Node		
Three Years	$ 3,600.00	$ 1,800.00
Five Years	3,200.00	1,600.00
OC192 at OC192 Node		
Three Years	$ 9,000.00	$ 4,500.00
Five Years	7,600.00	3,800.00

ADVANCED DATA SERVICES

D. VERIZON DEDICATED SONET RING (DSR) - Continued

4. RATES

b. Subtending Node Facility (SNF) - Continued

(2) Monthly rate, per SNF extended

SNF Type -	Maximum Monthly Rate	Current Monthly Rate
OC3 SNF		
OC3 Mileage, per mile		
Three Years	$ 750.00	$ 375.00
Five Years	675.00	337.50
OC3 Channel Extension, each		
Three Years	$ 5,700.00	$ 2,850.00
Five Years	5,130.00	2,565.00
OC12 SNF		
OC12 Mileage, per mile		
Three Years	$ 1,500.00	$ 750.00
Five Years	1,350.00	675.00
OC12 Channel Extension, each		
Three Years	$ 11,000.00	$ 5,500.00
Five Years	9,000.00	4,500.00
OC48 SNF		
OC48 Mileage, per mile		
Three Years	$ 5,250.00	$ 2,625.00
Five Years	4,724.00	2,362.50
OC48 Channel Extension, each		
Three Years	$ 15,000.00	$ 7,500.00
Five Years	12,700.00	6,350.00

(3) Dual Node Cross-Connect Charge, per lower capacity channel provided through two interconnecting nodes in a subtending ring arrangement

	Nonrecurring Charge
All Channel Types	$ 500.00

ADVANCED DATA SERVICES

D. VERIZON DEDICATED SONET RING (DSR) - Continued

4. RATES - Continued

c. DSR Mileage, per mile

	Maximum Monthly Rate	Current Monthly Rate
OC3		
Three Years	$ 650.00	$ 325.00
Five Years	600.00	300.00
OC12		
Three Years	$ 670.00	$ 335.00
Five Years	640.00	320.00
OC48		
Three Years	$ 900.00	$ 450.00
Five Years	840.00	420.00
OC192		
Three Years	$ 2,780.00	$ 1,390.00
Five Years	2,558.00	1,279.00

ADVANCED DATA SERVICES

D. VERIZON DEDICATED SONET RING (DSR) - Continued

4. RATES - Continued

d. DSR Port

	Maximum Monthly Rate	Current Monthly Rate
DS1 at OC3 Node		
Month-to-Month	$ 110.00	$ 55.00
Three Years	110.00	55.00
Five Years	110.00	55.00
DS1 at OC12 Node		
Month-to-Month	$ 110.00	$ 55.00
Three Years	110.00	55.00
Five Years	110.00	55.00
DS1 at OC48 Node		
Month-to-Month	$ 110.00	$ 55.00
Three Years	110.00	55.00
Five Years	110.00	55.00
DS1 at OC192 Node		
Month-to-Month	$ 110.00	$ 55.00
Three Years	110.00	55.00
Five Years	110.00	55.00
DS3 or STS1 at OC3 Node		
Month-to-Month	$ 230.00	$ 115.00
Three Years	230.00	115.00
Five Years	230.00	115.00
DS3 or STS1 at OC12 Node		
Month-to-Month	$ 230.00	$ 115.00
Three Years	230.00	115.00
Five Years	230.00	115.00

ADVANCED DATA SERVICES

D. VERIZON DEDICATED SONET RING (DSR) - Continued

4. RATES - Continued

d. DSR Port - Continued

	Maximum Monthly Rate	Current Monthly Rate
DS3 or STS1 at OC48 Node		
Month-to-Month	$ 230.00	$ 115.00
Three Years	230.00	115.00
Five Years	230.00	115.00
DS3 or STS1 at OC192 Node		
Month-to-Month	$ 230.00	$ 115.00
Three Years	230.00	115.00
Five Years	230.00	115.00
DS3 Transmux at OC3 Node		
Month-to-Month	$ 800.00	$ 400.00
Three Years	800.00	400.00
Five Years	800.00	400.00
DS3 Transmux at OC12 Node		
Month-to-Month	$ 800.00	$ 400.00
Three Years	800.00	400.00
Five Years	800.00	400.00
DS3 Transmux at OC48 Node		
Month-to-Month	$ 800.00	$ 400.00
Three Years	800.00	400.00
Five Years	800.00	400.00
DS3 Transmux at OC192 Node		
Month-to-Month	$ 800.00	$ 400.00
Three Years	800.00	400.00
Five Years	800.00	400.00

ADVANCED DATA SERVICES

D. VERIZON DEDICATED SONET RING (DSR) - Continued

4. RATES - Continued

d. DSR Port - Continued

	Maximum Monthly Rate	Current Monthly Rate
OC3c at OC12 Node		
Month-to-Month	$ 548.00	$ 274.00
Three Years	548.00	274.00
Five Years	548.00	274.00
OC3c at OC48 Node		
Month-to-Month	$ 548.00	$ 274.00
Three Years	548.00	274.00
Five Years	548.00	274.00
OC3c at OC192 Node		
Month-to-Month	$ 548.00	$ 274.00
Three Years	548.00	274.00
Five Years	548.00	274.00
OC3 at OC12 Node		
Month-to-Month	$ 686.00	$ 343.00
Three Years	686.00	343.00
Five Years	686.00	343.00
OC3 at OC48 Node		
Month-to-Month	$ 686.00	$ 343.00
Three Years	686.00	343.00
Five Years	686.00	343.00
OC3 at OC192 Node		
Month-to-Month	$ 686.00	$ 343.00
Three Years	686.00	343.00
Five Years	686.00	343.00

ADVANCED DATA SERVICES

D. VERIZON DEDICATED SONET RING (DSR) - Continued

4. RATES - Continued

d. DSR Port - Continued

	Maximum Monthly Rate	Current Monthly Rate
OC12c at OC48 Node		
Month-to-Month	$ 1,028.00	$ 514.00
Three Years	1,028.00	514.00
Five Years	1,028.00	514.00
OC12c at OC192 Node		
Month-to-Month	$ 1,028.00	$ 514.00
Three Years	1,028.00	514.00
Five Years	1,028.00	514.00
OC12 at OC48 Node		
Month-to-Month	$ 1,284.00	$ 642.00
Three Years	1,284.00	642.00
Five Years	1,284.00	642.00
OC12 at OC192 Node		
Month-to-Month	$ 1,284.00	$ 642.00
Three Years	1,284.00	642.00
Five Years	1,284.00	642.00
OC48c at OC192 Node		
Month-to-Month	$ 2,400.00	$ 1,200.00
Three Years	2,400.00	1,200.00
Five Years	2,400.00	1,200.00
OC48 at OC192 Node		
Month-to-Month	$ 2,800.00	$ 1,400.00
Three Years	2,800.00	1,400.00
Five Years	2,800.00	1,400.00

ADVANCED DATA SERVICES

D. VERIZON DEDICATED SONET RING (DSR) - Continued

4. RATES - Continued

d. DSR Port - Continued

	Maximum Monthly Rate	Current Monthly Rate
GigE1 at OC3 Node		
Month-to-Month	$ 610.00	$ 305.00
Three Years	610.00	305.00
Five Years	610.00	305.00
GigE1 at OC12 Node		
Month-to-Month	$ 610.00	$ 305.00
Three Years	610.00	305.00
Five Years	610.00	305.00
GigE1 at OC48 Node		
Month-to-Month	$ 610.00	$ 305.00
Three Years	610.00	305.00
Five Years	610.00	305.00
GigE1 at OC192 Node		
Month-to-Month	$ 610.00	$ 305.00
Three Years	610.00	305.00
Five Years	610.00	305.00
GigE3 at OC12 Node		
Month-to-Month	$ 690.00	$ 345.00
Three Years	690.00	345.00
Five Years	690.00	345.00
GigE3 at OC48 Node		
Month-to-Month	$ 690.00	$ 345.00
Three Years	690.00	345.00
Five Years	690.00	345.00

ADVANCED DATA SERVICES

D. VERIZON DEDICATED SONET RING (DSR) - Continued

4. RATES - Continued

d. DSR Port - Continued

	Maximum Monthly Rate	Current Monthly Rate
GigE3 at OC192 Node		
Month-to-Month	$ 690.00	$ 345.00
Three Years	690.00	345.00
Five Years	690.00	345.00
GigE6 at OC12 Node		
Month-to-Month	$ 910.00	$ 455.00
Three Years	910.00	455.00
Five Years	910.00	455.00
GigE6 at OC48 Node		
Month-to-Month	$ 910.00	$ 455.00
Three Years	910.00	455.00
Five Years	910.00	455.00
GigE6 at OC192 Node		
Month-to-Month	$ 910.00	$ 455.00
Three Years	910.00	455.00
Five Years	910.00	455.00
GigE9 at OC12 Node		
Month-to-Month	$ 1,070.00	$ 535.00
Three Years	1,070.00	535.00
Five Years	1,070.00	535.00
GigE9 at OC48 Node		
Month-to-Month	$ 1,070.00	$ 535.00
Three Years	1,070.00	535.00
Five Years	1,070.00	535.00

ADVANCED DATA SERVICES

D. VERIZON DEDICATED SONET RING (DSR) - Continued

4. RATES - Continued

d. DSR Port - Continued

	Maximum Monthly Rate	Current Monthly Rate
GigE9 at OC192 Node		
Month-to-Month	$ 1,070.00	$ 535.00
Three Years	1,070.00	535.00
Five Years	1,070.00	535.00
GigE12 at OC48 Node		
Month-to-Month	$ 1,290.00	$ 645.00
Three Years	1,290.00	645.00
Five Years	1,290.00	645.00
GigE12 at OC192 Node		
Month-to-Month	$ 1,290.00	$ 645.00
Three Years	1,290.00	645.00
Five Years	1,290.00	645.00
GigE24 at OC48 Node		
Month-to-Month	$ 1,760.00	$ 880.00
Three Years	1,760.00	880.00
Five Years	1,760.00	880.00
GigE24 at OC192 Node		
Month-to-Month	$ 1,760.00	$ 880.00
Three Years	1,760.00	880.00
Five Years	1,760.00	880.00

ADVANCED DATA SERVICES

D. VERIZON DEDICATED SONET RING (DSR) - Continued

4. RATES - Continued

d. DSR Port - Continued

	Maximum Monthly Rate	Current Monthly Rate
1Gbps Fibre Channel at OC48 Node		
Month-to-Month	$ 2,000.00	$ 1,000.00
Three Years	2,000.00	1,000.00
Five Years	2,000.00	1,000.00
1Gbps Fibre Channel at OC192 Node		
Month-to-Month	$ 2,000.00	$ 1,000.00
Three Years	2,000.00	1,000.00
Five Years	2,000.00	1,000.00
1 Gbps FICON at OC48 Node		
Month-to-Month	$ 2,000.00	$ 1,000.00
Three Years	2,000.00	1,000.00
Five Years	2,000.00	1,000.00
1 Gbps FICON at OC192 Node		
Month-to-Month	$ 2,000.00	$ 1,000.00
Three Years	2,000.00	1,000.00
Five Years	2,000.00	1,000.00

ADVANCED DATA SERVICES

D. VERIZON DEDICATED SONET RING (DSR) - Continued

4. RATES - Continued

e. DSR Port, Initial Installation - Nonrecurring Charges

	First	Additional
DS1 Port		
Month-to-month	$ 525.00	$ 210.00
3 Year Term	N/A	N/A
5 Year Term	N/A	N/A
DS3 or STS1 Port		
Month-to-month	$ 805.00	$ 343.00
3 Year Term	N/A	N/A
5 Year Term	N/A	N/A
DS3 Transmux		
Month-to-month	$ 805.00	$ 343.00
3 Year Term	N/A	N/A
5 Year Term	N/A	N/A
OC3c Port		
Month-to-month	$ 805.00	$ 343.00
3 Year Term	N/A	N/A
5 Year Term	N/A	N/A
OC3 Port		
Month-to-month	$ 805.00	$ 343.00
3 Year Term	N/A	N/A
5 Year Term	N/A	N/A
OC12c Port		
Month-to-month	$ 767.00	$ 327.00
3 Year Term	N/A	N/A
5 Year Term	N/A	N/A
OC12 Port		
Month-to-month	$ 767.00	$ 327.00
3 Year Term	N/A	N/A
5 Year Term	N/A	N/A

ADVANCED DATA SERVICES

D. VERIZON DEDICATED SONET RING (DSR) - Continued

4. RATES - Continued

e. DSR Port, Initial Installation - Nonrecurring Charges - Continued

	First	Additional
OC48c Port		
Month-to-month	$ 767.00	$327.00
3 Year Term	N/A	N/A
5 Year Term	N/A	N/A
OC48 Port		
Month-to-month	$ 767.00	$327.00
3 Year Term	N/A	N/A
5 Year Term	N/A	N/A
GigE1 Port		
Month-to-month	$ 767.00	$327.00
3 Year Term	N/A	N/A
5 Year Term	N/A	N/A
GigE3 Port		
Month-to-month	$ 767.00	$327.00
3 Year Term	N/A	N/A
5 Year Term	N/A	N/A
GigE6 Port		
Month-to-month	$ 767.00	$327.00
3 Year Term	N/A	N/A
5 Year Term	N/A	N/A
GigE9 Port		
Month-to-month	$ 767.00	$327.00
3 Year Term	N/A	N/A
5 Year Term	N/A	N/A

ADVANCED DATA SERVICES

D. VERIZON DEDICATED SONET RING (DSR) - Continued

4. RATES - Continued

e. DSR Port, Initial Installation - Nonrecurring Charges - Continued

	First	Additional
GigE12 Port		
Month-to-month	$ 767.00	$327.00
3 Year Term	N/A	N/A
5 Year Term	N/A	N/A
GigE24 Port		
Month-to-month	$ 767.00	$327.00
3 Year Term	N/A	N/A
5 Year Term	N/A	N/A
1 Gbps Fibre Channel		
Month-to-month	$ 767.00	$578.00
3 Year Term	N/A	N/A
5 Year Term	N/A	N/A
1Gbps FICON		
Month-to-month	$ 767.00	$578.00
3 Year Term	N/A	N/A
5 Year Term	N/A	N/A

ADVANCED DATA SERVICES

D. VERIZON DEDICATED SONET RING (DSR) - Continued

4. RATES

f. Asymmetrical Port Facility (APF)

(1) Monthly rate, per APF APF Type -	Maximum Monthly Rate	Current Monthly Rate
OC3 APF		
OC3 Mileage, per mile		
Month-to-Month	$ 1,000.00	$ 500.00
Three Years	750.00	375.00
Five Years	675.00	337.50
OC3 Channel Extension, each		
Month-to-Month	$ 7,600.00	$ 3,800.00
Three Years	5,700.00	2,850.00
Five Years	5,130.00	2,565.00
OC12 APF		
OC12 Mileage, per mile		
Month-to-Month	$ 2,000.00	$ 1,000.00
Three Years	1,500.00	750.00
Five Years	1,350.00	675.00
OC12 Channel Extension, each		
Month-to-Month	$ 14,000.00	$ 7,000.00
Three Years	11,000.00	5,500.00
Five Years	9,000.00	4,500.00
OC48 APF		
OC48 Mileage, per mile		
Month-to-Month	$ 7,000.00	$ 3,500.00
Three Years	5,250.00	2,625.00
Five Years	4,725.00	2,362.50
OC48 Channel Extension, each		
Month-to-Month	$ 22,000.00	$ 11,000.00
Three Years	15,000.00	7,500.00
Five Years	12,700.00	6,350.00

(2) APF Mapping Charge, per lower capacity channel mapped between two APFs on the same DSR	Nonrecurring Charge
All Channel Types	$ 1,068.00

ADVANCED DATA SERVICES

D. VERIZON DEDICATED SONET RING (DSR) - Continued

4. RATES - Continued

g. Optional Feature - Customer Network Management

Monthly Rates

	Maximum Monthly Rate	Current Monthly Rate
Service Level 1 - Network View only		
Month-to-Month	N/A	N/A
Three Years	$ 500.00	$ 250.00
Five Years	500.00	250.00
Service Level 2 - Network View & Basic Reports		
Month-to-Month	N/A	N/A
Three Years	$ 900.00	$ 450.00
Five Years	900.00	450.00
Service Level 3 - Network View, Basic Reports & Reconfiguration		
Month-to-Month	N/A	N/A
Three Years	$ 1,700.00	$ 850.00
Five Years	1,700.00	850.00
Pre-planned Port Rates		
see D.4.d. for applicable corresponding DSR Port speeds & rates		

ADVANCED DATA SERVICES

D. VERIZON DEDICATED SONET RING (DSR) - Continued

4. RATES - Continued

g. Optional Feature - Customer Network Management - Continued

Nonrecurring Charges

	Nonrecurring Charge
Node Setup, per node on the ring equipped during initial establishment	$ 345.00
Initial CSM Setup, first partition with up to six (6) users	$ 500.00
Setup of additional partition, or change in CSM Service Level, each	$ 500.00
Setup of additional users, up to six (6) additional users	$ 350.00
Add/Remove Node, per node	$ 1,500.00
Company performed reconfiguration, per mapping	$ 300.00
Consultation and Support, each thirty (30) minutes or fraction thereof	$ 100.00
Preplanned Port, per port location see D.4.e. for nonrecurring charges for corresponding DSR Port speeds - Initial Installation	

ADVANCED DATA SERVICES

E. VERIZON DEDICATED WAVELENGTH RING (DWR)

1. APPLICATION

This section contains definitions, charges, terms and conditions applicable to the provision of Dedicated Wavelength Ring (DWR) Service furnished by the Company within the State of California, where conditions and facilities permit.

In addition to the terms and conditions set forth in this section, DWR is also subject to the provisions of tariff Schedule Cal. P.U.C. No. C-1, except that, in the event of conflict, the provisions of this sectionshall take precedence. DWR may be resold but no resale discount from the Company shall be required or shall apply.

Verizon Dedicated Wavelength Ring (DWR) is available where facilities and conditions permit in all existing Verizon exchanges as listed in Section 4A, Sheets 3 and 4. The Company concurs in all of the maps filed as part of Southwestern Bell Communications (SBC) Network and Exchange Services tariff, Schedule Cal. P.U.C. No. A5.1.A.

2. DESCRIPTION OF SERVICE

Dedicated Wavelength Ring (DWR) provides managed optical transport of multiple protocols which are transmitted over a single fiber optic pair. DWR is configured in a diversely routed ring architecture or topology and can be arranged as a full (closed) ring. The ring architecture allows for point-to-point optical services of varying wavelengths to be multiplexed on or off of the ring.

DWR allows for the native transmission of multiple high-speed protocols of various wavelengths over a single customized network. The wavelengths are arranged in a channelized format such that the protocol transmitted over each channel is independent of every other channel on the DWR. The customer must specify, by channel, the interface that defines the transmission speed and protocol being transmitted over the associated wavelength.

3. TERMS AND CONDITIONS

The Dedicate Wavelength Ring (DWR) is comprised of nodes, ring mileage, network optimization (amplification), and optical transport channels

a. Full Ring

A DWR full (closed) ring provides connectivity to multiple customer designated locations (nodes). A full ring must have a minimum of three nodes at different locations or two nodes at different locations with a network optimization mid-span amplifier. At least one of the devices (node or amplifier) must be located in a Central Office (CO) and one must be located at a customer's designated premises.

ADVANCED DATA SERVICES

E. VERIZON DEDICATED WAVELENGTH RING (DWR) - Continued

3. TERMS AND CONDITIONS - Continued

b. Network Design

The Company is responsible for the overall design and configuration of the DWR. Construction of the ring will not begin until such design and configuration are mutually agreeable to both the customer and the Company.

The customer is responsible to ensure that its facilities and equipment meet any applicable technical requirements or limitations for the protocol being transmitted over the optical transport channels.

The technical specifications for DWR are delineated in Technical Publications GR-2918- CORE, Issue 4, GR-2979-CORE, Issue 3, GR-1312- CORE, Issue 3, ITU G.959.1, and ITU G.692.

c. Connection to a Dedicated Wavelength Ring (DWR)

Connection of SONET Connects to a DWR occurs via a protected or unprotected SONET transport channel of an equal speed as follows:

SONET Connects Capacity	Single Port Channel	Multi-port 2.5 Gbps Facility	Multi-port 10 Gbps Facility
OC3/OC3c	SONET OC3/OC3c	SONET OC3/OC3c	
OC12/OC12c	SONET OC12/OC12c	SONET OC12/OC12c	
OC48/OC48c	SONET OC48/OC48c		SONET OC48/OC48c
OC192/OC192c	SONET OC192/OC192c		

ADVANCED DATA SERVICES

E. VERIZON DEDICATED WAVELENGTH RING (DWR) - Continued

3. TERMS AND CONDITIONS - Continued

c. Connection to a Dedicated Wavelength Ring (DWR) - Continued

Connection of Dedicated SONET Ring (DSR) to a DWR is provided over an equal speed, unprotected optical transport channel (e.g. a 155.52 Mbps unprotected channel would connect to an OC3 DSR node). Each node on the DSR ring must be located at the same customer designated premises or in the same Company CO as its corresponding DWR node.

Connection of Custom Connect Service to a DWR is provided over an equal speed OC3/OC3c, OC12/OC12c, OC48/OC48c, or OC192/OC192c protected SONET optical transport channel with a 2-fiber or 4-fiber interface or using an equal speed or unprotected optical transport channel with a 2-fiber interface as described in the following section. Protected 4-fiber interfaces are available with single port interfaces only.

Connection of a Verizon Optical Networking to a DWR is provided over an equal speed protected optical transport channel as follows. These services are transported over the DWR using a 2-fiber protected interface or a 4-fiber protected interface.

Verizon Optical Networking Service	Single Port Channel	Multi-port 2.5 Gbps Facility	Multi-port 10 Gbps Facility
OC3c Ethernet to SONET mapped Service	SONET OC3c	SONET OC3c	
GigE12/600 Mbps Ethernet mapped to OC12c Ethernet to SONET mapped	SONET OC12c	SONET OC12c	
1 Gbps Ethernet full rate	Gigabit Ethernet	Gigabit Ethernet	Gigabit Ethernet
1 Gbps FICON	1 Gbps FICON	1 Gbps FICON	1 Gbps FICON
Fiber Channel	1 Gbps Fibre	1 Gbps Fibre	1 Gbps Fibre

Connection of a Verizon Optical Networking Gigabit Fibre Channel and/or Gigabit FICON service is provided over a Gigabit Fibre channel and/or Gigabit FICON optical transport channel.

The use of a multi-port interface card requires that all channels on a single card be interrupted during periods when the Company is performing maintenance on that card. No credit for such periods of interruption will apply.

ADVANCED DATA SERVICES

E. VERIZON DEDICATED WAVELENGTH RING (DWR) - Continued

4. SERVICE COMPONENTS

a. Nodes

Nodes are Dense Wave Division Multiplexing (DWDM) devices located at customer designated premises or Company wire centers from which optical transport channels are multiplexed on or off of the DWR. The type of node that is deployed at each location is determined by the number of optical transport channels that will be multiplexed on or off of the DWR at that location.

(1) 4-Channel Node

Placement of a 4-channel node at a location enables up to 4 protected optical transport channels to be deployed. Each protected optical channel may be replaced by two unprotected optical channels up to a maximum of 8 possible channels on the node. A 4-channel node may be utilized as the primary node at a location or as an expansion node to expand the capacity of a 16-channel primary node. 4-channel nodes are subject to the availability of suitable facilities and equipment to provide such device. No more than one 4-channel node will be provided at a location.

(2) 16-Channel Node

Placement of a 16-channel node at a location enables up to 16 protected optical transport channels to be deployed. Each protected optical channel may be replaced by two unprotected optical channels up to a maximum of 32 possible channels on the primary node.

The capacity of a 16-channel primary node may be increased through the addition of an expansion node at the same location. A 4-channel expansion node enables up to 20 protected optical transport channels (i.e., 16 on the primary node and 4 on the expansion node) to be deployed at a single location. Each protected optical channel may be replaced by 2 unprotected optical channels up to a maximum of 40 possible channels at that location. A 16-channel expansion node enables up to 32 protected optical transport channels (i.e., 16 on the primary node and 16 on the expansion node) to be deployed at a single location. Each protected optical channel may be replaced by two unprotected optical channels up to a maximum of 64 possible channels at that location.

The maximum number of optical transport channels that can be deployed at a single location is dependent upon the specific configuration of the DWR and the type of optical transport channels being deployed from that location.

The customer will be billed additional charges for any charges levied the Company for space and power required to place nodes on the Company's side of the network interface.

When two nodes are located in the same building there will be no diversity between the two nodes.

ADVANCED DATA SERVICES

E. VERIZON DEDICATED WAVELENGTH RING (DWR) - Continued

4. SERVICE COMPONENTS - Continued

b. Mileage

For full ring service configurations, DWR Mileage is the total of airline distances between devices (nodes and amplifiers) rounded up to the nearest mile. The mileage rate is based on total ring capacity and not on individual services between devices. For example, the mileage charge for a five device ring with two mid-span amplifiers and a distance of 4.3 miles between each device (21.5 total miles) would be calculated by multiplying the mileage rate by 22 miles.

c. Network Optimization/Amplification

Network Optimization provides for amplification of the signal to ensure acceptable optical levels. When required, amplification is performed in a Company CO when mid-span amplification of the signal is required between nodes. Node amplification occurs in one or two directions (East to West and/or West to East). Mid-span amplification occurs simultaneously in both directions (East to West and West to East). The Company shall have sole responsibility in determining when amplification is required and the quantity and type of amplification necessary to maintain acceptable optical levels.

d. Optical Transport Channels

Optical transport channels allow for optical services to be multiplexed on to or off of the DWR at locations equipped with a DWR node. An optical interface at the node allows for connection of the applicable protocol to the customer's equipment. Optical transport channels are provided on a node-to-node (i.e., point-to-point) basis.

A Channel Mapping nonrecurring charge applies in lieu of the rates and charges for a point-to-point transport channel. Optical Transport Channels are available on a protected or unprotected basis depending on the protocol being transmitted and the level of redundancy required for the optical channel. These channels may be ordered using a single-port interface (each a single channel per interface card) or using a multi-port interface. A multi-port interface is a facility capable of supporting up to 4 multi-port channels of ESCON, Fibre Channel, FDDI, Fast Ethernet, D1 Video, or any combination of these multi-port channels. A multi-port optical transport channel provides a two-point facility over the DWR for the purpose of aggregating multiple optical channels over a single wavelength.

ADVANCED DATA SERVICES

E. VERIZON DEDICATED WAVELENGTH RING (DWR) - Continued

4. SERVICE COMPONENTS - Continued

d. Optical Transport Channels - Continued

Some protocols have facility distance limitations and may affect the design or availability of the DWR or its optical transport channels. The multi-port interface is provided with a short reach, 2-fiber interface with a 1310nm signal. A protected optical channel allows for a single signal from the customer to be duplicated and sent over separate diverse routes (working and protect) within the DWR network. An unprotected optical channel provides minimum protection of the signal from the customer. End-to-end protection is provided by the protection inherent in the connecting service provided by Verizon (e.g., DSR), as applicable.

Optical transport channels are delivered over a single-port interface or multi-port optical transport channel unless otherwise specified. The use of a multi-port optical transport channel and the type of optical transport channels that can be provided over a single-port or multi-port optical transport channel are subject to the availability of suitable equipment to provide the requested service. Multi-port facilities are offered in capacities of 2.5 Gbps or 10 Gbps and are capable of supporting the following channel types, in any combination up to the maximum capacity of the multi-port facility.

2.5 Gbps Multi-port Facility	10 Gbps Multi-port Facility
ESCON	1 Gbps Fibre Channel
1 Gbps Fibre Channel	2 Gbps Fibre Channel
FDDI	Gigabit Ethernet
1 Gbps FICON	1 Gbps FICON
Fast Ethernet	2 Gbps FICON
D1 Video	SONET OC48/OC48c
SONET OC3/OC3c	
SONET OC12/OC12c	
Gigabit Ethernet	

ADVANCED DATA SERVICES

E. VERIZON DEDICATED WAVELENGTH RING (DWR) - Continued

4. SERVICE COMPONENTS - Continued

e. Protocols

All signals generated by customer provided equipment and delivered to the Company for multiplexing on to DWR must meet industry standards and specifications for the underlying protocol. The customer is responsible to perform any error detection and error correction of the data generated by its equipment. The Company assumes no responsibility for the quality of the signal generated by the customer or any customer provided equipment and will deliver the signal to the receiving location in the same format and condition as generated by the customer. The Company will transmit the following protocols over DWR optical transport channels:

SONET OC3 – for transmission of 155.52 Mbps synchronous optical data transmission capability. SONET OC3 is delivered over a 2-fiber or 4-fiber single-port channel or a 2.5 Gbps multi-port channel.

SONET OC3c – for transmission of concatenated 155.52 Mbps synchronous optical data transmission capability. SONET OC3c is delivered over a 2-fiber or 4-fiber single-port channel or a 2.5 Gbps multi-port channel.

SONET OC12 – for transmission of 622.08 Mbps synchronous optical data transmission capability. SONET OC12 is delivered over a 2-fiber or 4-fiber single-port channel or a 2.5 Gbps multi-port channel.

SONET OC12c – for transmission of concatenated 622.08 Mbps synchronous optical data transmission capability. SONET OC12c is delivered over a 2-fiber or 4-fiber single-port channel or a 2.5 Gbps multi-port channel.

SONET OC48 – for transmission of 2.488 Gbps synchronous optical data transmission capability. SONET OC48 is delivered over a 2-fiber or 4-fiber single-port channel or a 10 Gbps multi-port channel.

SONET OC48c – for transmission of concatenated 2.488 Gbps synchronous optical data transmission capability. SONET OC48c is delivered over a 2-fiber or 4-fiber single-port channel or a 10 Gbps multi-port channel.

SONET OC192 – for transmission of 9.953 Gbps synchronous optical data transmission capability. SONET OC192 is delivered over a 2-fiber or 4-fiber single-port channel only.

SONET OC192c – for transmission of concatenated 9.953 Gbps synchronous optical data transmission capability. SONET OC192c is delivered over a 2-fiber or 4-fiber single-port channel only.

ESCON* – for transmission of one 200 Mbps Enterprise Service Connection channel between the same two DWR nodes used for computer-to-computer data exchange. An ESCON signal is limited to a maximum distance of 43km (physical route kilometers) between the locations involved. ESCON is delivered over a 2.5 Gbps multi-port channel only.

FICON* – for transmission of 1 Gbps and 2 Gbps Fiber Connection among mainframes, storage devices and peripherals on a single channel. A FICON signal is limited to a maximum distance of 100km (physical route kilometers) between the locations involved. FICON is delivered over a single-port channel, a 2.5 Gbps multi-port channel or a 10 Gbps multi-port channel.

* Denotes a data optical transport channel.

ADVANCED DATA SERVICES

E. VERIZON DEDICATED WAVELENGTH RING (DWR) - Continued

4. SERVICE COMPONENTS - Continued

e. Protocols - Continued

Fibre Channel* – for transmission of 2.125 Gbps, 1.0625 Gbps, 531 Mbps, 266 Mbps and 133 Mbps in a serial link between supercomputers, mainframes, workstations, desktop computers, storage devices, displays and other peripherals. A Fiber Channel signal is limited to a maximum distance of 100km (physical route kilometers) between the locations involved. Fiber Channel signals at transmission speeds of 2.125 Gbps, 1.0625 Gbps, 531 Mbps, 266 Mbps, and 133 Mbps are delivered over a single-port channel. Fiber Channel may also be delivered over a multi-port channel as follows:

2.5 Gbps Multi-port Facility	10 Gbps Multi-port Facility
133 Mbps	1.0625 Gbps
266 Mbps	2.125 Gbps
531 Mbps	
1.0625 Gbps	

ETR/CLO* – a channel for transmission of an 8 Mbps External Timing Reference/Control Link Oscillator signal for distributing time-of-day information to all central processing units in the Sysplex and to keep the Sysplex timer units synchronized with each other. An ETR/CLO signal is limited to a maximum distance of 40km (physical route kilometers) between the locations involved. ETL/CLO is delivered over a single-port channel only.

FDDI* – for transmission of 100 Mbps Fiber Distributed Data Interface channels for general purpose interconnection between computers and peripheral equipment, including interconnection of Local Area Networks and other networks. FDDI is delivered over a single-port channel or 2.5 Gbps multi-port channel.

ISC* – for transmission of 1.06 Gbps InterSystem Channel for data caching, locking and queuing services between coupling facility and a central processing unit. An ISC signal is limited to a maximum distance of 40km (physical route kilometers) between the locations involved. ISC is delivered over a single-port channel only.

ISC3* – for transmission of 2.125 Gbps InterSystem Channel for data caching, locking and queuing services between coupling facility and a central processing unit. An ISC3 signal is limited to a maximum distance of 40 km (physical route kilometers) between the locations involved. ISC3 is delivered over a single-port channel only.

* Denotes a data optical transport channel.

ADVANCED DATA SERVICES

E. VERIZON DEDICATED WAVELENGTH RING (DWR) - Continued

4. SERVICE COMPONENTS - Continued

e. Protocols - Continued

Fast Ethernet* – for 100 Mbps transmission of Ethernet. Fast Ethernet is delivered over a single-port or multi-port channel.

Gigabit Ethernet* – for 1.0 Gbps transmission of Ethernet. Gigabit Ethernet is delivered over a single-port channel, a 2.5 Gbps multi-port channel, or a 10 Gbps multi-port channel.

10 Gigabit Ethernet LAN-PHY – 10GBASE-R (LAN PHY) interfaces offer an effective line rate of 10.3125 Gbps (10 Gbps of data traffic encoded in a 64B/66B protocol compared to the traditional 8B/10B protocol of Gigabit Ethernet). 10 Gigabit Ethernet LAN-PHY is delivered over a single-port channel only.

10 Gigabit Ethernet WAN-PHY – 10GigE data rate and format compatible with the SONET OC192c transmission format defined by ANSI. 10 Gigabit Ethernet WAN-PHY is delivered over a single-port channel only.

D1 Video* – for uncompressed digital transmission of video signals operating at 270 Mbps. D1 Video is delivered over a single-port channel or 2.5 Gbps multi-port channel.

* Denotes a data optical transport channel.

f. Channel Interface Codes

The following channel interface codes are used for the DWR:

NCI
02FMF.4 for 4 Channel Node (Primary or Expansion)
02FMF.16 for 16 Channel Node (Primary or Expansion)

The following channel interface codes are used for channels using wavelengths on the DWR:

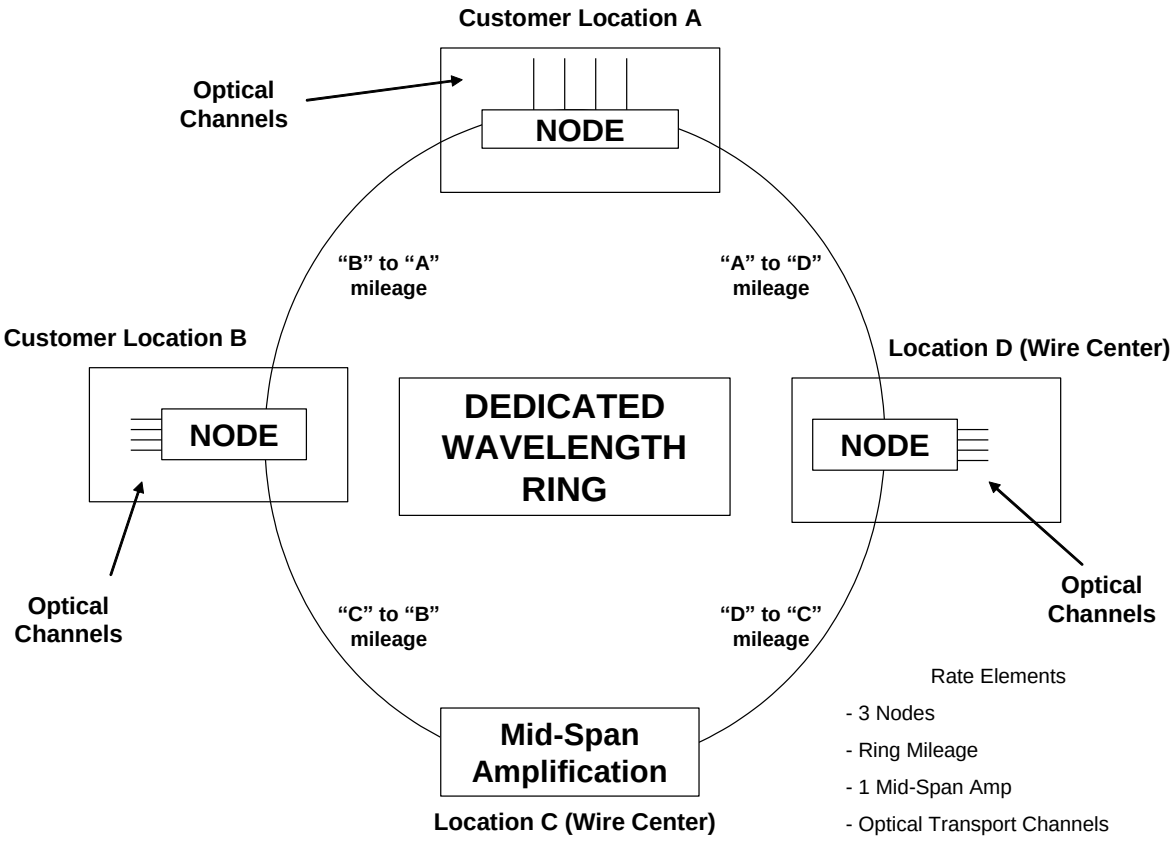
02FCF.10A (FDDI MM 125 Mbps)
02FCF.10A (FDDI SM 125 Mbps)
02FMF.S (DWDM 4-Port 1.25 Gbps)
02LNF. A02, A04, A07 (Fast Ethernet)
02LNF. A02, A04, A07 (Gigabit Ethernet)
02LNF.A02 (10 Gigabit Ethernet LAN-PHY)
02LNF.A02 (10 Gigabit Ethernet WAN-PHY)
02OPF.A02, A04, A07 (2.125 Gbps Fibre Channel)
02OPF.A02, A04, A07 (2.125 Gbps FICON)
02OPF.A02, A04, A07 (ISC3 at 2.125Gbps)
02OPF.A02, A04, A07 (1.0625 Gbps Fiber Channel)
02OPF.A02, A04, A07 (133 Mbps Fiber Channel)
02OPF.A02, A04, A07 (1Gbps FICON)
02OPF.A02, A04, A07 (266 Mbps Fiber Channel)
02OPF.A02, A04, A07 (531 Mbps Fiber Channel)
02OPF.A02, A04, A07 (ESCON)
02OPF.A02, A04, A07 (ETR/CLO)
02OPF.A02, A04, A07 (ISC)
02SOF.B,D,F,X (SONET OC12/OC12c)
02SOF.B,D,F,X (SONET OC192/192c)
02SOF.B,D,F,X (SONET OC3/OC3c)
02SOF.B,D,F,X (SONET OC48/OC48c)
02TD6.E (D1 Video)
04SOF.B,D,F,X (SONET OC12/OC12c)
04SOF.B,D,F,X (SONET OC3/OC3c)
04SOF.B,D,F,X (SONET OC48/OC48c)

ADVANCED DATA SERVICES

E. VERIZON DEDICATED WAVELENGTH RING (DWR) - Continued

4. SERVICE COMPONENTS - Continued

g. An example of a Dedicated Wavelength Ring is diagrammed below:



ADVANCED DATA SERVICES

E. VERIZON DEDICATED WAVELENGTH RING (DWR) - Continued

5. APPLICATION OF RATES AND CHARGES

a. Commitment Periods

DWR is available for 3-, 5- and 7-year commitment periods for the nodes, ring mileage, network optimization mid-span amplification and optical transport channels. DWR Optical Transport Channels are also available for a 1-year commitment.

Nodes, network optimization mid-span amplification and SONET optical transport channels added subsequent to the initial installation may be coterminous to the expiration date of the DWR at the rates and charges specified for the term plan on the existing DWR or may require an extension to the existing plan as follows:

For all rate elements other than SONET optical transport channels under a 1-year commitment period,

If the addition is prior to the 21st month for an existing 3-year plan, prior to the 36th month for an existing 5-year plan, or prior to the 50th month for an existing 7-year plan, the addition will be coterminous to the expiration date of the DWR.

If the addition is after the aforementioned periods, the customer must extend the commitment period of the existing plan for an additional one-year for a 3-year plan, an additional 2 years for a 5-year plan, or an additional 3 years for a 7-year plan. SONET services associated with DWR are subject to the termination liability set forth in E.5.c following.

For SONET optical transport channels under a 1-year commitment period, the addition will have commitment period that expires one year from the date that billing for the SONET optical transport channel commences. The minimum service period for such channels is three months.

Data optical transport channels (see E.4.f.) added subsequent to the initial installation under a 3-year, 5-year or 7-year commitment period will be coterminous to the expiration date of the DWR at the rates and charges specified for the term plan on the existing DWR. These channels are subject to a minimum service period of three months.

Data optical transport channels under a 1-year commitment period will have a commitment period that expires one year from the date that billing for the SONET optical transport channel commences. The minimum service period for such channels is three months.

The addition of SONET and/or Data optical transport channels subsequent to the initial installation of service may also require the addition of an expansion node(s) and/or network optimization device(s) to accommodate the increase in channels. The addition of an expansion node or network optimization is subject to the conditions set forth above.

ADVANCED DATA SERVICES

E. VERIZON DEDICATED WAVELENGTH RING (DWR) - Continued

5. APPLICATION OF RATES AND CHARGES - Continued

a. Commitment Periods - Continued

Monthly recurring charges apply for the nodes, ring mileage, network optimization, partial ring high speed (pass-through) interfaces (certain partial ring configurations only), and optical transport channels. The monthly rate for an optical transport channel applies for the entire point-to-point connection. The monthly rate for a point-to-fiber-meet optical transport channel applies for the entire node-to-fiber-meet (collocation arrangement in a wire center, premises or mutually agreed upon location, as applicable) connection. Once a term period expires, the prevailing rates of the current plan will continue until the customer cancels service or requests a new term plan.

When the optical transport channel is provided with a multi-port channel, rates and charges apply for the multi-port facility and for each multi-port channel riding the multi-port facility. When an optical transport channel is delivered over a multi-port channel, the multi-port facility and each multi-port channel riding the multi-port facility must be billed to the same customer who subscribes to the DWR. Once a term period expires, the prevailing rates of the current plan will continue until the customer cancels service or requests a new term plan.

The rates and charges for optical transport channels delivered over a single-port or multi-port interface are set forth in E.7.d. When the optical transport channel is provided with a multi-port interface, rates and charges apply for the multi-port facility and for each multi-port channel riding the multi-port facility.

b. Nonrecurring Charges

Nonrecurring charges for DWR apply for the initial installation of service and for any subsequent node, network optimization mid-span amplification, or optical transport channel that is added at any time after the initial installation of service. A nonrecurring charge also applies to upgrade a 4 channel primary node to a 16 channel primary node or a 4-channel expansion node to a 16-channel expansion node.

A change in the type (e.g., Fiber Channel to FICON, or SONET channel with a 2-fiber interface to SONET channel with a 4-fiber interface) or optical carrier rate (e.g., OC3 to OC12) of optical transport channel is treated as a discontinuance of the existing channel and an installation of a new optical transport channel.

When an optical transport channel is ordered to connect with DSR or Custom Connect, the optical channel will be billed to the DSR or Custom Connect customer, as applicable.

When an optical transport channel is delivered over a multi-port interface, the multi-port facility and each multi-port channel riding the multi-port facility must be billed to the same customer who subscribes to the DWR.

ADVANCED DATA SERVICES

E. VERIZON DEDICATED WAVELENGTH RING (DWR) - Continued

5. APPLICATION OF RATES AND CHARGES - Continued

c. Termination Liability

Termination liability applies to DWR and is charged per rate element on all nodes, network optimization, optical transport channels and Network Management Methods. Data optical transport channels as set forth in this section are not subject to termination liability; however, such channels are subject to a minimum service period of three months.

A separate termination liability charge is assessed for each rate element associated with the disconnected DWR or a Network Management Method. For a customer who subscribes to a DWR ring that is arranged with the Direct TL1 Monitoring Optional Feature, as set forth in E.6.b following, if that customer disconnects the DWR ring along with the Direct TL1 Monitoring Optional Feature prior to the end of the commitment period, the customer would pay termination liability on the nodes, network optimization, optical transport channels and the Direct TL1 Monitoring Optional Feature monthly recurring rate elements as set forth in E.7 Rates and Charges.

DWR or a Network Management Method may be canceled without termination liability when cancellation of the DWR or Network Management Method occurs within thirty (30) days of the effective date of a Company initiated rate increase of eight percent (8%) or more on any rate applicable to DWR service or Network Management Method.

Termination liability will not apply (1) if a customer changes its term plan to a longer commitment period; (2) if a 4 channel primary node is upgraded to a 16 channel primary node; or (3) if a 4 channel expansion node is upgraded to a 16 channel expansion node.

Termination liability will apply when the conditions above are not met and the customer cancels service prior to expiration of the plan period.

For all rate elements other than SONET optical transport channels under a 1-Year commitment period, if the cancellation occurs within the first two years of a term plan, termination liability is equal to 100 percent (100%) of the monthly charges for the unexpired portion of the first two years, and 25 percent (25%) of the monthly charges for the remainder of the plan.

If the customer cancels after the first two years of service, then termination liability is equal to 25 percent (25%) of the monthly charges for the remaining life of the term.

For SONET optical transport channels under a 1-year term commitment, if the cancellation occurs prior to completion of the 1-year commitment period, termination liability is equal to 100 percent of the monthly charges for the unexpired portion of the first year.

ADVANCED DATA SERVICES

E. VERIZON DEDICATED WAVELENGTH RING (DWR) - Continued

5. APPLICATION OF RATES AND CHARGES - Continued

c. Termination Liability - Continued

For Dedicated Wavelength Ring (DWR) Service with a commitment period which was extended, termination liability is calculated as the difference between the monthly rates for the highest Term Pricing Plan commitment period that could have been satisfied prior to disconnection of the service or cancellation of the plan and the monthly rates already paid for the expired commitment period and the extended commitment period for the period of time the service was in effect.

d. Conversions

Customers who wish to move or convert existing Special Access DSR or High Capacity Special Access services to DWR may do so without conversion charges (termination liability and installation charges) as long as the total capacity of Special Access services or DSR purchased by the customer does not decrease.

e. Extension of a Commitment Period

The customer has the option, within sixty (60) days prior to the expiration date for its commitment period, to extend its expiring Term Pricing Plan to a plan with a longer commitment period, for which time-in-service credit will be allowed for the expiring plan. The commitment period selected for the extended plan must be longer that the commitment period of the expiring plan as follows:

- An expiring 1-Year Term may be extended to a 3-Year, 5-Year or 7-Year Term Plan.
- An expiring 3-Year Term may be extended to either a 5-Year or 7-Year Term Plan.
- An expiring 5-Year Term may be extended to a 7-Year Term Plan.

Time-in-service credit on the expiring plan will be granted and applied towards the new extended plan. For example, an expiring 3-Year term plan will allow for 3 years of time-in-service credit towards the extended plan.

The customer may also extend the commitment period in order to install additional nodes, network optimization devices or SONET optical channels as described in E.5.a preceding.

The rate for the longer commitment period will apply effective with the first bill day following expiration of the commitment period for the existing plan and continue through the remainder of the commitment period associated with the extended plan. No adjustment for the increased discount associated with the extended plan will be made to the monthly rates already billed on the expiring plan.

ADVANCED DATA SERVICES

E. VERIZON DEDICATED WAVELENGTH RING (DWR) - Continued

5. APPLICATION OF RATES AND CHARGES - Continued

f. Credit Allowance for Service Interruption

For Dedicated Wavelength Ring (DWR) nodes and network optimization, any single service outage of four hours or more due solely to a Company facility failure will result in a credit of 100% of the monthly rates for the applicable DWR node or network optimization devices affected. Only one such credit is allowed in a single month's billing period.

For DWR Optical Transport Channels, the following credits will be applied.

- For protected Optical Transport Channels, any Company facility failure which is not restored within 1 minute will result in a credit of 100% of the monthly rate for the applicable protected optical channels affected. Only one such credit is allowed in a single month's billing period.

