

MULTI-SERVICE OPTICAL NETWORK RING SERVICE

Effective December 1, 2012, Multi-Service Optical Network (MON) Ring Service is not available for new installations. Existing MON Ring customers will be permitted to modify their service by adding new circuits to their existing service, but will not be permitted to add new nodes in new locations. New circuits added to existing locations will utilize the customer's existing Term Payment Plan (TPP) and should be coterminous with the customer's existing TPP. Customers with TPPs that expire may not extend their service contract. In addition, effective December 1, 2016, no Move, Add or Change orders of any type will be accepted for MON Ring Service.

A. Description

Multi-service Optical Network Ring (MON Ring) Service provides high volume optical transport utilizing multiplexing technology in a dedicated ring configuration. Multiple data signals are transmitted over fiber-optic cable using different wavelengths of light. Each of these wavelengths represents a transmission channel in the MON Ring system and is protocol-independent of every other channel in the system.

MON Ring Service is only available within the Local Access and Transport Areas (LATAs) served by and within the service territories of the Company.

MON Ring Service allows customers to combine their multiple data signals so that they can be amplified and transported over one network. MON Ring Service provides dedicated capacity over a single pair of fiber in two directions that increases capacity without limiting customer-required data interfaces.

Sub-Rate Systems

Sub-Rate System – provides a multiplexing system operating at 1.25 Gbps with 4 ports. Applicable to ESCONTM, Fast Ethernet, D1 Video, DVB-ASI Video, and OC-3/OC-3c port interfaces. Sub-rate multiplexing is offered at the serving wire center only for OC-3/OC-3c.^{/1/}

ESCONTM Sub-Rate System - provides a multiplexing system which allows customers to put up to 8 ESCONTM Channels (no other protocol) on one card.^{/1/}

GigE/FC/FICONTM Sub-Rate System - provides a multiplexing system which allows customers to put up to two (2) Gigabit Ethernet (GigE) Channels or up to two (2) Fibre Channels (1.0625 Gbps) or up to two (2) FICONTM Channels (1.0625 Gbps), or any combination thereof totaling two channels on the sub-rate system. Fibre Channel (2.125 Gbps) and FICONTM (2.125 bps) cannot be placed on this sub-rate system.

SONET OC-3/OC-12 Sub-Rate System – provides a multiplexing system which allows customers to put up to either 4 OC-3/OC-3c signals or OC-12/OC-12c signals or combinations thereof on one card. This sub-rate multiplexing system will have independent timing which allows multiple OC-3/OC-3c services or OC-12/OC-12c services on one card.^{/1/}

SONET OC-48 Sub-Rate System – provides a multiplexing system which allows customers to put up to four (4) OC-48/OC-48c signals on one card.^{/2/}

/1/ Available where facilities and equipment permit.

/2/ Available where facilities and equipment permit beginning November 30, 2005.

MULTI-SERVICE OPTICAL NETWORK RING SERVICE (cont'd)**A. Description (cont'd)**

MON Ring Service offers the following port interfaces:

IBM Protocols^{/1/}

ESCONTM (200 Mbps) – Enterprise Systems Connection. An IBM duplex optical connection used for computer-to-computer data exchange. ESCONTM is limited to a maximum distance of 43 km and actual data throughput is distance sensitive. ESCONTM is offered as a riding circuit where facilities and equipment permit.

ETR/CLOTM (8 Mbps – Manchester Encoded) – External Timing References/Control Link Oscillator. This protocol is used for IBM GDPSTM architecture for multiple-location host processors. ETR/CLOTM is limited to a maximum distance of 40 km.

FICONTM (1.0625 Gbps and 2.125 Gbps) – A higher-speed evolution of ESCONTM, enabling 1 Gbps connectivity among mainframes, storage devices and peripherals. FICONTM is limited to a maximum distance of 100 km and actual data throughput is distance sensitive. 1.0625 Gbps service is offered as a riding circuit where facilities and equipment permit. 1.0625 Gbps service is capable of being multiplexed on the GigE/FC/FICONTM Sub-Rate System.

ISC-1TM (1.0625 Gbps) – Inter-System Coupling. This protocol is used with IBM GDPSTM architecture for multiple-location host processors. ISC-1TM is limited to a maximum distance of 40 km.

ISC-3TM (2.125 Gbps) – Inter-System Channel. ISC-3TM links have a peak data rate of 2.125 Gbps and can interconnect IBMTM eServer z900 systems for distances up to 100 km.

/1/ ESCONTM, ETR/CLOTM, FICONTM, ISC-1TM, ISC-3TM and GDPSTM are registered trademarks of the International Business Machines (IBM) Corporation, Armonk, NY 10504.

MULTI-SERVICE OPTICAL NETWORK RING SERVICE (cont'd)**A. Description (cont'd)****Other Protocols**

Fibre Channel (1.0625 Gbps and 2.125 Gbps) – an industry standard protocol used to interconnect Storage Area Networks (SANs). Fibre Channel (FC) is limited to a maximum distance of 100 km and actual data throughput is distance sensitive. 1.0625 Gbps service is offered as a riding circuit where facilities and equipment permit. 1.0625 Gbps service is capable of being multiplexed on the GigE/FC/FICON™ Sub-Rate System.

Fast Ethernet – a version of Ethernet that allows data transmission rates of 100 Mbps. Offered as a riding circuit where facilities and equipment permit.

Gigabit Ethernet – a version of Ethernet that allows data transmission rates of 1 Gbps. Gigabit Ethernet (GigE) is offered as a riding circuit where facilities and equipment permit.

10 Gigabit Ethernet (WAN-PHY) – a version of Ethernet that allows data transmission rates of 9.953 Gbps with a WAN-PHY only interface.

10 Gigabit Ethernet (LAN-PHY) – a version of Ethernet that allows data transmission rates of 10.3125 Gbps with a LAN-PHY only interface.

D1 Video – uncompressed digital video signal operating at 270 Mbps. Offered as a riding circuit where facilities and equipment permit.

DVB-ASI Video – Digital Video Broadcasting – provides a 1310 nm optical interface at 270 Mbps. Offered as a riding circuit where facilities and equipment permit.

SONET OC-3/OC-3c - provides a fiber-based 155.52 Mbps synchronous optical full duplex data transmission capability. Offered as a riding circuit where facilities and equipment permit.^{/1/}

SONET OC-12/OC-12c - provides a fiber-based 622.08 Mbps synchronous optical full duplex data transmission capability. Offered as a riding circuit where facilities and equipment permit.^{/1/}

SONET OC-48/OC-48c - provides a fiber-based 2488.32 Mbps synchronous optical full duplex data transmission capability. Offered as a riding circuit where facilities and equipment permit beginning November 30, 2005^{/1/}

SONET OC-192/OC-192c - provides a fiber-based 9953.28 Mbps synchronous optical full duplex data transmission capability.^{/1/}

/1/ These port interfaces are available at both the Customer Premises Node and the Central Office Node. All other port interfaces are available only at the Customer Premises Node.

MULTI-SERVICE OPTICAL NETWORK RING SERVICE (cont'd)**B. Definitions**Bulk Power

Provides for customer premises node power which will be required if the customer's power source is AC.

Central Office Node

Provides for the termination of service at a serving wire center.

Channel Mileage (CM)

Provides for the transmission facilities between the serving wire centers associated with each node involved on the MON Ring. Channel mileage is calculated using the V and H coordinate method described in Part 15, Section 1. A one-mile minimum will be billed between nodes. A two-node ring configuration has a two-mile minimum, one mile from the Central Office Node to the Customer Premises Node, and one mile from the Customer Premises Node to the Central Office Node.

Channel Protection (Optional)

Provides protection for a single channel toward the network. It does not protect the channel against failure towards the customer interface. Protection reduces the maximum individual channel capacity of the system.

Customer Premises Node

Provides for the termination of service at the customer's premises and presents the various selected ports to the customer.

Optical Amplifier

Provides for an optical signal boost if the distance between nodes exceeds the transmission loss parameters (link loss specific). Engineering considerations may dictate the need for more than one optical amplifier on a circuit route. These additions may be service affecting. Optical amplifiers may be located at a Customer Premises Node, a Central Office Node or at a serving wire center.

Port

Provides the channel interface at any Node location for each unprotected or protected channel.

Regenerator

Provides for re-timing, re-shaping and regeneration of signals if degradation exceeds the dispersion or optical amplifier noise limits. Provided on a per shelf basis for up to 2.5 Gigabit Ethernet service. Provided on a per circuit, per each location the circuit is regenerated basis for up to 10 Gigabit Ethernet service.

Sub-Rate System

Allows for multiple ports, also called riding circuits, on a single wavelength.

MULTI-SERVICE OPTICAL NETWORK RING SERVICE (cont'd)**C. Terms and Conditions**

In addition to regulations set forth elsewhere in this Guidebook, the following regulations apply to MON Ring Service:

1. The customer-provided equipment must deliver the data signals for the MON Ring Service transport within the industry specification for the subscribed data services.
2. MON Ring Service provides physical layer transport only. The Company assumes no responsibility for the signals generated by the customer, for the quality of or defects in such signals, for the reception of signals by the customer, or address signaling to the extent addressing is performed by the customer. Error detection and correction of data generated by the customer is the customer's responsibility.
3. The service is considered interrupted when the customer reports a service disruption to the Company and the Company confirms that continuity of its service has been lost.
4. MON Ring Service may have distance limitations based on the services carried and may require routing through central offices based on loss limits between nodes. Services with facility length limitations may not be available on some MON rings, or may not be available between some nodes on certain MON rings.
5. Optical Amplifiers and/or Regenerators may have to be added to an MON Ring Service subsequent to the initial installation.
6. When additional services are added, such installation may cause a service interruption to existing unprotected channels, or a protection switch on protected channels.
7. Where conditions, equipment, and facilities permit, MON Ring Service will be offered in two configurations. Customers can purchase MON Ring with growth capacity up to 16 wavelengths or up to 32 wavelengths. The 32 wavelength system may, at the discretion of the Company, be built as two 16 wavelength systems sharing common fiber and some common equipment. Depending upon the configuration, conversion from a 16 wavelength MON Ring Service to a 32 wavelength MON Ring Service may not be available.
8. The minimum service period for MON Ring Service is 36 months or 60 months.

MULTI-SERVICE OPTICAL NETWORK RING SERVICE (cont'd)**C. Terms and Conditions (cont'd)**

9. MON Ring Service is provided at the option of the Company where facilities permit. If appropriate facilities are not available, Special Construction charges may apply.
10. Floor space for subsequent shelf growth at a Central Office Node beyond the initial installation will be provided where available, but cannot be guaranteed for subsequent shelf growth beyond the initial installation.
11. Prior to confirming an order for service, the Company will provide a proposed route diagram to the customer.
12. Installation of service will not begin until the customer has accepted the proposed routing by the Company.
13. Channel protection may not be available for all interface types.
14. Conversion from MON Service to MON Ring Service is not available.
15. Conversions from any other lower speed services to MON Ring Service are not available.
16. Where conditions, equipment, and facilities apply, the customer must first order the MON Ring Transport System followed by the MON Ring Channels. When ordering riding services, the customer must first order the MON Ring Transport System, followed by a MON Ring Sub-Rate System, over which these riding services will be assigned. When riding services are ordered on a Sub-Rate System, they are represented by different rate elements than those services ordered directly on the MON Ring.
17. Services with time-delay sensitive protocols have facility length limitations and may affect the design/availability of MON Ring Service. (E.g., CPU to CPU communications have a maximum distance limitation of 60 km.) The Company will work cooperatively with the customer to determine if the desired services can operate between the customers designated premises.
18. Neither electrical interfaces nor optical add/drop multiplexing are available with this service.

MULTI-SERVICE OPTICAL NETWORK RING SERVICE (cont'd)**D. Features****1. Standard Features**

MON Ring Service is available in different ring configurations utilizing Central Office Nodes and Customer Premises Nodes. The total number of circuits and total usable bandwidth to the customer depends upon the mix of services ordered and the specific traffic patterns of the customer. The company will determine the appropriate wavelength assignment and the design of the MON Ring.