- For unprotected Optical Transport Channels, no credit applies for a service outage on these channels for which no protection is provided by the Company.

g. Moves and Changes

A move involves a change in the physical location of the Customer designated Premises which also involves a connection to a different rate demarcation point. The charges for the move are dependent on whether the move is to a new location within the same building or to a different building.

a. Moves Within the Same Building

When the move is to a new location within the same building (Inside Move), a non-recurring charge for the Inside Move will apply. There will be no change in the Minimum Period requirement, and termination liability does not apply.

b. Moves To a Different Building

Moves to a different building (Outside Move) will be treated as a discontinuance and start of Service and all associated nonrecurring charges will apply. New minimum period and/or Service Discount Plan requirements will be established for the new Services. The Customer will also remain responsible for satisfying all outstanding minimum period and/or termination liability charges for the discontinued Service.

ADVANCED DATA SERVICES

E. VERIZON DEDICATED WAVELENGTH RING (DWR) - Continued

5. APPLICATION OF RATES AND CHARGES - Continued

h. Cancellation Charges

For DWR, the Company will construct the customer's dedicated ring. The customer must provide the Company with complete and accurate information to design and construct the customer's dedicated ring. Construction will not begin until the customer and the Company agree on the design of the ring. The order date for the ring is the date on which the customer provides the Company with a complete and accurate order for the service. In the event that the customer cancels its request, or part of its request, for construction of the ring, cancellation charges will apply as follows.

Cancellation Charges Which Apply After the Order Date

	31st to 60th day after ordering	61st day after ordering to completion of Ring
- per Primary Node	$13,000.00	$26,000.00
- per Expansion Node	26,000.00	52,000.00
- per Mid-span Amp.	5,600.00	10,600.00

6. OPTIONAL FEATURES - NETWORK MANAGEMENT

The customer has the option of purchasing one of the following Network Management Methods for use with DWR Special Access service provided by the Company in accordance with this section. Only one method may be provided on a single DWR. Network Management Methods will be available subject to compatibility of the current release of the Network Management Methods software with the DWR equipment deployed for the customer's network.

a. Customer Service Management (CSM)

CSM provides a customer with real-time information about the operational status of its DWR network. CSM provides a network view of real-time detection and reporting of network alarm conditions within the customer's DWR network. In addition, CSM provides the customer with the ability to generate basic network performance reports for its DWR network. The customer may also request network performance reports that are customized to meet their specific needs.

ADVANCED DATA SERVICES

E. VERIZON DEDICATED WAVELENGTH RING (DWR) - Continued

6. OPTIONAL FEATURES - NETWORK MANAGEMENT - Continued

a. Customer Service Management (CSM) - Continued

(1) Terms and Conditions

The customer must utilize Internet web access to connect its customer-provided terminal equipment to the Company's CSM management system. Access to the internet and any associated rates and charges are the responsibility of the customer. The customer is also responsible for obtaining communications software that is compatible with the software the Company utilizes to provide CSM. The Company will work cooperatively with the customer to determine compatibility of its communications software.

CSM is provided only when the Company provides all nodes on the ring.

Subject to the restrictions set forth in E.6.a(3) following, CSM is provided coincident with the installation of the associated DWR ring or may be added to an existing ring.

(2) Application of Rates and Charges

A CSM monthly recurring charge applies, per full ring, for each DWR provided with the CSM optional feature.

A Node Setup charge applies, per primary or expansion node, for each node that is equipped with CSM at the time that CSM is initially established on the DWR.

An Initial CSM Setup charge applies for establishment of the customer's initial CSM database partition. The initial CSM database partition includes setup for up to six (6) users.

A Setup of Additional Users charge applies for the setup of up to six (6) additional users beyond those users included with the setup of initial or additional database partitions.

A Setup of Additional Partition charge applies for the setup of an additional CSM database partition created for the same customer. Each additional CSM database partition provides for the setup of up to six (6) additional users.

ADVANCED DATA SERVICES

E. VERIZON DEDICATED WAVELENGTH RING (DWR) - Continued

6. OPTIONAL FEATURES - NETWORK MANAGEMENT - Continued

a. Customer Service Management (CSM) - Continued

(2) Application of Rates and Charges - Continued

An Add/Remove Node charge applies, per primary and expansion node, for each node that is added to, or removed from, a DWR equipped with CSM subsequent to the initial establishment of CSM.

A Consultation and Support charge applies for each thirty (30) minutes or fraction thereof that the customer requests Company consultation and support of its CSM network. This charge does not apply during initial setup of CSM.

A Change in Network Management Method charge applies, per primary and expansion node, when the customer requests a change in Network Management Method (e.g., from CSM to DTM).

(3) Rate Conditions

CSM is provided under a term plan of 3 years, 5 years or 7 years, as described following:

a) The duration of the term plan for CSM must be the same duration as the term plan for the DWR nodes provided with CSM. At the expiration of its 3-, 5- or 7-year term plans for CSM, the customer has the option of extending CSM with a coterminous end date as described following.

b) The expiration date of each CSM added subsequent to the initial installation must be coterminous to the expiration date of the associated DWR, provided the addition is prior to the 21st month for a 3-year plan, prior to the 36th month for a 5-year plan, or prior to the 50th month for a 7-year plan. A CSM added after the aforementioned periods requires extension of the commitment period for the associated DWR in accordance with this Product Guide. Such extension results in the establishment of a new plan that includes both the DWR and the CSM under the same plan with the same expiration date.

The customer may retrieve basic reports containing performance-monitoring information on its DWR network. Basic reports are available at no additional charge to the customer. The customer may also request that a report be customized to meet its particular needs. Rates and charges for customized reports are provided on an individual case basis (ICB) only.

CSM is subject to termination liability if the service is disconnected prior to completion of the existing commitment period. The terms and conditions in E.5.c apply to termination of CSM prior to completion of the existing commitment period. Changes in Network Management Method (e.g., from CSM to DTM) will be made without termination liability subject to the Add/Remove Node charge described in E.5.a of this section.

ADVANCED DATA SERVICES

E. VERIZON DEDICATED WAVELENGTH RING (DWR) - Continued

6. OPTIONAL FEATURES - NETWORK MANAGEMENT - Continued

b. Direct TL1 Monitoring (DTM)

DTM provides a customer with near real-time information about the operational status of its DWR network over a TL1 connection. A TL1 connection is a machine-to-machine communication language protocol. The connection allows a customer to monitor its DWR network via a limited set of executable TL1 commands in order to query alarm and performance criteria.

DTM enables the following:

- Near real-time access to system-generated alarm and performance messages originating from the customer's DWR network elements.
- Query and response capability that enables two-way communications with the capability to poll and retrieve messages, such as command alarms and performance messages.
- Access to ring inventory information that will enable the customer to maintain its own inventory database containing network element configurations and usage records for active service channels.
- Notification that a power failure has occurred at a DWR network element and that the affected network element has reverted to battery backup.
- Ability to monitor the ring, as well as all service channels riding the ring.

(1) Terms and Conditions

The customer must order two (2) special access services, provided by the Company, in order to ensure secure, dedicated private line access and enable full redundancy for DTM. These special access lines must originate at the customer's designated premises and terminate at a DTM site designated by the Company with the terms and conditions of this section. The customer is responsible for procuring any additional services that may be necessary to connect the special access service to the customer's designated premises.

When requested by the customer, and where technically feasible to do so, the Company will provide encryption capabilities on the Special Access Services used to access DTM. The Company will specify any equipment or software required to provide encryption. Obtaining such equipment or software is the responsibility of the customer. The customer is also responsible for:

a) Security of any equipment, servers, systems or other facilities provided by the customer and which have access to the DTM network; and
b) Monitoring access to the DTM service using the facilities, systems, equipment or servers provided by the customers.
c) DTM is only provided when the Company provides all the nodes on the ring.

ADVANCED DATA SERVICES

E. VERIZON DEDICATED WAVELENGTH RING (DWR) - Continued

6. OPTIONAL FEATURES - NETWORK MANAGEMENT - Continued

b. Direct TL1 Monitoring (DTM) - Continued

(2) Application of Rates and Charges

A DTM monthly recurring charge applies, per full ring, for each DWR provided with the DTM optional feature.

A Node Setup charge applies, per primary or expansion node, for each node that is equipped with DTM at the time that DTM is initially established on the DWR.

A DTM Setup charge applies for establishment of the customer's DTM database partition.

An Add/Remove Node charge applies, per primary and expansion node, for each node that is added to, or removed from, an DWR ring equipped with DTM subsequent to the initial establishment of DTM.

A Consultation and Support charge applies for each thirty (30) minutes or fraction thereof that the customer requests Company consultation and support of its DTM network. This charge does not apply during initial setup of DTM.

A Change in Network Management Method charge applies, per primary and expansion node, when the customer requests a change in Network Management Method (e.g., from DTM to CSM).

(3) Rate Conditions

DTM is provided under a term plan of 3 years, 5 years or 7 years, as described following.

a) The duration of the term plan for DTM must be the same duration as the term plan for the DWR nodes provided with DTM. At the expiration of its 3-, 5- or 7-year term plans for DTM, the customer has the option of extending DTM with a coterminous end date as described following.

b) The expiration date of each DTM added subsequent to the initial installation must be coterminous to the expiration date of the associated DWR, provided the addition is prior to the 21st month for a 3-year plan, prior to the 36th month for a 5-year plan, or prior to the 50th month for a 7-year plan. A DTM added after the aforementioned periods requires extension of the commitment period for the associated DWR in accordance with this section. Such extension results in the establishment of a new plan that includes both the DWR and the DTM under the same plan with the same expiration date.

Termination liability will apply if DTM is removed prior to completion of the existing commitment period. The terms and conditions in E.5.c apply to termination of DTM prior to completion of the existing commitment period. Changes in Network Management Method (e.g., from DTM to CSM) will be made without termination liability subject to the Add/Remove Node charge set forth in E.5.a of this section.

ADVANCED DATA SERVICES

E. VERIZON DEDICATED WAVELENGTH RING (DWR) - Continued

7. RATES AND CHARGES

a. Nodes, per node

	Monthly Rate	Initial Nonrecurring Charge
4 Channel Nodes (Primary or Expansion)		
3-Year Term	$ 6,530.00	$1.00
5-Year Term	4,900.00	1.00
7-Year Term	4,850.00	1.00
16 Channel Nodes (Primary or Expansion)		
3-Year Term	$ 8,270.00	$1.00
5-Year Term	6,200.00	1.00
7-Year Term	6,100.00	1.00

ADVANCED DATA SERVICES

E. VERIZON DEDICATED WAVELENGTH RING (DWR) - Continued

7. RATES AND CHARGES - Continued

a. Nodes, per node - Continued

	Nonrecurring Charge
Subsequent Installation or Augmentation, per 4 channel or 16 channel Primary or Expansion node	$ 1,600.00
Upgrade to 16 channel Primary or Expansion Node, Per 4 channel Primary or Expansion Node Upgraded	20,000.00

ADVANCED DATA SERVICES

E. VERIZON DEDICATED WAVELENGTH RING (DWR) - Continued

7. RATES AND CHARGES - Continued

b. Ring Mileage, per mile

	Monthly Rate
3-Year Term	
Mile 1 – 20	$310.00
Mile 21 and Over	310.00
5-Year Term	
Mile 1 – 20	230.00
Mile 21 and Over	230.00
7-Year Term	
Mile 1 – 20	225.00
Mile 21 and Over	225.00

ADVANCED DATA SERVICES

E. VERIZON DEDICATED WAVELENGTH RING (DWR) - Continued

7. RATES AND CHARGES - Continued

c. Network Optimization,
per amplification device

	Monthly Rate	Initial Nonrecurring Charge
Mid-span 3-Year Term	5,130.00	1.00
Mid-span 5-Year Term	3,850.00	1.00
Mid-span 7-year Term	3,825.00	1.00

		Nonrecurring Charge
Subsequent Installation, per amplification device	--	$1,600.00

ADVANCED DATA SERVICES

E. VERIZON DEDICATED WAVELENGTH RING (DWR) - Continued

7. RATES AND CHARGES - Continued

d. Optical Transport Channels, Point-to-Point Unprotected, Single/Multi-Port Interface

	Monthly Rate			
Interface Type	1-Year Term	3-Year Term	5-Year Term	7-Year Term
Unprotected SONET OC3/OC3c	$ 1,905.00	$ 1,270.00	$ 950.00	$ 850.00
Unprotected SONET OC12/OC12c	2,100.00	1,400.00	1,050.00	950.00
Unprotected SONET OC48/OC48c	2,805.00	1,870.00	1,400.00	1,300.00
Unprotected SONET OC192/OC192c	6,900.00	4,600.00	3,450.00	3,350.00
Unprotected 1 Gbps FICON	3,600.00	2,400.00	1,800.00	1,600.00
Unprotected 2 Gbps FICON	3,600.00	2,400.00	1,800.00	1,600.00
Unprotected Fiber Channel	3,600.00	2,400.00	1,800.00	1,600.00
Unprotected 2Gbps Fiber Channel	3,600.00	2,400.00	1,800.00	1,600.00
Unprotected ETR/CLO	3,600.00	2,400.00	1,800.00	1,600.00
Unprotected FDDI	3,600.00	2,400.00	1,800.00	1,600.00
Unprotected 1.06 Gbps ISC	3,600.00	2,400.00	1,800.00	1,600.00
Unprotected 2Gbps ISC3	3,600.00	2,400.00	1,800.00	1,600.00
Unprotected Fast Ethernet	3,600.00	2,400.00	1,800.00	1,600.00
Unprotected Gigabit Ethernet	3,600.00	2,400.00	1,800.00	1,600.00
Unprotected 10Gigabit Ethernet LAN-PHY/WAN-PHY	6,900.00	4,600.00	3,450.00	3,350.00
Unprotected D1 Video	3,600.00	2,400.00	1,800.00	1,600.00
Unprotected 2.5Gbps Multi-Port Facility	4,995.00	3,330.00	2,500.00	2,200.00
Unprotected Multi-Port Channel				
ESCON	225.00	225.00	225.00	225.00
Fiber Channel (up to 1Gbps)	225.00	225.00	225.00	225.00
FDDI	225.00	225.00	225.00	225.00
Fast Ethernet	225.00	225.00	225.00	225.00
D1 Video	225.00	225.00	225.00	225.00
OC3/3c	225.00	225.00	225.00	225.00
OC12/12c	225.00	225.00	225.00	225.00
Gigabit Ehternet	225.00	225.00	225.00	225.00
1Gbps FICON	225.00	225.00	225.00	225.00
Unprotected 10Gbps Multi-Port Facility	8,625.00	5,750.00	4,312.50	4,187.50
Unprotected Multi-Port Channel				
Gigabit Ethernet	225.00	225.00	225.00	225.00
1Gbps Fiber Channel	225.00	225.00	225.00	225.00
2Gbps Fiber Channel	225.00	225.00	225.00	225.00
1Gbps FICON	225.00	225.00	225.00	225.00
2Gbps FICON	225.00	225.00	225.00	225.00
OC48/48c	225.00	225.00	225.00	225.00

ADVANCED DATA SERVICES

E. VERIZON DEDICATED WAVELENGTH RING (DWR) - Continued

7. RATES AND CHARGES - Continued

d. Optical Transport Channels, Point-to-Point Protected, Single/Multi-Port Interface

	Monthly Rate			
Interface Type	1-Year Term	3-Year Term	5-Year Term	7-Year Term
4-Fiber Protected SONET OC3/OC3c	$ 3,810.00	$ 2,540.00	$ 1,900.00	$ 1,700.00
4-Fiber Protected SONET OC12/OC12c	4,200.00	2,800.00	2,100.00	1,900.00
4-Fiber Protected SONET OC48/OC48c	5,610.00	3,740.00	2,800.00	2,600.00
4-Fiber Protected SONET OC192/OC192c	13,800.00	9,200.00	6,900.00	6,700.00
Protected SONET OC3/OC3c	2,400.00	1,600.00	1,200.00	1,100.00
Protected SONET OC12/OC12c	2,595.00	1,730.00	1,300.00	1,200.00
Protected SONET OC48/OC48c	4,305.00	2,870.00	2,150.00	1,925.00
Protected SONET OC192/OC192c	11,205.00	7,470.00	5,600.00	4,750.00
Protected 1 Gbps FICON	4,395.00	2,930.00	2,200.00	1,950.00
Protected 2 Gbps FICON	4,395.00	2,930.00	2,200.00	1,950.00
Protected Fiber Channel	4,395.00	2,930.00	2,200.00	1,950.00
Protected 2Gbps Fiber Channel	4,395.00	2,930.00	2,200.00	1,950.00
Protected FDDI	4,395.00	2,930.00	2,200.00	1,950.00
Protected 1.06 Gbps ISC	4,395.00	2,930.00	2,200.00	1,950.00
Protected 2Gbps ISC3	4,395.00	2,930.00	2,200.00	1,950.00
Protected Fast Ethernet	4,395.00	2,930.00	2,200.00	1,950.00
Protected Gigabit Ethernet	4,395.00	2,930.00	2,200.00	1,950.00
Protected 10Gigabit Ethernet LAN-PHY/WAN-PHY	11,205.00	7,470.00	5,600.00	4,750.00
Protected D1 Video	4,395.00	2,930.00	2,200.00	1,950.00

ADVANCED DATA SERVICES

E. VERIZON DEDICATED WAVELENGTH RING (DWR) - Continued

7. RATES AND CHARGES - Continued

d. Optical Transport Channels, Point-to-Point Protected, Single/Multi-Port Interface - Continued

	Monthly Rate			
Interface Type	1-Year Term	3-Year Term	5-Year Term	7-Year Term
Protected 2.5Gbps Multi-Port Facility	$ 6,000.00	$ 4,000.00	$ 3,000.00	$ 2,700.00
Protected Multi-Port Channel				
ESCON	225.00	225.00	225.00	225.00
Fiber Channel (up to 1Gbps)	225.00	225.00	225.00	225.00
FDDI	225.00	225.00	225.00	225.00
Fast Ethernet	225.00	225.00	225.00	225.00
D1 Video	225.00	225.00	225.00	225.00
OC3/3c	225.00	225.00	225.00	225.00
OC12/12c	225.00	225.00	225.00	225.00
Gigabit Ehternet	225.00	225.00	225.00	225.00
1Gbps FICON	225.00	225.00	225.00	225.00
Protected 10Gbps Multi-Port Facility	14,006.25	9,337.50	7,000.00	5,937.50
Protected Multi-Port Channel				
Gigabit Ethernet	225.00	225.00	225.00	225.00
1Gbps Fiber Channel	225.00	225.00	225.00	225.00
2Gbps Fiber Channel	225.00	225.00	225.00	225.00
1Gbps FICON	225.00	225.00	225.00	225.00
2Gbps FICON	225.00	225.00	225.00	225.00
OC48/48c	225.00	225.00	225.00	225.00

ADVANCED DATA SERVICES

E. VERIZON DEDICATED WAVELENGTH RING (DWR) - Continued

7. RATES AND CHARGES - Continued

e. Initial and Subsequent Installations - Nonrecurring Charges,
Per optical transport channel

Interface Type	Nonrecurring Charge
Unprotected SONET OC3/OC3c	$ 1.00
Unprotected SONET OC12/OC12c	1.00
Unprotected SONET OC48/OC48c	1.00
Unprotected SONET OC192/OC192c	1.00
Unprotected 1Gbps FICON	1.00
Unprotected 2Gbps FICON	1.00
Unprotected 1GbpsFiber Channel	1.00
Unprotected 2Gbps Fiber Channel	1.00
Unprotected ETR/CLO	1.00
Unprotected FDDI	1.00
Unprotected 1.06 Gbps ISC	1.00
Unprotected 2Gbps ISC3	1.00
Unprotected Fast Ethernet	1.00
Unprotected Gigabit Ethernet	1.00
Unprotected 10 Gigabit Ethernet (LAN-PHY/WAN-PHY)	1.00
Unprotected D1 Video	1.00
Unprotected 2.5Gbps Multi-Port Facility	1.00
Unprotected Multi-Port Channel	
ESCON	1.00
Fiber Channel (up to 1Gbps)	1.00
FDDI	1.00
Fast Ethernet	1.00
D1 Video	1.00
OC3/3c	1.00
OC12/12c	1.00
Gigabit Ethernet	1.00
1Gbps FICON	1.00
Unprotected 10Gbps Multi-Port Facility	1.00
Unprotected Multi-Port Channel	
Gigabit Ethernet	1.00
1Gbps Fiber Channel)	1.00
2Gbps Fiber Channel	1.00
1Gbps FICON	1.00
2Gbps FICON	1.00
OC48/48c	1.00

ADVANCED DATA SERVICES

E. VERIZON DEDICATED WAVELENGTH RING (DWR) - Continued

7. RATES AND CHARGES - Continued

e. Initial and Subsequent Installations - Nonrecurring Charges, Per optical transport channel - Continued

Interface Type	Nonrecurring Charge
4-Fiber Protected SONET OC3/OC3c	$ 1.00
4-Fiber Protected SONET OC12/OC12c	1.00
4-Fiber Protected SONET OC48/OC48c	1.00
4-Fiber Protected SONET OC192/OC192c	1.00
Protected SONET OC3/OC3c	1.00
Protected SONET OC12/OC12c	1.00
Protected SONET OC48/OC48c	1.00
Protected SONET OC192/OC192c	1.00
Protected 1 Gbps FICON	1.00
Protected 2 Gbps FICON	1.00
Protected Fiber Channel	1.00
Protected 2Gbps Fiber Channel	1.00
Protected FDDI	1.00
Protected 1.06 Gbps ISC	1.00
Protected 2Gbps ISC3	1.00
Protected Fast Ethernet	1.00
Protected Gigabit Ethernet	1.00
Protected 10 Gigabit Ethernet (LAN-PHY/WAN-PHY)	1.00
Protected D1 Video	1.00

ADVANCED DATA SERVICES

E. VERIZON DEDICATED WAVELENGTH RING (DWR) - Continued

7. RATES AND CHARGES - Continued

e. Initial and Subsequent Installations - Nonrecurring Charges,
Per optical transport channel - Continued

Interface Type	Nonrecurring Charge
Protected 2.5Gbps Multi-Port Facility	$ 1.00
Protected Multi-Port Channel	
ESCON	1.00
Fiber Channel (up to 1Gbps)	1.00
FDDI	1.00
Fast Ethernet	1.00
D1 Video	1.00
OC3/3c	1.00
OC12/12c	1.00
Gigabit Ethernet	1.00
1Gbps FICON	1.00
Protected 10Gbps Multi-Port Facility	1.00
Protected Multi-Port Channel	
Gigabit Ethernet	1.00
1Gbps Fiber Channel)	1.00
2Gbps Fiber Channel	1.00
1Gbps FICON	1.00
2Gbps FICON	1.00
OC48/48c	1.00

ADVANCED DATA SERVICES

E. VERIZON DEDICATED WAVELENGTH RING (DWR) - Continued

7. RATES AND CHARGES - Continued

f. Optional Features - Network Management Methods

(1) Customer Service Management

	Monthly Rate
CSM, per primary ring	
3 year	$ 450.00
5 year	450.00
7 year	450.00
Customized Reports	ICB

	Nonrecurring Charge
Node Setup, per primary or expansion node on the ring equipped during initial CNM Method establishment	$ 200.00
Initial CSM Setup, first partition with up to 6 users	500.00
Setup of Additional Partition	500.00
Setup of Additional Users, up to 6 additional users	350.00
Add/Remove Node, per primary or expansion node added to, or removed from, the CSM ring subsequent to initial establishment or for a Change in Network Management Method	200.00
Consultation and Support, each 30 minutes or fraction thereof	100.00
Change Network Management Method, from CSM to DTM, per node	200.00

ADVANCED DATA SERVICES

E. VERIZON DEDICATED WAVELENGTH RING (DWR) - Continued

7. RATES AND CHARGES - Continued

f. Optional Features - Network Management Methods - Continued

(2) Direct TL1 Monitoring (DTM)

	Monthly Rate
DTM, per primary ring	
3 year	$ 450.00
5 year	450.00
7 year	450.00
Customized Reports	ICB

	Nonrecurring Charge
Node Setup, per primary or expansion node on the ring equipped during initial DTM establishment	$ 200.00
Initial DTM Setup, first partition with up to 6 users	500.00
Add/Remove Node, per primary or expansion node added to, or removed from, the DTM ring subsequent to initial establishment or for a Change in Network Management Method	200.00
Consultation and Support, each 30 minutes or fraction thereof	100.00
Change Network Management Method, from DTM to CSM, per node	200.00

ADVANCED DATA SERVICES

F. VERIZON INTEGRATED OPTICAL SERVICES (IOS)

1. APPLICATION

This section contains definitions, charges, terms and conditions applicable to the provision of Integrated Optical Services (IOS) furnished by the Company within the State of California, where conditions and facilities permit.

In addition to the terms and conditions set forth in this section, IOS is also subject to the provisions of tariff Schedule Cal. P.U.C. No. C-1, except that, in the event of conflict, the provisions of this section shall take precedence. IOS may be resold but no resale discount from the Company shall be required or shall apply.

Verizon Integrated Optical Services (IOS) is available where facilities and conditions permit in all existing Verizon exchanges as listed in Section 4A, Sheets 3 and 4. The Company concurs in all of the maps filed as part of Southwestern Bell Communications (SBC) Network and Exchange Services tariff, Schedule Cal. P.U.C. No. A5.1.A.

2. DESCRIPTION OF SERVICE

Integrated Optical Service (IOS) is a dedicated optical network that integrates Dense Wave Division Multiplexing (DWDM), Synchronous Optical Network (SONET), and packet technologies into a single network. An IOS network may be configured specifically to address the Customer's diversity and survivability requirements and may be configured as a single diversely routed ring. The rings are full (closed). The protocols that can be transmitted over IOS include, but are not limited to, time division multiplexing (TDM), SONET, Ethernet, Storage, Video, and mainframe. These services may be protected or unprotected depending on the level of survivability required by the Customer.

IOS is designed with fiber path diversity, which provides two fiber pairs, placed in physically separate paths (e.g. different conduit paths) and separated by at least twenty-five (25) feet. Such 25-foot separation is not required: a) on Customer's property, even if past the Point of Termination; b) five hundred (500) feet out from the property line of the Customer Node location; and c) five hundred (500) feet out from any Verizon central office Node location.

IOS provides a high capacity optical network for the delivery of a variety of interfaces and protocols. Each signal (Rider) transported over IOS is provisioned over a single or multiple Facilities of the dedicated optical network.

An IOS full (closed) ring provides connectivity to multiple locations (Nodes) using Facilities and network elements provided solely by Verizon. A minimum of three (3) Nodes are required of which one (1) Node must be located at a Customer designated Premises and one (1) Node must be located in a Verizon Wire Center.

ADVANCED DATA SERVICES

F. VERIZON INTEGRATED OPTICAL SERVICES (IOS) - Continued

3. ACRONYMS AND DEFINITIONS

a. Acronyms

ANSI - American National Standards Institute
CSM – Customer Service Management Optional Feature
DSR – Dedicated SONET Ring
EPR - Ethernet Packet Ring
F.C.C. - Federal Communications Commission
Gbps - Gigabits Per Second
GigE - Gigabit Ethernet
HDTV - High Definition Television
IBT – IntelliLight® Broadband Transport
IOTS - IntelliLight® Optical Transport Service
LAN - Local Area Network
Mbps - Megabits Per Second
OC - Optical Carrier
SLA - Service Level Agreement
STS - Synchronous Transport Signal
UNI - User to Network Interface

b. Definitions

Appearance: an IOS rate element that denotes the interface at which a Rider terminates or originates at an IOS Node.

Central Office (CO): A Verizon office or building in which local loops serving a Customer designated Premises in a locality are connected to each other or to a Verizon optical network at such office or building.

Channel(s): an electrical or photonic, in the case of fiber optic-based transmission systems, communications path between two (2) or more points of termination.

Customer(s): any individual, partnership, association, joint-stock company, trust, corporation, or governmental entity or other entity which subscribes to the Services or other arrangements offered under this Product Guide, including both Interexchange Carriers and End Users.

Customer Premises Equipment (CPE): terminal equipment connected to Verizon's network and residing on the Customer designated Premises.

Drop Port Protection: provided on SONET appearances in which a four fiber (4-fiber) 1+1 interface is demarcated. This 1+1 interface is protected against a port failure either on the Verizon side or on the Customer side of the demarcation point.

ADVANCED DATA SERVICES

F. VERIZON INTEGRATED OPTICAL SERVICES (IOS) - Continued

3. ACRONYMS AND DEFINITIONS - Continued

b. Definitions - Continued

Facilities: telecommunications cables and equipment owned and utilized by Verizon in the provision of service.

Node: A rate element and a designation of either a Customer designated Premises or CO on an IOS ring that has ADM capability.

Optical Carrier Rate (OCn): a SONET transmission signal/speed, line rate, or service. The rates are in multiples of an OC1, which is equivalent to an STS1 (51.84 Mbps), SONET's basic rate.

OCn Rate	Bandwidth Capacity
OC3	155.52 Mbps
OC12	622.08 Mbps
OC48	2.488 Gbps
OC192	9.953 Gbps

Optical Carrier Rate Concatenated (OCnc): a "clear channel" SONET transmission using only one (1) framing format. For example, an OC3 signal provides three (3) STS1 frame formats with 3 overheads for a total capacity of 2,268 bytes per SPE frame in an OC3c signal. In an OC3c signal, one (1) STS3c frame format is used with one (1) overhead, increasing the total payload capacity to 2,340 bytes per SPE frame.

Point of Termination: the point of demarcation within the Customer designated Premises at which Verizon's responsibility for the provision of Service ends.

Premises: a building, a portion of a building in a multi-tenant building, or buildings on a continuous property (except Railroad Right-of-Way, etc.) not separated by a public highway.

Service Date: the date that a service has been installed, tested, and made available to the Customer. A confirmed ASR is required to establish a Service Date.

ADVANCED DATA SERVICES

F. VERIZON INTEGRATED OPTICAL SERVICES (IOS) - Continued

3. ACRONYMS AND DEFINITIONS - Continued

b. Definitions - Continued

SONET (Synchronous Optical Network): the North American standard for the transmission of high capacity bandwidth over optical Facilities. This synchronous transmission platform utilizes a modular multiplexing approach. Because of the large bandwidth, some of the payload is used to monitor, protect, manage, and improve the transmission of the signal.

Synchronous Transport Signal - Level (STS1): a 51.84 Mbps signal that is the electrical equivalent of the OC1 or a DS3 with additional Mbps devoted to SONET overhead information. The STS1 signal consists of overhead and an SPE. The overhead part of the signal is used for controlling, framing, and maintaining the signal. An STS1 can carry a DS3 or 28 DS1s when specifically formatted (Mapped). However, individual DS1s within a DS3 are not accessible within SONET and their performance cannot be guaranteed for this reason. These DS1s may be accessed using the Special Access DS3-to-DS1 multiplexing optional service.

Wire Center: a Verizon building in which one (1) or more Central Office switches and cross connection equipment used for the provision of Verizon telecommunications services are located.

4. SERVICE COMPONENTS

a. Components

1) Nodes

Nodes are optical networking devices located at Customer designated Premises or Verizon Wire Centers from which Riders are multiplexed on or off of the IOS network. The configuration of an IOS Node that is deployed at each location is determined by the number and type of Riders that are transported between locations.

Each Node allows Protected or Unprotected Riders to be deployed, as described in F.4.a.3) following.

The maximum number of Riders that can be deployed at a single location is dependent upon the specific configuration of the IOS network and the type and quantity of Riders being deployed from that location.

ADVANCED DATA SERVICES

F. VERIZON INTEGRATED OPTICAL SERVICES (IOS) - Continued

4. SERVICE COMPONENTS - Continued

a. Components - Continued

2) Ring Mileage

For full ring service configurations, Ring Mileage is the total of airline distances between devices (Nodes and/or high speed pass-through interfaces) rounded up to the nearest mile. The mileage rate is based on total ring capacity and not on individual services between devices. For example, the mileage charge for a five device ring and a distance of 4.3 miles between each device (21.5 total miles) would be calculated by multiplying the mileage rate by 22 miles.

The mileage between devices located at the same Customer designated Premises or Verizon CO (e.g., dual Nodes at the same Premises) is zero.

The mileage calculation applies regardless of the number of services that are transported over the IOS ring.

3) Riders

Riders allow lower level signals to be transported over the IOS network. Riders allow for optical services to be multiplexed on to or off of the IOS network at locations equipped with a Node. An optical interface at the Node allows for connection of the applicable protocol to the Customer's equipment.

Riders are available on a Protected or Unprotected basis depending on the protocol being transmitted and the level of redundancy required for the Rider. Some protocols have facility distance limitations and may affect the design or availability of the IOS network or its Riders.

i) Protected Rider

A Protected Rider allows for a single signal from the Customer to be duplicated and sent over separate diverse routes (working and protect) within the IOS network. At the option of the Customer, network Protected Riders may be ordered with Drop Port Protection.

ii) Unprotected Rider

An Unprotected Rider provides minimum protection of the signal from the Customer. Verizon does not provide route (network level) protection or Drop Port Protection on an Unprotected Rider. However, a Customer purchasing two (2) Unprotected Riders may create their own protection schemes.

Riders are provided on a Node-to-Node (i.e., point-to-point) basis.

ADVANCED DATA SERVICES

F. VERIZON INTEGRATED OPTICAL SERVICES (IOS) - Continued

4. SERVICE COMPONENTS - Continued

a. Components - Continued

3) Riders - Continued

The services transmitted as Riders over the IOS network include the following protocols:

DS1 (available pursuant to Verizon's Tariff F.C.C. Nos. 14 and/or 16) – for transmission of isochronous serial data at a rate of 1.544 Mbps.

DS3 (available pursuant to Verizon's Tariff F.C.C. Nos. 14 and/or 16) – for transmission of isochronous serial data at a rate of 44.736 Mbps.

SONET OC3 – for transmission of 155.52 Mbps synchronous optical data transmission capability.

SONET OC3c – for transmission of concatenated 155.52 Gbps synchronous optical data transmission capability.

SONET OC12 – for transmission of 622.08 Mbps synchronous optical data transmission capability.

SONET OC12c – for transmission of concatenated 622.08 Gbps synchronous optical data transmission capability.

SONET OC48 – for transmission of 2.488 Gbps synchronous optical data transmission capability.

SONET OC48c – for transmission of concatenated 2.488 Gbps synchronous optical data transmission capability.

SONET OC192 – for transmission of 9.953 Gbps synchronous optical data transmission capability.

SONET OC192c – for transmission of concatenated 9.953 Gbps synchronous optical data transmission capability.

ADVANCED DATA SERVICES

F. VERIZON INTEGRATED OPTICAL SERVICES (IOS) - Continued

4. SERVICE COMPONENTS - Continued

a. Components - Continued

3) Riders - Continued

The services transmitted as Riders over the IOS network include the following protocols: - Continued

10 Gigabit Ethernet LAN-PHY – 10GBASE-R (LAN PHY) interfaces offer an effective line rate of 10.3125 Gbps (10 Gbps of data traffic encoded in a 64B/66B protocol compared to the traditional 8B/10B protocol of Gigabit Ethernet).

10 Gigabit Ethernet WAN-PHY – 10GigE data rate and format compatible with the SONET OC192c transmission format defined by ANSI.

10 Mbps Ethernet – for 10 Mbps transmission of Ethernet.

Fast Ethernet – for 50 Mbps or 100 Mbps transmission of Ethernet.

Gigabit Ethernet – for 1.0 Gbps transmission of Ethernet. Gigabit Ethernet may also be mapped at 50, 100, 150, 300, 450, or 600 Mbps.

Fibre Channel – for full-duplex, serial bit transmission at a link rate of 1, 2, 4 or 10 Gbps Fibre Channel among mainframes, storage devices, and peripherals.

D1 Video – for uncompressed digital transmission of video signals operating at 270 Mbps.

High Definition Video – for uncompressed digital transmission of video signals operating at 1.485Gbps.

When a Rider is ordered to connect with Verizon Optical Networking, Custom Connect or IBT, the Rider will be billed to the Verizon Optical Networking, Custom Connect or IBT Customer, as applicable.

ADVANCED DATA SERVICES

F. VERIZON INTEGRATED OPTICAL SERVICES (IOS) - Continued

4. SERVICE COMPONENTS - Continued

a. Components - Continued

4) Ethernet Packet Ring Service Optional Feature

a) Description

EPRS is available on IOS. EPRS enables switched Ethernet signals to be transmitted over partitioned bandwidth of the Customer's IOS.

The partitioned bandwidth is comprised of STS1 capacity within the IOS that is dedicated to unprotected Ethernet signal transmission between Nodes on that IOS. Ethernet signals must originate at, and terminate to, Nodes that are located at a Customer designated Premises. These Nodes are part of the backbone ring for IOS and are also used to add lower level services onto the backbone ring or to drop lower level services from the backbone ring.

Multiple EPRS partitions may be created on the same IOS. Subject to the preceding paragraph, in no case will the total bandwidth of the EPRS partition(s) exceed the remaining OCn capacity of the IOS. Ethernet traffic on the EPRS partition may be transmitted in either direction (East to West or West to East) around the ring.

Connection to other Verizon Ethernet services is prohibited.

Verizon does not guarantee the performance of Ethernet signals transported over EPRS.

Monthly rates apply for each EPR Station per Node and to each UNI associated with that EPR Station. Nonrecurring charges apply for the installation of EPRS UNIs on a first and additional basis. Rates and charges EPRS are provided on an individual case basis (ICB) only.

ADVANCED DATA SERVICES

F. VERIZON INTEGRATED OPTICAL SERVICES (IOS) - Continued

4. SERVICE COMPONENTS - Continued

a. Components - Continued

4) Ethernet Packet Ring Service Optional Feature - Continued

b) Service Components of EPRS

EPRS is comprised of EPR Stations and UNIs.

An EPR Station defines the bandwidth required for the partitioned EPRS. A minimum of one EPR Station is required per EPRS. Available EPR Station rates include:

EPR Station Rate	OC12	OC48	OC192
50 Mbps (STS1)	X	X	X
150 Mbps (STS3 or STS3c)	X	X	X
300 Mbps (STS6 or STS6c)	X	X	X
450 Mbps (STS9 or STS9c)	X	X	X
600 Mbps (STS12 or STS12c)		X	X
1000 Mbps (STS21/24 or STS21c/24c)		X	X

UNIs provide access to the EPRS partition on the IOS ring. A minimum of two UNIs is required per EPRS partition. The maximum number of UNIs per EPRS partition is dependent upon the type and capacity of Enhanced Nodes on the IOS. Available UNIs on EPR stations are as follows:

	EPR Station Rate					
Available UNIs	50 Mbps	150 Mbps	300 Mbps	450 Mbps	600 Mbps	1,000 Mbps
10 Mbps UNIs	X	X	X	X	X	X
100 Mbps UNIs	X	X	X	X	X	X
1000 Mbps UNIs	X	X	X	X	X	X

ADVANCED DATA SERVICES

F. VERIZON INTEGRATED OPTICAL SERVICES (IOS) - Continued

4. SERVICE COMPONENTS - Continued

a. Components - Continued

4) Ethernet Packet Ring Service Optional Feature - Continued

b) Service Components of EPRS - Continued

Verizon will disable SONET protection on the portion of the IOS that is partitioned for transmission of Ethernet traffic. No credit applies for a service outage of EPRS, or for any Ethernet signal transported over EPRS, when the SONET protection is disabled by Verizon.

When an EPRS partition is established on an IOS that is also configured with Customer Service Management as set forth in Section 4.B following, Customer Service Management functionality will not be provided on EPRS or any Ethernet signals transmitted over EPRS.

EPRS cannot be used to access Transparent LAN Service.

b. Customer Service Management (CSM)

Customer Service Management (CSM) provides a customer a view of their IOS network. CSM will be accessible via the internet on the Verizon Business Customer Center (VBCC). CSM will provide inventory and circuit information with regards to the IOS network and all services that ride the IOS.

The Customer may retrieve basic reports containing performance monitoring information on its IOS network. Basic reports are available at no additional charge to the Customer. The Customer may also request that a report be customized to meet its particular needs. Rates and charges for customized reports are provided on an individual case basis (ICB) only.

The Customer must utilize Internet web access to connect its Customer provided terminal equipment to Verizon's CSM management system. Access to the Internet and any associated rates and charges are the responsibility of the Customer. The Customer is also responsible for obtaining communications software that is compatible with the software Verizon utilizes to provide CSM. Verizon will work cooperatively with the Customer to determine compatibility of its communications software.

CSM is provided as part of the IOS offering at no additional charge.

EPRS partitions and Ethernet signals transmitted over such partitions are not accessible via CSM.

ADVANCED DATA SERVICES

F. VERIZON INTEGRATED OPTICAL SERVICES (IOS) - Continued

5. TECHNICAL SPECIFICATIONS

a. Technical Specifications

The technical specifications for IOS are currently delineated in following Technical References:

DWDM. Technical Publications GR-2918-CORE, Issue 4, GR-2979-CORE, Issue 3, GR-1312-CORE, Issue 3, ITU-T G.959.1 and ITU-T G.692 for DWDM.

SONET. Technical Publications GR-253-CORE, Issue 3, GR-1374-CORE, Issue 1, ANSI T1.105-1995 for SONET.

EPRS. Technical Publication IEEE 802.17 for EPRS.

b. Protocols

The technical publications for the protocols transmitted over IOS are set forth in:

Protocol Transmitted	Technical Publication
DS1, DS3	GR-342, Issue 1, Pub 62411, TR-NPL-000054, TR-EOP-000063 Issue 1
OC3, OC3c, OC12, OC12c, OC48, OC48c, OC192, OC192c	GR-253-CORE, Issue 3
Ethernet (10 Mbps)	ANSI/IEEE 802.3
Fast Ethernet	ANSI/IEEE 802.3u
Gigabit Ethernet	ANSI/IEEE X3.802.3, X3.802.3z
10 Gigabit Ethernet WAN-PHY	IEEE 802.3ae with WAN Interface Sublayer
10 Gigabit Ethernet LAN-PHY	IEEE 802.3ae with LAN Interface Sublayer
Fibre Channel	ANSI/NCITS 404 - 2005 ANSI/NCITS 364 - 2004
D1 Video	ANSI/SMPTE 259M – 1997

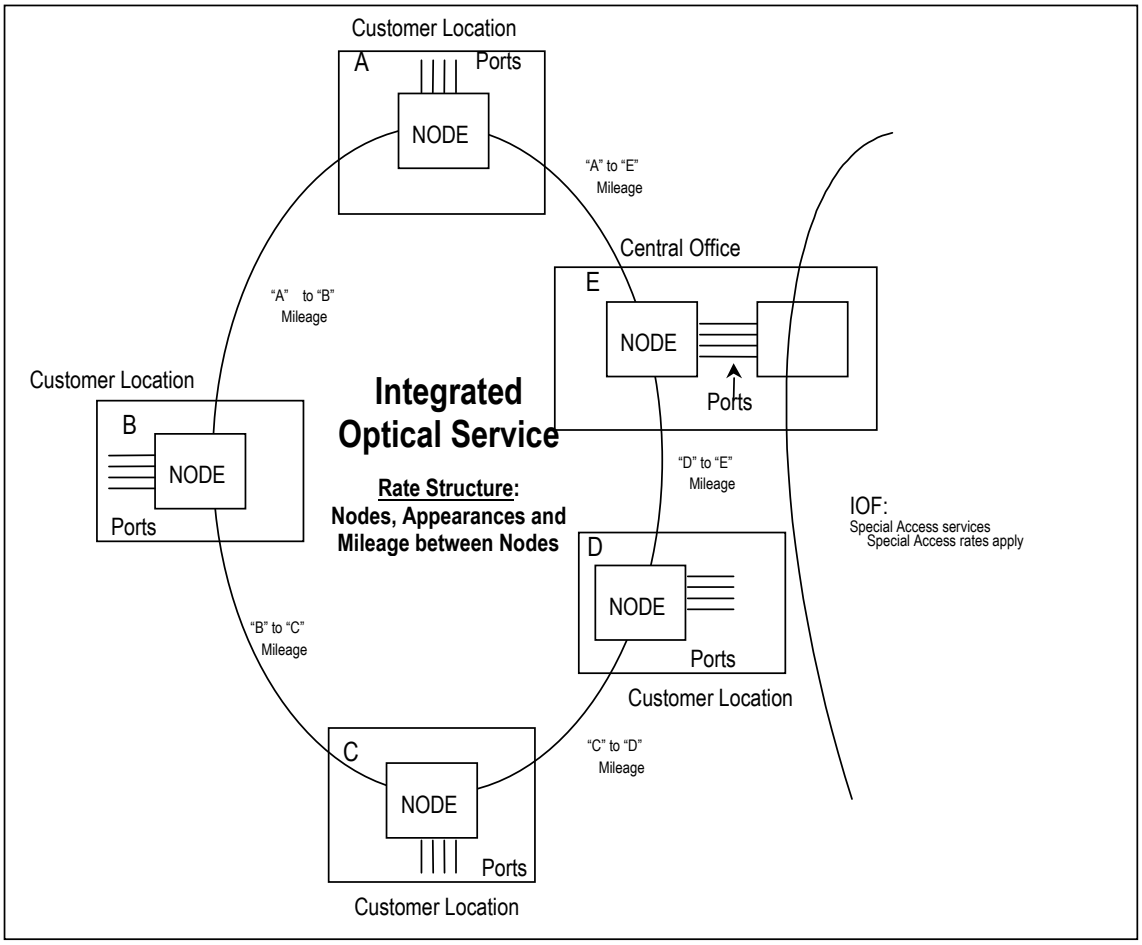
Technical specifications are subject to change in accordance with changes adopted by standards-setting industry bodies. Such updates to technical specifications, as they occur, and as determined by Verizon, shall be automatically incorporated without the requirement to amend this section.

ADVANCED DATA SERVICES

F. VERIZON INTEGRATED OPTICAL SERVICES (IOS) - Continued

5. TECHNICAL SPECIFICATIONS - Continued

c. An example of an Integrated Optical Service ring is diagrammed below:



ADVANCED DATA SERVICES

F. VERIZON INTEGRATED OPTICAL SERVICES (IOS) - Continued

6. TERMS AND CONDITIONS

a. Deployment and Availability

Because IOS is a dedicated high capacity customized network, it is deployed upon Customer request. Where suitable Facilities and equipment are not sufficient or do not exist to provide IOS, Verizon may provide the Service subject to additional special construction, if any. If the Customer agrees to the special construction charges, the Parties shall either enter in to a separate agreement for such special construction, or enter into an amendment to an existing agreement, as mutually agreed to by the Parties.

The provisioning of IOS is based on negotiated intervals between Verizon and the Customer.

b. Connection to Other Services

IOS connects to other Verizon services only as expressly stated herein:

Special Access DS1 and DS3 High Capacity Services - Connection of Special Access DS1 and DS3 High Capacity Services are provided pursuant to Verizon's Tariff F.C.C. Nos. 1, 11, 14, and/or 16.

IBT - Connection of IBT to an IOS network is provided over an equal speed OC3/OC3c, OC12/OC12c, OC48/OC48c, or OC192/OC192c Protected Rider or Protected Rider with Drop Port Protection.
All other applicable IBT terms and conditions apply.

Verizon Optical Networking - Connection of a Verizon Optical Networking Ethernet service to an IOS network is provided over an equal speed protected Ethernet Rider. Connection of a Verizon Optical Networking Ethernet-to-SONET mapped service is provided over an equal speed Protected SONET Rider. All other applicable Verizon Optical Networking terms and conditions apply to the derived Ethernet-to-SONET mapped service.

Available Verizon Optical Networking Service	Interface Connections
10M Ethernet	10BaseT
Fast Ethernet @ 50Mbps	10BaseT or 100FX
Fast Ethernet @ 100Mbps	10BaseT or 100FX
Gigabit Ethernet @ 50Mbps	1000SX or LX
Gigabit Ethernet @ 150Mbps	1000SX or LX
Gigabit Ethernet @ 300Mbps	1000SX or LX
Gigabit Ethernet @ 450Mbps	1000SX or LX
Gigabit Ethernet @ 600Mbps	1000SX or LX
Gigabit Ethernet @ 1000Mbps	1000SX or LX

ADVANCED DATA SERVICES

F. VERIZON INTEGRATED OPTICAL SERVICES (IOS) - Continued

6. TERMS AND CONDITIONS - Continued

b. Connection to Other Services - Continued

Available Verizon Optical Networking Service	Interface Connections - Continued
10M Ethernet mapped to STS1	OC3, OC12, OC48
Fast Ethernet mapped to STS1	OC3, OC12, OC48
Fast Ethernet mapped to OC3c	OC3c, OC12,OC48
Gigabit Ethernet @ 50Mbps mapped to STS1	OC3, OC12, OC48
Gigabit Ethernet @ 150Mbps mapped to 3 STS1s	OC3, OC12, OC48
Gigabit Ethernet @ 300Mbps mapped to 6 STS1s	OC12, OC48
Gigabit Ethernet @ 450Mbps mapped to 9 STS1s	OC12, OC48
Gigabit Ethernet @ 600Mbps mapped to 12 STS1s	OC12, OC48
Gigabit Ethernet @ 600Mbps mapped to OC12c	OC12c, OC48
Gigabit Ethernet @ 1000Mbps mapped to 21 STS1s	OC48

Custom Connect - Connection of Custom Connect to an IOS network is provided over an equal speed OC3/OC3c, OC12/OC12c, OC48/OC48c, or OC192/OC192c Protected Rider or a Protected Rider with Drop Port Protection (e.g., a 155.52 Mbps Protected Rider would connect to a Custom Connect SONET OC3 service). All other applicable Custom Connect and SONET terms and conditions apply to the derived Custom Connect.

c. Responsibilities of the Parties

The Customer is responsible to ensure that its Facilities and equipment meet any applicable technical requirements or limitations for the protocol being transmitted over IOS.