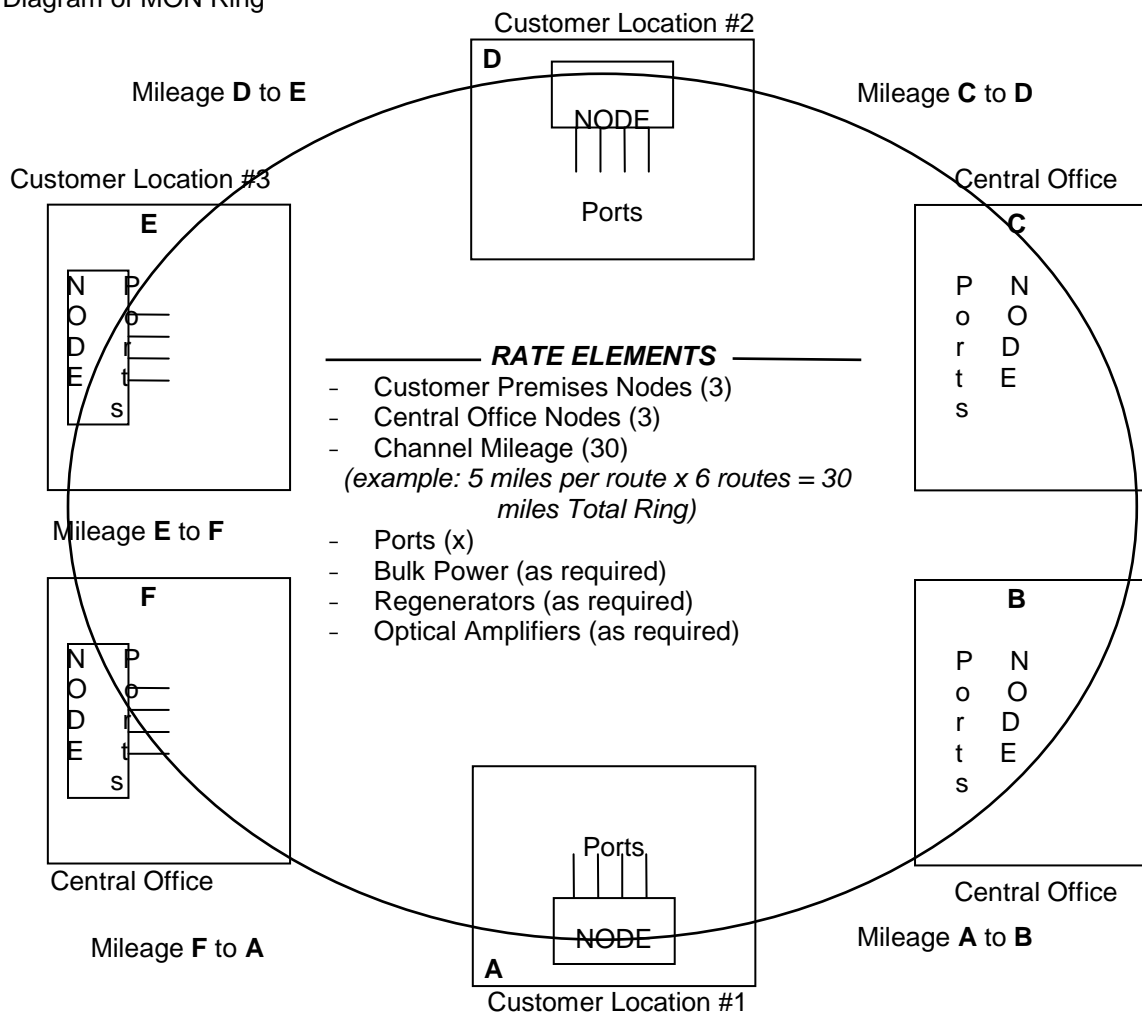
The minimum configuration would be two customer nodes either at a serving wire center or a customer premise site. If the customer nodes are not in a serving wire center, a central office management site for monitoring is required. An optical amplifier located at a serving wire center can be used as a monitoring site.

A combination of these configurations may be used in a network design depending on the customer's traffic pattern.

MULTI-SERVICE OPTICAL NETWORK RING SERVICE (cont'd)**D. Features (cont'd)**

1. Standard Features (cont'd)

Diagram of MON Ring



MULTI-SERVICE OPTICAL NETWORK RING SERVICE (cont'd)**D. Features (cont'd)****1. Standard Features (cont'd)**Route Diversity

MON Ring Service is configured with diversely routed fiber whenever possible. MON Ring Service will be available for protected channels 99.999% of the time and protected channels will switch within 50 milliseconds (not to exceed 2 seconds). Equipment interfaces towards the customer are not protected. Unprotected channels will be lost in the event of a fiber path failure on which the circuit is assigned.

Routing of fiber may be diversified from the customer's property line to their serving wire center or alternate serving wire center to ensure that loop fibers follow separate paths to the serving central office. In addition, IOF fiber (if applicable) may be diversified to ensure that with any serving wire center Central Office Node, the fibers do not egress and ingress at the same point. In cases where the central office does not have multiple entrance fiber facilities, the section of the fiber from the closest manhole (to the serving wire center) will be routed within the same duct structure.

At the customer's request, additional protection to the Customer Premises Nodes can be provided via diverse dual entrance facilities. This special request will cause the customer to incur special construction cost. Without this special request, diverse fiber is provided to the closest manhole to the customer location property line. The customer or building owner is responsible for providing conduit designed to meet industry standards and local fire and safety codes from the property line to the building to within the premises. The customer determines route and method of protection inside the premises.

In the case where dual entrance facilities are not established at the customer premises, facilities routed within the same duct structure from the property line to the building equipment location are not diverse.

MULTI-SERVICE OPTICAL NETWORK RING SERVICE (cont'd)**E. Technical References**

<u>Subject</u>	<u>Technical Reference</u>
LAN Interconnect Service - Token Ring Interface Specifications	AM TR-NIS-000100
LAN Interconnect Service - CSMA/CD Interface Specifications	AM TR-NIS-000104
OC-3, OC-12 and OC-48 Service Interface Specifications	AM-TR-NIS-000111
Digital Service Transmission Parameters	AM-TR-TMO-000101
Service's Network Channel and Network Channel Interface Codes	AM-TR-TMO-000080
Technical Interface Specifications (ESCON™)	AM-TR-NIS-000096
	AM-TR-NIS-000107
IBM Documentation (ESCON™)	IBM SA22-7202-XX
	IBM SA23-0394-XX
Fibre Channel (also includes FICON™ and ISC™) Fast Ethernet	ANSI X3.T9.3
	ANSI/IEEE 802.3
GigaBit Ethernet	IEEE 802.3x and z
	IEEE 802.3ae
D1 Video	ANSI/SMPTE 259M

The technical references can be obtained from:

AT&T at

www.sbc.com/public_affairs/regulatory_documents/tariffs /1,5932,448,00.html?pid=240

The Telcordia Publication(s) can be obtained from:

Telcordia Technologies, Inc.

8 Corporate Place, PYA 3A-184

Piscataway, New Jersey 08854-4156

MULTI-SERVICE OPTICAL NETWORK RING SERVICE (cont'd)**F. Prices**

1. Service Elements

<u>Description /Billing Code/</u>	<u>Nonrecurring Charge</u>
Administrative Charge	
- per service order /ORCMX/	\$125.00
Design and Central Office Connection Charge	
- per circuit /NRBCL/	600.00
Customer Connection Charge	
Service Establishment	
- per node /NRBBL/	7,500.00
Subsequent Installation	
- per subsequent shelf /NHCNL/	1,000.00

MULTI-SERVICE OPTICAL NETWORK RING SERVICE (cont'd)**F. Prices (cont'd)**

1. Service Elements (cont'd)

	Monthly Payment Term Payment Plans		
<u>Description /Billing Code/</u>	<u>36 Months</u>	<u>60 Months</u>	<u>Monthly Extension</u>
MON Ring Transport System			
Customer Premises Node (includes first shelf) /F2ND1/	\$7,800.00	\$6,240.00	\$10,920.00
- per subsequent shelf /F2NDS/	5,850.00	4,680.00	8,190.00
Central Office Node (includes first shelf) /F2NC1/	7,800.00	6,240.00	10,920.00
- per subsequent shelf /F2NCS/	5,850.00	4,680.00	8,190.00
Channel Mileage - per V&H mile or fraction thereof /1L5XX/	325.00	260.00	455.00
Optical Amplifier (as required)			
- C band(per location) /67QXX/	5,400.00	3,600.00	7,600.00
- L band(per location) /67QSX/ ^{/1/}	5,400.00	3,600.00	7,600.00
Regenerator (as required)			
- up to 2.5 Gbps (per shelf) /V8RXX/	7,500.00	5,000.00	10,500.00
- up to 10 Gbps(per circuit/per each location) /V8R2C/	15,000.00	10,000.00	21,000.00
Bulk Power (as required)			
- per first shelf (shelves 1-4) /CBVDX/	2,000.00	1,600.00	2,600.00
- per subsequent shelf (shelves 5-8) /CBVDS/	1,600.00	1,300.00	2,100.00

/1 Available where facilities and equipment permit.

MULTI-SERVICE OPTICAL NETWORK RING SERVICE (cont'd)**F. Prices (cont'd)**

1. Service Elements (cont'd)

<u>Description /Billing Code/</u>	Monthly Payment Term Payment Plans		<u>Monthly Extension</u>
	<u>36 Months</u>	<u>60 Months</u>	
MON Ring Channels			
Ports			
- per port/per circuit terminating location			
ETR/CLO™			
- unprotected channel /POYKW/	\$975.00	\$750.00	\$1,400.00
FICON™ (1.0625 Gbps)			
- unprotected channel /POYMW/	975.00	750.00	1,400.00
- protected channel /POYMP/	1,950.00	1,500.00	2,800.00
FICON™ (2.125 Gbps)			
- unprotected channel /POYWW/	1,700.00	1,300.00	2,400.00
- protected channel /POYWP/	3,400.00	2,600.00	4,800.00
ISC-1™			
- unprotected channel /POYJW/	3,250.00	1,250.00	4,600.00
- protected channel /POYJP/	3,600.00	2,500.00	5,000.00
ISC-3™			
- unprotected channel /POY9W/	3,750.00	2,500.00	5,000.00
- protected channel /POY9P/	7,500.00	5,000.00	10,000.00
Fibre Channel (1.0625 Gbps)			
- unprotected channel /POYNW/	1,200.00	900.00	1,700.00
- protected channel /POYNP/	2,400.00	1,800.00	3,400.00
Fibre Channel (2.125 Gbps)			
- unprotected channel /POYYW/	1,700.00	1,300.00	2,400.00
- protected channel /POYYP/	3,400.00	2,600.00	4,800.00
Gigabit Ethernet			
- unprotected channel /POYLW/	1,200.00	900.00	1,700.00
- protected channel /POYLP/	2,400.00	1,800.00	3,400.00

MULTI-SERVICE OPTICAL NETWORK RING SERVICE (cont'd)**F. Prices (cont'd)**

1. Service Elements (cont'd)

<u>Description /Billing Code/</u>	<u>Monthly Payment Term Payment Plans</u>		<u>Monthly Extension</u>
	<u>36 Months</u>	<u>60 Months</u>	
MON Ring Channels (cont'd)			
Ports			
- per port/per circuit terminating location (cont'd)			
10 Gigabit Ethernet (WAN PHY)			
- unprotected channel /POYTW/	\$15,000.00	\$12,500.00	\$21,000.00
- protected channel /POYTP/	20,000.00	16,700.00	28,000.00
10 Gigabit Ethernet(LAN-PHY)			
- unprotected channel /POYUW/	15,375.00	12,815.00	21,525.00
- protected channel /POYUP/	20,500.00	17,120.00	28,700.00
SONET OC-12/OC-12c			
- unprotected channel /POYFW/	1,300.00	1,000.00	1,900.00
- protected channel /POYFP/	2,600.00	2,000.00	3,700.00
SONET OC-48/OC-48c ^{/1/}			
- unprotected channel /POYGW/	4,400.00	3,700.00	6,000.00
- protected channel /POYGP/	6,600.00	5,560.00	9,000.00
SONET OC-192/OC-192c			
- unprotected channel /POYOW/	15,000.00	12,500.00	21,000.00
- protected channel /POYOP/	20,000.00	16,700.00	28,000.00

/1/ Available only where facilities and equipment permit.

MULTI-SERVICE OPTICAL NETWORK RING SERVICE (cont'd)**F. Prices (cont'd)**

1. Service Elements (cont'd)

<u>Description /Billing Code/</u>	<u>Monthly Payment Term Payment Plans</u>		<u>Monthly Extension</u>
	<u>36 Months</u>	<u>60 Months</u>	
MON Ring Channels (cont'd)			
Ports			
- per port/per circuit terminating location (cont'd)			
GigE/FC/FICON™ Sub-Rate System			
- unprotected channel /POY1W/	\$875.00	\$700.00	\$1,140.00
- protected channel /POY1P/	1,750.00	1,400.00	2,280.00
GigE Riding Circuit ^{/1/}			
- unprotected channel /POY4W/	500.00	400.00	650.00
- protected channel /POY4P/	1,000.00	800.00	1,300.00
Fibre Channel (1.065 Gbps)Riding Circuit ^{/1/}			
- unprotected channel /POY6W/	500.00	400.00	650.00
- protected channel /POY6P/	1,000.00	800.00	1,300.00
FICON™ (1.065 Gbps)Riding Circuit ^{/1/}			
- unprotected channel /POY7W/	400.00	320.00	480.00
- protected channel /POY7P/	800.00	640.00	960.00

/1/ Available only when ordered with GigE/FC/FICON™ Sub-Rate System and Customer - Specific Offering, Continental Casualty Company, Chicago, Illinois, Part 20, Section 15.

MULTI-SERVICE OPTICAL NETWORK RING SERVICE (cont'd)**F. Prices (cont'd)**

1. Service Elements (cont'd)

<u>Description /Billing Code/</u>	<u>Monthly Payment Term Payment Plans</u>		<u>Monthly Extension</u>
	<u>36 Months</u>	<u>60 Months</u>	
MON Ring Channels (cont'd)			
Ports			
- per port/per circuit terminating location (cont'd)			
ESCON ^{1M/1/}			
- unprotected channel /PWY1W/	\$1,300.00	\$1,000.00	\$1,900.00
- protected channel /PWY1P/	2,600.00	2,000.00	3,700.00
Fast Ethernet ^{/1/}			
- unprotected channel /PWY2W/	1,300.00	1,000.00	1,900.00
- protected channel /PWY2P/	2,600.00	2,000.00	3,700.00
D1 Video Circuit ^{/1/}			
- unprotected channel /PWY3W/	1,300.00	1,000.00	1,900.00
- protected channel /PWY3P/	2,600.00	2,000.00	3,700.00
DVB-ASI Video ^{/1/}			
- unprotected channel /POY8W/	2,100.00	1,650.00	3,075.00
- protected channel /POY8P/	4,200.00	3,300.00	5,775.00
SONET OC-3/OC-3c ^{/1/}			
- unprotected channel /PWY4W/	1,300.00	1,000.00	1,900.00
- protected channel /PWY4P/	2,600.00	2,000.00	3,700.00
OC-48 Sub-Rate System ^{/1/}			
- unprotected channel /POYRW/	3,500.00	2,750.00	4,250.00
- protected channel /POYRP/	7,000.00	5,500.00	8,500.00
SONET OC-48/OC-48c Riding Circuit ^{/1//2/}			
- unprotected channel /POYZW/	1,900.00	1,200.00	2,800.00
- protected channel /POYZP/	3,800.00	2,400.00	5,600.00

/1/ Available only where facilities and equipment permit beginning November 30, 2005.