Verizon is responsible for the overall design and configuration of the IOS network. Construction of the IOS network will not begin until such design and configuration are mutually agreeable to both the Customer and Verizon.

All signals generated by the Customer provided equipment and delivered to Verizon for multiplexing on to IOS must meet industry standards and specifications for the underlying protocol. The Customer is responsible to perform any error detection and error correction of the data generated by its equipment. Verizon assumes no responsibility for the quality of the signal generated by the Customer or any Customer provided equipment and will deliver the signal to the receiving location in the same format and condition as generated by the Customer.

ADVANCED DATA SERVICES

F. VERIZON INTEGRATED OPTICAL SERVICES (IOS) - Continued

6. TERMS AND CONDITIONS - Continued

d. Service Level Agreements

1) General

The following Service Level Agreements (SLAs) apply only to the IOS network and Riders. The applicable SLAs are Mean Time To Restore and Service Availability. Customer is eligible for Service Response Credits (SRCs) for missed SLAs with respect to the IOS network and Riders (Affected Services). No SLAs shall be available until the Affected Service measured is in service for at least one full calendar month.

In order to obtain an SRC, Customer must make a written request as directed by Verizon for such SRCs within thirty (30) calendar days of the end of the monitoring period for the SLA measurement. The request must include a list of all impacted circuit/connection identification numbers and the type of SRC requested for each circuit/connection. The monitoring period for all SLAs is based on a calendar month. Any SRCs are subject to verification by Verizon through its own monitoring systems and procedures.

For any calendar month, the SRCs may not exceed the total monthly recurring charges (MRCs) billed to Customer for the Affected Service that is subject to a missed SLA for that month.

No SRCs will be issued to the extent the missed SLA is caused by the following:

a) The negligence of the Customer or a third party authorized by the Customer to use the IOS;

b) Failure of power, CPE or other equipment, systems, facilities or services not provided by Verizon;

c) Customer's failure to release any IOS component for testing and/or repair or Verizon is otherwise not afforded access to the premises where the IOS are provided;

d) The SLA is missed due to routine maintenance of the IOS, an IOS rearrangement requested by Customer, or the implementation of a Customer issued service order for a change to the IOS;

e) Customer failure to authorize replacement of any element of new construction following the receipt of written notification by Verizon of the need for such replacement;

f.) Force majeure events;

g) Subsequent reports made by Customer while the initial trouble report is pending or service troubles repaired by Verizon prior to its receipt of a trouble report; and

h) Service troubles closed due to Customer action.

ADVANCED DATA SERVICES

F. VERIZON INTEGRATED OPTICAL SERVICES (IOS) - Continued

6. TERMS AND CONDITIONS - Continued

d. Service Level Agreements - Continued

2) Service Availability

The Service Availability SLA refers to the percentage of time during a calendar month that the Affected Services (*i.e.*, IOS network or Riders as may be applicable) is available for use by Customer, which means that the Affected Service is capable of transmitting data over such Affected Service. Measurements for Service Availability shall not be rounded up. Service Availability is calculated based upon the total number of minutes in a calendar month that Customer was actually in service divided by the total number of minutes in such month for all Affected Services.

With respect to IOS network, the Service Availability SLA is 99.999%. If the overall Service Availability measurement for the IOS network is less than that threshold for a calendar month, Customer is eligible for an SRC of twenty-five percent (25%) of the MRCs for Nodes and Mileage.

The Service Availability measurement of a Protected Rider is 99.999%. The Service Availability of an Unprotected Rider is 99.000%. When the Service Availability SLA for a Rider is not met, Customer is eligible for an SRC of twenty-five percent (25%) of the MRCs for the Appearances relating to the Affected Rider that did not meet such threshold during such calendar month.

3) Mean Time to Restore

The Mean Time to Restore (MTTR) SLA refers to the average Time to Restore (TTR) for Customer-reported IOS Interruptions. An IOS Interruption shall mean that data cannot be transported over the IOS network solely because of a failure in Verizon-provided facilities.

The TTR is measured from the date and time a trouble ticket is opened by Verizon and the date and time when such ticket is closed by Verizon. In measuring the TTR, any stop clock time or adjusted duration time basis associated with the trouble shall be subtracted from such measurement. For purposes of this measurement, stop clock time refers to:

a) time periods when Customer testing is occurring,

b) time periods when Verizon is awaiting Customer authorization to commence work on the IOS;

c) periods when the Customer is working on its equipment and has not released the facility to Verizon for maintenance, testing, or repair;

d) Verizon is denied access to Customer premises or facilities as necessary to diagnose, repair or test;

ADVANCED DATA SERVICES

F. VERIZON INTEGRATED OPTICAL SERVICES (IOS) - Continued

6. TERMS AND CONDITIONS - Continued

d. Service Level Agreements - Continued

3) Mean Time to Restore - Continued

e) periods following a repair of a Service when the trouble ticket is held open by Customer to ensure the trouble is resolved;

f) periods when pre-defined maintenance windows have been established between the Customer and Verizon, and

g) any time period during which any of the occurrences listed in F.6.d.3)a) - f) preceding existed.

The MTTR SLA shall not apply to cases where no trouble is found, informational tickets, subsequent trouble tickets made by Customer while the initial trouble report is pending or trouble repaired by Verizon prior to its receipt of a trouble ticket.

The MTTR SLA shall be measured on a calendar month basis and shall be calculated by adding the TTR for all IOS Interruptions and dividing that sum by the total number of trouble tickets opened for such Interruptions for that Customer during that month. Calculation of MTTR shall exclude any subsequent reports (additional Customer inquiries while the trouble is pending), and troubles repaired by Verizon prior to receipt of a trouble report on the Affected Service from Customer.

If the MTTR for the IOS network is greater than 2.5 hours over the calendar month, then Customer will be eligible for an SRC of twenty-five percent (25%) of the MRC per Affected Node or Mileage that was interrupted for more than 2.5 hours.

The MTTR for a Service Interruption of a Protected Rider is 2.5 hours. The MTTR for a Service Interruption of an Unprotected Rider is four (4) hours. For a Protected Rider, if the MTTR is greater than 2.5 hours over the calendar month, then Customer will be eligible for an SRC of one hundred percent (100%) of the MRC per Appearance for such Affected Rider that was interrupted for more than 2.5 hours. For an Unprotected Rider, if the MTTR is greater than four (4) hours over the calendar month, then Customer is eligible for an SRC of one hundred percent (100%) of the MRC per Appearance for such Affected Rider that was interrupted for more than four (4) hours.

4) Exceptions

The Remedies set forth in Section F.6.d. 2) and 3) preceding will not apply in the following instances:

a) Interruptions, failures, or delays in service resulting from DC power, equipment, service, or services not under the sole responsibility of Verizon.

b) Interruptions, failures, or delays in service resulting from Customer owned and/or installed equipment.

ADVANCED DATA SERVICES

F. VERIZON INTEGRATED OPTICAL SERVICES (IOS) - Continued

6. TERMS AND CONDITIONS - Continued

d. Service Level Agreements - Continued

4) Exceptions - Continued

c) Interruptions, failures, or delays in service that occur at any time in which Verizon or its authorized agents, after reasonable attempt to gain access to the Customer designated premises, are not granted access to such premises where Verizon Facilities and equipment associated with the provision of IOS are terminated.

d) Interruptions or delays in service resulting from maintenance, rearrangement of service, or implementation of an order authorized by the Customer.

e) Interruptions, failures, or delays in service resulting from the Customer's refusal to release IOS to Verizon or its authorized agents for testing and/or repair, after reasonable attempts by Verizon or its authorized agent to schedule repair with the Customer.

f) Interruptions, failures, or delays in service due to acts of God or the public enemy, compliance with any order of any governmental authority, acts of terrorism, war, rebellion, insurrection, or sabotage or damage resulting from, fires, floods, earthquakes, unusually severe weather, explosions, washouts, rules and regulations with regard to common carriers, accidents, epidemics, breakdowns, riots, strikes or other concerted acts of its employees, whether direct or indirect, lockouts or other industrial disturbances, whether direct or indirect, worms, viruses or other contaminants that may cause damage to or disable software, computer, or electronic services, or any similar cause, or other causes beyond such party's reasonable control.

g) Interruptions, failures, or delays in service during periods of scheduled maintenance and scheduled downtimes where the Customer has received prior written (electronic, fax, or paper) notification from Verizon.

h) Interruptions resulting from the negligence, gross negligence, willful misconduct, or other act or omission of the Customer or other party authorized by the Customer to use the service.

e. Conversions and Upgrades

Customers who wish to convert one (1) or both Points of Termination of an existing High Capacity Special Access services, Special Access DSR, Special Access IOTS, Special Access IBT, or Special Access Custom Connect to IOS may do so without conversion charges (termination liability and installation charges) as long as the total capacity of Special Access services purchased by the Customer does not decrease.

ADVANCED DATA SERVICES

F. VERIZON INTEGRATED OPTICAL SERVICES (IOS) - Continued

7. APPLICATION OF RATES AND CHARGES

a. Monthly Rates

MRCs apply for the Node, Ring Mileage, and Riders.

The MRC for a Rider applies per appearance, and two (2) appearances apply per Rider for the entire point-to-point (Node-to-Node) connection. MRCs for Riders are also differentiated by whether the Rider is Protected or Unprotected, and whether the Rider is delivered with Drop Port Protection.

b. Nonrecurring Charges

A nonrecurring charge (NRC) applies for any subsequent installation of a Node.

Subsequent installations of Nodes include (i) Nodes that are added to an existing ring, and (ii) existing Nodes on the ring that are moved to a new location and remain on that same ring. Nodes that are moved to a new location and remain on the same ring are also subject to the requirements set forth in Section F.7.c. following.

A Consultation and Support charge applies for each thirty (30) minutes or fraction thereof that the Customer requests Verizon consultation and support of its CSM network. This charge does not apply during initial setup of CSM.

First and additional nonrecurring charges apply for the installation of EPRS UNIs provided on a month-to-month basis.

Any other required work, services or facilities not referred to herein will be provided subject to prevailing rates and charges, as set forth in Verizon's Product Guide or other tariffs, or, as mutually agreed to in writing by the parties.

c. Term Plans

IOS is available for term plans of 1 year, 2 years, 3 years, 5 years, or 7 years (Commitment Periods) for the Nodes, Ring Mileage, and Riders. IOS is also available with a 3-, 5-, or 7-year Commitment Period for EPRS. EPRS UNIs and certain Riders are also available on month-to-month basis. However, such Riders shall have a 12 month minimum service period. As such, if a month-to-month Rider is terminated prior to the first twelve months following installation of such Rider, the Customer will be responsible for termination liability of 100% of the monthly rates for the Rider times the number of months left in such twelve month period.

ADVANCED DATA SERVICES

F. VERIZON INTEGRATED OPTICAL SERVICES (IOS) - Continued

7. APPLICATION OF RATES AND CHARGES - Continued

c. Term Plans - Continued

Nodes, Riders, and EPRS UNIs added subsequent to the initial installation and prior to the first twelve (12) months of a 2-year term plan, the first twenty-one (21) months of a 3-year term plan, the first thirty-six (36) months of a 5-year term plan, or the first fifty (50) months of a 7-year term plan will be added to the existing term plan with an expiration date that is coterminous with the expiration date for the remainder of the service. For example, a Node added in the 18th month of a 3-year term plan will be added to the existing term plan for the balance of the 3-year Commitment Period. The rate applicable to such Node is the 3-year rate for the applicable Rider. Nodes added to an IOS on a 1-year term plan require a 1-year extension beyond the completion of the current 1-year term plan.

Nodes, Riders, and EPRS UNIs added subsequent to the initial installation and after the first 12 months of a 2-year term plan, the first 21 months of a 3-year term plan, the first 36 months of a 5-year term plan, or the first 50 months of a 7-year term plan require that the existing term plan be extended so that the term plan will include the existing services and the added services. In doing so, the expiration date of the existing services and the added services will be common (coterminous) for all rate elements of the service. The existing term plan shall be extended by 12 months for a 2-year term plan, 12 months for a 3-year term plan, 24 months for a 5-year term plan, or 36 months for a 7-year term plan. For example, a Node added in the 38th month of a 5-year term plan requires that the expiration date for the 5-year term plan be extended by 24 months so that the existing rate elements (e.g., Nodes, Riders, etc) and the added Node will have a coterminous expiration date.

EPRS UNIs provided on a month-to-month basis may be added at any time. Changes in month-to-month billed EPRS UNIs are treated as disconnects and subsequent installations.

Riders (appearances) provided on a month-to-month basis may be added at any time subsequent to the initial installation of IOS. Such Riders will be added for the balance of the applicable Commitment Period and do not require extension of the term plan as specified in Section F.7.d. following. Riders are described in Section F.4.a.3) preceding.

d. Extension and Renewal of Commitment Period

Once a term period expires, the prevailing rates of the current term plan will continue until the Customer cancels service, extends the term plan, or requests a new term plan.

When the Commitment Period for IOS is extended under this Section 7.d., termination liability is calculated as the difference between the monthly rates for the highest term plan Commitment Period that could have been satisfied prior to disconnection of the service or cancellation of the plan and the monthly rates already paid for the expired Commitment Period and the extended Commitment Period for the period of time the service was in effect. For example: If a customer is on a 3-year plan and extends to a 5-year plan, and terminates the service in month 48, the termination liability will be the difference between the 3-year Node and Mileage MRC and 5-year Node and Mileage MRC multiplied by 12 months (for months 37 through 48).

ADVANCED DATA SERVICES

F. VERIZON INTEGRATED OPTICAL SERVICES (IOS) - Continued

7. APPLICATION OF RATES AND CHARGES - Continued

d. Extension and Renewal of Commitment Period - Continued

The Customer has the option to extend its expiring term plan to a plan with a longer Commitment Period, for which the original term will be considered under the new extended term. For example, an expiring 3-year term plan will allow for 3 years towards the extended plan. The Commitment Period selected for the extended plan must be longer than the Commitment Period of the expiring plan as follows:

- An expiring 1-year term plan may be extended to a 2-year, 3-year, 5-year, or 7-year term plan.
- An expiring 2-year term plan may be extended to a 3-year, 5-year, or 7-year term plan.
- An expiring 3-year term plan may be extended to a 5-year or 7-year term plan.
- An expiring 5-year term plan may be extended to a 7-year term plan.

The Customer may also extend the Commitment Period in order to install additional Nodes or Riders as described in Section F.7.c. preceding.

The rate for the longer Commitment Period will apply effective with the first bill day following expiration of the Commitment Period for the existing plan and continue through the remainder of the Commitment Period associated with the extended plan. No adjustment for the increased discount associated with the extended plan will be made to the monthly rates already billed on the expiring plan.

e. Moves and Changes

1) Node Moves

The Customer may move a Node subject to all of the following:

a) The Node must remain on the same ring.

b) The Customer remains responsible for any outstanding minimum period obligations on the Node being disconnected from its originally installed location.

c) A new minimum period will be established for the Node at the newly installed location.

d) The newly installed Node will be treated as a Node addition in accordance with Section F.7.b. preceding.

e) A subsequent installation charge applies for installation of the Node at the new location.

When the above requirements are met, termination liability will not apply for discontinuance of the Node from its originally installed location. In all other cases, termination liability applies for discontinuance of the Node from its originally installed location.

ADVANCED DATA SERVICES

F. VERIZON INTEGRATED OPTICAL SERVICES (IOS) - Continued

7. APPLICATION OF RATES AND CHARGES - Continued

e. Moves and Changes - Continued

2) Change in Rider

A change in the type (e.g., Fibre Channel to Gigabit Ethernet) of a Rider is treated as a discontinuance of the existing Rider and an installation of a new Rider. Termination liability does not apply to a Rider that is changed to another Rider of the same bandwidth.

A change of a Rider to a new Rider with a higher optical carrier rate (e.g., OC3 to OC12) is an upgrade for which termination liability charges do not apply to the Rider being disconnected.

Minimum period obligations apply for both of the changes in Riders described above.

f. Order Cancellation

A Customer may cancel an order for the installation of IOS at any time prior to notification by Verizon that service is available for the Customer's use or prior to the Service Date, whichever is later. The cancellation date is the date Verizon receives written or verbal notice from the Customer that the order is to be cancelled. The verbal notice must be followed by written confirmation within ten (10) days.

Cancellation charges apply if the Customer cancels an order, or part of an order, for the installation of Integrated Optical Service, or to partition the ring for EPRS, after providing Verizon with written or electronic notification to begin installation. Cancellation charges apply as follows:

1. When a Customer cancels the order, or part of the order, within the first thirty (30) days following written or electronic notification to Verizon to begin installation, no cancellation charge will apply.

2. When a Customer cancels the order, or part of the order, on the thirty-first (31st) day, but no later than the sixtieth (60th) day, following written or electronic notification to Verizon to begin installation, cancellation charges will apply.

3. When a Customer cancels the order, or part of the order, on the sixty-first (61st) day following written or electronic notification to Verizon to begin installation, up to the date of notification that installation is complete, cancellation charges will apply.

4. If the Customer cancels the order, or part of the order, after installation is complete, cancellation will apply. Minimum period charges as described in Section F.7.h. following and termination liability as described in Section F.7.g. following will also apply.

5. When a Customer cancels the order, or part of the order, to establish an EPRS partition on its Integrated Optical Service, cancellation charges apply.

ADVANCED DATA SERVICES

F. VERIZON INTEGRATED OPTICAL SERVICES (IOS) - Continued

7. APPLICATION OF RATES AND CHARGES - Continued

g. Termination Liability

Termination liability applies to IOS and is charged per monthly rate element on all Nodes, Riders (Appearances), and EPRS.

Termination liability does not apply to Ring Mileage.

A separate termination liability charge is assessed for each rate element associated with the disconnected IOS.

Termination liability is calculated as follows:

1) If the disconnection occurs during the first year of the Commitment Period, the Minimum Period obligation specified in Section F.7.h. following applies for the unexpired portion of the first year. Termination liability is calculated at one hundred percent (100%) of the MRCs for the second year and twenty-five percent (25%) of the MRCs for the 25th month through the remainder of the Commitment Period, as applicable.

2) If the disconnection occurs during the second year of the Commitment Period, termination liability is calculated at one hundred percent (100%) of the MRCs for the unexpired portion of the second year and twenty-five percent (25%) of the MRCs for the 25th month through the remainder of the Commitment Period, as applicable.

3) If the disconnection occurs after the first two (2) years of the Commitment Period, termination liability is calculated at twenty-five (25%) of the MRCs from the date of disconnection through the remainder of the Commitment Period.

IBT, Special Access DS1 and DS3 High Capacity Service, and Verizon Optical Networking services associated with IOS are subject to the termination liability specified for such service pursuant to the applicable arrangement offered by Verizon.

h. Minimum Period

The minimum period for which IOS (i.e. Nodes, Mileage and Riders) is provided is twelve (12) months, regardless of the applicable term plan requested.

When an IOS term plan is disconnected prior to the expiration of the minimum period, minimum period charges are applicable for the balance of the minimum period. The charge for each month, or fraction thereof, remaining in the minimum period is the applicable monthly rate for the service.

Riders must be purchased for a minimum period of twelve (12) months following installation of such Riders. Off-Net Riders may also be purchased for longer service periods of twenty-four (24), thirty-six (36) or sixty (60) months.

ADVANCED DATA SERVICES

F. VERIZON INTEGRATED OPTICAL SERVICES (IOS) - Continued

8. RATES AND CHARGES

a. IOS Nodes, per node

	Monthly Rate
Month to month	N/A
1-Year Term	$ 14,000.00
2-Year Term	11,000.00
3-Year Term	8,800.00
5-Year Term	7,500.00
7-Year Term	7,000.00

	Nonrecurring Charge
Subsequent Node Installation Charge	$ 5,000.00

ADVANCED DATA SERVICES

F. VERIZON INTEGRATED OPTICAL SERVICES (IOS) - Continued

8. RATES AND CHARGES - Continued

b. IOS Mileage, per mile

	Monthly Rate
Month to month	N/A
1-Year Term	$ 625.00
2-Year Term	500.00
3-Year Term	400.00
5-Year Term	350.00
7-Year Term	325.00

ADVANCED DATA SERVICES

F. VERIZON INTEGRATED OPTICAL SERVICES (IOS) - Continued

8. RATES AND CHARGES - Continued

c. Protected Riders,

Two Appearances per Rider provided on a Node-to-Node (i.e., point-to-point) basis

	Monthly Rate					
Appearance Type	Month-to-Month	1-Year Term	2-Year Term	3-Year Term	5-Year Term	7-Year Term
DS1	$ 75.00	$ 75.00	$ 75.00	$ 75.00	$ 75.00	$ 75.00
DS3	150.00	150.00	150.00	150.00	150.00	150.00
SONET OC3/3c	450.00	450.00	450.00	450.00	450.00	450.00
SONET OC12/12c	650.00	650.00	650.00	650.00	650.00	650.00
SONET OC48/48c	900.00	900.00	900.00	900.00	900.00	900.00
SONET OC192/192c	2,200.00	2,200.00	2,200.00	2,200.00	2,200.00	2,200.00
SONET OC3/OC3c, w/Drop Side Protection	525.00	525.00	525.00	525.00	525.00	525.00
SONET OC12/OC12c, w/Drop Side Protection	775.00	775.00	775.00	775.00	775.00	775.00
SONET OC48/OC48c, w/Drop Side Protection	1,075.00	1,075.00	1,075.00	1,075.00	1,075.00	1,075.00
SONET OC192/OC192c, w/Drop Side Protection	2,550.00	2,550.00	2,550.00	2,550.00	2,550.00	2,550.00
1 Gbps Fibre Channel	750.00	750.00	750.00	750.00	750.00	750.00
2 Gbps Fibre Channel	1,250.00	1,250.00	1,250.00	1,250.00	1,250.00	1,250.00
4 Gbps Fibre Channel	1,500.00	1,500.00	1,500.00	1,500.00	1,500.00	1,500.00
10 Gbps Fibre Channel	2,200.00	2,200.00	2,200.00	2,200.00	2,200.00	2,200.00
10M Ethernet	150.00	150.00	150.00	150.00	150.00	150.00
Fast Ethernet @ 50Mbps	150.00	150.00	150.00	150.00	150.00	150.00
Fast Ethernet @ 100Mbps	200.00	200.00	200.00	200.00	200.00	200.00
Gigabit Ethernet @ 50Mbps	600.00	600.00	600.00	600.00	600.00	600.00
Gigabit Ethernet @ 100Mbps	600.00	600.00	600.00	600.00	600.00	600.00
Gigabit Ethernet @ 150Mbps	600.00	600.00	600.00	600.00	600.00	600.00
Gigabit Ethernet @ 300Mbps	600.00	600.00	600.00	600.00	600.00	600.00
Gigabit Ethernet @ 450Mbps	600.00	600.00	600.00	600.00	600.00	600.00
Gigabit Ethernet @ 600Mbps	600.00	600.00	600.00	600.00	600.00	600.00
Gigabit Ethernet @ 1000Mbps	750.00	750.00	750.00	750.00	750.00	750.00
10Gbps Ethernet (LAN-PHY/WAN-PHY)	2,200.00	2,200.00	2,200.00	2,200.00	2,200.00	2,200.00
SDI Video 270Mbps	800.00	800.00	800.00	800.00	800.00	800.00
High Definition Video 1.485Gbps	1,000.00	1,000.00	1,000.00	1,000.00	1,000.00	1,000.00

ADVANCED DATA SERVICES

F. VERIZON INTEGRATED OPTICAL SERVICES (IOS) - Continued

8. RATES AND CHARGES - Continued

d. Unprotected Riders,
Two Appearances per Rider provided on a Node-to-Node (i.e., point-to-point) basis

	Monthly Rate					
Appearance Type	Month-to-Month	1-Year Term	2-Year Term	3-Year Term	5-Year Term	7-Year Term
SONET OC48/48c	$ 650.00	$ 650.00	$ 650.00	$ 650.00	$ 650.00	$ 650.00
SONET OC192/192c	1,225.00	1,225.00	1,225.00	1,225.00	1,225.00	1,225.00
1 Gbps Fibre Channel	625.00	625.00	625.00	625.00	625.00	625.00
2 Gbps Fibre Channel	825.00	825.00	825.00	825.00	825.00	825.00
4 Gbps Fibre Channel	1,025.00	1,025.00	1,025.00	1,025.00	1,025.00	1,025.00
10 Gbps Fibre Channel	1,225.00	1,225.00	1,225.00	1,225.00	1,225.00	1,225.00
Gigabit Ethernet @ 1000Mbps	625.00	625.00	625.00	625.00	625.00	625.00
10Gbps Ethernet (LAN-PHY/WAN-PHY)	1,225.00	1,225.00	1,225.00	1,225.00	1,225.00	1,225.00

e. Consultation and Support,
each 30 minutes or fraction thereof — Nonrecurring Charge: $ 100.00

Effective: Pending PUC approval of AL 12xxx

ADVANCED DATA SERVICES

G. SPECIALIZED FIA OR ARRANGEMENTS (N)

1. GENERAL

Specialized FIA or Arrangements may be provided by the Utility at the request of a customer, on an Individual Case Basis (ICB) if such FIA or arrangements meet the following criteria:

a The requested FIA or arrangements are not offered under other sections of this tariff.

b. The facilities utilized to provide the requested FIA or arrangements are of a type normally used by the Utility in furnishing its other services.

c. The requested FIA or arrangements are provided within a Market Area.

d. The requested FIA or arrangements are compatible with other Utility services, facilities, and its engineering and maintenance practices.

This offering is subject to the availability of the necessary Utility personnel and capital resources.

2. RATES AND CHARGES

Rates and charges and additional regulations, if applicable, for Specialized FIA or Arrangements provided on an individual case basis will be filed herein. (N)

ADVANCED DATA SERVICES

G. SPECIALIZED FIA OR ARRANGEMENTS (N)

1. GENERAL

Specialized FIA or Arrangements may be provided by the Utility at the request of a customer, on an Individual Case Basis (ICB) if such FIA or arrangements meet the following criteria:

a The requested FIA or arrangements are not offered under other sections of this tariff.

b. The facilities utilized to provide the requested FIA or arrangements are of a type normally used by the Utility in furnishing its other services.

c. The requested FIA or arrangements are provided within a Market Area.

d. The requested FIA or arrangements are compatible with other Utility services, facilities, and its engineering and maintenance practices.

This offering is subject to the availability of the necessary Utility personnel and capital resources.

2. RATES AND CHARGES

Rates and charges and additional regulations, if applicable, for Specialized FIA or Arrangements provided on an individual case basis will be filed herein. (N)

ADVANCED DATA SERVICES

H. SPECIAL FACILITIES ROUTING OF FIA (T)

1. DESCRIPTION

The FIA are provided over such routes and facilities as the Utility may elect. Special routing is involved where, in order to comply with requirements specified by the customer, the Utility provides Access Services in a manner which includes one or more of the following conditions.

a. Diversity

Where two or more FIA must be provided over not more than two different physical routes.

b. Avoidance

Where a FIA must be provided on a route which avoids specified geographical locations.

c. Cable-Only Facilities

Where certain voice grade FIA are provided on cable-only facilities to meet the particular needs of a customer. FIA is provided subject to the availability of cable-only facilities. In the event of FIA failure, restoration will be made through the use of any available facilities as selected by the Utility.

In order to identify any special routing requirement, the Utility will provide the ordering customer with the required routing information for each specially routed FIA. If requested by the customer, this information will be provided when the FIA is installed and prior to any subsequent change in routing.

The rates and charges for Special Facilities Routing of FIA are in addition to all other rates and charges.

2. RATES AND CHARGES

The rates and charges for Special Facilities Routing of FIA will be developed on and individual case basis for Diversity, Avoidance, Diversity and Avoidance Combined and Cable-Only Facilities.

ADVANCED DATA SERVICES

H. SPECIALIZED FIA OR ARRANGEMENTS (N)

1. DESCRIPTION

The FIA are provided over such routes and facilities as the Utility may elect. Special routing is involved where, in order to comply with requirements specified by the customer, the Utility provides Access Services in a manner which includes one or more of the following conditions.

a. Diversity

Where two or more FIA must be provided over not more than two different physical routes.

b. Avoidance

Where a FIA must be provided on a route which avoids specified geographical locations.

c. Cable-Only Facilities

Where certain voice grade FIA are provided on cable-only facilities to meet the particular needs of a customer. FIA is provided subject to the availability of cable-only facilities. In the event of FIA failure, restoration will be made through the use of any available facilities as selected by the Utility.

In order to identify any special routing requirement, the Utility will provide the ordering customer with the required routing information for each specially routed FIA. If requested by the customer, this information will be provided when the FIA is installed and prior to any subsequent change in routing.

The rates and charges for Special Facilities Routing of FIA are in addition to all other rates and charges.

2. RATES AND CHARGES

The rates and charges for Special Facilities Routing of FIA will be developed on and individual case basis for Diversity, Avoidance, Diversity and Avoidance Combined and Cable-Only Facilities. (N)

Effective: Pending PUC approval of AL 12xxx

ADVANCED DATA SERVICES

H. SPECIALIZED FIA OR ARRANGEMENTS (N)

1. DESCRIPTION

The FIA are provided over such routes and facilities as the Utility may elect. Special routing is involved where, in order to comply with requirements specified by the customer, the Utility provides Access Services in a manner which includes one or more of the following conditions.

a. Diversity

Where two or more FIA must be provided over not more than two different physical routes.

b. Avoidance

Where a FIA must be provided on a route which avoids specified geographical locations.

c. Cable-Only Facilities

Where certain voice grade FIA are provided on cable-only facilities to meet the particular needs of a customer. FIA is provided subject to the availability of cable-only facilities. In the event of FIA failure, restoration will be made through the use of any available facilities as selected by the Utility.

In order to identify any special routing requirement, the Utility will provide the ordering customer with the required routing information for each specially routed FIA. If requested by the customer, this information will be provided when the FIA is installed and prior to any subsequent change in routing.

The rates and charges for Special Facilities Routing of FIA are in addition to all other rates and charges.

2. RATES AND CHARGES

The rates and charges for Special Facilities Routing of FIA will be developed on and individual case basis for Diversity, Avoidance, Diversity and Avoidance Combined and Cable-Only Facilities. (N)

ADVANCED DATA SERVICES

I. RESERVED FOR FUTURE USE (C)

(L)

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(L) Material relocated to Section 3, Sheet 13 (N)

ADVANCED DATA SERVICES

I. SPECIAL CONSTRUCTION (N)

1. GENERAL

This section contains the regulations, rates and charges applicable for Special Construction of Utility facilities which are used to provide FIA.

When Special Construction of FIA is required, the provisions of this section apply in addition to regulations, rates and charges set forth in other sections of this tariff as well as Rule 2 shown in Schedule Cal. P.U.C. D&R.

a. Conditions Requiring Special Construction

Special Construction is required when facilities, suitable to the customer, are not available to meet the order and one or more of the following conditions exist:

1) The Utility has no other requirement for the facilities requested

2) It is requested that FIA be furnished using a type of facility, or via a route, other than that which the Utility would otherwise utilize in furnishing the requested FIA.

3). More facilities are requested than are required to satisfy its order for FIA.

4) It is requested that construction be expedited resulting in added cost to the Utility.

5) It is requested that temporary facilities be constructed until permanent facilities are available. (N)

Effective: Pending PUC approval of AL 12xxx

ADVANCED DATA SERVICES

I. SPECIAL CONSTRUCTION (N)

1. GENERAL

This section contains the regulations, rates and charges applicable for Special Construction of Utility facilities which are used to provide FIA.

When Special Construction of FIA is required, the provisions of this section apply in addition to regulations, rates and charges set forth in other sections of this tariff as well as Rule 2 shown in Schedule Cal. P.U.C. D&R.

a. Conditions Requiring Special Construction

Special Construction is required when facilities, suitable to the customer, are not available to meet the order and one or more of the following conditions exist:

1) The Utility has no other requirement for the facilities requested

2) It is requested that FIA be furnished using a type of facility, or via a route, other than that which the Utility would otherwise utilize in furnishing the requested FIA.

3). More facilities are requested than are required to satisfy its order for FIA.

4) It is requested that construction be expedited resulting in added cost to the Utility.

5) It is requested that temporary facilities be constructed until permanent facilities are available. (N)

ADVANCED DATA SERVICES

I. RESERVED FOR FUTURE USE (C)

(L)

(L) Material relocated to Section 3, Sheet 14 (N)

Effective: Pending PUC approval of AL 12xxx

ADVANCED DATA SERVICES

I. SPECIAL CONSTRUCTION - Continued (N)

1. GENERAL - Continued

b. Filing of Charges

Rates and charges for Special Construction will be filed on an individual case basis. After charges have been filed and have become effective they will apply from the date that the special construction was provided.

c. Ownership of Facilities

The Utility retains ownership of all specially constructed facilities except for those facilities constructed by connecting companies or carriers, even though the customer may be required to pay Special Construction Charges.

d. Interval to Provide FIA

Based on available information and the type of FIA ordered, the Utility will establish a scheduled date for the installation of necessary facilities. The date will be established on an individual case basis and provided to the customer. (N)

ADVANCED DATA SERVICES

I. SPECIAL CONSTRUCTION - Continued (N)

1. GENERAL - Continued

b. Filing of Charges

Rates and charges for Special Construction will be filed on an individual case basis. After charges have been filed and have become effective they will apply from the date that the special construction was provided.

c. Ownership of Facilities

The Utility retains ownership of all specially constructed facilities except for those facilities constructed by connecting companies or carriers, even though the customer may be required to pay Special Construction Charges.

d. Interval to Provide FIA

Based on available information and the type of FIA ordered, the Utility will establish a scheduled date for the installation of necessary facilities. The date will be established on an individual case basis and provided to the customer. (N)

ADVANCED DATA SERVICES

I. RESERVED FOR FUTURE USE (C)

(L)

.

(L) Material relocated to Section 3, Sheet 15 (N)

ADVANCED DATA SERVICES

I. SPECIAL CONSTRUCTION - Continued

(N)

1. GENERAL - Continued

e. Special Construction Involving Interstate and Intrastate FIA

When Special Construction involves facilities used to provide both interstate and intrastate ~IA, charges for the portion of the construction used to provide intrastate FIA shall be in accordance with this tariff. Charges for the portion of the construction used to provide interstate FIA shall be in accordance with GTE Operating Companies Tariff FCC No. 1.

2. LIABILITIES, CHARGES AND PAYMENTS

a. General

This section describes the various charges and liabilities that apply when the Utility provides special construction of FIA in accordance with a customer's specific request. Once the customer is notified of all charges and liabilities, the customer must provide the Utility with written approval prior to the start of construction. If more than one condition requiring special construction is involved, charges for each condition apply.

b. Payment of Charges

Payment is due upon presentation of a bill for the specially constructed facilities.

c. Start/End of Billing

Billing of recurring charges for specially constructed FIA starts on the day after the FIA are provided. Billing accrues through and includes the day that the specially constructed FIA are discontinued. Monthly charges will normally be billed one month in advance.

(N)

Effective: Pending PUC approval of AL 12xxx

ADVANCED DATA SERVICES

I. SPECIAL CONSTRUCTION - Continued

(N)

1. GENERAL - Continued

e. Special Construction Involving Interstate and Intrastate FIA

When Special Construction involves facilities used to provide both interstate and intrastate ~IA, charges for the portion of the construction used to provide intrastate FIA shall be in accordance with this tariff. Charges for the portion of the construction used to provide interstate FIA shall be in accordance with GTE Operating Companies Tariff FCC No. 1.

2. LIABILITIES, CHARGES AND PAYMENTS

a. General

This section describes the various charges and liabilities that apply when the Utility provides special construction of FIA in accordance with a customer's specific request. Once the customer is notified of all charges and liabilities, the customer must provide the Utility with written approval prior to the start of construction. If more than one condition requiring special construction is involved, charges for each condition apply.

b. Payment of Charges

Payment is due upon presentation of a bill for the specially constructed facilities.

c. Start/End of Billing

Billing of recurring charges for specially constructed FIA starts on the day after the FIA are provided. Billing accrues through and includes the day that the specially constructed FIA are discontinued. Monthly charges will normally be billed one month in advance.

(N)

ADVANCED DATA SERVICES

I. RESERVED FOR FUTURE USE (C)

(L)

(L) Material relocated to Section 3, Sheet 16 (N)

Effective: Pending PUC approval of AL 12xxx

ADVANCED DATA SERVICES

I. SPECIAL CONSTRUCTION - Continued (N)

2. LIABILITIES, CHANGES AND PAYMENTS - Continued

d. Partial Payments

The Utility will require a customer which has a proven history of late payments to the Utility, or does not have established credit, to make a partial payment for the portion of the estimated cost of the Special Construction for which the customer is subject to a nonrecurring charge. Partial payments will be requested as costs are incurred and will be credited to the customer's account. Partial payments will not exceed the total nonrecurring charge to the customer for the Special Construction.

e. Development of Liabilities and Charges

The customer has the option of accepting the liabilities and charges based on estimated or actual costs. Estimated costs will be used unless the customer notifies the Utility of the selection of the actual cost option in writing prior to the start of special construction.

Under the estimated cost option, special construction liabilities and charges are developed based on estimated costs and will be filed in this tariff.

Under the actual cost option, if all actual costs are not available prior to the in-service date of the FIA, estimated special construction charges will be filed in this tariff. As soon as the actual costs, including costs of maintaining and tiling these costs, are subsequently determined, the estimated charges will be adjusted to reflect the actual costs. The filed charges will then reflect actual costs existing at the time the CIA are provided.

f. Type of Contingent Liability

Depending on the specifics associated with each individual case, the Maximum Termination Liability may be applicable to Special Construction. (N)

ADVANCED DATA SERVICES

I. SPECIAL CONSTRUCTION - Continued (N)

2. LIABILITIES, CHANGES AND PAYMENTS - Continued

d. Partial Payments

The Utility will require a customer which has a proven history of late payments to the Utility, or does not have established credit, to make a partial payment for the portion of the estimated cost of the Special Construction for which the customer is subject to a nonrecurring charge. Partial payments will be requested as costs are incurred and will be credited to the customer's account. Partial payments will not exceed the total nonrecurring charge to the customer for the Special Construction.

e. Development of Liabilities and Charges

The customer has the option of accepting the liabilities and charges based on estimated or actual costs. Estimated costs will be used unless the customer notifies the Utility of the selection of the actual cost option in writing prior to the start of special construction.

Under the estimated cost option, special construction liabilities and charges are developed based on estimated costs and will be filed in this tariff.

Under the actual cost option, if all actual costs are not available prior to the in-service date of the FIA, estimated special construction charges will be filed in this tariff. As soon as the actual costs, including costs of maintaining and tiling these costs, are subsequently determined, the estimated charges will be adjusted to reflect the actual costs. The filed charges will then reflect actual costs existing at the time the CIA are provided.

f. Type of Contingent Liability

Depending on the specifics associated with each individual case, the Maximum Termination Liability may be applicable to Special Construction. (N)

ADVANCED DATA SERVICES

I. RESERVED FOR FUTURE USE (C)

(L)

(L) Material relocated to Section 3, Sheet 17 (N)

ADVANCED DATA SERVICES

I. SPECIAL CONSTRUCTION - Continued (N)

2. LIABILITIES, CHANGES AND PAYMENTS

f. Continued

1) Maximum Termination Liability (MTL)

An MTL has two components, an amount and a specified period of time.

The amount is equal to all nonrecoverable costs less the net salvage value; (e.g., depreciation, return, income tax associated with the specially constructed facilities.) The amount will be amortized over the average account life of the specially constructed facilities. The standard liability period is the average account life of the specially constructed facilities expressed in years.

At the customer's option, an optional liability period shorter than the average account life may be established. If the customer chooses an optional liability period, the MTL amortization schedule will not change. The remaining MTL amount for the period between expiration of the optional liability period and the expiration of the amortization schedule will be due as a lump sum payment at the time the optional liability period expires unless the case of Special Construction is extended. (N)

Effective: Pending PUC approval of AL 12xxx

ADVANCED DATA SERVICES

I. SPECIAL CONSTRUCTION - Continued (N)

2. LIABILITIES, CHANGES AND PAYMENTS

f. Continued

1) Maximum Termination Liability (MTL)

An MTL has two components, an amount and a specified period of time.

The amount is equal to all nonrecoverable costs less the net salvage value; (e.g., depreciation, return, income tax associated with the specially constructed facilities.) The amount will be amortized over the average account life of the specially constructed facilities. The standard liability period is the average account life of the specially constructed facilities expressed in years.

At the customer's option, an optional liability period shorter than the average account life may be established. If the customer chooses an optional liability period, the MTL amortization schedule will not change. The remaining MTL amount for the period between expiration of the optional liability period and the expiration of the amortization schedule will be due as a lump sum payment at the time the optional liability period expires unless the case of Special Construction is extended. (N)

ADVANCED DATA SERVICES

I. RESERVED FOR FUTURE USE (C)

(L)

(L) Material relocated to Section 3, Sheet 18 (N)

ADVANCED DATA SERVICES (N)

I. SPECIAL CONSTRUCTION - Continued

2 LIABILITIES, CHANGES AND PAYMENTS

f. 1) Continued

Prior to the expiration of an optional liability period, the customer has the option to (1) extend the use of the specially constructed FIA establishing a new liability period, or (2) terminate the case of Special Construction and pay the lump sum payment.

The Utility will notify the customer six months in advance of the expiration date of the optional liability period. The customer must provide the Utility with written notification of its intention to be received one month prior to the expiration of the optional liability period. Failure to do so, and payment of the next month's charges, will result in extension of the case of the Special Construction and the establishment of a new liability period equal to the remaining amortization period. A case preparation charge will always apply if the Special Constructuion case is extended. (N)

Effective: Pending PUC approval of AL 12xxx

ADVANCED DATA SERVICES (N)

I. SPECIAL CONSTRUCTION - Continued

2 LIABILITIES, CHANGES AND PAYMENTS

f. 1) Continued

Prior to the expiration of an optional liability period, the customer has the option to (1) extend the use of the specially constructed FIA establishing a new liability period, or (2) terminate the case of Special Construction and pay the lump sum payment.

The Utility will notify the customer six months in advance of the expiration date of the optional liability period. The customer must provide the Utility with written notification of its intention to be received one month prior to the expiration of the optional liability period. Failure to do so, and payment of the next month's charges, will result in extension of the case of the Special Construction and the establishment of a new liability period equal to the remaining amortization period. A case preparation charge will always apply if the Special Constructuion case is extended. (N)

ADVANCED DATA SERVICES

I. RESERVED FOR FUTURE USE (C)

(L)

(L) Material relocated to Section 3, Sheet 19 (N)

Effective: Pending PUC approval of AL 12xxx

ADVANCED DATA SERVICES

I. SPECIAL CONSTRUCTION - Continued (N)

2 LIABILITIES, CHARGES AND PAYMENTS - Continued.

g. Types of Charges

Two categories of charges may be applicable for Special Construction. These charges are nonrecurring charges and recurring charges. These categories are described below.

1) Nonrecurring Charges

One or more of the following nonrecurring charges may apply for each completed case of Special Construction or inquiry for Special Construction:

- Case Preparation
- Termination
- Cancellation
- Expediting the Construction
- Optional Payment Charges

(a) Case Preparation Charge

The charge for case preparation includes such items as the administrative expense associated with preparing and listing the charges in the tariff. This includes such items as (a) tariff preparation and processing and (b) gross receipts and surcharge taxes. (N)

ADVANCED DATA SERVICES

I. SPECIAL CONSTRUCTION - Continued (N)

2 LIABILITIES, CHARGES AND PAYMENTS - Continued.

g. Types of Charges

Two categories of charges may be applicable for Special Construction. These charges are nonrecurring charges and recurring charges. These categories are described below.

1) Nonrecurring Charges

One or more of the following nonrecurring charges may apply for each completed case of Special Construction or inquiry for Special Construction:

- Case Preparation
- Termination
- Cancellation
- Expediting the Construction
- Optional Payment Charges

(a) Case Preparation Charge

The charge for case preparation includes such items as the administrative expense associated with preparing and listing the charges in the tariff. This includes such items as (a) tariff preparation and processing and (b) gross receipts and surcharge taxes. (N)

ADVANCED DATA SERVICES

I. RESERVED FOR FUTURE USE (C)

(L)

(L) Material relocated to Section 3, Sheet 20 (N)

ADVANCED DATA SERVICES

I. SPECIAL CONSTRUCTION - Continued (N)

2 LIABILITIES, CHARGES AND PAYMENTS - Continued.

g. - Continued

(3) Termination Charge

A termination charge applies when, at the customer's request, FIA provided on specially constructed facilities which have a tariffed Maximum Termination Liability are discontinued prior to the expiration of the liability period.

The charge reflects the unamortized portion of the nonrecoverable cost at the time of termination of the specially constructed FIA adjusted for tax effects, for net salvage and for possible reuse. Administrative costs associated with the specific case of special construction and any cost for restoring a location to its original condition are also included. Termination charges will never exceed the MT-.

(4) Cancellation Charge

If the customer cancels an order with which Special Construction is associated prior to the in-service date of the FIA, a cancellation charge will apply. The charge will include all nonrecoverable costs less the net salvage value incurred by the Utility up to and including the time of cancellation.

(5) Expediting Charge

An expediting charge applies when a customer requests that special construction be completed on an expedited basis. The charge is equal to the difference in the estimated cost of construction on an expedited basis and construction without expediting. (N)

Effective: Pending PUC approval of AL 12xxx

ADVANCED DATA SERVICES

I. SPECIAL CONSTRUCTION - Continued (N)

2 LIABILITIES, CHARGES AND PAYMENTS - Continued.

g. - Continued

(3) Termination Charge

A termination charge applies when, at the customer's request, FIA provided on specially constructed facilities which have a tariffed Maximum Termination Liability are discontinued prior to the expiration of the liability period.

The charge reflects the unamortized portion of the nonrecoverable cost at the time of termination of the specially constructed FIA adjusted for tax effects, for net salvage and for possible reuse. Administrative costs associated with the specific case of special construction and any cost for restoring a location to its original condition are also included. Termination charges will never exceed the MT-.

(4) Cancellation Charge

If the customer cancels an order with which Special Construction is associated prior to the in-service date of the FIA, a cancellation charge will apply. The charge will include all nonrecoverable costs less the net salvage value incurred by the Utility up to and including the time of cancellation.

(5) Expediting Charge

An expediting charge applies when a customer requests that special construction be completed on an expedited basis. The charge is equal to the difference in the estimated cost of construction on an expedited basis and construction without expediting. (N)

ADVANCED DATA SERVICES

I. RESERVED FOR FUTURE USE (C)

(L)

(L) Material relocated to Section 3, Sheet 21 (N)

Effective: Pending PUC approval of AL 12xxx

ADVANCED DATA SERVICES

I. SPECIAL CONSTRUCTION - Continued (N)

2 LIABILITIES, CHARGES AND PAYMENTS - Continued.

g. - Continued

(6) Optional Payment Charge

The customer may elect to pay an optional payment charge when it requests special construction of facilities utilizing (1) a type of facilities or (2) a route other than that which the Utility would otherwise utilize in furnishing the requested service. Payment of this charge will result in a lower recurring charge for special construction. This election must be made in writing before special construction starts.

If this election is coupled with the actual cost option, the optional payment charge will reflect the actual cost of the specially constructed facilities.