/2/ Available only when ordered with OC-48 Sub-Rate System beginning November 30, 2005.

MULTI-SERVICE OPTICAL NETWORK RING SERVICE (cont'd)**F. Prices (cont'd)**

1. Service Elements (cont'd)

<u>Description /Billing Code/</u>	<u>Monthly Payment Term Payment Plans</u>		<u>Monthly Extension</u>
	<u>36 Months</u>	<u>60 Months</u>	
MON Ring Channels (cont'd)			
Ports			
- per port/per circuit terminating location (cont'd)			
Sub-Rate System ^{/1/}			
- unprotected channel /POYSW/	\$1,300.00	\$1,000.00	\$1,900.00
- protected channel /POYSP/	2,600.00	2,000.00	3,700.00
ESCON™ Riding Circuit ^{/1//2//3/}			
- unprotected channel /POYHW/	100.00	100.00	150.00
- protected channel /POYHP/	100.00	100.00	150.00
Fast Ethernet Riding Circuit ^{/1//2/}			
- unprotected channel /POYCW/	325.00	250.00	400.00
- protected channel /POYCP/	500.00	400.00	650.00
D1 Video Riding Circuit ^{/1//2/}			
- unprotected channel /POYVW/	100.00	100.00	150.00
- protected channel /POYVP/	100.00	100.00	150.00
DVB ASI Video Riding Circuit ^{/1//2/}			
- unprotected channel /PWY5W/	100.00	100.00	100.00
- protected channel /PWY5P/	100.00	100.00	100.00
SONET OC-3/OC-3c Riding Circuit ^{/1//2//4/}			
- unprotected channel /POYEW/	100.00	100.00	150.00
- protected channel /POYEP/	100.00	100.00	150.00

/1/ Available where facilities and equipment permit.

/2/ Available only when ordered with a Sub-Rate System.

/3/ Also available with ESCON Sub-Rate System.

/4/ Also available with SONET OC-3/OC-12 Sub-Rate System.

MULTI-SERVICE OPTICAL NETWORK RING SERVICE (cont'd)**F. Prices (cont'd)**

1. Service Elements (cont'd)

	Monthly Payment Term Payment Plans		
<u>Description /Billing Code/</u>	<u>36 Months</u>	<u>60 Months</u>	<u>Monthly Extension</u>
MON Ring Channels (cont'd)			
Ports			
- per port/per circuit terminating location (cont'd)			
ESCON TM Sub-Rate System ^{/1/}			
- unprotected channel /POY2W/	\$1,500.00	\$1,125.00	\$1,950.00
- protected channel /POY2P/	3,000.00	2,250.00	3,900.00
OC-3/OC-12 Sub-Rate System ^{/1/}			
- unprotected channel /POY3W/	1,000.00	750.00	1,300.00
- protected channel /POY3P/	2,000.00	1,500.00	2,600.00
OC-12/OC-12c Riding Circuit ^{/1//2/}			
- unprotected channel /POY5W/	500.00	375.00	700.00
- protected channel /POY5P/	1,000.00	750.00	1,400.00

/1/ Available only where facilities and equipment permit.

/2/ Available only when ordered with OC-3/OC-12 Sub-Rate System.

MULTI-SERVICE OPTICAL NETWORK RING SERVICE (cont'd)**F. Prices (cont'd)**

2. Payment Plans

- Term Payment Plans

MON Ring Service TPP provides the customer with discounted rates for a 36 or 60-month period.

After the expiration of 25 months of a 36-month TPP term or 42 months of a 60-month TPP term, any MON Ring components added to the existing service configuration provided under that TPP will be billed under the monthly extension rates.

Refer to *Term Payment Plans* in Part 15, Section 1.

- Single Payment Option (SPO)

A single payment option is available for this service. Refer to *Term Payment Plans* in Part 15, Section 1 for calculating Single Payment Options.

3. Termination Charges

Termination Charges will apply to services terminated prior to the contracted period. For purposes of applying Termination Charges, all rate elements making up a MON Ring service are subject to Termination Charges.

If, during the duration of the TPP, the customer wishes to rearrange or move a Customer Premises Node, a Termination Charge will apply.

Refer to *Termination Charges* in Part 15, Section 1 for calculating Termination Charges.

MULTI-SERVICE OPTICAL NETWORK RING SERVICE (cont'd)

F. Prices (cont'd)

4. Credit Allowance

A credit allowance will be given for interruptions of service. An interruption of service will start when an inoperative service is reported to the Company and end when the service is operative.

Any protected service interruption of greater than ten consecutive seconds as a result of a failure on the protected portion of the circuit will result in a credit equal to one month's bill for the individual port-to-port connections involved.

If the interruption occurs on an unprotected portion of the circuit, normal terms and conditions for credit allowances will apply.

In any month, as a result of an interruption, the total credit per rate element of the interrupted service may not exceed 100 percent of the monthly charge for that particular rate element.

Refer to *Credit Allowance* in Part 15, Section 1 for calculating Credit Allowances.

MULTI-SERVICE OPTICAL NETWORK RING SERVICE (cont'd)**G. Customer-Specific Offerings**

Continental Casualty Company, with its location at:

- Chicago, Illinois

10 Gigabit Sub-Rate System

<u>Description</u>	<u>Monthly Payment Term Payment Plans</u>		<u>Monthly Extension</u>
	<u>36 Months</u>	<u>60 Months</u>	
Ports			
- per port/per circuit terminating location (cont'd)			
10 Gigabit Sub-Rate System:			
- unprotected channel	\$2,190.00	\$1,750.00	\$2,850.00
- protected channel	\$4,380.00	\$3,500.00	\$5,700.00

10 Gigabit Sub-Rate System can support up to:

Eight full rate Gigabit Ethernet (GigE)
Channels, Fibre Channels (1.0625 Gbps),
FICONTM Channels (1.0625 Gbps), or
combinations thereof over a single
wavelength.

OR

Four full rate Fibre Channels (2.125 Gbps) or
FICON^{TM/1/} Channels (2.125 Gbps), or
combinations thereof over a single
wavelength.

/1/ FICONTM is a registered trademark of the International Business Machines (IBM) Corporation, Armonk, NY 10504.

MULTI-SERVICE OPTICAL NETWORK RING SERVICE (cont'd)**G. Customer-Specific Offerings**

Continental Casualty Company, with its location at:

- Chicago, Illinois

10 Gigabit Sub-Rate System

<u>Description</u>	<u>Monthly Payment Term Payment Plans</u>		<u>Monthly Extension</u>
	<u>36 Months</u>	<u>60 Months</u>	
GigE Riding Circuit ^{/1/}			
Fibre Channel (1.0625 Gbps) Riding Circuit ^{/1/}			
FICON ^{TM/3/} (1.0625 Gbps) Riding Circuit ^{/1/}			
Fibre Channel (2.125 Gbps) Riding Circuit ^{/2/}			
- unprotected channel	\$875.00	\$700.00	\$1,150.00
- protected channel	\$1,750.00	\$1,400.00	\$2,300.00
FICON ^{TM/3/} (2.125 Gbps) Riding Circuit ^{/2/}			
- unprotected channel	\$700.00	\$560.00	\$840.00
- protected channel	\$1,400.00	\$1,120.00	\$1,680.00

/1/ See the GigE, Fibre Channel, and FICONTM Riding Circuits on the GigE/FC/FICONTM Sub-Rate System described earlier in this offering.

/2/ Available only when ordered with 10 Gigabit Sub-Rate System.

/3/ FICONTM is a registered trademark of the International Business Machines (IBM) Corporation, Armonk, NY 10504.

SERIES 7000 CHANNEL SERVICES**A. Types and Description**

Channels are furnished in systems of one or more channels. Each channel is equipped for the transmission of video material of a single television program at one time. Type 7003 is also equipped for the transmission of associated audio material. The transmission characteristics and the various types of services furnished within this Series are as follows:

1. Local Channels^{/1/}

Type 7001B Channels furnished for monthly use between two stations within an exchange area or between two stations in separate exchange areas where the mileage, determined in accordance with Part 15, Section 2, is twenty-five miles or less. Local channels are suitably arranged for video transmission with a frequency range of approximately three MHz. A local channel of the Company is not designed for use where the through transmission of video material between stations involves more than four local channels, furnished by the Company or by others.

2. Local Distribution System^{/2/}

Type 7003 Channels furnished for the transmission of monochrome signals, comprising 525 scanning lines per frame, interlaced two to one in successive fields, with a frame frequency of 30, a field frequency of 60, and a line frequency of 15,750 per second.

/1/ This service will not be provided to new customers after November 26, 1975. Customers having this service on that date may retain it at its present or future locations on the same continuous property at the rates shown.

/2/ This service will not be provided to new customers on and after July 17, 1978.

SERIES 7000 CHANNEL SERVICES (cont'd)**A. Types and Description (cont'd)**2. Local Distribution System (cont'd)^{/1/}

A local distribution system is furnished within an exchange area from a signal source to its receiving locations generally in one direction of transmission only, and may include facilities to provide service to a receiving location outside the exchange area where the airline distance does not exceed 25 miles from its signal source, and consists of:

- 1 to 6 channels.
- channel input equipment for 1 to 6 channels for use at a signal source to convert the customer's signals from baseband frequencies to frequencies of approximately 25 to 88 megacycles.
- channel output equipment at receiving locations, to deliver signals at standard VHF broadcast frequencies.
- outlet connections for television viewers, with distribution amplifier equipment where required, and associated building wiring. These connections may be furnished by the customer provided the customer furnishes all such connections required within a building.

B. Regulations

In addition to the regulations applicable to Series 1000, Series 2000 and Series 3000 Services, the following regulations apply:

1. Connecting Lines and Facilities

The rates and regulations of the Company apply to systems furnished by the Company and a connecting company, provided and so long as such connecting company accepts a prorate of such charges. If, however, the connecting company does not accept such prorate, the charges of the connecting company apply for the portions of the channels furnished by the company involved.

/1/ This service will not be provided to new customers on and after July 17, 1978.

SERIES 7000 CHANNEL SERVICES (cont'd)**B. Regulations (cont'd)**

2. Type 7001B

a. Undertaking of the Company

1. Channels are furnished subject to availability of facilities and the requirement of exchange and long distance service and are derived in such manner as the Company may elect.
2. Channels are furnished only for communications in which the customer has a direct interest and shall not be used for the collection, transmission or delivery of communications for others.
3. The resale of the use of any facility furnished by the Company is not permitted and no facility furnished a customer may be used to furnish to others a telephone service or any other service furnished by the Company.

b. Cancellation or Change of Application Prior to Furnishing of Channels

When an application for channels is canceled or changed in whole or in part:

1. After completion of the installation, the customer is required to pay the nonrecurring and minimum charges which would apply if the channels had been placed in service.
2. Prior to completion of the installation, the customer may be required to pay the costs incurred by the Company but not to exceed the amount specified in 1. preceding.

c. Application of Rates for Fractional Periods

Where rates are on a "per month" basis, the minimum charge will be for one month. If the period of use exceeds one month, the charges for the fractional part of a month following and consecutive with a full month will be a proportionate part of the monthly charges based on the actual number of days the facilities are furnished. For the purpose of administering this regulation with respect to the determination of charges for a fractional part of a month, each month is considered to have thirty days.

SERIES 7000 CHANNEL SERVICES (cont'd)**B. Regulations (cont'd)**

2. Type 7001B (cont'd)

d. Provision of Channels

1. Type 7001B channel facilities are the only channel facilities furnished by the Company for video transmission in connection with television viewers. Facilities furnished with other services or channels may not be connected with video transmission channels or with television viewers at customers' stations either directly or indirectly, except that Series 6000 channels as provided for in Part 15, Section 2 may be used in providing the accompanying audio material.
2. Channels of the Company may be interconnected at a station provided no interference with or impairment of Company channels or services will result. Local channels of the Company or of others may be connected with other local channels of the Company.
3. All station equipment and station wiring, other than any facilities necessary for the suitable termination of the channel facilities on the customer's premises, shall be provided by the customer. Video channel wiring on the property owned or leased by the customer and upon which the station is located may be included as station wiring.
4. The customer is responsible for providing suitable electric power at a suitable outlet when and where required. In the event of a power failure, no allowance is made for interruption of service.
5. All customer-provided apparatus shall be such that its connection to the Company channel does not interfere with service over other Company channels. In cases in which additional protective equipment is required, this shall be provided by the customer or by the Company at the customer's expense. Such equipment shall be suitable to avoid hazard of damage to Company plant or of injury to employees or to the public because of the character or location of a customer-provided apparatus and of sources of power to which it is connected.

SERIES 7000 CHANNEL SERVICES (cont'd)**B. Regulations (cont'd)**3. Type 7003 Channels^{/1/}

Local distribution systems are furnished only for transmission of educational television program material by public or private schools, non-commercial educational television broadcast stations and other non-commercial education organizations.