(a) Development of Optional Payment Charge

This charge is equal to the excess installed cost or the total nonrecoverable cost, whichever is less (based on estimated or actual costs as elected by the customer). The methodology for the development of the Optional Payment Charge is set forth in GTE Operating Companies Tariff FCC No. 1. (N)

ADVANCED DATA SERVICES

I. SPECIAL CONSTRUCTION - Continued (N)

2 LIABILITIES, CHARGES AND PAYMENTS - Continued.

g. - Continued

(6) Optional Payment Charge

The customer may elect to pay an optional payment charge when it requests special construction of facilities utilizing (1) a type of facilities or (2) a route other than that which the Utility would otherwise utilize in furnishing the requested service. Payment of this charge will result in a lower recurring charge for special construction. This election must be made in writing before special construction starts.

If this election is coupled with the actual cost option, the optional payment charge will reflect the actual cost of the specially constructed facilities.

(a) Development of Optional Payment Charge

This charge is equal to the excess installed cost or the total nonrecoverable cost, whichever is less (based on estimated or actual costs as elected by the customer). The methodology for the development of the Optional Payment Charge is set forth in GTE Operating Companies Tariff FCC No. 1. (N)

ADVANCED DATA SERVICES

I. RESERVED FOR FUTURE USE (C)

(L)

(L) Material relocated to Section 3, Sheet 22 (N)

ADVANCED DATA SERVICES

I. SPECIAL CONSTRUCTION - Continued (N)

2 LIABILITIES, CHARGES AND PAYMENTS - Continued.

g. (6) - Continued

(b) Replacement Charge

If any portion of the specially constructed FIA, for which an optional payment charge has been paid, requires replacement involving capital investment, a charge for replacement will apply.
This charge will in the same ratio as the initial optional payment charge was to the installed cost of the specially constructed FIA. The customer will be notified in writing that the replacement is required. Replacement will not be made without the customer's order. If any portion of the FIA subject to the replacement charge fails, the FIA will not be restored until the customer orders the replacement. The methodology for development of the Replacement Charge is set forth in the GTE Operating Companies Tariff FCC No. 1.

Recurring Charges

These charges apply on a monthly or annual basis for specially constructed FIA. There are two conditions for which recurring charges apply. When a customer:

- requests a facility route or type other than that which the Utility would utilize to provide a FIA.

- makes a request resulting in the Utility leasing transmission or other equipment from private vendors to provide a FIA (Lease Charge). (N)

Effective: Pending PUC approval of AL 12xxx

ADVANCED DATA SERVICES

I. SPECIAL CONSTRUCTION - Continued (N)

2 LIABILITIES, CHARGES AND PAYMENTS - Continued.

g. (6) - Continued

(b) Replacement Charge

If any portion of the specially constructed FIA, for which an optional payment charge has been paid, requires replacement involving capital investment, a charge for replacement will apply.
This charge will in the same ratio as the initial optional payment charge was to the installed cost of the specially constructed FIA. The customer will be notified in writing that the replacement is required. Replacement will not be made without the customer's order. If any portion of the FIA subject to the replacement charge fails, the FIA will not be restored until the customer orders the replacement. The methodology for development of the Replacement Charge is set forth in the GTE Operating Companies Tariff FCC No. 1.

Recurring Charges

These charges apply on a monthly or annual basis for specially constructed FIA. There are two conditions for which recurring charges apply. When a customer:

- requests a facility route or type other than that which the Utility would utilize to provide a FIA.

- makes a request resulting in the Utility leasing transmission or other equipment from private vendors to provide a FIA (Lease Charge). (N)

ADVANCED DATA SERVICES

I. RESERVED FOR FUTURE USE (C)

(L)

(L) Material relocated to Section 3, Sheet 23 (N)

ADVANCED DATA SERVICES

I. SPECIAL CONSTRUCTION - Continued (N)

2 LIABILITIES, CHARGES AND PAYMENTS - Continued.

g. (6) - Continued

(c) Charge for Route or Type Other Than Normal

When the customer requests special construction using a route or type of FIA other than that which the Utility would normally use, a recurring charge is applicable. The charge is the difference between the estimated recurring costs of the specially constructed FIA and the estimated recurring costs of the FIA the Utility would normally use. The charge will be no greater than the recurring costs of the specially constructed FIA.

(1) If the customer elects to pay an optional payment charge, the portion of the recurring charge for the excess investment covered by the optional payment excludes capital cost items (depreciation, return on investment and federal income tax on that return). The remaining recurring expense cost items associated with the Optional Payment (maintenance, administration, and other taxes), are increased by a ten percent management fee, and will be included in the recurring charge.

The portion of any recurring charge associated with any remaining special construction investment will include both capital and expense costs. The ten percent management fee is not applied to this portion of the recurring charge. The methodology for development of the charge for route and type other than normal is set forth in GTE Operating Companies Tariff FCC No. 1.

(2) If the customer has elected the actual cost option, the Recurring Charge will be adjusted to reflect the actual cost of the new construction when the cost is determined. This adjusted Recurring Charge is applicable from the start of FIA.

(d) Lease Charge

A lease charge applies when the Utility leases equipment (e.g., portable microwave equipment) in order to provide FIA to meet the customer's requirements. The amount of the charge is the net added cost to the Utility caused by the lease. (N)

Effective: Pending PUC approval of AL 12xxx

ADVANCED DATA SERVICES

I. SPECIAL CONSTRUCTION - Continued (N)

2 LIABILITIES, CHARGES AND PAYMENTS - Continued.

g. (6) - Continued

(c) Charge for Route or Type Other Than Normal

When the customer requests special construction using a route or type of FIA other than that which the Utility would normally use, a recurring charge is applicable. The charge is the difference between the estimated recurring costs of the specially constructed FIA and the estimated recurring costs of the FIA the Utility would normally use. The charge will be no greater than the recurring costs of the specially constructed FIA.

(1) If the customer elects to pay an optional payment charge, the portion of the recurring charge for the excess investment covered by the optional payment excludes capital cost items (depreciation, return on investment and federal income tax on that return). The remaining recurring expense cost items associated with the Optional Payment (maintenance, administration, and other taxes), are increased by a ten percent management fee, and will be included in the recurring charge.

The portion of any recurring charge associated with any remaining special construction investment will include both capital and expense costs. The ten percent management fee is not applied to this portion of the recurring charge. The methodology for development of the charge for route and type other than normal is set forth in GTE Operating Companies Tariff FCC No. 1.

(2) If the customer has elected the actual cost option, the Recurring Charge will be adjusted to reflect the actual cost of the new construction when the cost is determined. This adjusted Recurring Charge is applicable from the start of FIA.

(d) Lease Charge

A lease charge applies when the Utility leases equipment (e.g., portable microwave equipment) in order to provide FIA to meet the customer's requirements. The amount of the charge is the net added cost to the Utility caused by the lease. (N)

ADVANCED DATA SERVICES

I. RESERVED FOR FUTURE USE (C)

(L)

(L) Material relocated to Section 3, Sheet 24 (N)

Effective: Pending PUC approval of AL 12xxx

ADVANCED DATA SERVICES

I. SPECIAL CONSTRUCTION - Continued (N)

2 LIABILITIES, CHARGES AND PAYMENTS - Continued.

h. Application of Charges

The charges for special construction are those charges which are in effect for the period that the special construction is furnished. If the charges for a period covered by a bill change after the bill has been rendered, the bill will be adjusted to reflect the new charges. Charges are based on special construction of (a) permanent FIA, or (b) temporary FIA.

1. Special Construction of Permanent FIA

(a) Special Construction When Permanent FIA Are Not Available and There Is No Other Requirement for Them

When permanent FIA are not available and the Utility constructs them and there is no other Utility need for the specially constructed FIA, a nonrecurring charge and a Maximum Termination Liability charge may be applicable.

(b) Special Construction Using a Route or Type of FIA Other Than Normal

When the specially constructed FIA involve a route or type of FIA other than that which the Utility would ordinarily use, charges are based on the difference between the estimated costs of the specially constructed FIA and those the Utility would ordinarily use. A nonrecurring charge, a recurring charge, and a Maximum Termination Liability charge may be applicable. (N)

ADVANCED DATA SERVICES

I. SPECIAL CONSTRUCTION - Continued (N)

2 LIABILITIES, CHARGES AND PAYMENTS - Continued.

h. Application of Charges

The charges for special construction are those charges which are in effect for the period that the special construction is furnished. If the charges for a period covered by a bill change after the bill has been rendered, the bill will be adjusted to reflect the new charges. Charges are based on special construction of (a) permanent FIA, or (b) temporary FIA.

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(b) Special Construction Using a Route or Type of FIA Other Than Normal

When the specially constructed FIA involve a route or type of FIA other than that which the Utility would ordinarily use, charges are based on the difference between the estimated costs of the specially constructed FIA and those the Utility would ordinarily use. A nonrecurring charge, a recurring charge, and a Maximum Termination Liability charge may be applicable. (N)

ADVANCED DATA SERVICES

I. RESERVED FOR FUTURE USE (C)

(L)

(L) Material relocated to Section 3, Sheet 25 (N)

Effective: Pending PUC approval of AL 12xxx

ADVANCED DATA SERVICES

I. SPECIAL CONSTRUCTION - Continued (N)

2 LIABILITIES, CHARGES AND PAYMENTS - Continued.

h.1. Continued

(c) Special Construction of a Greater Quantity of FIA Than Necessary to Satisfy the Customer's Order for Service

When the Utility constructs more FIA than is required to satisfy the customer's order, additional charges will apply. These charges may include a nonrecurring charge, a recurring charge, and a Maximum Termination Liability charge.

(d) Special Construction Expedited at Greater Cost Than Would Otherwise be Incurred

When construction Is expedited resulting in added costs, a nonrecurring expediting charge applies.

2. Special Construction of Temporary FIA Order

When permanent FIA are not available and temporary FIA are constructed pending the construction of permanent FIA, a nonrecurring charge, and a Maximum Termination Liability charge may be applicable. (N)

ADVANCED DATA SERVICES

I. SPECIAL CONSTRUCTION - Continued (N)

2 LIABILITIES, CHARGES AND PAYMENTS - Continued.

h.1. Continued

(c) Special Construction of a Greater Quantity of FIA Than Necessary to Satisfy the Customer's Order for Service

When the Utility constructs more FIA than is required to satisfy the customer's order, additional charges will apply. These charges may include a nonrecurring charge, a recurring charge, and a Maximum Termination Liability charge.

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When permanent FIA are not available and temporary FIA are constructed pending the construction of permanent FIA, a nonrecurring charge, and a Maximum Termination Liability charge may be applicable. (N)

ADVANCED DATA SERVICES

I. RESERVED FOR FUTURE USE (C)

(L)

(L) Material relocated to Section 3, Sheet 26 (N)

ADVANCED DATA SERVICES

I. SPECIAL CONSTRUCTION - Continued (N)

3. DEFERRAL OF THE IN-SERVICE OF FIA

a. General

The customer may request the Utility to defer the in-service of FIA on specially constructed FIA. If the deferral Is not in compliance with the Ordering Option for FIA, the special construction case is considered to be cancel led and cancellation charges apply. Requests for deferral must be in writing and are subject to the following regulations:

b. Construction Has Not Started

If the Utility has not incurred any costs (e.g., engineering and/or Installation) before receiving the customer's request for deferral, no charge applies other than the Case Preparation Charge. However, the original quotation is subject to Utility review at the time of reinstatement to determine if the original charges are still valid. Any change in liabilities and charges requires the concurrence of the customer in writing. Additional Case Preparation Charges will also apply.

c. Construction Has Started But Is Not Complete

If the construction of FIA has started, but has not been completed, before the Utility receives the customer's request for deferral, charges apply. The charges vary depending on whether all or some of the FIA ordered are deferred.

1) All FIA Are Deferred

When all FIA involving special construction are deferred, a charge equal to the costs incurred during each month of the deferral applies. Those costs include the recurring costs for that portion of the FIA already completed and any other costs associated with the deferral. The Case Preparation Charge also applies. (N)

Effective: Pending PUC approval of AL 12xxx

ADVANCED DATA SERVICES

I. SPECIAL CONSTRUCTION - Continued (N)

3. DEFERRAL OF THE IN-SERVICE OF FIA

a. General

The customer may request the Utility to defer the in-service of FIA on specially constructed FIA. If the deferral Is not in compliance with the Ordering Option for FIA, the special construction case is considered to be cancel led and cancellation charges apply. Requests for deferral must be in writing and are subject to the following regulations:

b. Construction Has Not Started

If the Utility has not incurred any costs (e.g., engineering and/or Installation) before receiving the customer's request for deferral, no charge applies other than the Case Preparation Charge. However, the original quotation is subject to Utility review at the time of reinstatement to determine if the original charges are still valid. Any change in liabilities and charges requires the concurrence of the customer in writing. Additional Case Preparation Charges will also apply.

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If the construction of FIA has started, but has not been completed, before the Utility receives the customer's request for deferral, charges apply. The charges vary depending on whether all or some of the FIA ordered are deferred.

1) All FIA Are Deferred

When all FIA involving special construction are deferred, a charge equal to the costs incurred during each month of the deferral applies. Those costs include the recurring costs for that portion of the FIA already completed and any other costs associated with the deferral. The Case Preparation Charge also applies. (N)

ADVANCED DATA SERVICES

I. RESERVED FOR FUTURE USE (C)

(L)

(L) Material relocated to Section 3, Sheet 27 (N)

ADVANCED DATA SERVICES

I. SPECIAL CONSTRUCTION - Continued (N)

3. DEFERRAL OF THE IN-SERVICE OF FIA

c. - Continued

2). Some But Not All FIA Are Deferred

When some, but not all, FIA utilizing the specially constructed FIA are deferred, the special construction case will be completed. Maximum Termination Liability will apply in addition to Case Preparation Charges, and any recurring charges associated with the Special Construction.

d. Construction Complete

If the construction of FIA has been completed before the Utility receives the customer's request for deferral, the case preparation charge, and Maximum Termination Liability as originally determined, will apply and any recurring charges associated with the Special Construction.

4. Charges for Customers Choosing the Optional Liability Period to Provide Permanent FIA

This section contains the Special Construction charges to provide permanent FIA to individual customers. Charges are developed on an individual case basis for a specific customer and shall be filed in this section. (N)

Effective: Pending PUC approval of AL 12xxx

ADVANCED DATA SERVICES

I. SPECIAL CONSTRUCTION - Continued (N)

3. DEFERRAL OF THE IN-SERVICE OF FIA

c. - Continued

2). Some But Not All FIA Are Deferred

When some, but not all, FIA utilizing the specially constructed FIA are deferred, the special construction case will be completed. Maximum Termination Liability will apply in addition to Case Preparation Charges, and any recurring charges associated with the Special Construction.

d. Construction Complete

If the construction of FIA has been completed before the Utility receives the customer's request for deferral, the case preparation charge, and Maximum Termination Liability as originally determined, will apply and any recurring charges associated with the Special Construction.

4. Charges for Customers Choosing the Optional Liability Period to Provide Permanent FIA

This section contains the Special Construction charges to provide permanent FIA to individual customers. Charges are developed on an individual case basis for a specific customer and shall be filed in this section. (N)

ADVANCED DATA SERVICES

I. RESERVED FOR FUTURE USE (C)

(L)

(L) Material relocated to Section 3, Sheet 28 (N)

Effective: Pending PUC approval of AL 12xxx

ADVANCED DATA SERVICES

I. SPECIAL CONSTRUCTION - Continued (N)

4. Special Construction Charges

Customer Name/ Effective Date	Description and Location	MTL/NRC MRC
AT&T Communications September 21, 1987	(2) DS1 circuits between Cell Site 18 for L.A. Cellular at Whitewater Mt. and the Palm Springs East Central Office. (In addition, rates and charges in Section III, Special Access apply).	NRC $81,130.
AT&T Communications (eff. date of filing)	(1) DS1 circuit between Cell Site 19 for L.A. Cellular at N. Indio Hill and the Palm Springs East Central Office. (In addition, rates and charges in Section III, Special Access apply).	NRC $13,859.36

(N)

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ADVANCED DATA SERVICES

I. SPECIAL CONSTRUCTION - Continued (N)

4. Special Construction Charges

Customer Name/ Effective Date	Description and Location	MTL/NRC MRC
AT&T Communications September 21, 1987	(2) DS1 circuits between Cell Site 18 for L.A. Cellular at Whitewater Mt. and the Palm Springs East Central Office. (In addition, rates and charges in Section III, Special Access apply).	NRC $81,130.
AT&T Communications (eff. date of filing)	(1) DS1 circuit between Cell Site 19 for L.A. Cellular at N. Indio Hill and the Palm Springs East Central Office. (In addition, rates and charges in Section III, Special Access apply).	NRC $13,859.36

(N)

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ADVANCED DATA SERVICES

J. SPECIAL FEDERAL GOVERNMENT FIA (N)

1. GENERAL

This section covers FIA that are provided for use only by agencies or branches of the Federal Government and other users authorized by the Federal Government. FIA provided to state emergency operations centers are included. These FIA provide for command and control communications, including communications for national security, emergency preparedness and presidential requirements. They are required to assure continuity of Government in emergency and crisis situations and to provide for national security.

FIA for command and control communications and for national security and emergency preparedness sometimes required within a short time frame. These provisions are especially needed to meet presidential requirements or in response to natural, man-made, or declared emergencies. Requirements of this type cannot be forecasted and are usually needed for a relatively short period. The provision of FIA under these conditions may require the availability of facilities, such as portable microwave equipment, etc., which are provided on a temporary basis.

2. EMERGENCY CONDITIONS

These FIA will be provided on the date requested or as soon as possible thereafter when the emergency falls into one of the following categories:

a. State of crisis declared by the National Command Authorities (includes commitments made to the National Communications System in the "National Plan for Emergencies and Major Disasters").

b. Efforts to protect endangered U.S. personnel or property both in the U.S. and abroad (includes space vehicle recovery and protection efforts). (N)

Effective: Pending PUC approval of AL 12xxx

ADVANCED DATA SERVICES

J. SPECIAL FEDERAL GOVERNMENT FIA (N)

1. GENERAL

This section covers FIA that are provided for use only by agencies or branches of the Federal Government and other users authorized by the Federal Government. FIA provided to state emergency operations centers are included. These FIA provide for command and control communications, including communications for national security, emergency preparedness and presidential requirements. They are required to assure continuity of Government in emergency and crisis situations and to provide for national security.

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b. Efforts to protect endangered U.S. personnel or property both in the U.S. and abroad (includes space vehicle recovery and protection efforts). (N)

ADVANCED DATA SERVICES

(N)

J. SPECIAL FEDERAL GOVERNMENT FIA - Continued

2. EMERGENCY CONDITIONS - Continued

c. Communications requirements resulting from hostile action, a major disaster or a major civil disturbance.

d. The Director (Cabinet level) of a Federal Department, Commander of a Unified/Specified Command, or Head of a Military Department has certified that a communications requirements is so critical to the protection of life and processed immediately.

e. Political unrest in foreign countries which affect the national interest.

f. Presidential Service

3. INTERVALS TO PROVIDE FIA

Orders for FIA may be placed under the provisions, as set forth under Ordering Options for FIA. (N)

ADVANCED DATA SERVICES

(N)

J. SPECIAL FEDERAL GOVERNMENT FIA - Continued

2. EMERGENCY CONDITIONS - Continued

c. Communications requirements resulting from hostile action, a major disaster or a major civil disturbance.

d. The Director (Cabinet level) of a Federal Department, Commander of a Unified/Specified Command, or Head of a Military Department has certified that a communications requirements is so critical to the protection of life and processed immediately.

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Effective: Pending PUC approval of AL 12xxx

ADVANCED DATA SERVICES

J. SPECIAL FEDERAL GOVERNMENT FIA - Continued (N)

4. SAFEGUARDING OF FIA

a. FIA Availability

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

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

5. FEDERAL GOVERNMENT REGULATIONS

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

ADVANCED DATA SERVICES

J. SPECIAL FEDERAL GOVERNMENT FIA - Continued (N)

4. SAFEGUARDING OF FIA

a. FIA Availability

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

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Effective: Pending PUC approval of AL 12xxx

ADVANCED DATA SERVICES

J. SPECIAL FEDERAL GOVERNMENT FIA - Continued (N)

6. FIA OFFERINGS TO THE FEDERAL GOVERNMENT

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

a. Type and Description

1. Voiceband Special Access

(a) Voice Grade Secure Communications Type I

Approximate bandwidth of 10 to 50,000 Hz. Furnished for two-point secure communications on two-wire or four-wire metallic facilities between a point of presence and an end user premises. For conditioning provisions, refer to GTOC FCC No. 1.

(b) Voice Grade Secure Communications Type II

Approximate bandwidth 10-50,000 Hz. Furnished on four-wire metallic facilities for duplex operation for two-point secure communication between a point of presence and an end user's premises. For conditioning provisions, refer to GTOC FCC No. 1.

(c) Voice Grade Secure Communications Type III

Approximate bandwidth 10-50,000 Hz. Furnished on four-wire metallic facilities for two-point secure communication between a point of presence and an end user's premises. For conditioning provisions, refer to GTOC FCC No. 1.

(d) Voice Grade Secure Communications Type IV

Approximate bandwidth 10 to 50,000 Hz. Furnished on four-wire metallic facilities for duplex operations for two.point secure communications between two points of presence. For conditioning provisions, refer to GTOC FCC No. 1. (N)

ADVANCED DATA SERVICES

J. SPECIAL FEDERAL GOVERNMENT FIA - Continued (N)

6. FIA OFFERINGS TO THE FEDERAL GOVERNMENT

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

a. Type and Description

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(b) Voice Grade Secure Communications Type II

Approximate bandwidth 10-50,000 Hz. Furnished on four-wire metallic facilities for duplex operation for two-point secure communication between a point of presence and an end user's premises. For conditioning provisions, refer to GTOC FCC No. 1.

(c) Voice Grade Secure Communications Type III

Approximate bandwidth 10-50,000 Hz. Furnished on four-wire metallic facilities for two-point secure communication between a point of presence and an end user's premises. For conditioning provisions, refer to GTOC FCC No. 1.

(d) Voice Grade Secure Communications Type IV

Approximate bandwidth 10 to 50,000 Hz. Furnished on four-wire metallic facilities for duplex operations for two.point secure communications between two points of presence. For conditioning provisions, refer to GTOC FCC No. 1. (N)

ADVANCED DATA SERVICES

J. SPECIAL FEDERAL GOVERNMENT FIA - Continued (N)

6. a. - Continued

2. Special Wideband Digital Special Access

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

(a) Wideband Secure Communications Type I

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

(b) Wideband Secure Communications Type II

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

(c) Wideband Secure Communications Type III

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

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

b. Mileage Application

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

c. Rates and Charges

1. Voiceband Special Access

The provision of T-3 and G conditioned Special Access contemplates station and tandem switching operations using customer provided equipment, as well as Special Access. Separate Narrowband or dice Grade Special Access, where required by (N)

Effective: Pending PUC approval of AL 12xxx

ADVANCED DATA SERVICES

J. SPECIAL FEDERAL GOVERNMENT FIA - Continued (N)

6. a. - Continued

2. Special Wideband Digital Special Access

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

(a) Wideband Secure Communications Type I

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

(b) Wideband Secure Communications Type II

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

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1. Voiceband Special Access

The provision of T-3 and G conditioned Special Access contemplates station and tandem switching operations using customer provided equipment, as well as Special Access. Separate Narrowband or dice Grade Special Access, where required by (N)

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ADVANCED DATA SERVICES

J. SPECIAL FEDERAL GOVERNMENT FIA - Continued (N)

6. c. 1. - Continued

the customer provided equipment or switching operation, are furnished in accordance with the applicable sections of this tariff.

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

(N)

ADVANCED DATA SERVICES

J. SPECIAL FEDERAL GOVERNMENT FIA - Continued (N)

6. c. 1. - Continued

the customer provided equipment or switching operation, are furnished in accordance with the applicable sections of this tariff.

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

(N)

ADVANCED DATA SERVICES

J. SPECIAL FEDERAL GOVERNMENT FIA - Continued (N)

6. c. - Continued

2. Special Wideband Digital Special Access

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

d. Move Charges

When Special Access service requiring T-3 conditioning, T-3 additional conditioning, or a Special Access requiring G conditioning is moved to a different premises or to a different building, the full nonrecurring charge applies; when moved to a new location on the same premises, a charge of one half the nonrecurring charge applies.

When any FIA for which a termination charge is specified is moved and is installed at a new location the customer may elect:

(1) to pay the unexpired portion of the termination charge for the FIA, if any, with the application of a nonrecurring charge and the establishment of a new termination charge for such FIA at the new location; or

(2) to continue the FIA subject to the unexpired portion of the termination charge, if any, and pay the estimated costs of moving such FIA, provided that the customer requests these charges be quoted prior to ordering the FIA move. Charges for moving such FIA will be based on estimated costs attributable to the move.

Move charges include the estimated costs of removal, restoration of FIA necessitated by the move, transportation, storage, reinstallation, engineering, labor, supervision, materials, administration, taxes, and any other specific items of cost directly attributable to the move. (N)

Effective: Pending PUC approval of AL 12xxx

ADVANCED DATA SERVICES

J. SPECIAL FEDERAL GOVERNMENT FIA - Continued (N)

6. c. - Continued

2. Special Wideband Digital Special Access

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

d. Move Charges

When Special Access service requiring T-3 conditioning, T-3 additional conditioning, or a Special Access requiring G conditioning is moved to a different premises or to a different building, the full nonrecurring charge applies; when moved to a new location on the same premises, a charge of one half the nonrecurring charge applies.

When any FIA for which a termination charge is specified is moved and is installed at a new location the customer may elect:

(1) to pay the unexpired portion of the termination charge for the FIA, if any, with the application of a nonrecurring charge and the establishment of a new termination charge for such FIA at the new location; or

(2) to continue the FIA subject to the unexpired portion of the termination charge, if any, and pay the estimated costs of moving such FIA, provided that the customer requests these charges be quoted prior to ordering the FIA move. Charges for moving such FIA will be based on estimated costs attributable to the move.

Move charges include the estimated costs of removal, restoration of FIA necessitated by the move, transportation, storage, reinstallation, engineering, labor, supervision, materials, administration, taxes, and any other specific items of cost directly attributable to the move. (N)

ADVANCED DATA SERVICES

K. RESERVED FOR FUTURE USE [1] (C)

(D)

(D)

[1] Material formerly on this page has been withdrawn from the Product Guide. CyberDS1 Service is withdrawn as of November 1, 2014. (N)
(N)

ADVANCED DATA SERVICES

K. CYBERDS1 [1, 2] (T)

1. SERVICE DESCRIPTION

CyberDS1 is a unique DS1 service designed specifically for Internet Service Providers (ISPs). This service packages 24 two-way trunks into a single "trunk-side" DS1 digital local service. Multiple CyberDS1's may be provided in a CyberDS1 Arrangement to provide the ISP with as many trunks as desired, in increments of 24.

CyberDS1 Service provides network dial tone service between a customer's premises and the local serving office on a channelized basis (DS0) over a single high-capacity (DS1) digital facility that terminates on the trunk side of the switch in the local serving office. CyberDS1 is available for data dialed access use.

CyberDS1 provides a trunkside DS1 connection with 24 channels. CyberDS1 does not provide the function of analog to digital (or vice versa) conversions and no service types can be specified on the DS1.

CyberDS1 is provided in capacity increments of 24 digital channels within a single DS1 (1.544 Mbps) signal.

CyberDS1 is comprised of a CyberDS1 Capacity component:

a. The CyberDS1 Capacity will be at the rates and charges as set forth in this tariff.

b. CyberDS1 customers will have to select capacity in increments of 24 digital channels.

[1] Effective October 3, 2011, CyberDS1 is grandfathered and no longer available to new customers. Additions or changes to this service are permitted at existing customers locations only.

[2] Effective November 3, 2012, moves, additions or changes to subscribers' existing CyberDS1 Service are not permitted. Also Effective November 3, 2012, the 1-Year, 2-Year and 3-Year Term options for CyberDS1 Service are no longer available for subscription. At the end of the customer's term, unless the customer converts to another service or discontinues use of the service, the customer will be converted to the month to month rate. CyberDS1 Service continues to be available for resale until February 16, 2013, on which date the foregoing terms shall be effective for resale. (N)

ADVANCED DATA SERVICES

K. CYBERDS1[1] (N)

1. SERVICE DESCRIPTION

CyberDS1 is a unique DS1 service designed specifically for Internet Service Providers (ISPs). This service packages 24 two-way trunks into a single "trunk-side" DS1 digital local service. Multiple CyberDS1's may be provided in a CyberDS1 Arrangement to provide the ISP with as many trunks as desired, in increments of 24.

CyberDS1 Service provides network dial tone service between a customer's premises and the local serving office on a channelized basis (DS0) over a single high-capacity (DS1) digital facility that terminates on the trunk side of the switch in the local serving office. CyberDS1 is available for data dialed access use.

CyberDS1 provides a trunkside DS1 connection with 24 channels. CyberDS1 does not provide the function of analog to digital (or vice versa) conversions and no service types can be specified on the DS1.

CyberDS1 is provided in capacity increments of 24 digital channels within a single DS1 (1.544 Mbps) signal.

CyberDS1 is comprised of a CyberDS1 Capacity component:

a. The CyberDS1 Capacity will be at the rates and charges as set forth in this tariff.

b. CyberDS1 customers will have to select capacity in increments of 24 digital channels.

[1] Effective October 3, 2011, CyberDS1 is grandfathered and no longer available to new customers. Additions or changes to this service are permitted at existing customers locations only. (N) (N)

ADVANCED DATA SERVICES

K. CYBERDS1 (N)

1. SERVICE DESCRIPTION

CyberDS1 is a unique DS1 service designed specifically for Internet Service Providers (ISPs). This service packages 24 two-way trunks into a single "trunk-side" DS1 digital local service. Multiple CyberDS1's may be provided in a CyberDS1 Arrangement to provide the ISP with as many trunks as desired, in increments of 24.

CyberDS1 Service provides network dial tone service between a customer's premises and the local serving office on a channelized basis (DS0) over a single high-capacity (DS1) digital facility that terminates on the trunk side of the switch in the local serving office. CyberDS1 is available for data dialed access use.

CyberDS1 provides a trunkside DS1 connection with 24 channels. CyberDS1 does not provide the function of analog to digital (or vice versa) conversions and no service types can be specified on the DS1.

CyberDS1 is provided in capacity increments of 24 digital channels within a single DS1 (1.544 Mbps) signal.

CyberDS1 is comprised of a CyberDS1 Capacity component:

a. The CyberDS1 Capacity will be at the rates and charges as set forth in this tariff.

b. CyberDS1 customers will have to select capacity in increments of 24 digital channels. (N)

ADVANCED DATA SERVICES

K. CYBERDS1 (N)

1. SERVICE DESCRIPTION

CyberDS1 is a unique DS1 service designed specifically for Internet Service Providers (ISPs). This service packages 24 two-way trunks into a single "trunk-side" DS1 digital local service. Multiple CyberDS1's may be provided in a CyberDS1 Arrangement to provide the ISP with as many trunks as desired, in increments of 24.

CyberDS1 Service provides network dial tone service between a customer's premises and the local serving office on a channelized basis (DS0) over a single high-capacity (DS1) digital facility that terminates on the trunk side of the switch in the local serving office. CyberDS1 is available for data dialed access use.

CyberDS1 provides a trunkside DS1 connection with 24 channels. CyberDS1 does not provide the function of analog to digital (or vice versa) conversions and no service types can be specified on the DS1.

CyberDS1 is provided in capacity increments of 24 digital channels within a single DS1 (1.544 Mbps) signal.

CyberDS1 is comprised of a CyberDS1 Capacity component:

a. The CyberDS1 Capacity will be at the rates and charges as set forth in this tariff.

b. CyberDS1 customers will have to select capacity in increments of 24 digital channels. (N)

ADVANCED DATA SERVICES

K. RESERVED FOR FUTURE USE [1] (C)

(D)

(D)

[1] Material formerly on this page has been withdrawn from the Product Guide. CyberDS1 Service is withdrawn as of November 1, 2014. (N)
(N)

ADVANCED DATA SERVICES

K. CYBERDS1 [1, 2] (T)

2. SERVICE PROVISIONING

Foreign Exchange Service for CyberDS1 is available on an Individual Case Basis (ICB).

CyberDS1 differs in provisioning method and numbering format from end-to-end services. These services will be available from the Utility on a link (partial channel) basis rather than as an end-to-end service. This architecture is intended to promote more efficient connectivity of analog and digital networks.

The time required to provision service is known as the service date interval. The service date interval for CyberDS1 and related network services connected to CyberDS1 will differ from the normal guidelines applicable to end-to-end services.

CyberDS1 will be available on a digital basis at the network interface on a customer's premises. Both the Utility and the customer have joint responsibilities to ensure the proper transmission of the provided services. Normal analog channel network interface specifications will be superseded by the electrical specifications on the 1.544 Mbps (DS1) channel which is actually terminated. Each digital channel provided will have an identity only as a "time slot" within a DS1 Channel. Compatible digital to analog conversion equipment must be provided by the customer to derive the desired analog services. Any Channel Service Units (CSUs) necessary for digital services are the responsibility of the customer.

3. TERMINATION LIABILITY

See Verizon California Inc. Product Guide, Section 2.15, for termination liability rules.

4. Regulations

CyberDS1 is furnished subject to the availability of facilities from digital central office equipment located in a central office building owned or leased by the Utility. Clear Channel Capability (B8ZS) will be provided where available.

[1] Effective October 3, 2011, CyberDS1 is grandfathered and no longer available to new customers. Additions or changes to this service are permitted at existing customers locations only.

[2] Effective November 3, 2012, moves, additions or changes to subscribers' existing CyberDS1 Service are not permitted. Also Effective November 3, 2012, the 1-Year, 2-Year and 3-Year Term options for CyberDS1 Service are no longer available for subscription. At the end of the customer's term, unless the customer converts to another service or discontinues use of the service, the customer will be converted to the month to month rate. CyberDS1 Service continues to be available for resale until February 16, 2013, on which date the foregoing terms shall be effective for resale. (N) (N)

ADVANCED DATA SERVICES

K. CYBERDS1[1] - Continued (N)

2. SERVICE PROVISIONING

Foreign Exchange Service for CyberDS1 is available on an Individual Case Basis (ICB).

CyberDS1 differs in provisioning method and numbering format from end-to-end services. These services will be available from the Utility on a link (partial channel) basis rather than as an end-to-end service. This architecture is intended to promote more efficient connectivity of analog and digital networks.

The time required to provision service is known as the service date interval. The service date interval for CyberDS1 and related network services connected to CyberDS1 will differ from the normal guidelines applicable to end-to-end services.

CyberDS1 will be available on a digital basis at the network interface on a customer's premises. Both the Utility and the customer have joint responsibilities to ensure the proper transmission of the provided services. Normal analog channel network interface specifications will be superseded by the electrical specifications on the 1.544 Mbps (DS1) channel which is actually terminated. Each digital channel provided will have an identity only as a "time slot" within a DS1 Channel. Compatible digital to analog conversion equipment must be provided by the customer to derive the desired analog services. Any Channel Service Units (CSUs) necessary for digital services are the responsibility of the customer.

\. 3. TERMINATION LIABILITY

See Verizon California Inc. Product Guide, Section 2.15, for termination liability rules.

4. Regulations

CyberDS1 is furnished subject to the availability of facilities from digital central office equipment located in a central office building owned or leased by the Utility. Clear Channel Capability (B8ZS) will be provided where available.

[1] Effective October 3, 2011, CyberDS1 is grandfathered and no longer available to new customers. Additions or changes to this service are permitted at existing customers locations only. (N) (N)

Effective: Pending PUC approval of AL 12xxx

ADVANCED DATA SERVICES

K. CYBERDS1 - Continued (N)

2. SERVICE PROVISIONING

Foreign Exchange Service for CyberDS1 is available on an Individual Case Basis (ICB).

CyberDS1 differs in provisioning method and numbering format from end-to-end services. These services will be available from the Utility on a link (partial channel) basis rather than as an end-to-end service. This architecture is intended to promote more efficient connectivity of analog and digital networks.

The time required to provision service is known as the service date interval. The service date interval for CyberDS1 and related network services connected to CyberDS1 will differ from the normal guidelines applicable to end-to-end services.

CyberDS1 will be available on a digital basis at the network interface on a customer's premises. Both the Utility and the customer have joint responsibilities to ensure the proper transmission of the provided services. Normal analog channel network interface specifications will be superseded by the electrical specifications on the 1.544 Mbps (DS1) channel which is actually terminated. Each digital channel provided will have an identity only as a "time slot" within a DS1 Channel. Compatible digital to analog conversion equipment must be provided by the customer to derive the desired analog services. Any Channel Service Units (CSUs) necessary for digital services are the responsibility of the customer.

\. 3. TERMINATION LIABILITY

See Verizon California Inc. Product Guide, Section 2.15, for termination liability rules.

4. Regulations

CyberDS1 is furnished subject to the availability of facilities from digital central office equipment located in a central office building owned or leased by the Utility. Clear Channel Capability (B8ZS) will be provided where available. (N)

ADVANCED DATA SERVICES

K. CYBERDS1 - Continued (N)

2. SERVICE PROVISIONING

Foreign Exchange Service for CyberDS1 is available on an Individual Case Basis (ICB).

CyberDS1 differs in provisioning method and numbering format from end-to-end services. These services will be available from the Utility on a link (partial channel) basis rather than as an end-to-end service. This architecture is intended to promote more efficient connectivity of analog and digital networks.

The time required to provision service is known as the service date interval. The service date interval for CyberDS1 and related network services connected to CyberDS1 will differ from the normal guidelines applicable to end-to-end services.

CyberDS1 will be available on a digital basis at the network interface on a customer's premises. Both the Utility and the customer have joint responsibilities to ensure the proper transmission of the provided services. Normal analog channel network interface specifications will be superseded by the electrical specifications on the 1.544 Mbps (DS1) channel which is actually terminated. Each digital channel provided will have an identity only as a "time slot" within a DS1 Channel. Compatible digital to analog conversion equipment must be provided by the customer to derive the desired analog services. Any Channel Service Units (CSUs) necessary for digital services are the responsibility of the customer.

\. 3. TERMINATION LIABILITY

See Verizon California Inc. Product Guide, Section 2.15, for termination liability rules.

4. Regulations

CyberDS1 is furnished subject to the availability of facilities from digital central office equipment located in a central office building owned or leased by the Utility. Clear Channel Capability (B8ZS) will be provided where available. (N)

ADVANCED DATA SERVICES

K. RESERVED FOR FUTURE USE [1] (C)

(D)

(D)

[1] Material formerly on this page has been withdrawn from the Product Guide. CyberDS1 Service is withdrawn as of November 1, 2014. (N)
(N)

ADVANCED DATA SERVICES

K. CYBERDS1 [1, 2] - Continued (T)

3. REGULATIONS - Continued

CyberDS1 is available within an exchange where appropriate digital facilities are available as determined by the Utility. Service inquires will be necessary to determine availability. Special Construction Charges as specified in Section IX of this tariff may be applicable.

All CyberDS1 must be channelized in a single equipment location on a customer's premises. CyberDS1 cannot be split between premises, or multiple locations within a premise. Standard network interfaces, without Integrated Services Digital Network (ISDN) signaling and without any line type features, will be provided by the Utility for analog and digital services consistent with existing practices.

The technical specifications and standard network interface for DS1 and associated channelized services are stated in Section 7000 of the Verizon Technical Interface Reference Manual.

4. APPLICATION OF RATES

a. The CyberDS1 Capacity rate is applicable to each CyberDS1 arrangement.

b. The CyberDS1 Capacity element provides for the network facility to the customer premises and the central office channelization.

c. CyberDS1 Service is available on a Month-to-Month Option, a 1, 2 or 3 Year Term Commitment Plan, or a 1, 2 or 3 Year Term and Volume Plan. Changes between service periods (i.e., Month-to-Month Option, Term Commitment Plan, or Term and Volume Plan) will incur a Subsequent Order charge as specified in Schedule Cal. P.U.C. No. A-41.

Term Commitment Plan

Customers on a Term Commitment Plan may convert to a Term and Volume Plan without incurring termination liability charges, provided the customer has less than 12 months remaining on the existing Term Commitment Plan, and the length of the new Term and Volume Plan is equal to or greater than the existing Term Commitment Plan.

1 Effective October 3, 2011, CyberDS1 is grandfathered and no longer available to new customers. Additions or changes to this service are permitted at existing customers locations only.

2 Effective November 3, 2012, moves, additions or changes to subscribers' existing CyberDS1 Service are not permitted. Also Effective November 3, 2012, the 1-Year, 2-Year and 3-Year Term options for CyberDS1 Service are no longer available for subscription. At the end of the customer's term, unless the customer converts to another service or discontinues use of the service, the customer will be converted to the month to month rate. CyberDS1 Service continues to be available for resale until February 16, 2013, on which date the foregoing terms shall be effective for resale. (N) (N)

ADVANCED DATA SERVICES

(N)

K. CYBERDS1[1] - Continued

3. REGULATIONS - Continued

CyberDS1 is available within an exchange where appropriate digital facilities are available as determined by the Utility. Service inquires will be necessary to determine availability. Special Construction Charges as specified in Section IX of this tariff may be applicable.

All CyberDS1 must be channelized in a single equipment location on a customer's premises. CyberDS1 cannot be split between premises, or multiple locations within a premise. Standard network interfaces, without Integrated Services Digital Network (ISDN) signaling and without any line type features, will be provided by the Utility for analog and digital services consistent with existing practices.

The technical specifications and standard network interface for DS1 and associated channelized services are stated in Section 7000 of the Verizon Technical Interface Reference Manual.

4. APPLICATION OF RATES

a. The CyberDS1 Capacity rate is applicable to each CyberDS1 arrangement.

b. The CyberDS1 Capacity element provides for the network facility to the customer premises and the central office channelization.

c. CyberDS1 Service is available on a Month-to-Month Option, a 1, 2 or 3 Year Term Commitment Plan, or a 1, 2 or 3 Year Term and Volume Plan. Changes between service periods (i.e., Month-to-Month Option, Term Commitment Plan, or Term and Volume Plan) will incur a Subsequent Order charge as specified in Schedule Cal. P.U.C. No. A-41.

Term Commitment Plan

Customers on a Term Commitment Plan may convert to a Term and Volume Plan without incurring termination liability charges, provided the customer has less than 12 months remaining on the existing Term Commitment Plan, and the length of the new Term and Volume Plan is equal to or greater than the existing Term Commitment Plan.

1 Effective October 3, 2011, CyberDS1 is grandfathered and no longer available to new customers. Additions or changes to this service are permitted at existing customers locations only. (N) (N)

ADVANCED DATA SERVICES

K. CYBERDS1 - Continued (N)

3. REGULATIONS - Continued

CyberDS1 is available within an exchange where appropriate digital facilities are available as determined by the Utility. Service inquires will be necessary to determine availability. Special Construction Charges as specified in Section IX of this tariff may be applicable.

All CyberDS1 must be channelized in a single equipment location on a customer's premises. CyberDS1 cannot be split between premises, or multiple locations within a premise. Standard network interfaces, without Integrated Services Digital Network (ISDN) signaling and without any line type features, will be provided by the Utility for analog and digital services consistent with existing practices.

The technical specifications and standard network interface for DS1 and associated channelized services are stated in Section 7000 of the Verizon Technical Interface Reference Manual.

4. APPLICATION OF RATES

a. The CyberDS1 Capacity rate is applicable to each CyberDS1 arrangement.

b. The CyberDS1 Capacity element provides for the network facility to the customer premises and the central office channelization.

c. CyberDS1 Service is available on a Month-to-Month Option, a 1, 2 or 3 Year Term Commitment Plan, or a 1, 2 or 3 Year Term and Volume Plan. Changes between service periods (i.e., Month-to-Month Option, Term Commitment Plan, or Term and Volume Plan) will incur a Subsequent Order charge as specified in Schedule Cal. P.U.C. No. A-41.

Term Commitment Plan

Customers on a Term Commitment Plan may convert to a Term and Volume Plan without incurring termination liability charges, provided the customer has less than 12 months remaining on the existing Term Commitment Plan, and the length of the new Term and Volume Plan is equal to or greater than the existing Term Commitment Plan. (N)

ADVANCED DATA SERVICES

K. CYBERDS1 - Continued (N)

3. REGULATIONS - Continued

CyberDS1 is available within an exchange where appropriate digital facilities are available as determined by the Utility. Service inquires will be necessary to determine availability. Special Construction Charges as specified in Section IX of this tariff may be applicable.

All CyberDS1 must be channelized in a single equipment location on a customer's premises. CyberDS1 cannot be split between premises, or multiple locations within a premise. Standard network interfaces, without Integrated Services Digital Network (ISDN) signaling and without any line type features, will be provided by the Utility for analog and digital services consistent with existing practices.

The technical specifications and standard network interface for DS1 and associated channelized services are stated in Section 7000 of the Verizon Technical Interface Reference Manual.

4. APPLICATION OF RATES

a. The CyberDS1 Capacity rate is applicable to each CyberDS1 arrangement.

b. The CyberDS1 Capacity element provides for the network facility to the customer premises and the central office channelization.

c. CyberDS1 Service is available on a Month-to-Month Option, a 1, 2 or 3 Year Term Commitment Plan, or a 1, 2 or 3 Year Term and Volume Plan. Changes between service periods (i.e., Month-to-Month Option, Term Commitment Plan, or Term and Volume Plan) will incur a Subsequent Order charge as specified in Schedule Cal. P.U.C. No. A-41.

Term Commitment Plan

Customers on a Term Commitment Plan may convert to a Term and Volume Plan without incurring termination liability charges, provided the customer has less than 12 months remaining on the existing Term Commitment Plan, and the length of the new Term and Volume Plan is equal to or greater than the existing Term Commitment Plan. (N)

ADVANCED DATA SERVICES

K. RESERVED FOR FUTURE USE [1] (C)

(D)

(D)

[1] Material formerly on this page has been withdrawn from the Product Guide. CyberDS1 Service is withdrawn as of November 1, 2014. (N)
(N)

ADVANCED DATA SERVICES

K. CYBERDS1 [1, 2] - Continued (T)

4. APPLICATION OF RATES - Continued

d. Term and Volume Plan

(1) Customers may increase or decrease the number of DS1s during the term commitment period without initiating a new term commitment and without incurring termination liability charges, provided customer subscription does not fall below the minimum threshold of six (6) DS1s. If the increase or decrease in DS1s causes customer subscription to fall within a different threshold level, all remaining DS1s will be billed at the applicable level of discount for the remainder of the term commitment period.

(2) Customers who change from a Term and Volume Plan to a Term Commitment Plan or a Month-to-Month Option will incur termination liability charges.

Unless specified herein, rules and regulations contained elsewhere in the Utility's tariffs are also applicable to CyberDS1 Service.

e. CyberDS1 Credit

For each increment of 24 channels, a credit equal to 100% of the applicable interstate Subscriber Line Charge will be applied to 22 of the 24 channels.

[1] Effective October 3, 2011, CyberDS1 is grandfathered and no longer available to new customers. Additions or changes to this service are permitted at existing customers locations only.

[2] Effective November 3, 2012, moves, additions or changes to subscribers' existing CyberDS1 Service are not permitted. (N)
Also Effective November 3, 2012, the 1-Year, 2-Year and 3-Year Term options for CyberDS1 Service are no longer available for subscription. At the end of the customer's term, unless the customer converts to another service or discontinues use of the service, the customer will be converted to the month to month rate. CyberDS1 Service continues to be available for resale until February 16, 2013, on which date the foregoing terms shall be effective for resale. (N)

ADVANCED DATA SERVICES

K. CYBERDS1[1]- Continued (N)

4. APPLICATION OF RATES - Continued

d. Term and Volume Plan

(1) Customers may increase or decrease the number of DS1s during the term commitment period without initiating a new term commitment and without incurring termination liability charges, provided customer subscription does not fall below the minimum threshold of six (6) DS1s. If the increase or decrease in DS1s causes customer subscription to fall within a different threshold level, all remaining DS1s will be billed at the applicable level of discount for the remainder of the term commitment period.

(2) Customers who change from a Term and Volume Plan to a Term Commitment Plan or a Month-to-Month Option will incur termination liability charges.

Unless specified herein, rules and regulations contained elsewhere in the Utility's tariffs are also applicable to CyberDS1 Service.

e. CyberDS1 Credit

For each increment of 24 channels, a credit equal to 100% of the applicable interstate Subscriber Line Charge will be applied to 22 of the 24 channels.

[1] Effective October 3, 2011, CyberDS1 is grandfathered and no longer available to new customers. Additions or changes to this service are permitted at existing customers locations only. (N) (N)

ADVANCED DATA SERVICES

(N)

K. CYBERDS1 - Continued

4. APPLICATION OF RATES - Continued

d. Term and Volume Plan

(1) Customers may increase or decrease the number of DS1s during the term commitment period without initiating a new term commitment and without incurring termination liability charges, provided customer subscription does not fall below the minimum threshold of six (6) DS1s. If the increase or decrease in DS1s causes customer subscription to fall within a different threshold level, all remaining DS1s will be billed at the applicable level of discount for the remainder of the term commitment period.