- a. Systems are furnished between the premises of the customer, authorized users, and any combination thereof. Special operation and supervision are not furnished.
- b. Station facilities and wiring, other than items specified in c. following, will be furnished by the customer. The facilities furnished by the customer will include where required:
 - video cameras, microphones, consoles, monitors and like studio equipment
 - television viewers
 - antennas to pick up broadcast television material
 - power and space and supporting structures (including on premises conduit) for Company equipment located on the premises of a customer or authorized users, including those for terminals of interexchange systems.
- c. Pick-Up and Retransmission of Broadcast Signals

Where a customer desires to pick-up and retransmit broadcast television material to channels furnished hereunder, the customer is responsible for making all arrangements with stations, networks or other parties for the necessary authorizations for the off-the-air pickup and use for retransmission, and the Company shall be indemnified and saved harmless by the customer from any liability arising out of the use of such material.

- d. Intrastate-Interstate System

Channels furnished by the Company in Illinois under this guidebook may be used in conjunction with interstate channels to provide a complete television system.

Where both intrastate and interstate channels are used, all channels in the system are numbered for rate application, the channel having the highest total rate mileage is considered the first channel and succeeding numbered channels will be determined consecutively in order of decreasing rate mileages and the charges for intrastate channels and associated equipment and arrangements are determined in accordance with C.2. following.

/1/ This service will not be provided to new customers on and after July 17, 1978. Customers having this service on that date may retain it in its present configuration on the same continuous property at the rates shown.

SERIES 7000 CHANNEL SERVICES (cont'd)**B. Regulations (cont'd)**3. Type 7003 Channels^{/1/} (cont'd)

e. Interconnection of Channels

The customer may interconnect at his premises channels provided by the Company hereunder with the following classes of channels:

- video, audio and television channels furnished by the Company
- studio-to-transmitter channels provided by television broadcast stations
- television channels operating on broadcast frequencies
- local television distribution systems provided by the customer
- interexchange television systems provided by the customer provided that
- such connections are made at a location where program material is used for television viewing for transmission over a local distribution system, or for transmission by a broadcast station and where the customer has in attendance adequate personnel and equipment for testing with the Company
- such connections do not result in any transmissions from channels furnished hereunder, or via any other channels, into video, audio or television interexchange channels furnished by the Company
- the customer facilities will be so constructed, maintained and operated as to work satisfactorily with channels of the Company
- when Company channels are connected with channels provided other than by the Company, the Company's responsibility for transmission is limited to providing and maintaining satisfactory transmission capability between the terminals of the channel facilities it furnishes.

/1/ This service will not be provided to new customers on and after July 17, 1978. Customers having this service on that date may retain it in its present configuration on the same continuous property at the rates shown.

SERIES 7000 CHANNEL SERVICES (cont'd)**C. Rates**

The rates shown below apply for local distribution systems, interexchange systems and additional arrangements furnished in exchanges of the Company in Illinois. Where a system involves a location or locations in an exchange or exchanges of another telephone company the rates specified below also apply for the facilities and equipment provided by the company involved, except as provided for in B.1. preceding. Where unusual construction costs are involved in providing facilities, additional charges may apply.

1. Monthly Service - 525 Line Monochrome ^{/1/}	<u>Per Mo.</u>
a. Type 7001B (Local Channels)	
Monthly Service - 24 hours per day	
Monthly Charge per channel plus mileage charge /IL2AJ/	\$194.81
- First 8 miles per 1/4 airline mile or fraction thereof /1L2AR/	22.29
- Each additional airline mile or fraction thereof /IL2AS/	39.25

/1/ This service will not be provided to new customers after November 26, 1975. Customers having this service on that date may retain it at its present or future locations on the same continuous property at the rates shown.

SERIES 7000 CHANNEL SERVICES (cont'd)**C. Rates (cont'd)**2. Local Distribution System Channels – Type 7003^{/1/}

(Minimum charge is that for 12 months)

Per Mo.

- a. Between buildings not on the same continuous property,
-
- per 1/4 mile, or fraction thereof

First channel	\$14.54
Second channel	4.85

Minimum charge for the total number of channels between a
signal source and a receiving location, per 1/4 airline mile, or fraction thereofNote: The maximum mileage charge for any two-point section of a Local Distribution
System will be equivalent of twenty-five miles of Interexchange System channel at
the appropriate channel rate.

- b. Channel Input Equipment, per signal source

Input for first channel	38.77
Input for second channel	29.08

- c. Channel Output Equipment, per receiving location

First output	7.27
Second to sixth outputs, inclusive, each	4.85

3. Additional Arrangements^{/2/}

- a. Channel Output at a Receiving Location Arranged as a Signal Source

To convert a VHF signal to video and audio baseband frequencies

- Per channel arranged	12.12
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/1/ This service will not be provided to new customers on and after July 17, 1978.

/2/ This service will not be provided to new customers on and after July 17, 1978. Customers having
this service on that date may retain it in its present configuration on the same continuous property
at the rates shown.

SERIES 10000 CHANNEL SERVICES (ENTRANCE FACILITIES)^{/1/}**A. Types and Descriptions**

Series 10000 channels are furnished to the customer by the Company for the purpose of extending customer-provided communications systems to a premises of the customer or authorized user. Channels are furnished for half-duplex or duplex operation on a two-point basis for a minimum period of one month.

Type 10001 Approximate bandwidth of 300 - 3000 Hertz

Furnished, to the extent permitted by the normal transmission characteristics of this grade of channel, for types of transmission similar to those set forth for Series 1000, 2000 and 3000 channels.

B. Regulations

In addition to the regulations contained elsewhere in this guidebook, the following regulations apply to Series 10000 channels.

Type 10001 - The customer's or authorized user's premises must be located 25 airline miles or less from the point at which the customer-provided communication channel is connected to the Company entrance facility.

Entrance facilities may be connected at the premises of the customer or authorized user to a local or long distance central office line in accordance with the regulations covered in Part 2, Section 9, paragraph B.2.d.4.

/1/ This service will not be provided to new customers on and after July 6, 1986. Customers having the service prior to that date may retain it in its present configuration. Additions and rearrangements are not permitted.

SERIES 10000 CHANNEL SERVICES (ENTRANCE FACILITIES) (cont'd)**C. Rates and Charges**

Type 10001

Rates and charges for entrance facilities will be provided in this Section on a case-by-case basis.

	Initial Nonrecurring <u>Charge</u>	Monthly <u>Rate</u>	Termination <u>Charge</u>
<u>Midwestern Relay Company</u>			
Two 2-Wire Voice Grade Entrance Facilities between the Merchandise Mart, Chicago and WLS, 190 North State Street, Chicago	\$96.62	\$14.47	\$266.53
<u>Midwestern Relay Company</u>			
Two 2-Wire Voice Grade Entrance Facilities between the Merchandise Mart, Chicago and CBS, 630 North McClurg Court, Chicago	96.62	17.38	290.76
<u>Chessie System</u>			
Thirty 4-Wire Voice Grade Entrance Facilities between the Prospect (Centrex) C.O. and the Norfolk and Western Microwave Facility at 2534 W. Columbus Drive, Chicago			
Initial circuit /VALCS/	906.20	45.31	--
Each additional circuit ^{/1/} /VALCS/ (29 maximum)	518.52	45.31	--

Termination charges will be calculated as the lesser of the following:

1. The termination charges stated above, which reduces 1/60 for each month in service.
- or**
2. In addition to any unpaid Special Construction or nonrecurring charges, excluding any waived charges, customer termination liability for cancellation of Series 10000 Channel Service (Entrance Facilities) shall be equal to fifty percent (50%) of all recurring charges for the remaining months of the customer's term.