(2) Customers who change from a Term and Volume Plan to a Term Commitment Plan or a Month-to-Month Option will incur termination liability charges.

Unless specified herein, rules and regulations contained elsewhere in the Utility's tariffs are also applicable to CyberDS1 Service.

e. CyberDS1 Credit

For each increment of 24 channels, a credit equal to 100% of the applicable interstate Subscriber Line Charge will be applied to 22 of the 24 channels. (N)

ADVANCED DATA SERVICES

(N)

K. CYBERDS1 - Continued

4. APPLICATION OF RATES - Continued

d. Term and Volume Plan

(1) Customers may increase or decrease the number of DS1s during the term commitment period without initiating a new term commitment and without incurring termination liability charges, provided customer subscription does not fall below the minimum threshold of six (6) DS1s. If the increase or decrease in DS1s causes customer subscription to fall within a different threshold level, all remaining DS1s will be billed at the applicable level of discount for the remainder of the term commitment period.

(2) Customers who change from a Term and Volume Plan to a Term Commitment Plan or a Month-to-Month Option will incur termination liability charges.

Unless specified herein, rules and regulations contained elsewhere in the Utility's tariffs are also applicable to CyberDS1 Service.

e. CyberDS1 Credit

For each increment of 24 channels, a credit equal to 100% of the applicable interstate Subscriber Line Charge will be applied to 22 of the 24 channels. (N)

ADVANCED DATA SERVICES

K. RESERVED FOR FUTURE USE [1] (C)

(D)

(D)

[1] Material formerly on this page has been withdrawn from the Product Guide. CyberDS1 Service is withdrawn as of November 1, 2014. (N)
(N)

ADVANCED DATA SERVICES

K. CYBERDS1 [4, 5] - Continued (T)

5. RATES AND CHARGES

	Nonrecurring Charge	Monthly Rate
CyberDS1 Capacity, each arrangement [1]	$ 500.00	
Month-to-Month Option [2]		$ 900.00 (I)
Term Commitment Plan [2, 3]		
1 Year Term		725.00
2 Year Term		675.00
3 Year Term		600.00

Term and Volume Plan [2, 3]

	Monthly Rate		
Threshold Levels	1 Year	2 Year	3 Year
6 - 10 DS1s	$ 675.00	$ 625.00	$ 550.00
11 - 20 DS1s	600.00	550.00	450.00
21 + DS1s	500.00	450.00	375.00

1 For each increment of 24 channels, a credit equal to 100% of the applicable interstate Subscriber Line Charge will be applied to 22 of the 24 channels.

2 Nonrecurring charge applies per arrangement.

3 See Verizon California Inc. Product Guide, Section 2.15, for termination liability rules.

4 Effective October 3, 2011, CyberDS1 is grandfathered and no longer available to new customers. Additions or changes to this service are permitted at existing customers locations only.

5 Effective November 3, 2012, moves, additions or changes to subscribers' existing CyberDS1 Service are not permitted. (N)
Also Effective November 3, 2012, the 1-Year, 2-Year and 3-Year Term options for CyberDS1 Service are no longer available for subscription. At the end of the customer's term, unless the customer converts to another service or discontinues use of the service, the customer will be converted to the month to month rate. CyberDS1 Service continues to be available for resale until February 16, 2013, on which date the foregoing terms shall be effective for resale. (N)

ADVANCED DATA SERVICES

K. CYBERDS1 [4] - Continued (N)

5. RATES AND CHARGES

	Nonrecurring Charge	Monthly Rate
CyberDS1 Capacity, each arrangement [1]	$ 500.00	
Month-to-Month Option [2]		$ 750.00
Term Commitment Plan [2, 3]		
1 Year Term		725.00
2 Year Term		675.00
3 Year Term		600.00

Term and Volume Plan [2, 3]

	Monthly Rate		
Threshold Levels	1 Year	2 Year	3 Year
6 - 10 DS1s	$ 675.00	$ 625.00	$ 550.00
11 - 20 DS1s	600.00	550.00	450.00
21 + DS1s	500.00	450.00	375.00

1 For each increment of 24 channels, a credit equal to 100% of the applicable interstate Subscriber Line Charge will be applied to 22 of the 24 channels.
2 Nonrecurring charge applies per arrangement.
3 See Verizon California Inc. Product Guide, Section 2.15, for termination liability rules.
4 Effective October 3, 2011, CyberDS1 is grandfathered and no longer available to new customers. Additions or changes to this service are permitted at existing customers locations only. (N) (N)

ADVANCED DATA SERVICES

K. CYBERDS1 - Continued (N)

5. RATES AND CHARGES

	Nonrecurring Charge	Monthly Rate
CyberDS1 Capacity, each arrangement [1]	$ 500.00	
Month-to-Month Option [2]		$ 750.00
Term Commitment Plan [2, 3]		
1 Year Term		725.00
2 Year Term		675.00
3 Year Term		600.00

Term and Volume Plan [2, 3]

	Monthly Rate		
Threshold Levels	1 Year	2 Year	3 Year
6 - 10 DS1s	$ 675.00	$ 625.00	$ 550.00
11 - 20 DS1s	600.00	550.00	450.00
21 + DS1s	500.00	450.00	375.00 (N)

1 For each increment of 24 channels, a credit equal to 100% of the applicable interstate Subscriber Line Charge will be applied to 22 of the 24 channels. (N)

2 Nonrecurring charge applies per arrangement.

3 See Verizon California Inc. Product Guide, Section 2.15, for termination liability rules. (N)

ADVANCED DATA SERVICES

K. CYBERDS1 - Continued (N)

5. RATES AND CHARGES

	Nonrecurring Charge	Monthly Rate
CyberDS1 Capacity, each arrangement [1]	$ 500.00	
Month-to-Month Option [2]		$ 750.00
Term Commitment Plan [2, 3]		
1 Year Term		725.00
2 Year Term		675.00
3 Year Term		600.00

Term and Volume Plan [2, 3]

Threshold Levels	Monthly Rate 1 Year	2 Year	3 Year
6 - 10 DS1s	$ 675.00	$ 625.00	$ 550.00
11 - 20 DS1s	600.00	550.00	450.00
21 + DS1s	500.00	450.00	375.00 (N)

[1] For each increment of 24 channels, a credit equal to 100% of the applicable interstate Subscriber Line Charge will be applied to 22 of the 24 channels. (N)

[2] Nonrecurring charge applies per arrangement.

[3] See Verizon California Inc. Product Guide, Section 2.15, for termination liability rules. (N)

ADVANCED DATA SERVICES

L. TRANSPARENT LAN SERVICE (TLS)

1. DEFINITIONS

Domain - Closed User Groups, also known as Virtual LANs (VLANs), which are used to provide traffic separation, privacy and security between customers on the shared switch and backbone. Users in a group can only access their own data.

Gigabit Per Second (Gbps): Data transfer rate for 1000 Mbps. The speed at which data is transferred through the network, where one Gigabit per second equals the transfer rate of one (1) billion bits of data in one (1) second. (N)

Megabit Per Second (Mbps.) - The speed where data is being transferred in the network, where one Megabit Per Second equals to the transfer rate of 1 million bits of data in 1 second.

Nanometers (nm) - Wavelength frequency equivalent to 1 billionth of a meter.

2. SERVICE DESCRIPTION

Transparent LAN Service (TLS) is a high speed data service which uses a shared fiber network to allow for the interconnection of Local Area Networks (LANs) across selected metropolitan areas in the same Local Access Transport Area (LATA). TLS delivers high speed data service to the interface at speeds of 10 Mbps, 100 Mbps, 1000 Mbps and 10 Gbps from the customer's LANs to the shared network.

TLS creates a network with the ability to function as a shared public network. TLS protects data privacy by using specialized screening software that permits subscribers to access only their data.

TLS is available as two service types: Ethernet Multipoint Service (EMS) or Ethernet Relay Service (ERS). The customer must select either EMS or ERS as the service type for each domain:

Ethernet Multipoint Service (EMS) is a connection-less Ethernet TLS service that allows connectivity among multiple customer designated locations within a LATA.

With the EMS service type, Ethernet TLS protects data privacy by using closed user groups (CUGs), also known as virtual LANs. CUGs or virtual LANs are used to provide traffic separation, privacy and security between customers on the shared switch and backbone. An EMS domain is comprised of any number of access lines designated by the customer to be included in a closed user group (CUG) or virtual LAN. EMS provides multipoint-to-multipoint connectivity among all of the customer's access lines within a given domain. TLS may be used to access shared networks. In such cases, subscribers in a CUG can only access their own data.

ADVANCED DATA SERVICES

L. TRANSPARENT LAN SERVICE (TLS)

1. DEFINITIONS

Domain - Closed User Groups, also known as Virtual LANs (VLANs), which are used to provide traffic separation, privacy and security between customers on the shared switch and backbone. Users in a group can only access their own data.

Megabit Per Second (Mbps.) - The speed where data is being transferred in the network, where one Megabit Per Second equals to the transfer rate of 1 million bits of data in 1 second.

Nanometers (nm) - Wavelength frequency equivalent to 1 billionth of a meter.

2. SERVICE DESCRIPTION

Transparent LAN Service (TLS) is a high speed data service which uses a shared fiber network to allow for the interconnection of Local Area Networks (LANs) across selected metropolitan areas in the same Local Access Transport Area (LATA). TLS delivers high speed data service to the interface at speeds of 10 Mbps, 100 Mbps, 1000 Mbps and 10 Gbps from the customer's LANs to the shared network. (N)

TLS creates a network with the ability to function as a shared public network. TLS protects data privacy by using specialized screening software that permits subscribers to access only their data.

TLS is available as two service types: Ethernet Multipoint Service (EMS) or Ethernet Relay Service (ERS). The customer must select either EMS or ERS as the service type for each domain:

Ethernet Multipoint Service (EMS) is a connection-less Ethernet TLS service that allows connectivity among multiple customer designated locations within a LATA.

With the EMS service type, Ethernet TLS protects data privacy by using closed user groups (CUGs), also known as virtual LANs. CUGs or virtual LANs are used to provide traffic separation, privacy and security between customers on the shared switch and backbone. An EMS domain is comprised of any number of access lines designated by the customer to be included in a closed user group (CUG) or virtual LAN. EMS provides multipoint-to-multipoint connectivity among all of the customer's access lines within a given domain. TLS may be used to access shared networks. In such cases, subscribers in a CUG can only access their own data.

ADVANCED DATA SERVICES

L. TRANSPARENT LAN SERVICE (TLS) (N)

1. DEFINITIONS

Domain - Closed User Groups, also known as Virtual LANs (VLANs), which are used to provide traffic separation, privacy and security between customers on the shared switch and backbone. Users in a group can only access their own data.

Megabit Per Second (Mbps.) - The speed where data is being transferred in the network, where one Megabit Per Second equals to the transfer rate of 1 million bits of data in 1 second.

Nanometers (nm) - Wavelength frequency equivalent to 1 billionth of a meter.

2. SERVICE DESCRIPTION

Transparent LAN Service (TLS) is a high speed data service which uses a shared fiber network to allow for the interconnection of Local Area Networks (LANs) across selected metropolitan areas in the same Local Access Transport Area (LATA). TLS delivers high speed data service to the interface at speeds of 10 Mbps, 100 Mbps, and 1000 Mbps from the customer's LANs to the shared network.

TLS creates a network with the ability to function as a shared public network. TLS protects data privacy by using specialized screening software that permits subscribers to access only their data.

TLS is available as two service types: Ethernet Multipoint Service (EMS) or Ethernet Relay Service (ERS). The customer must select either EMS or ERS as the service type for each domain:

Ethernet Multipoint Service (EMS) is a connection-less Ethernet TLS service that allows connectivity among multiple customer designated locations within a LATA.

With the EMS service type, Ethernet TLS protects data privacy by using closed user groups (CUGs), also known as virtual LANs. CUGs or virtual LANs are used to provide traffic separation, privacy and security between customers on the shared switch and backbone. An EMS domain is comprised of any number of access lines designated by the customer to be included in a closed user group (CUG) or virtual LAN. EMS provides multipoint-to-multipoint connectivity among all of the customer's access lines within a given domain. TLS may be used to access shared networks. In such cases, subscribers in a CUG can only access their own data. (N)

ADVANCED DATA SERVICES

L. TRANSPARENT LAN SERVICE (TLS) (N)

1. DEFINITIONS

Domain - Closed User Groups, also known as Virtual LANs (VLANs), which are used to provide traffic separation, privacy and security between customers on the shared switch and backbone. Users in a group can only access their own data.

Megabit Per Second (Mbps.) - The speed where data is being transferred in the network, where one Megabit Per Second equals to the transfer rate of 1 million bits of data in 1 second.

Nanometers (nm) - Wavelength frequency equivalent to 1 billionth of a meter.

2. SERVICE DESCRIPTION

Transparent LAN Service (TLS) is a high speed data service which uses a shared fiber network to allow for the interconnection of Local Area Networks (LANs) across selected metropolitan areas in the same Local Access Transport Area (LATA). TLS delivers high speed data service to the interface at speeds of 10 Mbps, 100 Mbps, and 1000 Mbps from the customer's LANs to the shared network.

TLS creates a network with the ability to function as a shared public network. TLS protects data privacy by using specialized screening software that permits subscribers to access only their data.

TLS is available as two service types: Ethernet Multipoint Service (EMS) or Ethernet Relay Service (ERS). The customer must select either EMS or ERS as the service type for each domain:

Ethernet Multipoint Service (EMS) is a connection-less Ethernet TLS service that allows connectivity among multiple customer designated locations within a LATA.

With the EMS service type, Ethernet TLS protects data privacy by using closed user groups (CUGs), also known as virtual LANs. CUGs or virtual LANs are used to provide traffic separation, privacy and security between customers on the shared switch and backbone. An EMS domain is comprised of any number of access lines designated by the customer to be included in a closed user group (CUG) or virtual LAN. EMS provides multipoint-to-multipoint connectivity among all of the customer's access lines within a given domain. TLS may be used to access shared networks. In such cases, subscribers in a CUG can only access their own data. (N)

ADVANCED DATA SERVICES

L. TRANSPARENT LAN SERVICE (TLS) - Continued

2. SERVICE DESCRIPTION - Continued

Ethernet Relay Service (ERS) is a connection-oriented Ethernet TLS service that allows for point-to-point connectivity between customer designated locations within a LATA.

With the ERS service type, each Ethernet Virtual Circuit (EVC) establishes a virtual LAN or CUG. An ERS domain is comprised of any number of virtual LANs designated by the customer to be included in the ERS domain. ERS provides point-to-point connectivity between pairs of customer's access lines and shared, Internet virtual circuits, and shared network services within a given domain. (T)

A customer may have more than one domain within a LATA, but connections between domains are not permitted. TLS may be used to access shared networks. In such cases, subscribers in a CUG can only access their own data.

With ERS service type, an Ethernet Virtual Private – Local Area Network (EVP -LAN) can be established with EVP-LAN EVCs. An EVP-LAN is a multipoint Virtual LAN comprised of a CUG of two or more EVCs. EVP-LAN EVCs are designated by the Customer within an ERS Premier domain. (N) (N)

Six EVC service classes are available for use with the ERS service type: (T)

ERS Standard (ERS-Std) and ERS Basic (ERS-B) and EVP-LAN Basic (EVPLAN-B) are designed for customer applications that do not require a Committed Information Rate (CIR) or low delay, where CIR = 0 and Excess Information Rate (EIR) = # of Mbps of the selected ERS-Std/ERS-B or EVPLAN-B EVC service class. (N) (N)

ERS-Priority Data (ERS-PD) is designed for customer applications which do not require low delay, but require a CIR, where CIR = # of Mbps of the selected ERS-PD EVC service class and EIR = # of Mbps of the selected ERS-PD EVC service class.

ERS Real Time (ERS-RT) and EVP-LAN Real Time (EVPLAN-RT) are designed for customer applications which require a CIR and low delay for some portion of their traffic, where CIR = # of Mbps of the selected ERS-RT or EVPLAN-RT EVC service class and EIR = 0. EVPLAN-RT is not available for 10 Gbps UNI Speed. (N) (N) (N)

An ERS EVC can include up to three service classes (ERS-B, ERS-PD and ERS-RT) as described above within each EVC. An EVP-LAN EVC can include one service class (either EVPLAN-B or EVPLAN-RT) as described above within each EVC. The customer will be required to identify the B, PD and RT Class of Service Ethernet frames by one of the following choices, as appropriate: (N) (N)

setting the VLAN Class of Service (CoS) ID (for 802.1q tagged Ethernet Frames); or
setting the DiffServ Code Point (DSCP) (for tagged or untagged Ethernet frames); or
setting the VLAN ID (for tagged or untagged Ethernet frames).

ADVANCED DATA SERVICES

L. TRANSPARENT LAN SERVICE (TLS) - Continued (N)

2. SERVICE DESCRIPTION - Continued

Ethernet Relay Service (ERS) is a connection-oriented Ethernet TLS service that allows for point-to-point connectivity between customer designated locations within a LATA.

With the ERS service type, each Ethernet Virtual Circuit (EVC) establishes a virtual LAN or CUG. An ERS domain is comprised of any number of virtual LANs designated by the customer to be included in the ERS domain. ERS provides point-to-point connectivity between pairs of customer's access lines, Internet virtual circuits, and shared network services within a given domain.

A customer may have more than one domain within a LATA, but connections between domains are not permitted. TLS may be used to access shared networks. In such cases, subscribers in a CUG can only access their own data.

Four EVC service classes are available for use with the ERS service type:

ERS Standard (ERS-Std) and ERS Basic (ERS-B) are designed for customer applications that do not require a Committed Information Rate (CIR) or low delay, where CIR = 0 and Excess Information Rate (EIR) = # of Mbps of the selected ERS-Std/ERS-B EVC service class.

ERS-Priority Data (ERS-PD) is designed for customer applications which do not require low delay, but require a CIR, where CIR = # of Mbps of the selected ERS-PD EVC service class and EIR = # of Mbps of the selected ERS-PD EVC service class.

ERS Real Time (ERS-RT) is designed for customer applications which require a CIR and low delay for some portion of their traffic, where CIR = # of Mbps of the selected ERS-RT EVC service class and EIR = 0.

An ERS EVC can include up to three service classes (ERS-B, ERS-PD and ERS-RT) as described above within each EVC. The customer will be required to identify the B, PD and RT Class of Service Ethernet frames by one of the following choices, as appropriate:

setting the VLAN Class of Service (CoS) ID (for 802.1q tagged Ethernet Frames); or
setting the DiffServ Code Point (DSCP) (for tagged or untagged Ethernet frames); or
setting the VLAN ID (for tagged or untagged Ethernet frames). (N)

Effective: Pending PUC approval of AL 12xxx

ADVANCED DATA SERVICES

L. TRANSPARENT LAN SERVICE (TLS) - Continued (N)

2. SERVICE DESCRIPTION - Continued

Ethernet Relay Service (ERS) is a connection-oriented Ethernet TLS service that allows for point-to-point connectivity between customer designated locations within a LATA.

With the ERS service type, each Ethernet Virtual Circuit (EVC) establishes a virtual LAN or CUG. An ERS domain is comprised of any number of virtual LANs designated by the customer to be included in the ERS domain. ERS provides point-to-point connectivity between pairs of customer's access lines, Internet virtual circuits, and shared network services within a given domain.

A customer may have more than one domain within a LATA, but connections between domains are not permitted. TLS may be used to access shared networks. In such cases, subscribers in a CUG can only access their own data.

Four EVC service classes are available for use with the ERS service type:

ERS Standard (ERS-Std) and ERS Basic (ERS-B) are designed for customer applications that do not require a Committed Information Rate (CIR) or low delay, where CIR = 0 and Excess Information Rate (EIR) = # of Mbps of the selected ERS-Std/ERS-B EVC service class.

ERS-Priority Data (ERS-PD) is designed for customer applications which do not require low delay, but require a CIR, where CIR = # of Mbps of the selected ERS-PD EVC service class and EIR = # of Mbps of the selected ERS-PD EVC service class.

ERS Real Time (ERS-RT) is designed for customer applications which require a CIR and low delay for some portion of their traffic, where CIR = # of Mbps of the selected ERS-RT EVC service class and EIR = 0.

An ERS EVC can include up to three service classes (ERS-B, ERS-PD and ERS-RT) as described above within each EVC. The customer will be required to identify the B, PD and RT Class of Service Ethernet frames by one of the following choices, as appropriate:

setting the VLAN Class of Service (CoS) ID (for 802.1q tagged Ethernet Frames); or
setting the DiffServ Code Point (DSCP) (for tagged or untagged Ethernet frames); or
setting the VLAN ID (for tagged or untagged Ethernet frames). (N)

ADVANCED DATA SERVICES

L. TRANSPARENT LAN SERVICE (TLS) - Continued

3. CONDITIONS

(a) A TLS network will be limited to central offices in a specific geographic location. Customers gain access to the shared TLS network via a switch, node or other Utility equipment delivering service through a shared fiber path or network infra-structure and deployed in the customer's serving central office (TLS equipped central office) deployed in leased space near the Customer's location or deployed at the Customer's location. At subscription, the Customer has an option of selecting access lines at speeds of 10 Mbps, 100 Mbps, 1000 Mbps, or 10 Gbps. (C) (D)

(b) TLS is available to customers whose serving central office is a TLS equipped central office and is located within the maximum allowable range of the serving central office. The maximum allowable fiber range is determined by the dB loss rate where the actual distance between the TLS equipped serving wire center and the customer's location will vary based on the specifics of the facility used in each serving arrangement.

(c) If the customer's serving central office is not a TLS equipped central office, the Customer may obtain service by paying the Interoffice Mileage charge in addition to TLS access charges. The dB loss cannot exceed the maximum allowable range, as specified in F.3.(2) above.

For standard 'unprotected' UNI Port and Access connectivity at bandwidths of 10Mbps, 100Mbps and 1000Mbps, the first twenty Interoffice miles are included in the monthly recurring charge (MRC) of the UNI Port and Access. Interoffice mileage charges will apply to any IOF mileage that exceeds twenty miles per UNI. For UNI Port and Access at a bandwidth of 10Gbps, Customer shall be subject to all applicable IOF mileage charges, including the first twenty miles.

(d) The standard Customer connectivity model for UNI Port and Access includes direct fiber or existing transport facilities between the Customer's location and the TLS equipped central office. Customers requesting Protected Access Line service will have two standby fibers provisioned in addition to the primary direct fiber. Customer may select to have their UNI Port and Access provisioned over an optical transport system. If so, the customer must choose one of the following UNI Port with Access arrangements:

- Protected Non-Diverse: Customer connectivity is provisioned over an optical transport system as a survivable service with an alternate (non diverse) facility between the Customer's location and the TLS equipped central office. The optical protected interoffice charge is applicable to 1000 Mbps speed when interoffice facilities are required.

- Protected Diverse: Customer connectivity is provisioned over an optical transport system as a survivable service with an alternate and diverse fiber path between the Customer's location and the TLS equipped central office. The optical protected interoffice charge is applicable to 1000 Mbps speed when interoffice facilities are required. Dual entrance at the customer premises and company wire centers are not considered a standard feature of this option, but may be provided through special construction charges, where facilities are available.

- Protected Private: Customer connectivity is provisioned over a dedicated private ring which the customer has already obtained from the Telephone Company. At least one node of the private ring must be located in a TLS equipped central office.

ADVANCED DATA SERVICES

L. TRANSPARENT LAN SERVICE (TLS) - Continued

3. CONDITIONS

(a) A TLS network will be limited to central offices in a specific geographic location. Customers gain access to the shared TLS network via a switch, node or other Utility equipment delivering service through a shared fiber path or network infra-structure and deployed in the customer's serving central office (TLS equipped central office) deployed in leased space near the Customer's location or deployed at the Customer's location. At subscription, the Customer has an option of selecting access lines at speeds of 10 Mbps, 100 Mbps, 1000 Mbps, or 10 Gbps. The 10 Gbps UNI speed is only available through the Ethernet Relay Service (ERS) Premier access line service type.

(b) TLS is available to customers whose serving central office is a TLS equipped central office and is located within the maximum allowable range of the serving central office. The maximum allowable fiber range is determined by the dB loss rate where the actual distance between the TLS equipped serving wire center and the customer's location will vary based on the specifics of the facility used in each serving arrangement.

(c) If the customer's serving central office is not a TLS equipped central office, the Customer may obtain service by paying the Interoffice Mileage charge in addition to TLS access charges. The dB loss cannot exceed the maximum allowable range, as specified in F.3.(2) above.

For standard 'unprotected' UNI Port and Access connectivity at bandwidths of 10Mbps, 100Mbps and 1000Mbps, the first twenty Interoffice miles are included in the monthly recurring charge (MRC) of the UNI Port and Access. Interoffice mileage charges will apply to any IOF mileage that exceeds twenty miles per UNI. For UNI Port and Access at a bandwidth of 10Gbps, Customer shall be subject to all applicable IOF mileage charges, including the first twenty miles. (N)

(d) The standard Customer connectivity model for UNI Port and Access includes direct fiber or existing transport facilities between the Customer's location and the TLS equipped central office. Customers requesting Protected Access Line service will have two standby fibers provisioned in addition to the primary direct fiber. Customer may select to have their UNI Port and Access provisioned over an optical transport system. If so, the customer must choose one of the following UNI Port with Access arrangements:

- Protected Non-Diverse: Customer connectivity is provisioned over an optical transport system as a survivable service with an alternate (non diverse) facility between the Customer's location and the TLS equipped central office. The optical protected interoffice charge is applicable to 1000 Mbps speed when interoffice facilities are required.
- Protected Diverse: Customer connectivity is provisioned over an optical transport system as a survivable service with an alternate and diverse fiber path between the Customer's location and the TLS equipped central office. The optical protected interoffice charge is applicable to 1000 Mbps speed when interoffice facilities are required. Dual entrance at the customer premises and company wire centers are not considered a standard feature of this option, but may be provided through special construction charges, where facilities are available.
- Protected Private: Customer connectivity is provisioned over a dedicated private ring which the customer has already obtained from the Telephone Company. At least one node of the private ring must be located in a TLS equipped central office.

ADVANCED DATA SERVICES

L. TRANSPARENT LAN SERVICE (TLS) - Continued

3. CONDITIONS

(a) A TLS network will be limited to central offices in a specific geographic location. Customers gain access to the shared TLS network via a switch, node or other Utility equipment delivering service through a shared fiber path or network infra-structure and deployed in the customer's serving central office (TLS equipped central office) deployed in leased space near the Customer's location or deployed at the Customer's location. At subscription, the Customer has an option of selecting access lines at speeds of 10 Mbps, 100 Mbps, 1000 Mbps, or 10 Gbps. The 10 Gbps UNI speed is only available through the Ethernet Relay Service (ERS) Premier access line service type. (T) (N) (N) (N)

(b) TLS is available to customers whose serving central office is a TLS equipped central office and is located within the maximum allowable range of the serving central office. The maximum allowable fiber range is determined by the dB loss rate where the actual distance between the TLS equipped serving wire center and the customer's location will vary based on the specifics of the facility used in each serving arrangement. (N)

(c) If the customer's serving central office is not a TLS equipped central office, the Customer may obtain service by paying the Interoffice Mileage charge in addition to TLS access charges. The dB loss cannot exceed the maximum allowable range, as specified in F.3.(2) above. (T)

(d) The standard Customer connectivity model for UNI Port and Access includes direct fiber or existing transport facilities between the Customer's location and the TLS equipped central office. Customers requesting Protected Access Line service will have two standby fibers provisioned in addition to the primary direct fiber. Customer may select to have their UNI Port and Access provisioned over an optical transport system. If so, the customer must choose one of the following UNI Port with Access arrangements: (N)

- Protected Non-Diverse: Customer connectivity is provisioned over an optical transport system as a survivable service with an alternate (non diverse) facility between the Customer's location and the TLS equipped central office. The optical protected interoffice charge is applicable to 1000 Mbps speed when interoffice facilities are required.
- Protected Diverse: Customer connectivity is provisioned over an optical transport system as a survivable service with an alternate and diverse fiber path between the Customer's location and the TLS equipped central office. The optical protected interoffice charge is applicable to 1000 Mbps speed when interoffice facilities are required. Dual entrance at the customer premises and company wire centers are not considered a standard feature of this option, but may be provided through special construction charges, where facilities are available.
- Protected Private: Customer connectivity is provisioned over a dedicated private ring which the customer has already obtained from the Telephone Company. At least one node of the private ring must be located in a TLS equipped central office. (N)

(L)

(L) Material omitted from this page now appears on Original Sheet 207.1. (L)

Effective: Pending PUC approval of AL 12xxx

ADVANCED DATA SERVICES

L. TRANSPARENT LAN SERVICE (TLS) - Continued (N)

3. CONDITIONS

(a) A TLS network will be limited to central offices in a specific geographic location. Customers gain access to the shared TLS network via a switch, node or other Utility equipment delivering service through a shared fiber path or network infra-structure and deployed in the customer's serving central office (TLS equipped central office) or deployed in leased space near the customer's location. At subscription, the customer has an option of selecting access lines at speeds of 10 Mbps, 100 Mbps, or 1000 Mbps.

(b) TLS is available to customers whose serving central office is a TLS equipped central office and is located within the maximum allowable range of the serving central office. The maximum allowable range is determined by the dB loss rate where the actual distance between the TLS equipped serving wire center and the customer's location will vary based on the specifics of the facility used in each serving arrangement.

(c) If the customer's serving central office is not a TLS equipped central office, the customer may obtain service by paying the Interoffice Mileage charge in addition to TLS access charges. The dB loss cannot exceed the maximum allowable range, as specified in F.3.(2) above.

(d) Provision of Service

TLS service consists of the following components:

- Network Interface Device (NID) at the customer's premises to terminate the fiber pair, or other optical transport.
- Optical transport from the customer's premises to the serving central office.
- Network management including fault monitoring and diagnostics, performance and network configuration applications and manual monitoring when necessary.
- User Network Interface (UNI) Port With Access Line Connection.
- Ethernet Virtual Circuit (EVC), where applicable
- Interoffice mileage, where applicable.
- Optional Features
  - Customer Service Management (CSM) (N)

ADVANCED DATA SERVICES

L. TRANSPARENT LAN SERVICE (TLS) - Continued (N)

3. CONDITIONS

(a) A TLS network will be limited to central offices in a specific geographic location. Customers gain access to the shared TLS network via a switch, node or other Utility equipment delivering service through a shared fiber path or network infra-structure and deployed in the customer's serving central office (TLS equipped central office) or deployed in leased space near the customer's location. At subscription, the customer has an option of selecting access lines at speeds of 10 Mbps, 100 Mbps, or 1000 Mbps.

(b) TLS is available to customers whose serving central office is a TLS equipped central office and is located within the maximum allowable range of the serving central office. The maximum allowable range is determined by the dB loss rate where the actual distance between the TLS equipped serving wire center and the customer's location will vary based on the specifics of the facility used in each serving arrangement.

(c) If the customer's serving central office is not a TLS equipped central office, the customer may obtain service by paying the Interoffice Mileage charge in addition to TLS access charges. The dB loss cannot exceed the maximum allowable range, as specified in F.3.(2) above.

(d) Provision of Service

TLS service consists of the following components:

- Network Interface Device (NID) at the customer's premises to terminate the fiber pair, or other optical transport.
- Optical transport from the customer's premises to the serving central office.
- Network management including fault monitoring and diagnostics, performance and network configuration applications and manual monitoring when necessary.
- User Network Interface (UNI) Port With Access Line Connection.
- Ethernet Virtual Circuit (EVC), where applicable
- Interoffice mileage, where applicable.
- Optional Features
  - Customer Service Management (CSM) (N)

ADVANCED DATA SERVICES

L. TRANSPARENT LAN SERVICE (TLS) - Continued

3. CONDITIONS

(e) Provision of Service

TLS service consists of the following components:

- Network Interface Device (NID) at the customer's premises to terminate the fiber pair, or other optical transport.
- Optical transport from the customer's premises to the serving central office.
- Network management including fault monitoring and diagnostics, performance and network configuration applications and manual monitoring when necessary.
- User Network Interface (UNI) Port With Access Line Connection.
- Ethernet Virtual Circuit (EVC), where applicable
- Interoffice mileage, where applicable.
- Optional Features
  - Customer Service Management (CSM)* (T)
  - Dedicated port on the switch.

(D)

* Effective February 7, 2011 CSM is no longer available to new Customers. Moves, additions or changes to subscribers' existing service will not be permitted. (N) (N)

ADVANCED DATA SERVICES

L. TRANSPARENT LAN SERVICE (TLS) - Continued

3. CONDITIONS

(e) Provision of Service (L)

TLS service consists of the following components:

- Network Interface Device (NID) at the customer's premises to terminate the fiber pair, or other optical transport.
- Optical transport from the customer's premises to the serving central office.
- Network management including fault monitoring and diagnostics, performance and network configuration applications and manual monitoring when necessary.
- User Network Interface (UNI) Port With Access Line Connection.
- Ethernet Virtual Circuit (EVC), where applicable
- Interoffice mileage, where applicable.
- Optional Features
  - Customer Service Management (CSM) (L)
  - Dedicated port on the switch. (N)
  - Interoffice Mileage, where (applicable). (N)

(L) Material on this page formerly appeared on Original Sheet 207. (N)

ADVANCED DATA SERVICES

L. TRANSPARENT LAN SERVICE (TLS) - Continued

3. CONDITIONS - Continued

(f) Availability of Service

TLS will be provided seven days a week, 24 hours a day, from central offices equipped to provide this service.

ERS Service, including Premier Access Lines and ERS-Std, ERS-B, ERS-PD, ERS-RT, EVPLAN-B AND EVPLAN-RT EVCs, as defined in F.2, will only be available from Central Offices equipped to support ERS service. (N) (N)

(g) Connections

The network interface device (NID) is the LAN interface on the TLS equipment at the customer's premises. The customer is responsible for any inside wire required to connect the LAN to the TLS equipment. The interfaces are as follows: 10 Mbps Ethernet RJ45, 100 Mbps Ethernet RJ45, 1000 Mbps or 10,000 Mbps Ethernet multi-mode optical Connector.

The customer is also responsible for the installation, operation and maintenance of any customer-provided equipment.

The Utility has the service responsibility up to and including the network interface device (NID).

(h) Limitations

The customer's location must be within the maximum allowable range of the TLS equipped central office, as defined in 3.(2) preceding.

(i) Maintenance Window

To meet the customers' requirements, occasional network upgrades must be performed. These network upgrades are needed to provide improved performance and new features. Generally these upgrades will be performed between the hours of 11:00 PM and 6:00 AM. When network upgrades are planned, Verizon will attempt to provide customers reasonable and timely notification in order to minimize any impact on the customers' service.

(j) Technical Specifications

The technical specifications for TLS are delineated in IEEE802.3-2000.

ADVANCED DATA SERVICES

L. TRANSPARENT LAN SERVICE (TLS) - Continued

3. CONDITIONS - Continued

(f) Availability of Service (T)

TLS will be provided seven days a week, 24 hours a day, from central offices equipped to provide this service.

ERS Service, including Premier Access Lines and ERS-Std, ERS-B, ERS-PD, and ERS-RT EVCs, as defined in F.2, will only be available from Central Offices equipped to support ERS service.

(g) Connections (T)

The network interface device (NID) is the LAN interface on the TLS equipment at the customer's premises. The customer is responsible for any inside wire required to connect the LAN to the TLS equipment. The interfaces are as follows: 10 Mbps Ethernet RJ45, 100 Mbps Ethernet RJ45, 1000 (N)
Mbps or 10,000 Mbps Ethernet multi-mode optical Connector. (N)

The customer is also responsible for the installation, operation and maintenance of any customer-provided equipment.

The Utility has the service responsibility up to and including the network interface device (NID).

(h) Limitations (T)

The customer's location must be within the maximum allowable range of the TLS equipped central office, as defined in 3.(2) preceding.

(i) Maintenance Window (T)

To meet the customers' requirements, occasional network upgrades must be performed. These network upgrades are needed to provide improved performance and new features. Generally these upgrades will be performed between the hours of 11:00 PM and 6:00 AM. When network upgrades are planned, Verizon will attempt to provide customers reasonable and timely notification in order to minimize any impact on the customers' service.

(j) Technical Specifications (T)

The technical specifications for TLS are delineated in IEEE802.3-2000.

ADVANCED DATA SERVICES

L. TRANSPARENT LAN SERVICE (TLS) - Continued (N)

3. CONDITIONS - Continued

(e) Availability of Service

TLS will be provided seven days a week, 24 hours a day, from central offices equipped to provide this service.

ERS Service, including Premier Access Lines and ERS-Std, ERS-B, ERS-PD, and ERS-RT EVCs, as defined in F.2, will only be available from Central Offices equipped to support ERS service.

(f) Connections

The network interface device (NID) is the LAN interface on the TLS equipment at the customer's premises. The customer is responsible for any inside wire required to connect the LAN to the TLS equipment.

The customer is also responsible for the installation, operation and maintenance of any customer-provided equipment.

The Utility has the service responsibility up to and including the network interface device (NID).

(g) Limitations

The customer's location must be within the maximum allowable range of the TLS equipped central office, as defined in 3.(2) preceding.

(h) Maintenance Window

To meet the customers' requirements, occasional network upgrades must be performed. These network upgrades are needed to provide improved performance and new features. Generally these upgrades will be performed between the hours of 11:00 PM and 6:00 AM. When network upgrades are planned, Verizon will attempt to provide customers reasonable and timely notification in order to minimize any impact on the customers' service.

(i) Technical Specifications

The technical specifications for TLS are delineated in IEEE802.3-2000. (N)

ADVANCED DATA SERVICES

L. TRANSPARENT LAN SERVICE (TLS) - Continued (N)

3. CONDITIONS - Continued

(e) Availability of Service

TLS will be provided seven days a week, 24 hours a day, from central offices equipped to provide this service.

ERS Service, including Premier Access Lines and ERS-Std, ERS-B, ERS-PD, and ERS-RT EVCs, as defined in F.2, will only be available from Central Offices equipped to support ERS service.

(f) Connections

The network interface device (NID) is the LAN interface on the TLS equipment at the customer's premises. The customer is responsible for any inside wire required to connect the LAN to the TLS equipment.

The customer is also responsible for the installation, operation and maintenance of any customer-provided equipment.

The Utility has the service responsibility up to and including the network interface device (NID).

(g) Limitations

The customer's location must be within the maximum allowable range of the TLS equipped central office, as defined in 3.(2) preceding.

(h) Maintenance Window

To meet the customers' requirements, occasional network upgrades must be performed. These network upgrades are needed to provide improved performance and new features. Generally these upgrades will be performed between the hours of 11:00 PM and 6:00 AM. When network upgrades are planned, Verizon will attempt to provide customers reasonable and timely notification in order to minimize any impact on the customers' service.

(i) Technical Specifications

The technical specifications for TLS are delineated in IEEE802.3-2000. (N)

ADVANCED DATA SERVICES

L. TRANSPARENT LAN SERVICE (TLS) - Continued

3. CONDITIONS - Continued

(k) Transmission Mode

The transmission mode supported is dependent on the access rate, also known as the interface. The supported transmission mode for 10 Mbps access, is half duplex and full duplex. Full duplex 10 Mbps access is available only where conditions and facilities permit. The supported transmission mode for 100 Mbps access, 1000 Mbps or 10 Gbps access is full duplex.

(l) TLS is available where facilities and conditions permit. In the event facilities are not available, special construction charges as specified in the Verizon California Inc. Product Guide, Section 3, may apply.

4. APPLICATION OF RATES AND CHARGES

(a) The following rate elements are applicable to TLS:

- UNI Port with Access Line Connection
- Ethernet Virtual Circuit (EVC)
- Interoffice Mileage
- Domain/LAN Extension Equipment Changes
- Optional Features
  - Customer Service Management (CSM)*

(1) UNI Port with Access Line Connection

(i) Standard Access Line (available for EMS or ERS Service Type)

A monthly rate applies on a per line basis, based on the speed of the access connection (i.e.,10 MBPS, 100 MBPS, 1000 MBPS, or 10 Gbps). The Standard Access Line is offered on a Month-to-Month basis, or as a 3 or 5 Year Term Commitment Plan. A nonrecurring charge applies to the installation of Standard Access Lines provided on a Month-to-Month basis. (C)

Besides the standard connectivity model, Standard Access Lines is offered with three other type of UNI Port with Access Line Connections, where facilities exist. (10 Gbps is not available for these Protected options.) (C) (C)

(ii) Protected Non-Diverse
(iii) Protected Diverse
(iv) Protected Private

* Effective May 29, 2012 CSM is no longer available to new Customers. Moves, additions or changes to subscribers' existing service will not be permitted.

ADVANCED DATA SERVICES

L. TRANSPARENT LAN SERVICE (TLS) - Continued

3. CONDITIONS - Continued

(k) Transmission Mode

The transmission mode supported is dependent on the access rate, also known as the interface. The supported transmission mode for 10 Mbps access, is half duplex and full duplex. Full duplex 10 Mbps access is available only where conditions and facilities permit. The supported transmission mode for 100 Mbps access, 1000 Mbps or 10 Gbps access is full duplex.

(l) TLS is available where facilities and conditions permit. In the event facilities are not available, special construction charges as specified in the Verizon California Inc. Product Guide, Section 3, may apply. (C)

4. APPLICATION OF RATES AND CHARGES

(a) The following rate elements are applicable to TLS:

- UNI Port with Access Line Connection
- Ethernet Virtual Circuit (EVC)
- Interoffice Mileage
- Domain/LAN Extension Equipment Changes
- Optional Features
  - Customer Service Management (CSM)*

(1) UNI Port with Access Line Connection

(v) Standard Access Line (available for EMS or ERS Service Type)
A monthly rate applies on a per line basis, based on the speed of the access connection (i.e.,10 MBPS, 100 MBPS, or 1000 MBPS). The Standard Access Line is offered on a Month-to-Month basis, or as a 3 or 5 Year Term Commitment Plan. A nonrecurring charge applies to the installation of Standard Access Lines provided on a Month-to-Month basis.

Besides the standard connectivity model, Standard Access Lines is offered with three other type of UNI Port with Access Line Connections, where facilities exist.

(vi) Protected Non-Diverse
(vii) Protected Diverse
(viii) Protected Private

* Effective May 29, 2012 CSM is no longer available to new Customers. Moves, additions or changes to subscribers' existing service will not be permitted.

ADVANCED DATA SERVICES

L. TRANSPARENT LAN SERVICE (TLS) - Continued

3. CONDITIONS - Continued

(k) Transmission Mode

The transmission mode supported is dependent on the access rate, also known as the interface. The supported transmission mode for 10 Mbps access, is half duplex and full duplex. Full duplex 10 Mbps access is available only where conditions and facilities permit. The supported transmission mode for 100 Mbps access, 1000 Mbps or 10 Gbps access is full duplex.

(l) TLS is available where facilities and conditions permit. In the event facilities are not available, special construction charges as specified in Section IX, Special Construction, may apply.

4. APPLICATION OF RATES AND CHARGES

(a) The following rate elements are applicable to TLS:

- UNI Port with Access Line Connection
- Ethernet Virtual Circuit (EVC)
- Interoffice Mileage
- Domain/LAN Extension Equipment Changes
- Optional Features
  - Customer Service Management (CSM)* (T)

(1) UNI Port with Access Line Connection

(D)
|
(D)

(ix) Standard Access Line (available for EMS or ERS Service Type)
A monthly rate applies on a per line basis, based on the speed of the access connection (i.e.,10 MBPS, 100 MBPS, or 1000 MBPS). The Standard Access Line is offered on a Month-to-Month basis, or as a 3 or 5 Year Term Commitment Plan. A nonrecurring charge applies to the installation of Standard Access Lines provided on a Month-to-Month basis.

Besides the standard connectivity model, Standard Access Lines is offered with three other type of UNI Port with Access Line Connections, where facilities exist.

(x) Protected Non-Diverse
(xi) Protected Diverse
(xii) Protected Private

* Effective February 7, 2011 CSM is no longer available to new Customers. Moves, additions or changes to subscribers' existing service will not be permitted. (N) (N)

ADVANCED DATA SERVICES

L. TRANSPARENT LAN SERVICE (TLS) - Continued

3. CONDITIONS - Continued

(k) Transmission Mode

The transmission mode supported is dependent on the access rate, also known as the interface. The supported transmission mode for 10 Mbps access, is half duplex and full duplex. Full duplex 10 Mbps access is available only where conditions and facilities permit. The supported transmission mode for 100 Mbps access, 1000 Mbps or 10 Gbps access is full duplex. (N) (N) (T)

(l) TLS is available where facilities and conditions permit. In the event facilities are not available, special construction charges as specified in Section IX, Special Construction, may apply.

4. APPLICATION OF RATES AND CHARGES

(a) The following rate elements are applicable to TLS:

- UNI Port with Access Line Connection
- Ethernet Virtual Circuit (EVC)
- Interoffice Mileage
- Domain/LAN Extension Equipment Changes
- Optional Features
  - Customer Service Management (CSM)

(1) UNI Port with Access Line Connection

(D)

A monthly rate applies on a per line basis based on the speed of the access connection (i.e., 10 Mbps, 100 Mbps, 1000 Mbps or 10 Gbps). The Standard Access Line is offered as a Month-to-Month Option, or as a 3- or 5- Year Term Commitment Plan. A nonrecurring charge will apply for the installation of the Standard Access Line when a customer subscribes to the Month-to-Month Option.

(xiii) Standard Access Line (available for EMS or ERS Service Type) (N)
A monthly rate applies on a per line basis, based on the speed of the access connection (i.e.,10 MBPS, 100 MBPS, or 1000 MBPS). The Standard Access Line is offered on a Month-to-Month basis, or as a 3 or 5 Year Term Commitment Plan. A nonrecurring charge applies to the installation of Standard Access Lines provided on a Month-to-Month basis. Besides the standard connectivity model, Standard Access Lines is offered with three other type of UNI Port with Access Line Connections, where facilities exist.

(xiv) Protected Non-Diverse
(xv) Protected Diverse
(xvi) Protected Private (N)

ADVANCED DATA SERVICES

L. TRANSPARENT LAN SERVICE (TLS) - Continued (N)

3. CONDITIONS - Continued

(10) Transmission Mode

The transmission mode supported is dependent on the access rate, also known as the interface. The supported transmission mode for 10 Mbps access, 100 Mbps access and 1000 Mbps access is full duplex.

(11) TLS is available where facilities and conditions permit. In the event facilities are not available, special construction charges as specified in Section IX, Special Construction, may apply.

4. APPLICATION OF RATES AND CHARGES

(a) The following rate elements are applicable to TLS:

- UNI Port with Access Line Connection
- Ethernet Virtual Circuit (EVC)
- Interoffice Mileage
- Domain/LAN Extension Equipment Changes
- Optional Features
  - Customer Service Management (CSM)

(1) UNI Port with Access Line Connection

(i) Standard Access Line (available for EMS or ERS Service Type)

A monthly rate applies on a per line basis based on the speed of the access connection (i.e., 10 Mbps, 100 Mbps, or 1000 Mbps). The Standard Access Line is offered as a Month-to-Month Option, or as a 3- or 5- Year Term Commitment Plan. A nonrecurring charge will apply for the installation of the Standard Access Line when a customer subscribes to the Month-to-Month Option. (N)

ADVANCED DATA SERVICES

L. TRANSPARENT LAN SERVICE (TLS) - Continued (N)

3. CONDITIONS - Continued

(10) Transmission Mode

The transmission mode supported is dependent on the access rate, also known as the interface. The supported transmission mode for 10 Mbps access, 100 Mbps access and 1000 Mbps access is full duplex.

(11) TLS is available where facilities and conditions permit. In the event facilities are not available, special construction charges as specified in Section IX, Special Construction, may apply.

4. APPLICATION OF RATES AND CHARGES

(a) The following rate elements are applicable to TLS:

- UNI Port with Access Line Connection
- Ethernet Virtual Circuit (EVC)
- Interoffice Mileage
- Domain/LAN Extension Equipment Changes
- Optional Features
  - Customer Service Management (CSM)

(1) UNI Port with Access Line Connection

(i) Standard Access Line (available for EMS or ERS Service Type)

A monthly rate applies on a per line basis based on the speed of the access connection (i.e., 10 Mbps, 100 Mbps, or 1000 Mbps). The Standard Access Line is offered as a Month-to-Month Option, or as a 3- or 5- Year Term Commitment Plan. A nonrecurring charge will apply for the installation of the Standard Access Line when a customer subscribes to the Month-to-Month Option. (N)

ADVANCED DATA SERVICES

L. TRANSPARENT LAN SERVICE (TLS) - Continued

4. APPLICATION OF RATES AND CHARGES - Continued

(a) The following rate elements are applicable to TLS: - Continued

(1) UNI Port with Access Line Connection - Continued

(ii) Protected Access Line (available for EMS Service Type only)*

Protected Access Lines are provisioned as a survivable service with an alternate fiber pair between the central office and the customer premises. Protected Access Line allows the Utility, in most situations, to detect and recover a failure and move the customer's data to an alternate fiber pair in approximately one second in most instances. Both fiber pairs must be served by the same central office and must have the same access speed. The second fiber pair will be routed over a diverse fiber path when possible.

A monthly rate applies on a per line basis, based on the speed of the access connection (i.e., 10 Mbps, 100 Mbps, 1000 Mbps). The Protected Access Line is offered as a Month-to-Month Option, or as a 3- or 5- Year Term Commitment Plan. Protected Access Line is only offered with a direct fiber UNI Port with Access Line Connection, where facilities exist. A nonrecurring charge will apply to the installation of a Protected Access Line provided on a Month-to-Month basis.

(iii) Premier Access Line (available for ERS Service Type only)

A monthly rate applies on a per -line basis, based on the speed of the access line (i.e., 10Mbps, 100 Mbps, 1000 Mbps). A Premier Access Line must be purchased in conjunction with some combination of ERS-B, ERS-PD, and/or ERS-RT, EVPLAN-B and/or EVPLAN-RT EVC service classes, which are described in F.2. preceding. The Premier Access Line is offered on a Month-to-Month basis or as a 3- or 5- Year Term Commitment Plan. A nonrecurring charge applies to the installation of the Premier Access Line provided on a Month-to-Month basis. A customer cannot mix Premier UNI Ports with any other UNI Port type.

The percentage of each Premier Access Line UNIs allowed for EVC bandwidth is limited, where connections must comply with each of the following threshold requirements:

ERS-B less than or = to 500% of UNI speed
ERS-PD less than or = to 100% of UNI speed
ERS-RT less than or = to 100% of UNI speed
ERS-PD + ERS-RT less than or = to 100% of UNI speed
ERS-B + ERS-PD + ERS-RT less than or = to 500% of UNI speed
EVPLAN-B less than or = 20 Gbps of the EVP-LAN CUG (C)
EVPLAN-RT less than or = 1 Gbps of the EVP-LAN CUG (C)

Besides the standard connectivity model, Premier Access Line is offered with three other type of UNI Port with Access Line Connections, where facilities exist.

(1) Protected Non-Diverse
(2) Protected Diverse
(3) Protected Private

* Effective November 19, 2010, this service will no longer be available to new customers.

ADVANCED DATA SERVICES

L. TRANSPARENT LAN SERVICE (TLS) - Continued

4. APPLICATION OF RATES AND CHARGES - Continued

(a) The following rate elements are applicable to TLS: - Continued

(1) UNI Port with Access Line Connection - Continued

(ii) Protected Access Line (available for EMS Service Type only)*

Protected Access Lines are provisioned as a survivable service with an alternate fiber pair between the central office and the customer premises. Protected Access Line allows the Utility, in most situations, to detect and recover a failure and move the customer's data to an alternate fiber pair in approximately one second in most instances. Both fiber pairs must be served by the same central office and must have the same access speed. The second fiber pair will be routed over a diverse fiber path when possible.

A monthly rate applies on a per line basis, based on the speed of the access connection (i.e., 10 Mbps, 100 Mbps, 1000 Mbps). The Protected Access Line is offered as a Month-to-Month Option, or as a 3- or 5- Year Term Commitment Plan. Protected Access Line is only offered with a direct fiber UNI Port with Access Line Connection, where facilities exist. A nonrecurring charge will apply to the installation of a Protected Access Line provided on a Month-to-Month basis.

(iii) Premier Access Line (available for ERS Service Type only)

A monthly rate applies on a per -line basis, based on the speed of the access line (i.e., 10Mbps, 100 Mbps, 1000 Mbps). A Premier Access Line must be purchased in conjunction with some combination of ERS-B, ERS-PD, and/or ERS-RT, EVPLAN-B and/or EVPLAN-RT EVC service classes, which are described in F.2. preceding. The Premier Access Line is offered on a Month-to-Month basis or as a 3- or 5- Year Term Commitment Plan. A nonrecurring charge applies to the installation of the Premier Access Line provided on a Month-to-Month basis. A customer cannot mix Premier UNI Ports with any other UNI Port type.

The percentage of each Premier Access Line UNIs allowed for EVC bandwidth is limited, where connections must comply with each of the following threshold requirements:

ERS-B less than or = to 500% of UNI speed
ERS-PD less than or = to 100% of UNI speed (C)
ERS-RT less than or = to 100% of UNI speed |
ERS-PD + ERS-RT less than or = to 100% of UNI speed (C)
ERS-B + ERS-PD + ERS-RT less than or = to 500% of UNI speed
EVPLAN-B less than or = 5000Mbps of the EVP-LAN CUG
EVPLAN-RT less than or = 100Mbps of the EVP-LAN CUG

Besides the standard connectivity model, Premier Access Line is offered with three other type of UNI Port with Access Line Connections, where facilities exist.

(4) Protected Non-Diverse
(5) Protected Diverse
(6) Protected Private

* Effective November 19, 2010, this service will no longer be available to new customers.

ADVANCED DATA SERVICES

L. TRANSPARENT LAN SERVICE (TLS) - Continued

4. APPLICATION OF RATES AND CHARGES - Continued

(a) The following rate elements are applicable to TLS: - Continued

(1) UNI Port with Access Line Connection - Continued

(ii) Protected Access Line (available for EMS Service Type only)*

Protected Access Lines are provisioned as a survivable service with an alternate fiber pair between the central office and the customer premises. Protected Access Line allows the Utility, in most situations, to detect and recover a failure and move the customer's data to an alternate fiber pair in approximately one second in most instances. Both fiber pairs must be served by the same central office and must have the same access speed. The second fiber pair will be routed over a diverse fiber path when possible.

A monthly rate applies on a per line basis, based on the speed of the access connection (i.e., 10 Mbps, 100 Mbps, 1000 Mbps). The Protected Access Line is offered as a Month-to-Month Option, or as a 3- or 5- Year Term Commitment Plan. Protected Access Line is only offered with a direct fiber UNI Port with Access Line Connection, where facilities exist. A nonrecurring charge will apply to the installation of a Protected Access Line provided on a Month-to-Month basis.

(iii) Premier Access Line (available for ERS Service Type only)

A monthly rate applies on a per -line basis, based on the speed of the access line (i.e., 10Mbps, 100 Mbps, 1000 Mbps). A Premier Access Line must be purchased in conjunction with some combination of ERS-B, ERS-PD, and/or ERS-RT, EVPLAN-B and/or EVPLAN-RT EVC service classes, which are described in F.2. preceding. The Premier Access Line is offered on a Month-to-Month basis or as a 3- or 5- Year Term Commitment Plan. A nonrecurring charge applies to the installation of the Premier Access Line provided on a Month-to-Month basis. A customer cannot mix Premier UNI Ports with any other UNI Port type. (N)

The percentage of each Premier Access Line UNIs allowed for EVC bandwidth is limited, where connections must comply with each of the following threshold requirements:

ERS-B less than or = to 500% of UNI speed
ERS-PD less than or = to 85% of UNI speed
ERS-RT less than or = to 85% of UNI speed (T)
ERS-PD + ERS-RT less than or = to 85% of UNI speed
ERS-B + ERS-PD + ERS-RT less than or = to 500% of UNI speed
EVPLAN-B less than or = 5000Mbps of the EVP-LAN CUG (N)
EVPLAN-RT less than or = 100Mbps of the EVP-LAN CUG (N)

Besides the standard connectivity model, Premier Access Line is offered with three other type of UNI Port with Access Line Connections, where facilities exist.

(7) Protected Non-Diverse
(8) Protected Diverse
(9) Protected Private

* Effective November 19, 2010, this service will no longer be available to new customers.

ADVANCED DATA SERVICES

L. TRANSPARENT LAN SERVICE (TLS) - Continued

4. APPLICATION OF RATES AND CHARGES - Continued

(a) The following rate elements are applicable to TLS: - Continued

(1) UNI Port with Access Line Connection - Continued

(ii) Protected Access Line (available for EMS Service Type only)* (N)

Protected Access Lines are provisioned as a survivable service with an alternate fiber pair between the central office and the customer premises. Protected Access Line allows the Utility, in most situations, to detect and recover a failure and move the customer's data to an alternate fiber pair in approximately one second in most instances. Both fiber pairs must be served by the same central office and must have the same access speed. The second fiber pair will be routed over a diverse fiber path when possible.

A monthly rate applies on a per line basis, based on the speed of the access connection (i.e., 10 Mbps, 100 Mbps, 1000 Mbps). The Protected Access Line is offered as a Month-to-Month Option, or as a 3- or 5- Year Term Commitment Plan. Protected Access Line is only offered (N)
with a direct fiber UNI Port with Access Line Connection, where facilities exist. A nonrecurring (N)
charge will apply to the installation of a Protected Access Line provided on a Month-to-Month basis.

(iii) Premier Access Line (available for ERS Service Type only)

A monthly rate applies on a per -line basis, based on the speed of the access line (i.e., 10Mbps, 100 Mbps, 1000 Mbps). A Premier Access Line must be purchased in conjunction with some combination of ERS-B, ERS-PD, and/or ERS-RT EVC service classes, which are described in F.2. preceding. The Premier Access Line is offered on a Month-to-Month basis (T)
or as a 3- or 5- Year Term Commitment Plan. A nonrecurring charge applies to the installation of the Premier Access Line provided on a Month-to-Month basis. A customer (T)
cannot mix Premier UNI Ports with any other UNI Port type. (T)

The percentage of each Premier Access Line UNIs allowed for EVC bandwidth is limited, where connections must comply with each of the following threshold requirements:

ERS-B less than or = to 500% of UNI speed
ERS-PD less than or = to 85% of UNI speed (T)
ERS-RT less than or = to 50% of UNI speed
ERS-PD + ERS-RT less than or = to 85% of UNI speed (T)
ERS-B + ERS-PD + ERS-RT less than or = to 500% of UNI speed (T)

Besides the standard connectivity model, Premier Access Line is offered with three other type (N)
of UNI Port with Access Line Connections, where facilities exist.

(10) Protected Non-Diverse
(11) Protected Diverse
(12) Protected Private (N)

* Effective November 19, 2010, this service will no longer be available to new customers.

ADVANCED DATA SERVICES

L. TRANSPARENT LAN SERVICE (TLS) - Continued

4. APPLICATION OF RATES AND CHARGES - Continued

(a) The following rate elements are applicable to TLS: - Continued

(1) UNI Port with Access Line Connection - Continued

(ii) Protected Access Line (available for EMS Service Type only)

Protected Access Lines are provisioned as a survivable service with an alternate fiber pair between the central office and the customer premises. Protected Access Line allows the Utility, in most situations, to detect and recover a failure and move the customer's data to an alternate fiber pair in approximately one second in most instances. Both fiber pairs must be served by the same central office and must have the same access speed. The second fiber pair will be routed over a diverse fiber path when possible.

A monthly rate applies on a per line basis, based on the speed of the access connection (i.e., 10 Mbps, 100 Mbps, 1000 Mbps). The Protected Access Line is offered as a Month-to-Month Option, or as a 3- or 5- Year Term Commitment Plan. A nonrecurring charge will apply to the installation of a Protected Access Line provided on a Month-to-Month basis. (N)

(iii) Premier Access Line (available for ERS Service Type only)

A monthly rate applies on a per -line basis, based on the speed of the access line (i.e., 10Mbps, 100 Mbps, 1000 Mbps). A Premier Access Line must be purchased in conjunction with some combination of ERS-B, ERS-PD, and/or ERS-RT EVC service classes, which are described in F.2. preceding. The Premier Access Line is offered on a month-to-month basis or as a 3- or 5- Year Term Commitment Plan. A nonrecurring charge applies to the installation of the Premier Access Line provided on a month-to-month basis. A customer cannot mix Premier Access Lines with any other access line type. (N)

The percentage of each Premier Access Line UNIs allowed for EVC bandwidth is limited, where connections must comply with each of the following threshold requirements:

ERS-B less than or = to 500% of UNI speed
ERS-PD less than or = to 100% of UNI speed
ERS-RT less than or = to 50% of UNI speed
ERS-PD + ERS-RT less than or = to 100% of UNI speed
ERS-B + ERS-PD + ERS-RT less than or = to 600% of UNI speed

ADVANCED DATA SERVICES

L. TRANSPARENT LAN SERVICE (TLS) - Continued (N)

4. APPLICATION OF RATES AND CHARGES - Continued

(a) The following rate elements are applicable to TLS: - Continued

(1) UNI Port with Access Line Connection - Continued

(ii) Protected Access Line (available for EMS Service Type only)

Protected Access Lines are provisioned as a survivable service with an alternate fiber pair between the central office and the customer premises. Protected Access Line allows the Utility, in most situations, to detect and recover a failure and move the customer's data to an alternate fiber pair in approximately one second in most instances. Both fiber pairs must be served by the same central office and must have the same access speed. The second fiber pair will be routed over a diverse fiber path when possible.

A monthly rate applies on a per line basis, based on the speed of the access connection (i.e., 100 Mbps, 1000 Mbps). The Protected Access Line is offered as a Month-to-Month Option, or as a 3- or 5- Year Term Commitment Plan. A nonrecurring charge will apply to the installation of a Protected Access Line provided on a Month-to-Month basis.

(iii) Premier Access Line (available for ERS Service Type only)

A monthly rate applies on a per -line basis, based on the speed of the access line (i.e., 100 Mbps, 1000 Mbps). A Premier Access Line must be purchased in conjunction with some combination of ERS-B, ERS-PD, and/or ERS-RT EVC service classes, which are described in F.2. preceding. The Premier Access Line is offered on a month-to-month basis or as a 3- or 5- Year Term Commitment Plan. A nonrecurring charge applies to the installation of the Premier Access Line provided on a month-to-month basis. A customer cannot mix Premier Access Lines with any other access line type.

The percentage of each Premier Access Line UNIs allowed for EVC bandwidth is limited, where connections must comply with each of the following threshold requirements:

ERS-B less than or = to 500% of UNI speed
ERS-PD less than or = to 100% of UNI speed
ERS-RT less than or = to 50% of UNI speed
ERS-PD + ERS-RT less than or = to 100% of UNI speed
ERS-B + ERS-PD + ERS-RT less than or = to 600% of UNI speed (N)

Effective: Pending PUC approval of AL 12xxx

ADVANCED DATA SERVICES

L. TRANSPARENT LAN SERVICE (TLS) - Continued (N)

4. APPLICATION OF RATES AND CHARGES - Continued

(a) The following rate elements are applicable to TLS: - Continued

(1) UNI Port with Access Line Connection - Continued

(ii) Protected Access Line (available for EMS Service Type only)

Protected Access Lines are provisioned as a survivable service with an alternate fiber pair between the central office and the customer premises. Protected Access Line allows the Utility, in most situations, to detect and recover a failure and move the customer's data to an alternate fiber pair in approximately one second in most instances. Both fiber pairs must be served by the same central office and must have the same access speed. The second fiber pair will be routed over a diverse fiber path when possible.

A monthly rate applies on a per line basis, based on the speed of the access connection (i.e., 100 Mbps, 1000 Mbps). The Protected Access Line is offered as a Month-to-Month Option, or as a 3- or 5- Year Term Commitment Plan. A nonrecurring charge will apply to the installation of a Protected Access Line provided on a Month-to-Month basis.

(iii) Premier Access Line (available for ERS Service Type only)

A monthly rate applies on a per -line basis, based on the speed of the access line (i.e., 100 Mbps, 1000 Mbps). A Premier Access Line must be purchased in conjunction with some combination of ERS-B, ERS-PD, and/or ERS-RT EVC service classes, which are described in F.2. preceding. The Premier Access Line is offered on a month-to-month basis or as a 3- or 5- Year Term Commitment Plan. A nonrecurring charge applies to the installation of the Premier Access Line provided on a month-to-month basis. A customer cannot mix Premier Access Lines with any other access line type.

The percentage of each Premier Access Line UNIs allowed for EVC bandwidth is limited, where connections must comply with each of the following threshold requirements:

ERS-B less than or = to 500% of UNI speed
ERS-PD less than or = to 100% of UNI speed
ERS-RT less than or = to 50% of UNI speed
ERS-PD + ERS-RT less than or = to 100% of UNI speed
ERS-B + ERS-PD + ERS-RT less than or = to 600% of UNI speed (N)

ADVANCED DATA SERVICES

L. TRANSPARENT LAN SERVICE (TLS) - Continued

4. APPLICATION OF RATES AND CHARGES - Continued

(a) The following rate elements are applicable to TLS: - Continued

(1) UNI Port with Access Line Connection - Continued

(iv) EMS Real Time (EMS-RT) Access Line (available for EMS Service Type only)

A monthly rate applies on a per-line basis, based on the speed of the access connection (i.e., 100 Mbps, 1000 Mbps, or 10 Gbps). This enhanced service class configures a fixed portion of the UNI for Real Time Traffic, where each 100 Mbps UNI has CIR = 5 Mbps with EIR = 0, or each 1000 Mbps UNI has CIR = 20 Mbps with EIR = 0, and with each 10 Gbps UNI has CIR = 50Mbps with EIR = 0. The remainder of the UNI can be used for CIR = 0 and EIR = 0 traffic. The EMS-RT Access Line is offered on a Month-to-Month basis or as a 3- or 5- Year Term Commitment Plan. A nonrecurring charge applies to the installation of the EMS-RT provided on a Month-to-Month basis. A customer cannot mix an EMS-RT Access Line with the ERS Service type, but may mix EMS-RT Access Line with EMS Access Lines.

Besides the standard connectivity model, Premier Access Line is offered with three other type of UNI Port with Access Line Connections, where facilities exist. (10 Gbps is not available for these Protected options.)

(1) Protected Non-Diverse
(2) Protected Diverse
(3) Protected Private

(2) Ethernet Virtual Circuit (EVC)

For customers who order the ERS Service Type with a Standard Access Line, a monthly rate will apply on a per EVC bandwidth basis. ERS-Std is the only EVC class available with the ERS Standard Access Line. The EVC bandwidth must be equal to the bandwidth of the lowest speed of the end points it is connecting. ERS-Std EVCs are purchased on a Month-to-Month basis. A non-recurring setup charge will apply per ERS-Std EVC.

For customers who order the Premier Access Line, a monthly rate will apply on a service class and EVC bandwidth basis. Premier Access Line customers have the choice of combining ERS-B, ERS -PD, and/or ERS-RT bandwidth or combining EVPLAN-Basic and EVPLAN Real Time bandwidth on an EVC. A non-recurring setup charge will apply per ERS EVC. EVCs are purchased on a Month-to-Month basis. A customer may have more than one service class on the EVC, but will only pay one EVC non-recurring setup charge.

The number of EVCs permitted on each Standard Access Line and/or Premier Access Line are limited as follows:

10 Mbps less than or = to 5 EVCs (C)
100 Mbps less than or = to 16 EVCs
1000 Mbps less than or = to 250 EVCs
10 Gbps less than or = 750 EVCs

ADVANCED DATA SERVICES

L. TRANSPARENT LAN SERVICE (TLS) - Continued

4. APPLICATION OF RATES AND CHARGES - Continued

(a) The following rate elements are applicable to TLS: - Continued

(1) UNI Port with Access Line Connection - Continued

(iv) EMS Real Time (EMS-RT) Access Line (available for EMS Service Type only)

A monthly rate applies on a per-line basis, based on the speed of the access connection (i.e., 100 Mbps, 1000 Mbps, or 10 Gbps). This enhanced service class configures a fixed portion of the UNI for Real Time Traffic, where each 100 Mbps UNI has CIR = 5 Mbps with EIR = 0, or each 1000 Mbps UNI has CIR = 20 Mbps with EIR = 0, and with each 10 Gbps UNI has CIR = 50Mbps with EIR = 0. The remainder of the UNI can be used for CIR = 0 and EIR = 0 traffic. The EMS-RT Access Line is offered on a Month-to-Month basis or as a 3- or 5- Year Term Commitment Plan. A nonrecurring charge applies to the installation of the EMS-RT provided on a Month-to-Month basis. A customer cannot mix an EMS-RT Access Line with the ERS Service type, but may mix EMS-RT Access Line with EMS Access Lines.

Besides the standard connectivity model, Premier Access Line is offered with three other type of UNI Port with Access Line Connections, where facilities exist. (10 Gbps is not available for these Protected options.)

(1) Protected Non-Diverse
(2) Protected Diverse
(3) Protected Private

(2) Ethernet Virtual Circuit (EVC)

For customers who order the ERS Service Type with a Standard Access Line, a monthly rate will apply on a per EVC bandwidth basis. ERS-Std is the only EVC class available with the ERS Standard Access Line. The EVC bandwidth must be equal to the bandwidth of the lowest speed of the end points it is connecting. ERS-Std EVCs are purchased on a Month-to-Month basis. A non-recurring setup charge will apply per ERS-Std EVC.

For customers who order the Premier Access Line, a monthly rate will apply on a service class and EVC bandwidth basis. Premier Access Line customers have the choice of combining ERS-B, ERS -PD, and/or ERS-RT bandwidth or combining EVPLAN-Basic and EVPLAN Real Time bandwidth on an EVC. A non-recurring setup charge will apply per ERS EVC. EVCs are purchased on a Month-to-Month basis. A customer may have more than one service class on the EVC, but will only pay one EVC non-recurring setup charge.

The number of EVCs permitted on each Standard Access Line and/or Premier Access Line are limited as follows:

10 Mbps less than or = to 2 EVCs
100 Mbps less than or = to 16 EVCs
1000 Mbps less than or = to 250 EVCs (C)
10 Gbps less than or = 750 EVCs (C)

ADVANCED DATA SERVICES

L. TRANSPARENT LAN SERVICE (TLS) - Continued

4. APPLICATION OF RATES AND CHARGES - Continued

(a) The following rate elements are applicable to TLS: - Continued

(1) UNI Port with Access Line Connection - Continued

(iv) EMS Real Time (EMS-RT) Access Line (available for EMS Service Type only)

A monthly rate applies on a per-line basis, based on the speed of the access connection (i.e., 100 Mbps, 1000 Mbps, or 10 Gbps). This enhanced service class configures a fixed portion of the UNI for Real Time Traffic, where each 100 Mbps UNI has CIR = 5 Mbps with EIR = 0, or each 1000 Mbps UNI has CIR = 20 Mbps with EIR = 0, and with each 10 Gbps UNI has CIR = 50Mbps with EIR = 0. The remainder of the UNI can be used for CIR = 0 and EIR = 0 traffic. The EMS-RT Access Line is offered on a Month-to-Month basis or as a 3- or 5- Year Term Commitment Plan. A nonrecurring charge applies to the installation of the EMS-RT provided on a Month-to-Month basis. A customer cannot mix an EMS-RT Access Line with the ERS Service type, but may mix EMS-RT Access Line with EMS Access Lines. (C) (C) (C)

Besides the standard connectivity model, Premier Access Line is offered with three other type of UNI Port with Access Line Connections, where facilities exist. (10 Gbps is not available for these Protected options.) (C) (C)

(1) Protected Non-Diverse
(2) Protected Diverse
(3) Protected Private

(2) Ethernet Virtual Circuit (EVC)

For customers who order the ERS Service Type with a Standard Access Line, a monthly rate will apply on a per EVC bandwidth basis. ERS-Std is the only EVC class available with the ERS Standard Access Line. The EVC bandwidth must be equal to the bandwidth of the lowest speed of the end points it is connecting. ERS-Std EVCs are purchased on a Month-to-Month basis. A non-recurring setup charge will apply per ERS-Std EVC.

For customers who order the Premier Access Line, a monthly rate will apply on a service class and EVC bandwidth basis. Premier Access Line customers have the choice of combining ERS-B, ERS -PD, and/or ERS-RT bandwidth or combining EVPLAN-Basic and EVPLAN Real Time bandwidth on an EVC. A non-recurring setup charge will apply per ERS EVC. EVCs are purchased on a Month-to-Month basis. A customer may have more than one service class on the EVC, but will only pay one EVC non-recurring setup charge.

The number of EVCs permitted on each Standard Access Line and/or Premier Access Line are limited as follows:

10 Mbps less than or = to 2 EVCs
100 Mbps less than or = to 16 EVCs
1000 Mbps less than or = to 75 EVCs
10 Gbps less than or = 250 EVCs

ADVANCED DATA SERVICES

L. TRANSPARENT LAN SERVICE (TLS) - Continued

4. APPLICATION OF RATES AND CHARGES - Continued

(a) The following rate elements are applicable to TLS: - Continued

(1) UNI Port with Access Line Connection - Continued

(iv) EMS Real Time (EMS-RT) Access Line (available for EMS Service Type only)

A monthly rate applies on a per-line basis, based on the speed of the access connection (i.e., 100 Mbps, 1000 Mbps). This enhanced service class configures a fixed portion of the UNI for Real Time Traffic, where each 100 Mbps UNI has CIR = 5 Mbps with EIR = 0, or each 1000 Mbps UNI has CIR = 20 Mbps with EIR = 0. The remainder of the UNI can be used for CIR = 0 and EIR = 0 traffic. The EMS-RT Access Line is offered on a Month-to-Month basis or as a 3- or 5- Year Term Commitment Plan. A nonrecurring charge applies to the installation of the EMS-RT provided on a Month-to-Month basis. A customer cannot mix an EMS-RT Access Line with the ERS Service type, but may mix EMS-RT Access Line with EMS Access Lines.

Besides the standard connectivity model, Premier Access Line is offered with three other type of UNI Port with Access Line Connections, where facilities exist.

(1) Protected Non-Diverse
(2) Protected Diverse
(3) Protected Private

(2) Ethernet Virtual Circuit (EVC)

For customers who order the ERS Service Type with a Standard Access Line, a monthly rate will apply on a per EVC bandwidth basis. ERS-Std is the only EVC class available with the ERS Standard Access Line. The EVC bandwidth must be equal to the bandwidth of the lowest speed of the end points it is connecting. ERS-Std EVCs are purchased on a Month-to-Month basis. A non-recurring setup charge will apply per ERS-Std EVC.

For customers who order the Premier Access Line, a monthly rate will apply on a service class and EVC bandwidth basis. Premier Access Line customers have the choice of combining ERS-B, ERS -PD, and/or ERS-RT bandwidth or combining EVPLAN-Basic and EVPLAN Real Time bandwidth on an EVC. A non-recurring setup charge will apply per ERS EVC. EVCs are purchased on a Month-to-Month basis. A customer may have more than one service class on the EVC, but will only pay one EVC non-recurring setup charge. (N)

The number of EVCs permitted on each Standard Access Line and/or Premier Access Line are limited as follows:

10 Mbps less than or = to 2 EVCs
100 Mbps less than or = to 16 EVCs
1000 Mbps less than or = to 75 EVCs
10 Gbps less than or = 250 EVCs (T)

ADVANCED DATA SERVICES

L. TRANSPARENT LAN SERVICE (TLS) - Continued

4. APPLICATION OF RATES AND CHARGES - Continued

(a) The following rate elements are applicable to TLS: - Continued

(1) UNI Port with Access Line Connection - Continued

(iv) EMS Real Time (EMS-RT) Access Line (available for EMS Service Type only)

A monthly rate applies on a per-line basis, based on the speed of the access connection (i.e., 100 Mbps, 1000 Mbps). This enhanced service class configures a fixed portion of the UNI for Real Time Traffic, where each 100 Mbps UNI has CIR = 5 Mbps with EIR = 0, or each 1000 Mbps UNI has CIR = 20 Mbps with EIR = 0. The remainder of the UNI can be used for CIR = 0 and EIR = 0 traffic. The EMS-RT Access Line is offered on a Month-to-Month basis or as a 3- or 5- Year Term Commitment Plan. A nonrecurring charge applies to the installation of the EMS-RT provided on a Month-to-Month basis. A customer cannot mix an EMS-RT Access Line with the ERS Service type, but may mix EMS-RT Access Line with EMS Access Lines. (T)

Besides the standard connectivity model, Premier Access Line is offered with three other type of UNI Port with Access Line Connections, where facilities exist. (N)

(1) Protected Non-Diverse
(2) Protected Diverse
(3) Protected Private (N)

(2) Ethernet Virtual Circuit (EVC)

For customers who order the ERS Service Type with a Standard Access Line, a monthly rate will apply on a per EVC bandwidth basis. ERS-Std is the only EVC class available with the ERS Standard Access Line. The EVC bandwidth must be equal to the bandwidth of the lowest speed of the end points it is connecting. ERS-Std EVCs are purchased on a Month-to-Month basis. A non-recurring setup charge will apply per ERS-Std EVC. (T)

For customers who order the Premier Access Line, a monthly rate will apply on a service class and EVC bandwidth basis. Premier Access Line customers have the choice of combining ERS-B, ERS -PD, and/or ERS-RT bandwidth on an EVC. A non-recurring setup charge will apply per ERS EVC. EVCs are purchased on a Month-to-Month basis. A customer may have more than one service class on the EVC, but will only pay one EVC non-recurring setup charge. (T)

The number of EVCs permitted on each Standard Access Line and/or Premier Access Line are limited as follows:

10 Mbps less than or = to 2 EVCs
100 Mbps less than or = to 10 EVCs
1000 Mbps less than or = to 75 EVCs
10 Gbps less than or = 250 EVCs (N)

Effective: Pending PUC approval of AL 12xxx

ADVANCED DATA SERVICES

L. TRANSPARENT LAN SERVICE (TLS) - Continued (N)

4. APPLICATION OF RATES AND CHARGES - Continued

(a) The following rate elements are applicable to TLS: - Continued

(1) UNI Port with Access Line Connection - Continued

(iv) EMS Real Time (EMS-RT) Access Line (available for EMS Service Type only)

A monthly rate applies on a per-line basis, basied on the speed of the access connection (i.e., 100 Mbps, 1000 Mbps). This enhanced service class configures a fixed portion of the UNI for Real Time Traffic, where each 100 Mbps UNI has CIR = 2 Mbps with EIR = 0, or each 1000 Mbps UNI has CIR = 10 Mbps with EIR = 0. The remainder of the UNI can be used for CIR = 0 and EIR = 0 traffic. The EMS-RT Access Line is offered on a month-to-month basis or as a 3- or 5- Year Term Commitment Plan. A nonrecurring charge applies to the installation of the EMS-RT provided on a month-to-month basis. A customer cannot mix an EMS-RT Access Line with the ERS Service type, but may mix EMS-RT Access Line with EMS Access Lines.

(2) Ethernet Virtual Circuit (EVC)

For customers who order the ERS Service Type with a Standard Access Line, a monthly rate will apply on a per EVC bandwidth basis. ERS-Std is the only EVC class available with the ERS Standard Access Line. The EVC bandwidth must be equal to the bandwidth of the lowest speed of the end points it is connecting. ERS-Std EVCs are purchased on a month-to-month basis. A non-recurring setup charge will apply per ERS-Std EVC.

For customers who order the Premier Access Line, a monthly rate will apply on a service class and EVC bandwidth basis. Premier Access Line customers have the choice of combining ERS-B, ERS -PD, and/or ERS-RT bandwidth on an EVC. A non-recurring setup charge will apply per ERS EVC. EVCs are purchased on a month-to-month basis. A customer may have more than one service class on the EVC, but will only pay one EVC non-recurring setup charge.

The number of EVCs permitted on each Standard Access Line and/or Premier Access Line are limited as follows:

10 Mbps less than or = to 2 EVCs
100 Mbps less than or = to 10 EVCs
1000 Mbps less than or = to 75 EVCs

(N)

ADVANCED DATA SERVICES

L. TRANSPARENT LAN SERVICE (TLS) - Continued (N)

4. APPLICATION OF RATES AND CHARGES - Continued

(a) The following rate elements are applicable to TLS: - Continued

(1) UNI Port with Access Line Connection - Continued

(iv) EMS Real Time (EMS-RT) Access Line (available for EMS Service Type only)

A monthly rate applies on a per-line basis, basied on the speed of the access connection (i.e., 100 Mbps, 1000 Mbps). This enhanced service class configures a fixed portion of the UNI for Real Time Traffic, where each 100 Mbps UNI has CIR = 2 Mbps with EIR = 0, or each 1000 Mbps UNI has CIR = 10 Mbps with EIR = 0. The remainder of the UNI can be used for CIR = 0 and EIR = 0 traffic. The EMS-RT Access Line is offered on a month-to-month basis or as a 3- or 5- Year Term Commitment Plan. A nonrecurring charge applies to the installation of the EMS-RT provided on a month-to-month basis. A customer cannot mix an EMS-RT Access Line with the ERS Service type, but may mix EMS-RT Access Line with EMS Access Lines.

(2) Ethernet Virtual Circuit (EVC)

For customers who order the ERS Service Type with a Standard Access Line, a monthly rate will apply on a per EVC bandwidth basis. ERS-Std is the only EVC class available with the ERS Standard Access Line. The EVC bandwidth must be equal to the bandwidth of the lowest speed of the end points it is connecting. ERS-Std EVCs are purchased on a month-to-month basis. A non-recurring setup charge will apply per ERS-Std EVC.

For customers who order the Premier Access Line, a monthly rate will apply on a service class and EVC bandwidth basis. Premier Access Line customers have the choice of combining ERS-B, ERS -PD, and/or ERS-RT bandwidth on an EVC. A non-recurring setup charge will apply per ERS EVC. EVCs are purchased on a month-to-month basis. A customer may have more than one service class on the EVC, but will only pay one EVC non-recurring setup charge.

The number of EVCs permitted on each Standard Access Line and/or Premier Access Line are limited as follows:

10 Mbps less than or = to 2 EVCs
100 Mbps less than or = to 10 EVCs
1000 Mbps less than or = to 75 EVCs

(N)

ADVANCED DATA SERVICES

L. TRANSPARENT LAN SERVICE (TLS) - Continued

4. APPLICATION OF RATES AND CHARGES - Continued

(a) The following rate elements are applicable to TLS: - Continued

(2) Ethernet Virtual Circuit (EVC) - Continued

ERS-Basic, ERS-Priority Data and ERS-Real Time EVC bandwidth is limited to a maximum Mbps per Service Class per EVC, and must comply with each of the following maximum limits:

EVC Service Class	10 Mbps UNI Max/EVC		100 Mbps UNI Max/EVC		1000 Mbps UNI Max/EVC	10 Gbps UNI Max/EVC
ERS-B (or) EVPLAN-B	10 Mbps		100 Mbps		1000 Mbps	1000 Mbps
ERS-PD	10 Mbps	(N)	100 Mbps	(N)	500 Mbps	500 Mbps
ERS-RT (or)	10 Mbps	|	100 Mbps	(N)	100 Mbps	100 Mbps
EVPLAN-RT	10 Mbps	(N)	50 Mbps		50 Mbps	N/A

(3) Interoffice Mileage

The Interoffice Mileage charge is based on the Per Mile charge multiplied by the distance between the customer's serving central office and the nearest TLS equipped central office (a central office equipped with a switch, node, or other Utility equipment capable of delivering service, via a shared fiber path or network infra-structure). This interoffice distance is measured in airline miles, based upon latitude and longitude of each central office. The mileage measurement is calculated as specified by NECA Tariff FCC No. 4. The mileage rate applies on a per mile basis. This charge applies in addition to the applicable rates and charges for all UNI Port with Access Line connections. For standard and premier 'unprotected' UNI Port and Access at the 10Mbps, 100Mbps and 1000Mbps UNI speed, the first twenty Interoffice miles are included in the monthly recurring charge (MRC) of the 'unprotected' UNI Port and Access. Optical protected mileage interoffice transport is available for the 1000M UNI speed. The protected transport option for 10/100Mbps, Protected Non-Diverse and Protected Diverse, UNI speeds includes optical protected interoffice transport when needed.

(4) Domain/LAN Extension Equipment Changes

Customer requests for changes in EMS Domains and replacement of LAN extension equipment will be charged a nonrecurring charge per location per change.

(5) Optional Features

(i) Customer Service Management (CSM)*

Customer Service Management (CSM) is an optional feature that provides customers with web-based reports. These reports give customers the ability to extract read-only network traffic information regarding their networks, thereby allowing customers to monitor and manage their network performance. CSM reports are provided per customer Domain/VLAN.

* Effective February 7, 2011 CSM is no longer available to new Customers. Moves, additions or changes to subscribers' existing service will not be permitted.

ADVANCED DATA SERVICES

L. TRANSPARENT LAN SERVICE (TLS) - Continued

4. APPLICATION OF RATES AND CHARGES - Continued

(a) The following rate elements are applicable to TLS: - Continued

(2) Ethernet Virtual Circuit (EVC) - Continued

ERS-Basic, ERS-Priority Data and ERS-Real Time EVC bandwidth is limited to a maximum Mbps per Service Class per EVC, and must comply with each of the following maximum limits:

EVC Service Class	10 Mbps UNI Max/EVC	100 Mbps UNI Max/EVC	1000 Mbps UNI Max/EVC	10 Gbps UNI Max/EVC
ERS-B (or) EVPLAN-B	10 Mbps	100 Mbps	1000 Mbps	1000 Mbps
ERS-PD	5 Mbps	50 Mbps	500 Mbps	500 Mbps
ERS-RT (or)	5 Mbps	50 Mbps	100 Mbps	100 Mbps
EVPLAN-RT	5 Mbps	50 Mbps	50 Mbps	N/A

(3) Interoffice Mileage

The Interoffice Mileage charge is based on the Per Mile charge multiplied by the distance between the customer's serving central office and the nearest TLS equipped central office (a central office equipped with a switch, node, or other Utility equipment capable of delivering service, via a shared fiber path or network infra-structure). This interoffice distance is measured in airline miles, based upon latitude and longitude of each central office. The mileage measurement is calculated as specified by NECA Tariff FCC No. 4. The mileage rate applies on a per mile basis. This charge applies in addition to the applicable rates and charges for all UNI Port with Access Line connections. For standard and premier 'unprotected' UNI Port and Access at the 10Mbps, 100Mbps and 1000Mbps UNI speed, the first twenty Interoffice miles are included in the monthly recurring charge (MRC) of the 'unprotected' UNI Port and Access. Optical protected mileage interoffice transport is available for the 1000M UNI speed. The protected transport option for 10/100Mbps, Protected Non-Diverse and Protected Diverse, UNI speeds includes optical protected interoffice transport when needed. (C) (C)

(4) Domain/LAN Extension Equipment Changes

Customer requests for changes in EMS Domains and replacement of LAN extension equipment will be charged a nonrecurring charge per location per change.

(5) Optional Features

(i) Customer Service Management (CSM)*

Customer Service Management (CSM) is an optional feature that provides customers with web-based reports. These reports give customers the ability to extract read-only network traffic information regarding their networks, thereby allowing customers to monitor and manage their network performance. CSM reports are provided per customer Domain/VLAN.

* Effective February 7, 2011 CSM is no longer available to new Customers. Moves, additions or changes to subscribers' existing service will not be permitted.

ADVANCED DATA SERVICES

L. TRANSPARENT LAN SERVICE (TLS) - Continued

4. APPLICATION OF RATES AND CHARGES - Continued

(a) The following rate elements are applicable to TLS: - Continued

(2) Ethernet Virtual Circuit (EVC) - Continued

ERS-Basic, ERS-Priority Data and ERS-Real Time EVC bandwidth is limited to a maximum Mbps per Service Class per EVC, and must comply with each of the following maximum limits:

EVC Service Class	10 Mbps UNI Max/EVC	(N)	100 Mbps UNI Max/EVC	1000 Mbps UNI Max/EVC	10 Gbps UNI Max/EVC	
ERS-B (or) EVPLAN-B	10 Mbps		100 Mbps	1000 Mbps	1000 Mbps	
ERS-PD	5 Mbps		50 Mbps	500 Mbps	500 Mbps	
ERS-RT (or)	5 Mbps		50 Mbps	100 Mbps	100 Mbps	
EVPLAN-RT	5 Mbps	(N)	50 Mbps	50 Mbps	N/A	(N)

(3) Interoffice Mileage

The Interoffice Mileage charge is based on the Per Mile charge multiplied by the distance between the customer's serving central office and the nearest TLS equipped central office (a central office equipped with a switch, node, or other Utility equipment capable of delivering service, via a shared fiber path or network infra-structure). This interoffice distance is measured in airline miles, based upon latitude and longitude of each central office. The mileage measurement is calculated as specified by NECA Tariff FCC No. 4. The mileage rate applies on a per mile basis. This charge applies in addition to the applicable rates and charges for all UNI Port with Access Line connections. Optical protected mileage interoffice transport is available for the 1000M UNI speed. The protected transport option for 10/100Mbps, Protected Non-Diverse and Protected Diverse, UNI speeds includes optical protected interoffice transport when needed.

(4) Domain/LAN Extension Equipment Changes

Customer requests for changes in EMS Domains and replacement of LAN extension equipment will be charged a nonrecurring charge per location per change.

(5) Optional Features

(i) Customer Service Management (CSM)* (T)

Customer Service Management (CSM) is an optional feature that provides customers with web-based reports. These reports give customers the ability to extract read-only network traffic information regarding their networks, thereby allowing customers to monitor and manage their network performance. CSM reports are provided per customer Domain/VLAN.

* Effective February 7, 2011 CSM is no longer available to new Customers. Moves, additions or changes to subscribers' existing service will not be permitted. (N) (N)

ADVANCED DATA SERVICES

L. TRANSPARENT LAN SERVICE (TLS) - Continued

4. APPLICATION OF RATES AND CHARGES - Continued

(a) The following rate elements are applicable to TLS: - Continued

(2) Ethernet Virtual Circuit (EVC) - Continued

ERS-Basic, ERS-Priority Data and ERS-Real Time EVC bandwidth is limited to a maximum Mbps per Service Class per EVC, and must comply with each of the following maximum limits: (N)

EVC Service Class	100 Mbps UNI Max/EVC	1000 Mbps UNI Max/EVC	10 Gbps UNI Max/EVC	(C)
ERS-B	100 Mbps	1000 Mbps	1000 Mbps	
ERS-PD	50 Mbps	500 Mbps	500 Mbps	
ERS-RT	50 Mbps	100 Mbps	100 Mbps	(C)

(3) Interoffice Mileage

The Interoffice Mileage charge is based on the Per Mile charge multiplied by the distance between the customer's serving central office and the nearest TLS equipped central office (a central office equipped with a switch, node, or other Utility equipment capable of delivering service, via a shared fiber path or network infra-structure). This interoffice distance is measured in airline miles, based upon latitude and longitude of each central office. The mileage measurement is calculated as specified by NECA Tariff FCC No. 4. The mileage rate applies on a per mile basis. This charge applies in addition to the applicable rates and charges for all UNI Port with Access Line connections. Optical protected mileage interoffice transport is available for the 1000M UNI speed. (N)
The protected transport option for 10/100Mbps, Protected Non-Diverse and Protected Diverse, UNI speeds includes optical protected interoffice transport when needed. (N)

(4) Domain/LAN Extension Equipment Changes

Customer requests for changes in EMS Domains and replacement of LAN extension equipment will be charged a nonrecurring charge per location per change.

(5) Optional Features

(i) Customer Service Management (CSM)

Customer Service Management (CSM) is an optional feature that provides customers with web-based reports. These reports give customers the ability to extract read-only network traffic information regarding their networks, thereby allowing customers to monitor and manage their network performance. CSM reports are provided per customer Domain/VLAN.

ADVANCED DATA SERVICES

L. TRANSPARENT LAN SERVICE (TLS) - Continued

4. APPLICATION OF RATES AND CHARGES - Continued

(a) The following rate elements are applicable to TLS: - Continued

(2) Ethernet Virtual Circuit (EVC) - Continued

ERS EVC bandwidth is limited to a maximum Mbps per Service Class per EVC, and must comply with each of the following maximum limits:

EVC Service Class	10 Mbps UNI Max/EVC	100 Mbps UNI Max/EVC	1000 Mbps UNI Max/EVC	(N)
ERS-B	10 Mbps	100 Mbps	1000 Mbps	
ERS-PD	5 Mbps	50 Mbps	500 Mbps	
ERS-RT	5 Mbps	50 Mbps	100 Mbps	(N)

(3) Interoffice Mileage

The Interoffice Mileage charge is based on the Per Mile charge multiplied by the distance between the customer's serving central office and the nearest TLS equipped central office (a central office equipped with a switch, node, or other Utility equipment capable of delivering service, via a shared fiber path or network infra-structure). This interoffice distance is measured in airline miles, based upon latitude and longitude of each central office. The mileage measurement is calculated as specified by NECA Tariff FCC No. 4. The mileage rate applies on a per mile basis. This charge applies in addition to the applicable rates and charges for all UNI Port with Access Line connections.

(4) Domain/LAN Extension Equipment Changes

Customer requests for changes in EMS Domains and replacement of LAN extension equipment will be charged a nonrecurring charge per location per change.

(5) Optional Features

(i) Customer Service Management (CSM)

Customer Service Management (CSM) is an optional feature that provides customers with web-based reports. These reports give customers the ability to extract read-only network traffic information regarding their networks, thereby allowing customers to monitor and manage their network performance. CSM reports are provided per customer Domain/VLAN.

ADVANCED DATA SERVICES

L. TRANSPARENT LAN SERVICE (TLS) - Continued (N)

4. APPLICATION OF RATES AND CHARGES - Continued

(a) The following rate elements are applicable to TLS: - Continued

(2) Ethernet Virtual Circuit (EVC) - Continued

ERS EVC bandwidth is limited to a maximum Mbps per Service Class per EVC, and must comply with each of the following maximum limits:

EVC Service Class	100 Mbps UNI Max/EVC	1000 Mbps UNI Max/EVC
ERS-B	100 Mbps	1000 Mbps
ERS-PD	50 Mbps	500 Mbps
ERS-RT	50 Mbps	100 Mbps

(3) Interoffice Mileage

The Interoffice Mileage charge is based on the Per Mile charge multiplied by the distance between the customer's serving central office and the nearest TLS equipped central office (a central office equipped with a switch, node, or other Utility equipment capable of delivering service, via a shared fiber path or network infra-structure). This interoffice distance is measured in airline miles, based upon latitude and longitude of each central office. The mileage measurement is calculated as specified by NECA Tariff FCC No. 4. The mileage rate applies on a per mile basis. This charge applies in addition to the applicable rates and charges for all UNI Port with Access Line connections.

(4) Domain/LAN Extension Equipment Changes

Customer requests for changes in EMS Domains and replacement of LAN extension equipment will be charged a nonrecurring charge per location per change.

(5) Optional Features

(i) Customer Service Management (CSM)

Customer Service Management (CSM) is an optional feature that provides customers with web-based reports. These reports give customers the ability to extract read-only network traffic information regarding their networks, thereby allowing customers to monitor and manage their network performance. CSM reports are provided per customer Domain/VLAN. (N)

ADVANCED DATA SERVICES

L. TRANSPARENT LAN SERVICE (TLS) - Continued (N)

4. APPLICATION OF RATES AND CHARGES - Continued

(a) The following rate elements are applicable to TLS: - Continued

(2) Ethernet Virtual Circuit (EVC) - Continued

ERS EVC bandwidth is limited to a maximum Mbps per Service Class per EVC, and must comply with each of the following maximum limits:

EVC Service Class	100 Mbps UNI Max/EVC	1000 Mbps UNI Max/EVC
ERS-B	100 Mbps	1000 Mbps
ERS-PD	50 Mbps	500 Mbps
ERS-RT	50 Mbps	100 Mbps

(3) Interoffice Mileage

The Interoffice Mileage charge is based on the Per Mile charge multiplied by the distance between the customer's serving central office and the nearest TLS equipped central office (a central office equipped with a switch, node, or other Utility equipment capable of delivering service, via a shared fiber path or network infra-structure). This interoffice distance is measured in airline miles, based upon latitude and longitude of each central office. The mileage measurement is calculated as specified by NECA Tariff FCC No. 4. The mileage rate applies on a per mile basis. This charge applies in addition to the applicable rates and charges for all UNI Port with Access Line connections.

(4) Domain/LAN Extension Equipment Changes

Customer requests for changes in EMS Domains and replacement of LAN extension equipment will be charged a nonrecurring charge per location per change.

(5) Optional Features

(i) Customer Service Management (CSM)

Customer Service Management (CSM) is an optional feature that provides customers with web-based reports. These reports give customers the ability to extract read-only network traffic information regarding their networks, thereby allowing customers to monitor and manage their network performance. CSM reports are provided per customer Domain/VLAN. (N)

ADVANCED DATA SERVICES

L. TRANSPARENT LAN SERVICE (TLS) - Continued

4. APPLICATION OF RATES AND CHARGES - Continued

(a) The following rate elements are applicable to TLS: - Continued

(5) Optional Features - Continued

(i) Customer Service Management (CSM)* - Continued

The Utility reserves the right to temporarily interrupt CSM for maintenance, software upgrades, and in emergency situations.

A monthly rate and a nonrecurring charge apply for each CSM arrangement. The customer will be charged on a per Domain/VLAN basis. The nonrecurring charge applies to the initial installation in addition to all other applicable service charges.

(b) Minimum Period

The minimum subscription period for TLS under the Month-to-Month Option is nine months. For example, if the customer discontinues the service in the seventh month, the customer will be billed the full monthly rate for the remaining two months.

(d) Term Commitment Plans

The Standard Access Line, Protected Access Line*, Premier Access Line and/or EMS Real Time Access Line are offered under a 3 or 5 Year Term Commitment Plan.

(e) Moves and Changes

When the customer requests a move or relocation of the Standard Access Line, Protected Access Line*, Premier Access Line or EMS Real Time Access Line to a different address and/or different building, the move or relocation will be treated as a termination of the existing service and the establishment of a new service with the application of all installation charges.

When the customer requests an upgrade in service speed, or change in service type, at an existing address, the upgrade in service speed/change in service type will be treated as a termination of the existing service and the establishment of a new service with the application of all charges.

(f) Termination Liability

In the event TLS is terminated by the customer prior to completion of the initial term commitment period, termination liability charges, as set forth in Verizon California Inc. Product Guide, Section 2.15, will apply, including all termination liability exclusions. (C)

A change in TLS service type will be considered a change to another service for purposes of determining Termination Liability charges.

* Effective February 7, 2011 CSM is no longer available to new Customers. Moves, additions or changes to subscribers' existing service will not be permitted.

ADVANCED DATA SERVICES

L. TRANSPARENT LAN SERVICE (TLS) - Continued

4. APPLICATION OF RATES AND CHARGES - Continued

(a) The following rate elements are applicable to TLS: - Continued

(5) Optional Features - Continued

(i) Customer Service Management (CSM)* - Continued (T)

The Utility reserves the right to temporarily interrupt CSM for maintenance, software upgrades, and in emergency situations.

A monthly rate and a nonrecurring charge apply for each CSM arrangement. The customer will be charged on a per Domain/VLAN basis. The nonrecurring charge applies to the initial installation in addition to all other applicable service charges.

(b) Minimum Period

The minimum subscription period for TLS under the Month-to-Month Option is nine months. For example, if the customer discontinues the service in the seventh month, the customer will be billed the full monthly rate for the remaining two months.

(d) Term Commitment Plans

The Standard Access Line, Protected Access Line*, Premier Access Line and/or EMS Real Time Access Line are offered under a 3 or 5 Year Term Commitment Plan. (T)

(e) Moves and Changes

When the customer requests a move or relocation of the Standard Access Line, Protected Access Line*, Premier Access Line or EMS Real Time Access Line to a different address and/or different building, the move or relocation will be treated as a termination of the existing service and the establishment of a new service with the application of all installation charges. (T)

When the customer requests an upgrade in service speed, or change in service type, at an existing address, the upgrade in service speed/change in service type will be treated as a termination of the existing service and the establishment of a new service with the application of all charges.

(f) Termination Liability

In the event TLS is terminated by the customer prior to completion of the initial term commitment period, termination liability charges, as set forth in Verizon California Inc. Product Guide, Section 2.15, will apply.

A change in TLS service type will be considered a change to another service for purposes of determining Termination Liability charges.

* Effective February 7, 2011 CSM is no longer available to new Customers. Moves, additions or changes to subscribers' existing service will not be permitted. (N) (N)

ADVANCED DATA SERVICES

(N)

L. TRANSPARENT LAN SERVICE (TLS) - Continued

4. APPLICATION OF RATES AND CHARGES - Continued

(a) The following rate elements are applicable to TLS: - Continued

(5) Optional Features - Continued

(i) Customer Service Management (CSM) - Continued

The Utility reserves the right to temporarily interrupt CSM for maintenance, software upgrades, and in emergency situations.

A monthly rate and a nonrecurring charge apply for each CSM arrangement. The customer will be charged on a per Domain/VLAN basis. The nonrecurring charge applies to the initial installation in addition to all other applicable service charges.

(b) Minimum Period

The minimum subscription period for TLS under the Month-to-Month Option is nine months. For example, if the customer discontinues the service in the seventh month, the customer will be billed the full monthly rate for the remaining two months.

(d) Term Commitment Plans

The Standard Access Line, Protected Access Line, Premier Access Line and/or EMS Real Time Access Line are offered under a 3 or 5 Year Term Commitment Plan.

(e) Moves and Changes

When the customer requests a move or relocation of the Standard Access Line, Protected Access Line, Premier Access Line or EMS Real Time Access Line to a different address and/or different building, the move or relocation will be treated as a termination of the existing service and the establishment of a new service with the application of all installation charges.

When the customer requests an upgrade in service speed, or change in service type, at an existing address, the upgrade in service speed/change in service type will be treated as a termination of the existing service and the establishment of a new service with the application of all charges.

(f) Termination Liability

In the event TLS is terminated by the customer prior to completion of the initial term commitment period, termination liability charges, as set forth in Verizon California Inc. Product Guide, Section 2.15, will apply.

A change in TLS service type will be considered a change to another service for purposes of determining Termination Liability charges. (N)

ADVANCED DATA SERVICES

(N)

L. TRANSPARENT LAN SERVICE (TLS) - Continued

4. APPLICATION OF RATES AND CHARGES - Continued

(a) The following rate elements are applicable to TLS: - Continued

(5) Optional Features - Continued

(i) Customer Service Management (CSM) - Continued

The Utility reserves the right to temporarily interrupt CSM for maintenance, software upgrades, and in emergency situations.

A monthly rate and a nonrecurring charge apply for each CSM arrangement. The customer will be charged on a per Domain/VLAN basis. The nonrecurring charge applies to the initial installation in addition to all other applicable service charges.

(b) Minimum Period

The minimum subscription period for TLS under the Month-to-Month Option is nine months. For example, if the customer discontinues the service in the seventh month, the customer will be billed the full monthly rate for the remaining two months.

(d) Term Commitment Plans

The Standard Access Line, Protected Access Line, Premier Access Line and/or EMS Real Time Access Line are offered under a 3 or 5 Year Term Commitment Plan.

(e) Moves and Changes

When the customer requests a move or relocation of the Standard Access Line, Protected Access Line, Premier Access Line or EMS Real Time Access Line to a different address and/or different building, the move or relocation will be treated as a termination of the existing service and the establishment of a new service with the application of all installation charges.

When the customer requests an upgrade in service speed, or change in service type, at an existing address, the upgrade in service speed/change in service type will be treated as a termination of the existing service and the establishment of a new service with the application of all charges.

(f) Termination Liability

In the event TLS is terminated by the customer prior to completion of the initial term commitment period, termination liability charges, as set forth in Verizon California Inc. Product Guide, Section 2.15, will apply.

A change in TLS service type will be considered a change to another service for purposes of determining Termination Liability charges. (N)

ADVANCED DATA SERVICES

L. TRANSPARENT LAN SERVICE (TLS) - Continued

4. APPLICATION OF RATES AND CHARGES - Continued

(g) Service Level Agreements (SLAs)

Service Level Agreements (SLAs) provide TLS customers with Service Response Credits (SRCs) applied to their Verizon California Inc. bill if the Utility fails to meet certain operational and network thresholds. SLAs are available at no additional charge or fee to the customer.

A customer is eligible for the SLA SRC given the customer adheres to the conditions stated within this section. The SLA specifies performance criteria against which actual performance for TLS will be compared on a monthly basis.

The TLS SLA includes the following measurements:

- Operational SLAs
    - Mean Time to Repair (MTTR)
    - Network Availability
- Network Performance SLAs
    - Ethernet Virtual Circuit (EVC) Class of Service (CoS) Performance
        - Data Delivery Ratio (DDR)
        - Round Trip Delay (RTD)
        - Jitter

The SLA SRC will apply to the following TLS elements:

- UNI Port with Access Line Connection
- Ethernet Virtual Circuit (EVC) Bandwidth, excluding EVPLAN EVCs. (N)

To receive SRCs on eligible rate elements, the customer must have the eligible rate elements listed in the initial subscription based on the established customer of record, or have ordered the eligible rate elements subsequent to the initial subscription. The Utility reserves the right to change, alter or discontinue the optional SRC plan at its discretion.

ADVANCED DATA SERVICES

L. TRANSPARENT LAN SERVICE (TLS) - Continued (N)

4. APPLICATION OF RATES AND CHARGES - Continued

(g) Service Level Agreements (SLAs)

Service Level Agreements (SLAs) provide TLS customers with Service Response Credits (SRCs) applied to their Verizon California Inc. bill if the Utility fails to meet certain operational and network thresholds. SLAs are available at no additional charge or fee to the customer.

A customer is eligible for the SLA SRC given the customer adheres to the conditions stated within this section. The SLA specifies performance criteria against which actual performance for TLS will be compared on a monthly basis.

The TLS SLA includes the following measurements:

- Operational SLAs
  - Mean Time to Repair (MTTR)
  - Network Availability
- Network Performance SLAs
  - Ethernet Virtual Circuit (EVC) Class of Service (CoS) Performance
    - Data Delivery Ratio (DDR)
    - Round Trip Delay (RTD)
    - Jitter

The SLA SRC will apply to the following TLS elements:

- UNI Port with Access Line Connection
- Ethernet Virtual Circuit (EVC) Bandwidth

To receive SRCs on eligible rate elements, the customer must have the eligible rate elements listed in the initial subscription based on the established customer of record, or have ordered the eligible rate elements subsequent to the initial subscription. The Utility reserves the right to change, alter or discontinue the optional SRC plan at its discretion. (N)

ADVANCED DATA SERVICES

L. TRANSPARENT LAN SERVICE (TLS) - Continued (N)

4. APPLICATION OF RATES AND CHARGES - Continued

(g) Service Level Agreements (SLAs)

Service Level Agreements (SLAs) provide TLS customers with Service Response Credits (SRCs) applied to their Verizon California Inc. bill if the Utility fails to meet certain operational and network thresholds. SLAs are available at no additional charge or fee to the customer.

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The TLS SLA includes the following measurements:

- Operational SLAs
  - Mean Time to Repair (MTTR)
  - Network Availability
- Network Performance SLAs
  - Ethernet Virtual Circuit (EVC) Class of Service (CoS) Performance
    - Data Delivery Ratio (DDR)
    - Round Trip Delay (RTD)
    - Jitter

The SLA SRC will apply to the following TLS elements:

- UNI Port with Access Line Connection
- Ethernet Virtual Circuit (EVC) Bandwidth

To receive SRCs on eligible rate elements, the customer must have the eligible rate elements listed in the initial subscription based on the established customer of record, or have ordered the eligible rate elements subsequent to the initial subscription. The Utility reserves the right to change, alter or discontinue the optional SRC plan at its discretion. (N)

ADVANCED DATA SERVICES

L. TRANSPARENT LAN SERVICE (TLS) - Continued (N)

4. APPLICATION OF RATES AND CHARGES - Continued

(g) Service Level Agreements (SLAs) – Continued

All service performance and provisioning measurements are conducted using the Utility monitoring systems and procedures. The Utility may change these systems and procedures at its sole discretion. In performing measurements of overall Mean Time To Repair (MTTR) and Network Availability, the Utility shall include data measured throughout the territories covered by this tariff.

To receive credit, the Utility must receive from the customer a written request for credit within thirty (30) calendar days of the end of the monitoring period that the SRC is referencing. The customer's request for credit must be submitted to the appropriate Utility entity (office or interface) in a manner prescribed by Utility. The request must include a list of all impacted circuit/connection identification numbers and the type of SRC requested for each circuit/connection. The SRC monitoring period is based on a calendar month.

1. Operational Service Level Agreements (SLAs)

(a) Mean Time to Repair (MTTR)

MTTR is the average mean time for the Utility to repair customer reported interruptions for service that is within the Utility's network. A TLS service is interrupted when it becomes unusable to the customer because of a failure of a facility component within the Utility's network that is used to furnish service under this tariff.

MTTR Measurement

Under the MTTR SLA, the Utility will measure the average Time to Repair (TTR) for customer-reported interruptions in the services with respect to TLS Access Lines. To be measured under this SLA, the customer must report any interruption to a Utility-designated entity for the opening of a trouble ticket. The TTR is measured from the date and time a trouble ticket is opened by the Utility and the date and time when such ticket is closed by the Utility. In measuring the TTR, any stop clock time or adjusted duration time associated with the trouble shall be subtracted from such measurement. (N)

ADVANCED DATA SERVICES

L. TRANSPARENT LAN SERVICE (TLS) - Continued (N)

4. APPLICATION OF RATES AND CHARGES - Continued

(g) Service Level Agreements (SLAs) – Continued

All service performance and provisioning measurements are conducted using the Utility monitoring systems and procedures. The Utility may change these systems and procedures at its sole discretion. In performing measurements of overall Mean Time To Repair (MTTR) and Network Availability, the Utility shall include data measured throughout the territories covered by this tariff.

To receive credit, the Utility must receive from the customer a written request for credit within thirty (30) calendar days of the end of the monitoring period that the SRC is referencing. The customer's request for credit must be submitted to the appropriate Utility entity (office or interface) in a manner prescribed by Utility. The request must include a list of all impacted circuit/connection identification numbers and the type of SRC requested for each circuit/connection. The SRC monitoring period is based on a calendar month.

1. Operational Service Level Agreements (SLAs)

(a) Mean Time to Repair (MTTR)

MTTR is the average mean time for the Utility to repair customer reported interruptions for service that is within the Utility's network. A TLS service is interrupted when it becomes unusable to the customer because of a failure of a facility component within the Utility's network that is used to furnish service under this tariff.

MTTR Measurement

Under the MTTR SLA, the Utility will measure the average Time to Repair (TTR) for customer-reported interruptions in the services with respect to TLS Access Lines. To be measured under this SLA, the customer must report any interruption to a Utility-designated entity for the opening of a trouble ticket. The TTR is measured from the date and time a trouble ticket is opened by the Utility and the date and time when such ticket is closed by the Utility. In measuring the TTR, any stop clock time or adjusted duration time associated with the trouble shall be subtracted from such measurement. (N)

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ADVANCED DATA SERVICES

L. TRANSPARENT LAN SERVICE (TLS) - Continued (N)

4. APPLICATION OF RATES AND CHARGES - Continued

(g) Service Level Agreements (SLAs) - Continued

1. Operational Service Level Agreements (SLAs) - Continued

(a) Mean Time to Repair (MTTR) – Continued

MTTR Measurement - Continued

For purposes of this measurement, stop clock time refers to

(1) periods when the customer testing is occurring;

(2) periods when the Utility is awaiting the customer's authorization to commence work on a TLS Access Line;

(3) periods when the Utility is denied access to the customer's premises or facilities as necessary to diagnose, repair or test;

(4) periods following a repair of a TLS Access line when the ticket is held open by the customer to ensure the trouble is resolved; and,

(5) any time period during which any of the listed occurrences existed, as set forth in d. SLA Exclusions following.

The SLA shall not apply to cases of trouble where no trouble was found or repeated cases of trouble for the same interruption. The MTTR SLA shall be measured on a calendar month basis and shall be calculated by adding the TTR for all interruptions and dividing that sum by the total number of trouble tickets opened for interruptions for the customer during that month.

MTTR SRCs

If the MTTR is greater than four (4) hours over the calendar month, then 50% of the one month TLS Access Line monthly charge shall be given as a MTTR SRC for those Access Lines which have been out of service for longer than four (4) hours and have been reported by the customer via a trouble ticket to the Utility. The MTTR SRC credit excludes and is not applicable to scheduled maintenance, scheduled downtimes or delays resulting from an event of force majeure. (N)

ADVANCED DATA SERVICES

L. TRANSPARENT LAN SERVICE (TLS) - Continued (N)

4. APPLICATION OF RATES AND CHARGES - Continued

(g) Service Level Agreements (SLAs) - Continued

1. Operational Service Level Agreements (SLAs) - Continued

(a) Mean Time to Repair (MTTR) – Continued

MTTR Measurement - Continued

For purposes of this measurement, stop clock time refers to

(1) periods when the customer testing is occurring;

(2) periods when the Utility is awaiting the customer's authorization to commence work on a TLS Access Line;

(3) periods when the Utility is denied access to the customer's premises or facilities as necessary to diagnose, repair or test;

(4) periods following a repair of a TLS Access line when the ticket is held open by the customer to ensure the trouble is resolved; and,

(5) any time period during which any of the listed occurrences existed, as set forth in d. SLA Exclusions following.

The SLA shall not apply to cases of trouble where no trouble was found or repeated cases of trouble for the same interruption. The MTTR SLA shall be measured on a calendar month basis and shall be calculated by adding the TTR for all interruptions and dividing that sum by the total number of trouble tickets opened for interruptions for the customer during that month.

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ADVANCED DATA SERVICES

L. TRANSPARENT LAN SERVICE (TLS) - Continued (N)

4. APPLICATION OF RATES AND CHARGES - Continued

(g) Service Level Agreements (SLAs) - Continued

1. Operational Service Level Agreements (SLAs) - Continued

(b) Network Availability

Network Availability refers to the percentage of time during a calendar month that the TLS is available for use by the customer.

Network Availability Measurement

The Utility threshold for Network Availability is 99.90%. Network Availability is calculated on a per TLS Port Connection basis as follows:

((24 X Number of Days in Month X Number of TLS Port Connections) – (Number of Hours Out of Service during Month))/(24 X Number of Days in Month X Number of TLS Port Connections).

The Utility will not round up the calculation to reach the 99.90% threshold. This SLA is only available for outages reported by the customer via a trouble ticket to the Utility.

Network Availability SRCs

If the overall Network Availability measurement is less than the threshold of 99.90% for a calendar month, the Utility will provide a credit equal to ten percent (10%) of the associated monthly charge for any individual TLS port connection that did not meet such threshold during such calendar month. (N)

ADVANCED DATA SERVICES

L. TRANSPARENT LAN SERVICE (TLS) - Continued (N)

4. APPLICATION OF RATES AND CHARGES - Continued

(g) Service Level Agreements (SLAs) - Continued

1. Operational Service Level Agreements (SLAs) - Continued

(b) Network Availability

Network Availability refers to the percentage of time during a calendar month that the TLS is available for use by the customer.

Network Availability Measurement

The Utility threshold for Network Availability is 99.90%. Network Availability is calculated on a per TLS Port Connection basis as follows:

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The Utility will not round up the calculation to reach the 99.90% threshold. This SLA is only available for outages reported by the customer via a trouble ticket to the Utility.

Network Availability SRCs

If the overall Network Availability measurement is less than the threshold of 99.90% for a calendar month, the Utility will provide a credit equal to ten percent (10%) of the associated monthly charge for any individual TLS port connection that did not meet such threshold during such calendar month. (N)

ADVANCED DATA SERVICES

L. TRANSPARENT LAN SERVICE (TLS) - Continued

4. APPLICATION OF RATES AND CHARGES - Continued

(g) Service Level Agreements (SLAs) – Continued

2. Network Performance SLA

Network Performance SLA applies to all customers subscribing to an EVC Class of Service (CoS) within a local network consisting of the following types:

- Real Time EVC bandwidth CoS, and
- Priority Data EVC bandwidth CoS.
- All other EVCs do not qualify for Network Performance SLA, including EVPLAN EVCs. (N)

The performance SLA is hierarchical in nature and statistically-based. Conformance is determined on a Met or Missed basis, first on a per-hour basis and then on a per-month conformance basis.

Per-Hour Conformance - For each hour in the month, a determination is made as to whether the performance objectives are 'Met' for the CoS attributes related to the CoS instance on a given EVC. For a given Hour (e.g., H1), the overall performance objective is 'Met' if the performance objectives for each of the Data Delivery Ratio (DDR), Round Trip Delay (RTD), and Jitter, attributes are 'Met'. If any of the attribute objectives are 'Missed', then the overall performance objective for Hour (H1) is determined to be 'Missed'.

Per-Month Conformance - For the month, a determination is made as to the percentage of hours that the overall performance objective is 'Met'. So, for a given Month (e.g., M1), the monthly performance guarantee is 'Met' if the % of hours 'Met' for the month meet or exceed the monthly objective.

ADVANCED DATA SERVICES

L. TRANSPARENT LAN SERVICE (TLS) - Continued

4. APPLICATION OF RATES AND CHARGES - Continued

(g) Service Level Agreements (SLAs) – Continued

2. Network Performance SLA

Network Performance SLA applies to all customers subscribing to an EVC Class of Service (CoS) within a local network consisting of the following types:

- Real Time EVC bandwidth CoS, and
- Priority Data EVC bandwidth CoS.
- All other EVCs do not qualify for Network Performance SLA (N)

The performance SLA is hierarchical in nature and statistically-based. Conformance is determined on a Met or Missed basis, first on a per-hour basis and then on a per-month conformance basis.

Per-Hour Conformance - For each hour in the month, a determination is made as to whether the performance objectives are 'Met' for the CoS attributes related to the CoS instance on a given EVC. For a given Hour (e.g., H1), the overall performance objective is 'Met' if the performance objectives for each of the Data Delivery Ratio (DDR), Round Trip Delay (RTD), and Jitter, attributes are 'Met'. If any of the attribute objectives are 'Missed', then the overall performance objective for Hour (H1) is determined to be 'Missed'.

Per-Month Conformance - For the month, a determination is made as to the percentage of hours that the overall performance objective is 'Met'. So, for a given Month (e.g., M1), the monthly performance guarantee is 'Met' if the % of hours 'Met' for the month meet or exceed the monthly objective.

ADVANCED DATA SERVICES

L. TRANSPARENT LAN SERVICE (TLS) - Continued (N)

4. APPLICATION OF RATES AND CHARGES - Continued

(g) Service Level Agreements (SLAs) – Continued

2. Network Performance SLA

Network Performance SLA applies to all customers subscribing to an EVC Class of Service (CoS) within a local network consisting of the following types:

- Real Time EVC bandwidth CoS, and

- Priority Data EVC bandwidth CoS.

The performance SLA is hierarchical in nature and statistically-based. Conformance is determined on a Met or Missed basis, first on a per-hour basis and then on a per-month conformance basis.

Per-Hour Conformance - For each hour in the month, a determination is made as to whether the performance objectives are 'Met' for the CoS attributes related to the CoS instance on a given EVC. For a given Hour (e.g., H1), the overall performance objective is 'Met' if the performance objectives for each of the Data Delivery Ratio (DDR), Round Trip Delay (RTD), and Jitter, attributes are 'Met'. If any of the attribute objectives are 'Missed', then the overall performance objective for Hour (H1) is determined to be 'Missed'.

Per-Month Conformance - For the month, a determination is made as to the percentage of hours that the overall performance objective is 'Met'. So, for a given Month (e.g., M1), the monthly performance guarantee is 'Met' if the % of hours 'Met' for the month meet or exceed the monthly objective. (N)

ADVANCED DATA SERVICES

L. TRANSPARENT LAN SERVICE (TLS) - Continued (N)

4. APPLICATION OF RATES AND CHARGES - Continued

(g) Service Level Agreements (SLAs) – Continued

2. Network Performance SLA

Network Performance SLA applies to all customers subscribing to an EVC Class of Service (CoS) within a local network consisting of the following types:

- Real Time EVC bandwidth CoS, and
- Priority Data EVC bandwidth CoS.

The performance SLA is hierarchical in nature and statistically-based. Conformance is determined on a Met or Missed basis, first on a per-hour basis and then on a per-month conformance basis.

Per-Hour Conformance - For each hour in the month, a determination is made as to whether the performance objectives are 'Met' for the CoS attributes related to the CoS instance on a given EVC. For a given Hour (e.g., H1), the overall performance objective is 'Met' if the performance objectives for each of the Data Delivery Ratio (DDR), Round Trip Delay (RTD), and Jitter, attributes are 'Met'. If any of the attribute objectives are 'Missed', then the overall performance objective for Hour (H1) is determined to be 'Missed'.

Per-Month Conformance - For the month, a determination is made as to the percentage of hours that the overall performance objective is 'Met'. So, for a given Month (e.g., M1), the monthly performance guarantee is 'Met' if the % of hours 'Met' for the month meet or exceed the monthly objective. (N)

ADVANCED DATA SERVICES

L. TRANSPARENT LAN SERVICE (TLS) - Continued (N)

4. APPLICATION OF RATES AND CHARGES - Continued

(g) Service Level Agreements (SLAs) - Continued

2. Network Performance SLA - Continued

EVC Class of Service Network Performance SLA shall be based on the following Ethernet frame traffic criteria:

(a) Data Delivery Ratio (DDR)

DDR is defined as the ratio of service frames successfully received from the network relative to the number of service frames offered to the network. The DDR definition is restricted to service frames that are compliant to the subscribed Committed Information Rate (CIR) profile. Interruptions caused by MTTR activity shall be excluded from the measurement of DDR.

Real Time EVC Bandwidth - Data Delivery Ratio

The Utility threshold for Data Delivery Ratio is 99.5% in a calendar month.

Real Time EVC Bandwidth - Data Delivery SRCs

If the overall Data Delivery measurement does not meet the per month conformance, the Utility shall provide an SRC equal to ten percent (10%) of the monthly charge for any individual EVC that did not meet such threshold during such calendar month.

Priority Data EVC Bandwidth - Data Delivery Ratio

The Utility threshold for Data Delivery Ratio is 99% in a calendar month.

Priority Data EVC Bandwidth - Data Delivery SRCs

If the overall Data Delivery measurement does not meet the per month conformance, the Utility shall provide an SRC equal to ten percent (10%) of the monthly charge for any individual EVC that did not meet such threshold during such calendar month. (N)

ADVANCED DATA SERVICES

L. TRANSPARENT LAN SERVICE (TLS) - Continued (N)

4. APPLICATION OF RATES AND CHARGES - Continued

(g) Service Level Agreements (SLAs) - Continued

2. Network Performance SLA - Continued

EVC Class of Service Network Performance SLA shall be based on the following Ethernet frame traffic criteria:

(a) Data Delivery Ratio (DDR)

DDR is defined as the ratio of service frames successfully received from the network relative to the number of service frames offered to the network. The DDR definition is restricted to service frames that are compliant to the subscribed Committed Information Rate (CIR) profile. Interruptions caused by MTTR activity shall be excluded from the measurement of DDR.

Real Time EVC Bandwidth - Data Delivery Ratio

The Utility threshold for Data Delivery Ratio is 99.5% in a calendar month.

Real Time EVC Bandwidth - Data Delivery SRCs

If the overall Data Delivery measurement does not meet the per month conformance, the Utility shall provide an SRC equal to ten percent (10%) of the monthly charge for any individual EVC that did not meet such threshold during such calendar month.

Priority Data EVC Bandwidth - Data Delivery Ratio

The Utility threshold for Data Delivery Ratio is 99% in a calendar month.

Priority Data EVC Bandwidth - Data Delivery SRCs

If the overall Data Delivery measurement does not meet the per month conformance, the Utility shall provide an SRC equal to ten percent (10%) of the monthly charge for any individual EVC that did not meet such threshold during such calendar month. (N)

ADVANCED DATA SERVICES

L. TRANSPARENT LAN SERVICE (TLS) - Continued (N)

4. APPLICATION OF RATES AND CHARGES - Continued

(g) Service Level Agreements (SLAs) – Continued

2. Network Performance SLA - Continued

(b) Round Trip Delay (RTD)

RTD is defined as the time (in milliseconds) it takes for a service frame to be sent from one UNI to another UNI and back again (includes link insertion delays, propagation delays and queuing delays in the network). The RTD calculation includes only the time the packet is in the network, i.e., the processing time spent in devices attached to the UNI are factored out of the definition. The RTD definition is restricted to service frames that are compliant to the subscribed CIR profile.

Real Time EVC Bandwidth - Delay Measurement

The Utility threshold for Delay is 20 milliseconds.

Real Time EVC Bandwidth - Delay SRCs

If the overall delay measurement does not meet the per month conformance, the Utility shall provide an SRC equal to ten percent (10%) of the monthly charge for any individual EVC that did not meet such threshold during such calendar month.

Priority Data EVC Bandwidth - Delay Measurement

The Utility threshold for Delay is 50 milliseconds.

Priority Data EVC Bandwidth - Delay SRCs

If the overall delay measurement does not meet the per month conformance, the Utility shall provide an SRC equal to ten percent (10%) of the monthly charge for any individual EVC that did not meet such threshold during such calendar month. (N)

ADVANCED DATA SERVICES

L. TRANSPARENT LAN SERVICE (TLS) - Continued (N)

4. APPLICATION OF RATES AND CHARGES - Continued

(g) Service Level Agreements (SLAs) – Continued

2. Network Performance SLA - Continued

(b) Round Trip Delay (RTD)

RTD is defined as the time (in milliseconds) it takes for a service frame to be sent from one UNI to another UNI and back again (includes link insertion delays, propagation delays and queuing delays in the network). The RTD calculation includes only the time the packet is in the network, i.e., the processing time spent in devices attached to the UNI are factored out of the definition. The RTD definition is restricted to service frames that are compliant to the subscribed CIR profile.

Real Time EVC Bandwidth - Delay Measurement

The Utility threshold for Delay is 20 milliseconds.

Real Time EVC Bandwidth - Delay SRCs

If the overall delay measurement does not meet the per month conformance, the Utility shall provide an SRC equal to ten percent (10%) of the monthly charge for any individual EVC that did not meet such threshold during such calendar month.

Priority Data EVC Bandwidth - Delay Measurement

The Utility threshold for Delay is 50 milliseconds.

Priority Data EVC Bandwidth - Delay SRCs

If the overall delay measurement does not meet the per month conformance, the Utility shall provide an SRC equal to ten percent (10%) of the monthly charge for any individual EVC that did not meet such threshold during such calendar month. (N)

ADVANCED DATA SERVICES

L. TRANSPARENT LAN SERVICE (TLS) - Continued (N)

4. APPLICATION OF RATES AND CHARGES - Continued

(g) Service Level Agreements (SLAs) – Continued

2. Network Performance SLA - Continued

(c) Jitter

Jitter is defined as the variance in frame delay (in milliseconds) between two service frames as measured at the ingress and egress UNIs. The jitter definition is restricted to service frames that are compliant to the subscribed CIR profile.

Real Time EVC Bandwidth - Jitter Measurement

The Utility threshold for Delay is 5 milliseconds.

Real Time EVC Bandwidth - Jitter SRC

If the overall jitter measurement does not meet the per month conformance, the Utility shall provide an SRC equal to ten percent (10%) of the monthly charge for any individual EVC that did not meet such threshold during such calendar month.

3. Validation for Operational and Network Performance SLAs

(a) Customer Validation

Operational SLAs:

The customer must submit in writing a list of all rate elements, impacted circuit/connection identification numbers and the type of SRC requested for each circuit/connection. The written request for credit must be submitted to the appropriate Utility entity in the manner prescribed by the Utility. (N)

ADVANCED DATA SERVICES

L. TRANSPARENT LAN SERVICE (TLS) - Continued (N)

4. APPLICATION OF RATES AND CHARGES - Continued

(g) Service Level Agreements (SLAs) – Continued

2. Network Performance SLA - Continued

(c) Jitter

Jitter is defined as the variance in frame delay (in milliseconds) between two service frames as measured at the ingress and egress UNIs. The jitter definition is restricted to service frames that are compliant to the subscribed CIR profile.

Real Time EVC Bandwidth - Jitter Measurement

The Utility threshold for Delay is 5 milliseconds.

Real Time EVC Bandwidth - Jitter SRC

If the overall jitter measurement does not meet the per month conformance, the Utility shall provide an SRC equal to ten percent (10%) of the monthly charge for any individual EVC that did not meet such threshold during such calendar month.

3. Validation for Operational and Network Performance SLAs

(a) Customer Validation

Operational SLAs:

The customer must submit in writing a list of all rate elements, impacted circuit/connection identification numbers and the type of SRC requested for each circuit/connection. The written request for credit must be submitted to the appropriate Utility entity in the manner prescribed by the Utility. (N)

ADVANCED DATA SERVICES

L. TRANSPARENT LAN SERVICE (TLS) - Continued (N)

4. APPLICATION OF RATES AND CHARGES - Continued

(g) Service Level Agreements (SLAs) – Continued

3. Validation for Operational and Network Performance SLAs - Continued

(a) Customer Validation (Cont'd)

Network Performance SLAs:

The customer must request SRCs for Network Performance SLAs and may submit in support of such request its own measurements made by industry-standard network performance measuring equipment. Such equipment shall be subject to prior approval by the Utility and be capable of the following:

For the DDR SLA, the equipment must be capable of determining the number of actual packets sent and successfully received between two (2) customer locations.

For the RTD SLA, the equipment must be capable of measuring the transmission of a series of 128-byte time-stamped packets to a measurement system from one customer location to another customer location. The measurement systems must be time-synchronized by using a network based timing source that uses Greenwich Mean Time (GMT).

For the Jitter SLA, the equipment must be capable of measuring the transmission of a series of at least fifty (50), 128-byte time stamped packets at a fixed interval between each packet from one customer location to a measurement system at another customer location. The measurement systems must be time-synchronized by using a network based timing source that uses Greenwich Mean Time (GMT).

All equipment must be capable of measuring from edge to edge (Customer Premises Equipment (CPE) to CPE) and to make the measurement every five (5) minutes per hour for four (4) hours total per day, for a total of two-hundred and forty (240) measures per day. In order to be considered, such measurements must include at least seven consecutive days' worth of measurements for four (4) hours per day.

(b) Utility Validation

The Utility will research and validate the customer-submitted SRC in accordance with its own procedures and systems. The Utility may, at its discretion, use either the customer-provided data or its own measurement data (or above mentioned formulas) to evaluate and assess whether SRCs are warranted. (N)

ADVANCED DATA SERVICES

L. TRANSPARENT LAN SERVICE (TLS) - Continued (N)

4. APPLICATION OF RATES AND CHARGES - Continued

(g) Service Level Agreements (SLAs) – Continued

3. Validation for Operational and Network Performance SLAs - Continued

(a) Customer Validation (Cont'd)

Network Performance SLAs:

The customer must request SRCs for Network Performance SLAs and may submit in support of such request its own measurements made by industry-standard network performance measuring equipment. Such equipment shall be subject to prior approval by the Utility and be capable of the following:

For the DDR SLA, the equipment must be capable of determining the number of actual packets sent and successfully received between two (2) customer locations.

For the RTD SLA, the equipment must be capable of measuring the transmission of a series of 128-byte time-stamped packets to a measurement system from one customer location to another customer location. The measurement systems must be time-synchronized by using a network based timing source that uses Greenwich Mean Time (GMT).

For the Jitter SLA, the equipment must be capable of measuring the transmission of a series of at least fifty (50), 128-byte time stamped packets at a fixed interval between each packet from one customer location to a measurement system at another customer location. The measurement systems must be time-synchronized by using a network based timing source that uses Greenwich Mean Time (GMT).

All equipment must be capable of measuring from edge to edge (Customer Premises Equipment (CPE) to CPE) and to make the measurement every five (5) minutes per hour for four (4) hours total per day, for a total of two-hundred and forty (240) measures per day. In order to be considered, such measurements must include at least seven consecutive days' worth of measurements for four (4) hours per day.

(b) Utility Validation

The Utility will research and validate the customer-submitted SRC in accordance with its own procedures and systems. The Utility may, at its discretion, use either the customer-provided data or its own measurement data (or above mentioned formulas) to evaluate and assess whether SRCs are warranted. (N)

ADVANCED DATA SERVICES

L. TRANSPARENT LAN SERVICE (TLS) - Continued (N)

4. APPLICATION OF RATES AND CHARGES - Continued

(g) Service Level Agreements (SLAs) – Continued

4. SLA Exclusions

SLAs do not apply to the extent that any of the following reasons prevented the Utility from meeting such SLAs:

(a) The acts of the customer or other party authorized by the customer to use the TLS circuit/connection, including but not limited to customer's negligence, customer's refusal to grant the Utility reasonable access to its premises for testing/repair, customer's refusal to release the TLS circuit/connection for testing and/or repair, customer's maintenance activities or its rearrangement of the TLS circuit/connection or where the customer has exceeded the purchased EVC bandwidth;

(b) Subsequent reports (i.e., additional customer inquiries) while the trouble is pending;

(c) Service troubles closed due to the customer's action;

(d) Service troubles repaired by the Utility prior to its receipt of a trouble report;

(e) Service trouble caused by the customer's CPE or facilities on its side of the demarcation point or any power, equipment, service or systems not provided by the Utility;

(f) An Interruption related to the provisioning of a new TLS Access Line or Access Lines in service for less than a month;

(g) Scheduled maintenance and downtimes;

(h) Unavailability of network monitoring or management equipment or reporting;

(i) Any other reason outside the control of the Utility. (N)

ADVANCED DATA SERVICES

L. TRANSPARENT LAN SERVICE (TLS) - Continued (N)

4. APPLICATION OF RATES AND CHARGES - Continued

(g) Service Level Agreements (SLAs) – Continued

4. SLA Exclusions

SLAs do not apply to the extent that any of the following reasons prevented the Utility from meeting such SLAs:

(a) The acts of the customer or other party authorized by the customer to use the TLS circuit/connection, including but not limited to customer's negligence, customer's refusal to grant the Utility reasonable access to its premises for testing/repair, customer's refusal to release the TLS circuit/connection for testing and/or repair, customer's maintenance activities or its rearrangement of the TLS circuit/connection or where the customer has exceeded the purchased EVC bandwidth;

(b) Subsequent reports (i.e., additional customer inquiries) while the trouble is pending;

(c) Service troubles closed due to the customer's action;

(d) Service troubles repaired by the Utility prior to its receipt of a trouble report;

(e) Service trouble caused by the customer's CPE or facilities on its side of the demarcation point or any power, equipment, service or systems not provided by the Utility;

(f) An Interruption related to the provisioning of a new TLS Access Line or Access Lines in service for less than a month;

(g) Scheduled maintenance and downtimes;

(h) Unavailability of network monitoring or management equipment or reporting;

(i) Any other reason outside the control of the Utility. (N)

ADVANCED DATA SERVICES

L. TRANSPARENT LAN SERVICE (TLS) - Continued (N)

4. APPLICATION OF RATES AND CHARGES - Continued

(g) Service Level Agreements (SLAs) – Continued

5. Limitations on SRCs

The combined total of any SRCs applied to the customer's TLS service for a calendar month must meet the following conditions:

(a) For any calendar year, the total SRCs shall not exceed ten percent (10%) of the total annual revenue of the prior calendar year billed to the customer for qualifying service elements, or $200,000 per customer, whichever is less. For any calendar year in which the customer had less than twelve (12) full months of revenue for qualifying service elements in the prior calendar year, the SRCs may not exceed $20,000 per customer for TLS Network.

(b) To receive an SRC, the customer must request such SRC in writing within thirty (30) calendar days of the end of the monitoring period of the referenced SRC. The request must include a list of all impacted EVC identification numbers and the type of SRC requested for each EVC. (N)

ADVANCED DATA SERVICES

L. TRANSPARENT LAN SERVICE (TLS) - Continued (N)

4. APPLICATION OF RATES AND CHARGES - Continued

(g) Service Level Agreements (SLAs) – Continued

5. Limitations on SRCs

The combined total of any SRCs applied to the customer's TLS service for a calendar month must meet the following conditions:

(a) For any calendar year, the total SRCs shall not exceed ten percent (10%) of the total annual revenue of the prior calendar year billed to the customer for qualifying service elements, or $200,000 per customer, whichever is less. For any calendar year in which the customer had less than twelve (12) full months of revenue for qualifying service elements in the prior calendar year, the SRCs may not exceed $20,000 per customer for TLS Network.

(b) To receive an SRC, the customer must request such SRC in writing within thirty (30) calendar days of the end of the monitoring period of the referenced SRC. The request must include a list of all impacted EVC identification numbers and the type of SRC requested for each EVC. (N)

ADVANCED DATA SERVICES

L. TRANSPARENT LAN SERVICE (TLS) - Continued

5. RATES AND CHARGES

a) Standard Access Line

	Nonrecurring Charge [1]	Monthly Rate	
i) (EMS or ERS) UNI Port with Access			
Month-to-Month Option [2]			
10 Mbps	$ 1,300.00	$ 1,200.00	
100 Mbps	1,300.00	2,400.00	
1000 Mbps	1,300.00	4,000.00	
			(D)
10 Gbps	1,300.00	11,000.00	(N)
Term Commitment Plans [3]			
3 Year Term			
10 Mbps	--	1,000.00	
100 Mbps	--	2,000.00	
1000 Mbps	--	3,500.00	
			(D)
10 Gbps	--	9,500.00	(N)
5 Year Term			
10 Mbps	--	900.00	
100 Mbps	--	1,800.00	
1000 Mbps	--	3,200.00	
			(D)
10 Gbps	--	8,500.00	(N)

(EMS) UNI Port with Standard Access – Protected Non-Diverse

	Nonrecurring Charge [1]	Monthly Rate
Month-to-Month Option [2]		
10 Mbps	$ 1,300.00	$ 1,600.00
100 Mbps	1,300.00	2,600.00
1000 Mbps	1,300.00	9,000.00
Term Commitment Plans [3]		
3 Year Term		
10 Mbps	--	1,400.00
100 Mbps	--	2,400.00
1000 Mbps	--	8,000.00
5 Year Term		
10 Mbps	--	1,300.00
100 Mbps	--	2,100.00
1000 Mbps	--	7,000.00

1 See Verizon California Inc. Product Guide, Section 3 for applicable nonrecurring charges.
2 The minimum subscription period for the Month-to-Month Option is nine months.
3 See Verizon California Inc. Product Guide, Section 2.15, for termination liability rules.
4 Effective November 19, 2010, this service will no longer be available to new customers.

ADVANCED DATA SERVICES

L. TRANSPARENT LAN SERVICE (TLS) - Continued

5. RATES AND CHARGES

a) Standard Access Line

	Nonrecurring Charge [1]	Monthly Rate	
i) (EMS or ERS) UNI Port with Access			(T)
Month-to-Month Option [2]			
10 Mbps	$ 1,300.00	$ 1,200.00	
100 Mbps	1,300.00	2,400.00	
1000 Mbps	1,300.00	4,000.00	
10000 Mbps	1,300.00	ICB	(T)
Term Commitment Plans [3]			
3 Year Term			
10 Mbps	--	1,000.00	
100 Mbps	--	2,000.00	
1000 Mbps	--	3,500.00	
10000 Mbps	--	ICB	(T)
5 Year Term			
10 Mbps	--	900.00	
100 Mbps	--	1,800.00	
1000 Mbps	--	3,200.00	
10,000 Mbps	--	ICB	(T)

(EMS) UNI Port with Standard Access – Protected Non-Diverse (L)(N)

	Nonrecurring Charge [1]	Monthly Rate	
Month-to-Month Option [2]			
10 Mbps	$ 1,300.00	$ 1,600.00	
100 Mbps	1,300.00	2,600.00	
1000 Mbps	1,300.00	9,000.00	
Term Commitment Plans [3]			
3 Year Term			
10 Mbps	--	1,400.00	
100 Mbps	--	2,400.00	
1000 Mbps	--	8,000.00	
5 Year Term			(L)
10 Mbps	--	1,300.00	
100 Mbps	--	2,100.00	(N)
1000 Mbps	--	7,000.00	

[1] See Verizon California Inc. Product Guide, Section 3 for applicable nonrecurring charges.
[2] The minimum subscription period for the Month-to-Month Option is nine months.
[3] See Verizon California Inc. Product Guide, Section 2.15, for termination liability rules.
[4] Effective November 19, 2010, this service will no longer be available to new customers.
(L) Material formerly on this page has been moved to Sheet 227. (N)

ADVANCED DATA SERVICES

L. TRANSPARENT LAN SERVICE (TLS) - Continued

5. RATES AND CHARGES

a) UNI Port with Access Line Connection	Nonrecurring Charge [1]	Monthly Rate	
i) Standard Access Line, per line			
Month-to-Month Option [2]			
10 Mbps	$ 1,300.00	$ 1,200.00	
100 Mbps	1,300.00	2,400.00	
1000 Mbps	1,300.00	4,000.00	
10000 Mbps	1,300.00	11,000.00	(N)
Term Commitment Plans [3]			
3 Year Term			
10 Mbps	--	1,000.00	
100 Mbps	--	2,000.00	
1000 Mbps	--	3,500.00	
10000 Mbps	--	9,500.00	(N)
5 Year Term			
10 Mbps	--	900.00	
100 Mbps	--	1,800.00	
1000 Mbps	--	3,200.00	
10,000 Mbps	--	9,500.00	(N)
ii) Protected Access Line, per line[4]			(N)
Month-to-Month Option [2]			
10 Mbps	1,300.00	1,075.00	
100 Mbps	1,300.00	3,600.00	
1000 Mbps	1,300.00	6,000.00	
Term Commitment Plans [3]			
3 Year Term			
10 Mbps		875.00	
100 Mbps	--	3,000.00	
1000 Mbps	--	5,200.00	
5 Year Term			
10 Mbps		775.00	
100 Mbps	--	2,700.00	
1000 Mbps	--	4,800.00	

1 See Verizon California Inc. Product Guide, Section 3 for applicable nonrecurring charges.
2 The minimum subscription period for the Month-to-Month Option is nine months.
3 See Verizon California Inc. Product Guide, Section 2.15, for termination liability rules.
4 Effective November 19, 2010, this service will no longer be available to new customers. (N)

ADVANCED DATA SERVICES

L. TRANSPARENT LAN SERVICE (TLS) - Continued

5. RATES AND CHARGES

a) UNI Port with Access Line Connection	Nonrecurring Charge [1]	Monthly Rate	
i) Standard Access Line, per line			
Month-to-Month Option [2]			
10 Mbps	$ 1,300.00	$ 1,200.00	
100 Mbps	1,300.00	2,400.00	
1000 Mbps	1,300.00	4,000.00	
Term Commitment Plans [3]			
3 Year Term			
10 Mbps	--	1,000.00	
100 Mbps	--	2,000.00	
1000 Mbps	--	3,500.00	
5 Year Term			
10 Mbps	--	900.00	
100 Mbps	--	1,800.00	
1000 Mbps	--	3,200.00	
ii) Protected Access Line, per line			
Month-to-Month Option [2]			
10 Mbps	1,300.00	1,075.00	(N)
100 Mbps	1,300.00	3,600.00	
1000 Mbps	1,300.00	6,000.00	
Term Commitment Plans [3]			
3 Year Term			
10 Mbps		875.00	(N)
100 Mbps	--	3,000.00	
1000 Mbps	--	5,200.00	
5 Year Term			
10 Mbps		775.00	(N)
100 Mbps	--	2,700.00	
1000 Mbps	--	4,800.00	

1 See Verizon California Inc. Product Guide, Section 3 for applicable nonrecurring charges.
2 The minimum subscription period for the Month-to-Month Option is nine months.
3 See Verizon California Inc. Product Guide, Section 2.15, for termination liability rules.

ADVANCED DATA SERVICES

(N)

L. TRANSPARENT LAN SERVICE (TLS) - Continued

5. RATES AND CHARGES

a) UNI Port with Access Line Connection	Nonrecurring Charge [1]	Monthly Rate
i) Standard Access Line, per line		
Month-to-Month Option [2]		
10 Mbps	$ 1,300.00	$ 1,200.00
100 Mbps	1,300.00	2,400.00
1000 Mbps	1,300.00	4,000.00
Term Commitment Plans [3]		
3 Year Term		
10 Mbps	--	1,000.00
100 Mbps	--	2,000.00
1000 Mbps	--	3,500.00
5 Year Term		
10 Mbps	--	900.00
100 Mbps	--	1,800.00
1000 Mbps	--	3,200.00
ii) Protected Access Line, per line		
Month-to-Month Option [2]		
100 Mbps	1,300.00	3,600.00
1000 Mbps	1,300.00	6,000.00
Term Commitment Plans [3]		
3 Year Term		
100 Mbps	--	3,000.00
1000 Mbps	--	5,200.00
5 Year Term		
100 Mbps	--	2,700.00
1000 Mbps	--	4,800.00

1 See Verizon California Inc. Product Guide, Section 3 for applicable nonrecurring charges.
2 The minimum subscription period for the Month-to-Month Option is nine months.
3 See Verizon California Inc. Product Guide, Section 2.15, for termination liability rules. (N)

ADVANCED DATA SERVICES

(N)

L. TRANSPARENT LAN SERVICE (TLS) - Continued

5. RATES AND CHARGES

a) UNI Port with Access Line Connection	Nonrecurring Charge [1]	Monthly Rate
i) Standard Access Line, per line		
Month-to-Month Option [2]		
10 Mbps	$ 1,300.00	$ 1,200.00
100 Mbps	1,300.00	2,400.00
1000 Mbps	1,300.00	4,000.00
Term Commitment Plans [3]		
3 Year Term		
10 Mbps	--	1,000.00
100 Mbps	--	2,000.00
1000 Mbps	--	3,500.00
5 Year Term		
10 Mbps	--	900.00
100 Mbps	--	1,800.00
1000 Mbps	--	3,200.00
ii) Protected Access Line, per line		
Month-to-Month Option [2]		
100 Mbps	1,300.00	3,600.00
1000 Mbps	1,300.00	6,000.00
Term Commitment Plans [3]		
3 Year Term		
100 Mbps	--	3,000.00
1000 Mbps	--	5,200.00
5 Year Term		
100 Mbps	--	2,700.00
1000 Mbps	--	4,800.00

1 See Verizon California Inc. Product Guide, Section 3 for applicable nonrecurring charges.
2 The minimum subscription period for the Month-to-Month Option is nine months.
3 See Verizon California Inc. Product Guide, Section 2.15, for termination liability rules. (N)

ADVANCED DATA SERVICES

L. TRANSPARENT LAN SERVICE (TLS) - Continued

5. RATES AND CHARGES - Continued

a) (EMS) - Standard Access Line – Continued (L)(N)

(EMS) UNI Port with Standard Access – Protected Diverse

	Nonrecurring Charge [1]	Monthly Rate
Month-to-Month Option [2]		
10 Mbps	$ 1,300.00	$ 1,900.00
100 Mbps	1,300.00	3,000.00
1000 Mbps	1,300.00	9,500.00
Term Commitment Plans [3]		
3 Year Term		
10 Mbps	--	1,800.00
100 Mbps	--	2,800.00
1000 Mbps	--	8,500.00
5 Year Term		
10 Mbps	--	1,700.00
100 Mbps	--	2,500.00
1000 Mbps	--	7,500.00

(EMS) UNI Port with Standard Access – Protected Private (L)

	Nonrecurring Charge [1]	Monthly Rate	(L[1])
Month-to-Month Option [2]			
10 Mbps	$ 1,300.00	$ 700.00	
100 Mbps	1,300.00	900.00	
1000 Mbps	1,300.00	2,600.00	
Term Commitment Plans [3]			
3 Year Term			
10 Mbps	--	600.00	
100 Mbps	--	800.00	
1000 Mbps	--	2,400.00	
5 Year Term			
10 Mbps	--	500.00	
100 Mbps	--	700.00	
1000 Mbps	--	2,000.00	(N) (L[1])

[1] See Verizon California Inc. Product Guide, Section 3 for applicable nonrecurring charges.
[2] The minimum subscription period for the Month-to-Month Option is nine months.
[3] See Verizon California Inc. Product Guide, Section 2.15, for termination liability rules.

(L) Material formerly on this page has been moved to Sheet 229.
(L[1]) Material formerly on this page has been moved to Sheet 227.

ADVANCED DATA SERVICES

L. TRANSPARENT LAN SERVICE (TLS) - Continued

5. RATES AND CHARGES - Continued

a) UNI Port with Access Line Connection - Continued	Nonrecurring Charge [1]	Monthly Rate	
iii) Premier Access Line, per line			
Month-to-Month Option [2]			
10 Mbps	1,300.00	1,075.00	(N)
100 Mbps	1,300.00	1,200.00	
1000 Mbps	1,300.00	2,400.00	
10000 Mbps	1,300.00	10,000.00	(N)
Term Commitment Plans [3]			
3 Year Term			
10 Mbps	--	875.00	(N)
100 Mbps	--	1,000.00	
1000 Mbps	--	2,000.00	
10000 Mbps	--	9,000.00	(N)
5 Year Term			
10 Mbps	--	750.00	(N)
100 Mbps	--	900.00	
1000 Mbps	--	1,800.00	
10000 Mbps	--	8,000.00	(N)
iv) EMS - Real Time Access Line, per line			
Month-to-Month Option [2]			
100 Mbps	1,300.00	2,500.00	
1000 Mbps	1,300.00	4,500.00	
10000 Mbps	1,300.00	12,500.00	(N)
Term Commitment Plans [3]			
3 Year Term			
100 Mbps	--	2,100.00	
1000 Mbps	--	4,000.00	
10000 Mbps	--	11,000.00	(N)
5 Year Term			
100 Mbps	--	1,900.00	
1000 Mbps	--	3,700.00	
10000 Mbps	--	10,000.00	(N)

1 See Verizon California Inc. Product Guide, Section 3 for applicable nonrecurring charges.
2 The minimum subscription period for the Month-to-Month Option is nine months.
3 See Verizon California Inc. Product Guide, Section 2.15, for termination liability rules.

ADVANCED DATA SERVICES

L. TRANSPARENT LAN SERVICE (TLS) - Continued (N)

5. RATES AND CHARGES - Continued

a) UNI Port with Access Line Connection - Continued	Nonrecurring Charge [1]	Monthly Rate
iii) Premier Access Line, per line		
Month-to-Month Option [2]		
100 Mbps	1,300.00	1,200.00
1000 Mbps	1,300.00	2,400.00
Term Commitment Plans [3]		
3 Year Term		
100 Mbps	--	1,000.00
1000 Mbps	--	2,000.00
5 Year Term		
100 Mbps	--	900.00
1000 Mbps	--	1,800.00
iv) EMS - Real Time Access Line, per line		
Month-to-Month Option [2]		
100 Mbps	1,300.00	2,500.00
1000 Mbps	1,300.00	4,500.00
Term Commitment Plans [3]		
3 Year Term		
100 Mbps	--	2,100.00
1000 Mbps	--	4,000.00
5 Year Term		
100 Mbps	--	1,900.00
1000 Mbps	--	3,700.00

1 See Verizon California Inc. Product Guide, Section 3 for applicable nonrecurring charges.
2 The minimum subscription period for the Month-to-Month Option is nine months.
3 See Verizon California Inc. Product Guide, Section 2.15, for termination liability rules. (N)

ADVANCED DATA SERVICES

L. TRANSPARENT LAN SERVICE (TLS) - Continued (N)

5. RATES AND CHARGES - Continued

a) UNI Port with Access Line Connection - Continued	Nonrecurring Charge [1]	Monthly Rate
iii) Premier Access Line, per line		
Month-to-Month Option [2]		
100 Mbps	1,300.00	1,200.00
1000 Mbps	1,300.00	2,400.00
Term Commitment Plans [3]		
3 Year Term		
100 Mbps	--	1,000.00
1000 Mbps	--	2,000.00
5 Year Term		
100 Mbps	--	900.00
1000 Mbps	--	1,800.00
iv) EMS - Real Time Access Line, per line		
Month-to-Month Option [2]		
100 Mbps	1,300.00	2,500.00
1000 Mbps	1,300.00	4,500.00
Term Commitment Plans [3]		
3 Year Term		
100 Mbps	--	2,100.00
1000 Mbps	--	4,000.00
5 Year Term		
100 Mbps	--	1,900.00
1000 Mbps	--	3,700.00

1 See Verizon California Inc. Product Guide, Section 3 for applicable nonrecurring charges.
2 The minimum subscription period for the Month-to-Month Option is nine months.
3 See Verizon California Inc. Product Guide, Section 2.15, for termination liability rules. (N)

ADVANCED DATA SERVICES

L. TRANSPARENT LAN SERVICE (TLS) - Continued

5. RATES AND CHARGES - Continued

b) (EMS) – Protected Access Line, per line[4]

	Nonrecurring Charge [1]	Monthly Rate
Month-to-Month Option [2]		
10 Mbps	N/A	N/A
100 Mbps	N/A	N/A
1000 Mbps	N/A	N/A
Term Commitment Plans [3]		
3 Year Term		
10 Mbps	N/A	N/A
100 Mbps	N/A	3,000.00
1000 Mbps	N/A	5,200.00
5 Year Term		
10 Mbps	N/A	N/A
100 Mbps	N/A	2,700.00
1000 Mbps	N/A	4,800.00

c) (EMS) Real Time Access Line

(EMS) UNI Port with Real Time Access

	Nonrecurring Charge [1]	Monthly Rate	
Month-to-Month Option [2]			
100 Mbps	$ 1,300.00	$ 2,500.00	
1000 Mbps	1,300.00	4,500.00	
10 Gbps	1,300.00	12,500.00	(D) (N)
Term Commitment Plans [3]			
3 Year Term			
100 Mbps	--	2,100.00	
1000 Mbps	--	4,000.00	
10 Gbps	--	11,000.00	(D) (N)
5 Year Term			
100 Mbps	--	1,900.00	
1000 Mbps	--	3,700.00	
10 Gbps	--	10,000.00	(D) (N)

1 See Verizon California Inc. Product Guide, Section 3 for applicable nonrecurring charges.
2 The minimum subscription period for the Month-to-Month Option is nine months.
3 See Verizon California Inc. Product Guide, Section 2.15, for termination liability rule.
4 Effective November 19, 2010, this service will no longer be available to new customers.

ADVANCED DATA SERVICES

L. TRANSPARENT LAN SERVICE (TLS) - Continued

5. RATES AND CHARGES - Continued

b) (EMS) – Protected Access Line, per line[4] (L)(L[1])(T)

	Nonrecurring Charge [1]	Monthly Rate	
Month-to-Month Option [2]			
10 Mbps	N/A	N/A	(T)
100 Mbps	N/A	N/A	(T)
1000 Mbps	N/A	N/A	(T)
Term Commitment Plans [3]			
3 Year Term			
10 Mbps	N/A	N/A	(T)
100 Mbps	N/A	3,000.00	
1000 Mbps	N/A	5,200.00	
5 Year Term			
10 Mbps	N/A	N/A	(T)
100 Mbps	N/A	2,700.00	
1000 Mbps	N/A	4,800.00	(L[1])

c) (EMS) Real Time Access Line (L[2])

(EMS) UNI Port with Real Time Access (N)

	Nonrecurring Charge [1]	Monthly Rate	
Month-to-Month Option [2]			
100 Mbps	$ 1,300.00	$ 2,500.00	
1000 Mbps	1,300.00	4,500.00	
10000 Mbps	1,300.00	ICB	(T)
Term Commitment Plans [3]			
3 Year Term			
100 Mbps	--	2,100.00	
1000 Mbps	--	4,000.00	
10000 Mbps	--	ICB	(T)
5 Year Term			
100 Mbps	--	1,900.00	
1000 Mbps	--	3,700.00	
10000 Mbps	--	ICB	(L[2])(T)

1 See Verizon California Inc. Product Guide, Section 3 for applicable nonrecurring charges.
2 The minimum subscription period for the Month-to-Month Option is nine months.
3 See Verizon California Inc. Product Guide, Section 2.15, for termination liability rule. (L)
4 Effective November 19, 2010, this service will no longer be available to new customers. (L[1])

(L) Material formerly on this page has been moved to Sheet 232.
(L[1]) Material on this page formerly appeared on Sheet 225.
(L[2]) Material on this page formerly appeared on Sheet 226.

Effective: Pending PUC approval of AL 12xxx

ADVANCED DATA SERVICES

L. TRANSPARENT LAN SERVICE (TLS) - Continued (N)

5. RATES AND CHARGES - Continued

Nonrecurring	Monthly Charge [1]	Rate
b) ERS Standard Ethernet Virtual Circuit, per EVC		
i) ERS EVC Setup, per EVC	$ 200.00	--
ii). ERS EVC Standard (ERS-Std), per EVC		
10 Mbps	--	$ 50.00
100 Mbps	--	100.00
1000 Mbps	--	200.00
iii) ERS EVC Basic (ERS-B) Bandwidth, per Class		
1 Mbps	N/A	15.00
2 Mbps	N/A	30.00
3 Mbps	N/A	45.00
4 Mbps	N/A	60.00
5 Mbps	N/A	75.00
6 Mbps	N/A	90.00
7 Mbps	N/A	105.00
8 Mbps	N/A	120.00
9 Mbps	N/A	135.00
10 Mbps	N/A	150.00
20 Mbps	N/A	300.00
30 Mbps	N/A	450.00
40 Mbps	N/A	600.00
50 Mbps	N/A	750.00
60 Mbps	N/A	850.00
70 Mbps	N/A	950.00
80 Mbps	N/A	1,050.00
90 Mbps	N/A	1,150.00
100 Mbps	N/A	1,250.00
200 Mbps	N/A	1,350.00
300 Mbps	N/A	1,450.00
400 Mbps	N/A	1,550.00
500 Mbps	N/A	1,650.00
600 Mbps	N/A	1,740.00
700 Mbps	N/A	1,830.00
800 Mbps	N/A	1,920.00
900 Mbps	N/A	2,010.00
1000 Mbps	N/A	2,100.00

[1] See Schedule Cal. P.U.C. No. A-41 for applicable nonrecurring charges. (N)

ADVANCED DATA SERVICES

L. TRANSPARENT LAN SERVICE (TLS) - Continued (N)

5. RATES AND CHARGES - Continued

Nonrecurring	Monthly Charge [1]	Rate
b) ERS Standard Ethernet Virtual Circuit, per EVC		
i) ERS EVC Setup, per EVC	$ 200.00	--
ii). ERS EVC Standard (ERS-Std), per EVC		
10 Mbps	--	$ 50.00
100 Mbps	--	100.00
1000 Mbps	--	200.00
iii) ERS EVC Basic (ERS-B) Bandwidth, per Class		
1 Mbps	N/A	15.00
2 Mbps	N/A	30.00
3 Mbps	N/A	45.00
4 Mbps	N/A	60.00
5 Mbps	N/A	75.00
6 Mbps	N/A	90.00
7 Mbps	N/A	105.00
8 Mbps	N/A	120.00
9 Mbps	N/A	135.00
10 Mbps	N/A	150.00
20 Mbps	N/A	300.00
30 Mbps	N/A	450.00
40 Mbps	N/A	600.00
50 Mbps	N/A	750.00
60 Mbps	N/A	850.00
70 Mbps	N/A	950.00
80 Mbps	N/A	1,050.00
90 Mbps	N/A	1,150.00
100 Mbps	N/A	1,250.00
200 Mbps	N/A	1,350.00
300 Mbps	N/A	1,450.00
400 Mbps	N/A	1,550.00
500 Mbps	N/A	1,650.00
600 Mbps	N/A	1,740.00
700 Mbps	N/A	1,830.00
800 Mbps	N/A	1,920.00
900 Mbps	N/A	2,010.00
1000 Mbps	N/A	2,100.00

[1] See Schedule Cal. P.U.C. No. A-41 for applicable nonrecurring charges. (N)

ADVANCED DATA SERVICES

L. TRANSPARENT LAN SERVICE (TLS) - Continued

5. RATES AND CHARGES - Continued

c) (EMS) Real Time Access Line - Continued (L)(N)

(EMS) UNI Port with Real Time Access – Protected Non – Diverse

	Nonrecurring Charge	Monthly Rate
Month-to-Month Option [2]		
10 Mbps	$ N/A	$ N/A
100 Mbps	1,300.00	2,700.00
1000 Mbps	1,300.00	10,000.00
Term Commitment Plans [3]		
3 Year Term		
10 Mbps	--	N/A
100 Mbps	--	2,500.00
1000 Mbps	--	9,000.00
5 Year Term		
10 Mbps	--	N/A
100 Mbps	--	2,300.00
1000 Mbps	--	8,500.00

(EMS) UNI Port with Real Time Access – Protected Diverse

	Nonrecurring Charge	Monthly Rate
Month-to-Month Option [2]		
10 Mbps	$ N/A	$ N/A
100 Mbps	1,300.00	3,250.00
1000 Mbps	1,300.00	11,000.00
Term Commitment Plans [3]		
3 Year Term		
10 Mbps	--	N/A
100 Mbps	--	3,000.00
1000 Mbps	--	10,000.00
5 Year Term		
10 Mbps	--	N/A
100 Mbps	--	2,750.00
1000 Mbps	--	9,000.00

(L)

1 See Verizon California Inc. Product Guide, Section 3 for applicable nonrecurring charges.
2 The minimum subscription period for the Month-to-Month Option is nine months.
3 See Verizon California Inc. Product Guide, Section 2.15, for termination liability rule. (N)

(L) Material formerly on this page now appears on Sheet 233.

ADVANCED DATA SERVICES

L. TRANSPARENT LAN SERVICE (TLS) - Continued (N)

5. RATES AND CHARGES - Continued

	Nonrecurring Charge	Monthly Rate
b) ERS Standard Ethernet Virtual Circuit, per EVC - Cont'd		
iv) ERS EVC Priority Data (ERS-PD) Bandwidth, per Class		
1 Mbps	N/A	40.00
2 Mbps	N/A	80.00
3 Mbps	N/A	120.00
4 Mbps	N/A	160.00
5 Mbps	N/A	200.00
6 Mbps	N/A	220.00
7 Mbps	N/A	240.00
8 Mbps	N/A	260.00
9 Mbps	N/A	280.00
10 Mbps	N/A	300.00
20 Mbps	N/A	600.00
30 Mbps	N/A	900.00
40 Mbps	N/A	1,200.00
50 Mbps	N/A	1,500.00
60 Mbps	N/A	1,720.00
70 Mbps	N/A	1,940.00
80 Mbps	N/A	2,100.00
90 Mbps	N/A	2,300.00
100 Mbps	N/A	2,500.00
200 Mbps	N/A	2,700.00
300 Mbps	N/A	2,900.00
400 Mbps	N/A	3,100.00
500 Mbps	N/A	3,300.00 (N)

ADVANCED DATA SERVICES

L. TRANSPARENT LAN SERVICE (TLS) - Continued (N)

5. RATES AND CHARGES - Continued

	Nonrecurring Charge	Monthly Rate
b) ERS Standard Ethernet Virtual Circuit, per EVC - Cont'd		
iv) ERS EVC Priority Data (ERS-PD) Bandwidth, per Class		
1 Mbps	N/A	40.00
2 Mbps	N/A	80.00
3 Mbps	N/A	120.00
4 Mbps	N/A	160.00
5 Mbps	N/A	200.00
6 Mbps	N/A	220.00
7 Mbps	N/A	240.00
8 Mbps	N/A	260.00
9 Mbps	N/A	280.00
10 Mbps	N/A	300.00
20 Mbps	N/A	600.00
30 Mbps	N/A	900.00
40 Mbps	N/A	1,200.00
50 Mbps	N/A	1,500.00
60 Mbps	N/A	1,720.00
70 Mbps	N/A	1,940.00
80 Mbps	N/A	2,100.00
90 Mbps	N/A	2,300.00
100 Mbps	N/A	2,500.00
200 Mbps	N/A	2,700.00
300 Mbps	N/A	2,900.00
400 Mbps	N/A	3,100.00
500 Mbps	N/A	3,300.00 (N)

ADVANCED DATA SERVICES

L. TRANSPARENT LAN SERVICE (TLS) - Continued

5. RATES AND CHARGES - Continued

c) (EMS) Real Time Access Line - Continued (L)(N)

(EMS) UNI Port with Real Time Access - Protected Private

	Nonrecurring Charge	Monthly Rate	
Month-to-Month Option [2]			
10 Mbps	N/A	N/A	
100 Mbps	$ 1,300.00	950.00	
1000 Mbps	1,300.00	2,700.00	
Term Commitment Plans [3]			
3 Year Term			
10 Mbps	--	N/A	
100 Mbps	--	850.00	
1000 Mbps	1,300.00	2,500.00	
5 Year Term			
10 Mbps	N/A	N/A	
100 Mbps	N/A	750.00	
1000 Mbps	N/A	2,100.00	(N)

d) ERS – Premier Access Line (L[1])

	Nonrecurring Charge	Monthly Rate	
Month-to-Month Option [2]			
10 Mbps	1,300.00	1,075.00	(L)
100 Mbps	1,300.00	1,200.00	
1000 Mbps	1,300.00	2,400.00	
10000 Mbps	1,300.00	10,000.00	
Term Commitment Plans [3]			
3 Year Term			
10 Mbps	--	875.00	
100 Mbps	--	1,000.00	
1000 Mbps	--	2,000.00	
10000 Mbps	--	9,000.00	
5 Year Term			
10 Mbps	--	775.00	(T)
100 Mbps	--	900.00	
1000 Mbps	--	1,800.00	
10000 Mbps	--	8,000.00	

[1] See Verizon California Inc. Product Guide, Section 3 for applicable nonrecurring charges.
[2] The minimum subscription period for the Month-to-Month Option is nine months.
[3] See Verizon California Inc. Product Guide, Section 2.15, for termination liability rules. (L[1])

(L) Material formerly on this page now appears on Sheet 234.
(L[1]) Material on this page formerly appeared on Sheet 226.

ADVANCED DATA SERVICES

L. TRANSPARENT LAN SERVICE (TLS) - Continued (N)

5. RATES AND CHARGES - Continued

	Nonrecurring Charge	Monthly Rate
b) ERS Standard Ethernet Virtual Circuit, per EVC - Cont'd		
v. ERS EVC Real Time (ERS-RT) Bandwidth, per Class		
1 Mbps	N/A	120.00
2 Mbps	N/A	240.00
3 Mbps	N/A	360.00
4 Mbps	N/A	480.00
5 Mbps	N/A	600.00
6 Mbps	N/A	660.00
7 Mbps	N/A	720.00
8 Mbps	N/A	780.00
9 Mbps	N/A	840.00
10 Mbps	N/A	900.00
20 Mbps	N/A	1,175.00
30 Mbps	N/A	1,450.00
40 Mbps	N/A	1,725.00
50 Mbps	N/A	2,000.00
60 Mbps	N/A	2,200.00
70 Mbps	N/A	2,400.00
80 Mbps	N/A	2,600.00
90 Mbps	N/A	2,800.00
100 Mbps	N/A	3,000.00 (N)

ADVANCED DATA SERVICES

L. TRANSPARENT LAN SERVICE (TLS) - Continued (N)

5. RATES AND CHARGES - Continued

	Nonrecurring Charge	Monthly Rate
b) ERS Standard Ethernet Virtual Circuit, per EVC - Cont'd		
v. ERS EVC Real Time (ERS-RT) Bandwidth, per Class		
1 Mbps	N/A	120.00
2 Mbps	N/A	240.00
3 Mbps	N/A	360.00
4 Mbps	N/A	480.00
5 Mbps	N/A	600.00
6 Mbps	N/A	660.00
7 Mbps	N/A	720.00
8 Mbps	N/A	780.00
9 Mbps	N/A	840.00
10 Mbps	N/A	900.00
20 Mbps	N/A	1,175.00
30 Mbps	N/A	1,450.00
40 Mbps	N/A	1,725.00
50 Mbps	N/A	2,000.00
60 Mbps	N/A	2,200.00
70 Mbps	N/A	2,400.00
80 Mbps	N/A	2,600.00
90 Mbps	N/A	2,800.00
100 Mbps	N/A	3,000.00 (N)

ADVANCED DATA SERVICES

L. TRANSPARENT LAN SERVICE (TLS) - Continued

5. RATES AND CHARGES - Continued

d) ERS – Premier Access Line - Continued (N)

(L)

(ERS) UNI Port with Premier Access – Protected Non - Diverse

	Nonrecurring Charge [1]	Monthly Rate
Month-to-Month Option [2]		
10 Mbps	$ 1,300.00	$ 1,050.00
100 Mbps	1,300.00	1,900.00
1000 Mbps	1,300.00	7,500.00
Term Commitment Plans [3]		
3 Year Term		
10 Mbps	--	900.00
100 Mbps	--	1,600.00
1000 Mbps	--	7,500.00

(L)

5 Year Term		
10 Mbps	--	750.00
100 Mbps	--	1,450.00
1000 Mbps	--	6,500.00

(ERS) UNI Port with Premier Access – Protected Diverse

	Nonrecurring Charge [1]	Monthly Rate
Month-to-Month Option [2]		
10 Mbps	$ 1,300.00	$ 1,200.00
100 Mbps	1,300.00	2,150.00
1000 Mbps	1,300.00	9,000.00
Term Commitment Plans [3]		
3 Year Term		
10 Mbps	--	1,000.00
100 Mbps	--	1,800.00
1000 Mbps	--	8,500.00
5 Year Term		
10 Mbps	--	850.00
100 Mbps	--	1,600.00
1000 Mbps	--	8,000.00

(L)

[1] See Verizon California Inc. Product Guide, Section 3 for applicable nonrecurring charges. (L)
[2] The minimum subscription period for the Month-to-Month Option is nine months.
[3] See Verizon California Inc. Product Guide, Section 2.15, for termination liability rules. (N)

(L) Material formerly on this page now appears on Sheet 236.

ADVANCED DATA SERVICES

L. TRANSPARENT LAN SERVICE (TLS) - Continued

5. RATES AND CHARGES - Continued

	Nonrecurring Charge [1]	Monthly Rate	
c) Interoffice Mileage, per line [2]			
Per Mile	--	100.00	
Per Optical Protected Mile	--	750.00	(N)
Protected Non-Diverse and Protected Diverse Only			(N)
d) TLS Domain/LAN Extension Equipment Changes			
Per location, per change	400.00	--	
e) Optional Features			
Customer Service Management (CSM), Per Domain	350.00	150.00	

1 See Schedule Cal. P.U.C. No. A-41 for applicable nonrecurring charges.
2 Applies in addition to applicable rates and charges for all UNE Port with Access Line connections.

ADVANCED DATA SERVICES

L. TRANSPARENT LAN SERVICE (TLS) - Continued (N)

5. RATES AND CHARGES - Continued

	Nonrecurring Charge [1]	Monthly Rate	
c) Interoffice Mileage, per line [2]			
Per Mile	--	100.00	
d) TLS Domain/LAN Extension Equipment Changes			
Per location, per change	400.00	--	
e) Optional Features			
Customer Service Management (CSM), Per Domain	350.00	150.00	(N)

[1] See Schedule Cal. P.U.C. No. A-41 for applicable nonrecurring charges. (N)
[2] Applies in addition to applicable rates and charges for all UNE Port with Access Line connections. (N)

ADVANCED DATA SERVICES

L. TRANSPARENT LAN SERVICE (TLS) - Continued (N)

5. RATES AND CHARGES - Continued

	Nonrecurring Charge [1]	Monthly Rate	
c) Interoffice Mileage, per line [2]			
Per Mile	--	100.00	
d) TLS Domain/LAN Extension Equipment Changes			
Per location, per change	400.00	--	
e) Optional Features			
Customer Service Management (CSM), Per Domain	350.00	150.00	(N)

[1] See Schedule Cal. P.U.C. No. A-41 for applicable nonrecurring charges. (N)
[2] Applies in addition to applicable rates and charges for all UNE Port with Access Line connections. (N)

ADVANCED DATA SERVICES

L. TRANSPARENT LAN SERVICE (TLS) - Continued

(N)

5. RATES AND CHARGES – Continued

d) ERS – Premier Access Line - Continued

(ERS) UNI Port with Premier Access – Protected Private

	Non-recurring Charge[1]	Monthly Rate
Month to Month Plan		
10 Mbps.	$ 1,300.00	600.00
100 Mbps.	1,300.00	700.00
1000 Mbps.	1,300.00	1,700.00
Term Commitment Plans [3]		
Three Year Plan		
10 Mbps.	N/A	500.00
100 Mbps.	N/A	600.00
1000 Mbps.	N/A	1,550.00
Five Year Plan		
10 Mbps.	N/A	400.00
100 Mbps.	N/A	500.00
1000 Mbps.	N/A	1,400.00

e) ERS – Ethernet Virtual Circuit

ERS Standard, Premier and EVP-LAN EVC Setup, per EVC	200.00	--

(N)

[1] See Verizon California Inc. Product Guide, Section 3 for applicable nonrecurring charges. (N)
[2] The minimum subscription period for the Month-to-Month Option is nine months.
[3] See Verizon California Inc. Product Guide, Section 2.15, for termination liability rules. (N)

ADVANCED DATA SERVICES

L. TRANSPARENT LAN SERVICE (TLS) - Continued (L)

5. RATES AND CHARGES – Continued

e) ERS – Ethernet Virtual Circuit - Continued

(ERS) EVC Standard (ERS-Std), per EVC

	Non-recurring Charge[1]	Monthly Rate
10 Mbps	--	$ 50.00
100 Mbps	--	100.00
1000 Mbps	--	200.00

(ERS) Premier Basic (ERS-B) Bandwidth, per Class

	Non-recurring Charge[1]	Monthly Rate
1 Mbps	N/A	15.00
2 Mbps	N/A	30.00
3 Mbps	N/A	45.00
4 Mbps	N/A	60.00
5 Mbps	N/A	75.00
6 Mbps	N/A	90.00
7 Mbps	N/A	105.00
8 Mbps	N/A	120.00
9 Mbps	N/A	135.00
10 Mbps	N/A	150.00
20 Mbps	N/A	300.00
30 Mbps	N/A	450.00
40 Mbps	N/A	600.00
50 Mbps	N/A	750.00
60 Mbps	N/A	850.00
70 Mbps	N/A	950.00
80 Mbps	N/A	1,050.00
90 Mbps	N/A	1,150.00
100 Mbps	N/A	1,250.00
200 Mbps	N/A	1,350.00
300 Mbps	N/A	1,450.00
400 Mbps	N/A	1,550.00
500 Mbps	N/A	1,650.00
600 Mbps	N/A	1,740.00
700 Mbps	N/A	1,830.00
800 Mbps	N/A	1,920.00
900 Mbps	N/A	2,010.00
1000 Mbps	N/A	2,100.00

[1] See Schedule Cal. P.U.C. No. A-41 for applicable nonrecurring charges. (L)

(L) Material on this page formerly appeared on Sheet 227.

ADVANCED DATA SERVICES

L. TRANSPARENT LAN SERVICE (TLS) - Continued

5. RATES AND CHARGES – Continued

e) ERS – Ethernet Virtual Circuit - Continued (L)(T)

(ERS) EVC Premier Priority Data (ERS-PD) Bandwidth, per Class (T)

	Non-recurring Charge[1]	Monthly Rate
1 Mbps	N/A	40.00
2 Mbps	N/A	80.00
3 Mbps	N/A	120.00
4 Mbps	N/A	160.00
5 Mbps	N/A	200.00
6 Mbps	N/A	220.00
7 Mbps	N/A	240.00
8 Mbps	N/A	260.00
9 Mbps	N/A	280.00
10 Mbps	N/A	300.00
20 Mbps	N/A	600.00
30 Mbps	N/A	900.00
40 Mbps	N/A	1,200.00
50 Mbps	N/A	1,500.00
60 Mbps	N/A	1,720.00
70 Mbps	N/A	1,940.00
80 Mbps	N/A	2,100.00
90 Mbps	N/A	2,300.00
100 Mbps	N/A	2,500.00
200 Mbps	N/A	2,700.00
300 Mbps	N/A	2,900.00
400 Mbps	N/A	3,100.00
500 Mbps	N/A	3,300.00

[1] See Schedule Cal. P.U.C. No. A-41 for applicable nonrecurring charges. (L)

(L) Material on this page formerly appeared on Sheet 228.

ADVANCED DATA SERVICES

L. TRANSPARENT LAN SERVICE (TLS) - Continued

5. RATES AND CHARGES – Continued

e) ERS – Ethernet Virtual Circuit - Continued (L)(T)

(ERS) EVC Premier Real Time (ERS-RT) Bandwidth, per Class (T)

	Non-recurring Charge[1]	Monthly Rate
1 Mbps	N/A	120.00
2 Mbps	N/A	240.00
3 Mbps	N/A	360.00
4 Mbps	N/A	480.00
5 Mbps	N/A	600.00
6 Mbps	N/A	660.00
7 Mbps	N/A	720.00
8 Mbps	N/A	780.00
9 Mbps	N/A	840.00
10 Mbps	N/A	900.00
20 Mbps	N/A	1,175.00
30 Mbps	N/A	1,450.00
40 Mbps	N/A	1,725.00
50 Mbps	N/A	2,000.00
60 Mbps	N/A	2,200.00
70 Mbps	N/A	2,400.00
80 Mbps	N/A	2,600.00
90 Mbps	N/A	2,800.00
100 Mbps	N/A	3,000.00

[1] See Schedule Cal. P.U.C. No. A-41 for applicable nonrecurring charges. (L)

(L) Material on this page formerly appeared on Sheet 229.

ADVANCED DATA SERVICES

L. TRANSPARENT LAN SERVICE (TLS) - Continued

5. RATES AND CHARGES – Continued

e) ERS – Ethernet Virtual Circuit - Continued (N)

(ERS) EVP-LAN Basic (EVPLAN-B) Bandwidth, per Class

	Non-recurring Charge[1]	Monthly Rate
1 Mbps	N/A	16.00
2 Mbps	N/A	32.00
3 Mbps	N/A	48.00
4 Mbps	N/A	64.00
5 Mbps	N/A	80.00
6 Mbps	N/A	96.00
7 Mbps	N/A	112.00
8 Mbps	N/A	128.00
9 Mbps	N/A	144.00
10 Mbps	N/A	160.00
20 Mbps	N/A	315.00
30 Mbps	N/A	470.00
40 Mbps	N/A	625.00
50 Mbps	N/A	780.00
60 Mbps	N/A	885.00
70 Mbps	N/A	990.00
80 Mbps	N/A	1,200.00
90 Mbps	N/A	1,305.00
100 Mbps	N/A	1,410.00
200 Mbps	N/A	1,515.00
300 Mbps	N/A	1,602.00
400 Mbps	N/A	1,715.00
500 Mbps	N/A	1,810.00
600 Mbps	N/A	1,905.00
700 Mbps	N/A	1,830.00
800 Mbps	N/A	2,000.00
900 Mbps	N/A	2,095.00
1000 Mbps	N/A	2,190.00

[1] See Schedule Cal. P.U.C. No. A-41 for applicable nonrecurring charges. (N)

ADVANCED DATA SERVICES

L. TRANSPARENT LAN SERVICE (TLS) - Continued

5. RATES AND CHARGES – Continued

e) ERS – Ethernet Virtual Circuit - Continued (N)

(ERS) EVP-LAN Real Time (EVPLAN-RT) Bandwidth, per Class

	Non-recurring Charge[1]	Monthly Rate
1 Mbps	N/A	125.00
2 Mbps	N/A	250.00
3 Mbps	N/A	375.00
4 Mbps	N/A	500.00
5 Mbps	N/A	625.00
6 Mbps	N/A	690.00
7 Mbps	N/A	755.00
8 Mbps	N/A	820.00
9 Mbps	N/A	885.00
10 Mbps	N/A	950.00
20 Mbps	N/A	1,235.00
30 Mbps	N/A	1,520.00
40 Mbps	N/A	1,805.00
50 Mbps	N/A	2,090.00 (N)
f) Interoffice Mileage, per line [2]		(L)
Per Mile	--	100.00
Per Optical Protected Mile	--	750.00
Protected Non-Diverse and Protected Diverse Only		
g) **TLS Domain/LAN Extension Equipment Changes**		
Per location, per change	400.00	--
h) **Optional Features[3]**		
Customer Service Management (CSM), Per Domain	350.00	150.00

1 See Schedule Cal. P.U.C. No. A-41 for applicable nonrecurring charges.
2 Applies in addition to applicable rates and charges for all UNE Port with Access Line connections.
3 Effective February 7, 2011, this service will no longer be available to new customers. (L)

(L) Material on this page formerly appeared on Sheet 230.

Effective: January 1, 2010, pending PUC approval of AL 12,475

ADVANCED DATA SERVICES

M. CUSTOM CONNECT SERVICE

(N)

1. DESCRIPTION

The Custom Connect Service provides a connection to the Company's Optical network and Customer's designated location (CDL). The Custom Connect is comprised of Central Office (CO) Nodes, CDL Links or SONET Premises Nodes, Transport and Riders. Each Custom Connect must consist of a minimum of two Customer designated locations, one of which must be a CDL Link. The Service is provided where technically and operationally feasible. If adequate facilities do not exist, special construction and other additional charges will apply.

The CDL Link may be Concatenated or Non-concatenated. The Concatenated/Non-concatenated CDL Link may be optionally configured with a four fiber, 1+1 protected network interface, as Single or Diverse Route.

Custom Connect may connect to Intellilight® Optical Transport Service (IOTS) optical transport channels or may be provided over an IOTS backbone network.

Custom Connect may also be connected to the following Company services, provided that such connections are technically and operationally feasible, as determined by the Company:

- dedicated SONET ring service
- point-to-point SONET service
- DWDM ring service
- SONET entrance facility service
- ethernet private line service

Custom Connect may also be provided over a Company provided DWDM ring backbone network provided that such configurations are technically and operationally feasible, as determined by the Telephone Company.

Custom Connect Single Route and Diverse Route at OC12c and OC48c may also connect to an advanced data service at designated Company wire centers. (N)

Effective: January 1, 2010, pending PUC approval of AL 12,475

ADVANCED DATA SERVICES

M. CUSTOM CONNECT SERVICE (N)

2. RATE ELEMENTS

Central Office (CO) Node

The CO Node is applicable for each central office that is equipped with a fiber optic terminal in which the Customer requests the ability to add/drop traffic to a CDL. Traffic is dropped from the CO Node via ports (lower speed drops). The CO Node may be ordered when a Customer requires OC level multiplexing on the Custom Connect. If the Customer wants to drop traffic below a DS3 at the CO Node, the Customer must request a minimum DS1 interface and appropriate special access lines pursuant to Company's Facilities for Intrastate Access Tariff, Schedule CAL P.U.C. C-1. The CO Node may also be used when the Customer wants to add/drop DS1 or DS3 traffic to a CDL located between service areas. The OC192 CO Node's ability to drop traffic below an OCn level is limited to new and in-service terminals technically capable of providing such directly from the Add Drop Multiplexer (ADM). See Rider section, herein, for further details. Multiplexing, access line and transport, including applicable rates and charges, from Schedule CAL P.U.C. C-1 or as set out in the Custom Connect individual case basis contract will apply in addition to the CO Node and appropriate rider charges. However, multiplexing rates will not apply when all of the following conditions are met:

(1) The Customer requests to drop a DS3 from a CO Node for the purpose of establishing a DS3 multiplexed facility in its serving wire center; and

(2) the Customer subscribes to and is billed for the CO Node rate element; and

(3) the Customer CO Node is located in the same central office building where the DS3 multiplexed facility is to be located.

When the CO Node is not located within the wire center serving the CDL, additional charges apply, including but not limited to rates associated with transport of the DS3 facility to the wire center where the CO Node is located and rider charges.

The CO Node, or in the alternative a CDL Link and multiplexer, is also required when Custom Connect provides the optical transmission facilities that connect an advanced data service to a CDL in a different wire center.

The CO Node may be ordered at an OC3, OC12, OC48 or OC192 bandwidth capacity. (N)

Effective: January 1, 2010, pending PUC approval of AL 12,475

ADVANCED DATA SERVICES

M. CUSTOM CONNECT SERVICE (N)

2. RATE ELEMENTS Continued

CDL Link

The CDL Link is applicable for each Customer designated location in which the Customer requests the ability to add/drop traffic. The CDL Link is offered as Single Route Diverse Route, or Ring Route and may be ordered with premise multiplexer provided or with premise fiber meet provided as OC3, OC12, OC48 or OC192 bandwidth capacity. Only one CDL Link per connect may be ordered with premise fiber meet provided. The premise fiber meet will terminate on a fiber cross connect panel at the demarcation point. CDL Link with premise fiber meet is not available for jointly provided meet-point arrangements except where Company provides a node within its network to the Customer.

If more than two Links or Nodes are ordered on the same order, the CDL Link must be ordered as a Ring Route CDL Link. A Ring Route CDL Link has a minimum of three nodes, one of which must be located in a Telephone Company wire center.

Custom Connect Ring Route is available to existing customers only.

The CDL Link may be ordered as Single Route or Diverse Route with concatenated or non-concatenated optical interface for OC3/OC3c, OC12/OC12c, OC48/OC48c, and OC192/OC192c. These CDL Links will terminate on a fiber cross connect panel at the demarcation point. The rider charges are included in the monthly rate for these CDL Links.

The CDL Link may also be ordered as 1.25Gbps and 2.5Gbps Single Route or Diverse Route. This CDL Link cannot ride a higher level facility and can only be ordered CDL to CDL.

When Custom Connect is provided over an Intellilight® Optical Transport Service (IOTS) backbone or Company provided DWDM backbone, and the transport between the nodes is provided using IOTS optical transport channels or DWDM optical transport channels respectively, a SONET Premises Node applies in lieu of the CDL Link to each customer designated location of the Custom Connect ring where SONET multiplexing is required. (N)

Effective: January 1, 2010, pending PUC approval of AL 12,475

ADVANCED DATA SERVICES

M. CUSTOM CONNECT SERVICE

(N)

2. RATE ELEMENTS (Continued)

CDL Link with Optical Cross Connect

The CDL Link with Optical Cross Connect provides the communications path between the Company's serving wire center end of a CDL Link and an IXC's or ISP's transmission equipment and facilities collocated in the Company's serving wire center. This service element includes the CDL Link from the fiber optic terminal and the optical jumpers that facilitate the cross connect to the IXC's or ISP's transmission equipment and facilities, located within the Company wire center.

The CDL Link with Optical Cross Connect will be provided as a single route without Company provided electronics as OC3, OC3c, OC12 or OC12c as ordered by the customer.

In addition to the rate for the CDL Link with Optical Cross Connect, the appropriate CDL Link rate is applicable from the CDL to the serving wire center, and the appropriate Dedicated Transport rate is applicable between serving wire centers.

(N)

Effective: January 1, 2010, pending PUC approval of AL 12,475

ADVANCED DATA SERVICES

M. CUSTOM CONNECT SERVICE (N)

2. RATE ELEMENTS (Continued)

Transport

Transport may be provisioned as shared or dedicated. Shared Transport is applicable when the transport between Node and/or Links is ordered at different bandwidth levels. The Dedicated Transport is applicable when transport between the Nodes and/or Links is of the same bandwidth level.

Shared Transport may be ordered in bandwidths of DS1, DS3/STS1, OC3, OC3c, OC12, OC12c, OC48 or OC48c. Dedicated Transport may be in bandwidths of OC3, OC3c, OC12, OC12c, OC48, OC48c or OC192, 1.25 Gbps or 2.5 Gbps.

Transport (Shared and Dedicated) is mileage sensitive and will be calculated using airline mileage between serving wire centers based on the V&H coordinates of the wire centers comprising each segment of the connect. Mileage is rounded up to the next whole mile.

When point-to-point Custom Connect is provided over an Intellilight® Optical Transport Service (IOTS) backbone network, connection between the Custom Connect nodes is provided using an IOTS optical transport channel in lieu of Custom Connect transport. When Custom Connect configured in a ring topology is provided over an IOTS backbone network, connection between the SONET nodes (Custom Connect CO Nodes and/or SONET Premises Nodes) is provided using unprotected IOTS optical transport channels in lieu of Custom Connect transport. Since protection is inherent in the Custom Connect service, protection is not required on the IOTS optical transport channels.

Connection of Custom Connect configured in a ring topology to an IOTS ring is provided over an equal speed, unprotected optical transport channel (e.g., an OC3 Custom Connect node would connect to a 155.52 Mbps unprotected IOTS channel). Each node of a Custom Connect ring must be located at the same customer designated location or central office as its corresponding IOTS node.

When point-to-point Custom Connect is provided over a Company provided DWDM backbone network, connection between the Custom Connect nodes is provided using a DWDM optical transport channel in lieu of Custom Connect transport. When Custom Connect configured in a ring topology is provided over a Telephone Company provided DWDM backbone network, connection between the SONET nodes (Custom Connect CO Nodes and/or SONET Premises Nodes) is provided using unprotected DWDM optical transport channels in lieu of Custom Connect transport. Since protection is inherent in the Custom Connect service, protection is not required on the DWDM optical transport channels.

Connection of Custom Connect configured in a ring topology to a Telephone Company provided DWDM ring is provided over an equal speed, unprotected optical transport channel (e.g., an OC3 Custom Connect node would connect to a 155.52 Mbps unprotected DWDM channel). Each node of a Custom Connect ring must be located at the same customer designated location or central office as its corresponding DWDM node.

The Shared Transport rate for Custom Connect Transport DS1 and DS3 bandwidth services apply to the transport facilities connected to Optical Custom Connect services. (N)

Effective: January 1, 2010, pending PUC approval of AL 12,475

ADVANCED DATA SERVICES

M. CUSTOM CONNECT SERVICE (N)

2. RATE ELEMENTS (Continued)

Rider

The Rider addresses Customer's service(s) traversing a higher bandwidth level. Riders may be at DS1, DS3, OC3, OC3c, OC12, OC12c, OC48, OC48c or STS1 bandwidth levels as required by the Customer.

The Rider is provided at a flat-rated monthly recurring charge, and the Rider charge is applicable per rider circuit order. A Rider is not charged with a CDL Link – Single or Diverse Route – Concatenated/Non-concatenated optical interface.

Four fiber 1+1 protection, consisting of two cards in the add/drop multiplexer, one working card and a second, standby card to provide automatic protection from a fault in the working card, is available with Company provided add/drop multiplexers and with compatible CPE, and applies per CDL. Additional charges apply for this optional protection feature. When a Rider is ordered with four fiber 1+1 protection, the protection charge applies in addition to the charge for the Rider.

In jointly provided meet-point arrangements, rider charges apply in addition to other applicable charges when Company provides any Ocn mux node, whether provided at the Customer premise or in the central office.

Acceptable rider speeds allowed by node type are as follows:

NODES	OC3	OC12	OC48	OC192
DS1 Rider	X	X*	X*	X*
DS3 Rider	X	X	X	X*
STS1 Rider	X	X	X	X
OC3/OC3c Rider		X	X	X
OC12/OC12c Rider			X	X
OC48/OC48c Rider				X

Available only from nodes that are technically capable of providing DS1 and DS3 drops directly from the OCn node terminal. The maximum capacity utilization that can be delivered by a OCn node selected by Customer may be limited by the number and type of riders that are provisioned on the OCn node and are limited by the maximum number of interfaces available to the OCn backplane. Where the OCn terminal is technically capable of supporting lower bandwidth OCn nodes as a sub-multiplexer, Company may provide such at the Customer premise and Central Office Node locations and additional charges will apply. (N)

Effective: January 1, 2010, pending PUC approval of AL 12,475

ADVANCED DATA SERVICES

M. CUSTOM CONNECT SERVICE (N)

2. RATE ELEMENTS (Continued)

SONET Premises Node – IOTS

The SONET Premises Node rate element applies at each CDL at which a SONET node is needed to complete a Custom Connect ring over an IOTS backbone network. The functionality and capabilities of the SONET Premises Node are the same as those specified for the CO Node preceding. The SONET Premises Node will only be provided when Custom Connect is configured in a ring or point to point topology in which the transport between the nodes (CO Node and/or SONET Premises Nodes) is provided using IOTS optical transport channels. The SONET Premises Node applies in lieu of the Custom Connect CDL Link.

The SONET Premises Node rate element also applies at each CDL at which a SONET node is needed to complete a Custom Connect ring over a Company provided DWDM backbone network. The SONET Premises Node will only be provided when Custom Connect is configured in a ring or point to point topology in which the transport between the nodes (CO Node and/or SONET Premises Nodes) is provided using DWDM optical transport channels. The SONET Premises Node applies in lieu of the Custom Connect CDL Link.

Rate Regulations

The rates and charges will be determined on an Individual Case Basis (ICB). For customers with existing services under ICB contract arrangements, the rates, terms and conditions of such contract arrangements will continue, on a month to month basis, for no more than 180 days upon the expiration of that current contract term, in order for the parties to complete a new contract or transition service to another service.

Moves and Changes

A move involves a change in the physical end points of the Custom Connect Service. Two types of moves are set forth below:

Moves Within the Same CDL - When the move is to a new location within the same CDL (Inside Move), a nonrecurring charge for the Inside Move will be the installation charge for the portion of the Service being re-terminated. No termination liability will apply.

Moves To A Different CDL or Verizon Central Office - Moves to a different CDL or Verizon Central Office (Outside Move) will be treated as a discontinuance and start of a new Service and all associated nonrecurring charges will apply.

Termination Liability

See Section 2.B.15 of the Company's ILEC Product Guide for Termination Liability language. (N)