/1/ When installed at the same time as the initial circuit

SERIES 10000 CHANNEL SERVICES (ENTRANCE FACILITIES) (cont'd)**C. Rates and Charges (cont'd)**

Type 10001 (cont'd)

	Initial Nonrecurring Charge	Monthly Price
<u>Burlington Northern Railroad</u>		
Two Type 3C Voice Grade Entrance Facilities between the Wabash (Centrex) central office and the Illinois Central Gulf Railroad's Microwave Facility at 233 N. Michigan Avenue, Chicago, Illinois		
Initial circuit /VALBR/	\$479.75	\$18.94
One additional circuit (when installed at same time as initial circuit) /VALBR/	334.37	18.94
Third circuit (installed at a later date than others) /VALBR/	479.75	18.94
<u>Illinois Power Company</u>		
Three Type 3A Voice Grade Entrance Facilities between Decatur Main (Centrex) central office and the Microwave Site at 2701 N Broadway, Decatur, Illinois /VALPC/		
	983.74	170.77
<u>Natural Gas Pipeline Company</u>		
Two Type 3C Voice Grade Entrance Facilities between the Wabash (Centrex) central office and the Grand Trunk Railroad's Microwave Facility at 105 W. Adams, Chicago, Illinois /VALNG/		
	873.25	35.95
<u>Cities Service Oil Company</u>		
Four Type 1B2 Voice Grade Entrance Facilities between 100 E. Ogden, Westmont, Illinois, and 400 E. Sibley Blvd., Harvey, Illinois.		
Initial Circuit /VALCO/	1,318.11	141.95
Each additional circuit - 3 maximum (when installed at same time as initial circuit) /VALCR/	659.06	125.48

SERIES 10000 CHANNEL SERVICES (ENTRANCE FACILITIES) (cont'd)**C. Rates and Charges (cont'd)**

Type 10001 (cont'd)

	Initial Nonrecurring <u>Charge</u>	<u>Monthly Price</u>
<u>Commonwealth Edison Company</u>		
Three Type 2C Voice Grade Entrance Facilities between <u>1303 N. Milwaukee Avenue</u> and the substation west of Route 63 and south of Casey Road, Libertyville, Illinois		
Initial Circuit /VALCT/	\$649.36	\$43.36
Each additional circuit - 2 maximum (when installed at same time as initial circuit) /VALCT/	600.90	43.36
<u>Union Electric Company</u>		
One Type 1B2 Voice Grade Entrance Facility between <u>Illinois</u> Power Company's Wood River Plant and Union Electric's tower in Alton, Illinois /VALUE/		
	770.00	73.98

D. Exceptions

	Initial Nonrecurring <u>Charge</u>	<u>Monthly Price</u>
In compliance with the Federal Communications Commission Memorandum Opinion and Order 79-154, adopted March 15, 1979, "Interconnections with Private Interstate Communications Systems", and pending the completion of a rule making proceeding announced therein, the following facilities are provided without regard to the 25 mile limitation specified in 2.2 preceding.		
<u>ARINC</u>		
A Voice Grade Facility between 900 Lee Street, Elk Grove, and the ARCO Microwave Facility at 400 East Sibley Blvd., Harvey /VALAR/	\$1,153.35	\$286.36

MISCELLANEOUS CHANNEL SERVICES**A. Joint Use Arrangements^{/1/}****1. Regulations**

- a. Joint use arrangements are offered on those interexchange channel services which utilize Series 1000, Series 2000 and Series 3000 channels and equipment. Joint use arrangements are not offered on those services which utilize, in whole or in part, Series 6000 or Series 10000 channels, Foreign Exchange Service, or any channel service where such service is furnished for use in connection with composite data service.
- b. When the Telecommunications Channel Service is arranged for joint use, the service may be used for the transmission of communications to or from the joint user and relating directly to the joint user's business.
- c. The Company shall not be responsible for the manner in which the joint use of the service will be allocated. Orders which involve the start, rearrangement, release, or discontinuance of service will be accepted by the Company only from the customer.
- d. A joint user must have a station and local channel on the interexchange service and the station must be located on the premises of the joint user, except that these requirements do not apply to a joint user of the interexchange service with respect to the joint user's use of additional channels created by the customer from the interexchange service in accordance with the provisions of this guidebook, providing the customer whose channel is to be so connected is a joint user of the service from which the channels have been created by the other customer.

/1/ Joint Use Arrangements will not be provided as new service on and after March 17, 1989. Customers having this service as of March 17, 1989, may retain it at the rates shown for a period of two years, up to and including March 16, 1991. During this period the customer may add or delete joint users as required. At the end of the two year period Joint Use Arrangements will be discontinued.

MISCELLANEOUS CHANNEL SERVICES (cont'd)**A. Joint Use Arrangements^{/1/} (cont'd)****2. Rates**

- a. Joint use arrangements are furnished at the following monthly rate for each joint user.

	<u>Per Mo.</u>
Joint User Arrangement /JNP/	\$9.69

- b. All charges for the service, including the charges for the joint use arrangement and for local channels and station equipment furnished for the joint users as part of the Telecommunications Channel Service, will be computed as though the service were to be billed to the customer. The customer and each joint user will be billed for the components of the service which are furnished exclusively to each of them for their individual use. The charges for components of the service which are jointly used will be allocated for billing purposes in accordance with percentages of use specified by the customer. The specified percentages shall remain in effect for a minimum of one month and such percentages on file on the first day of the customer's billing cycle will be used in computing that month's billing. Without affecting the customer's ultimate responsibility for payment of all charges for the service, each joint user shall be responsible for the payment of the charges billed to the joint user in accordance with this subparagraph.

/1/ Joint Use Arrangements will not be provided as new service on and after March 17, 1989. Customers having this service as of March 17, 1989, may retain it at the rates shown for a period of two years, up to and including March 16, 1991. During this period the customer may add or delete joint users as required. At the end of the two year period Joint Use Arrangements will be discontinued.

DIRECT HIGH CAPACITY SERVICE^{/1/}**1.544 Megabits Per Second Digital Service****A. General**

1. 1.544 Megabits per second (Mbps) Digital Service consists of two-point digital channels and equipment which provide for simultaneous two-way transmission of serial, isochronous digital signals at a transmission speed of 1.544 Mbps. 1.544 Mbps Digital Service may be used to connect:
 - a. Two customer premises.
 - b. A customer's premises and a Company office for access to Centrex.
 - c. Between Company offices for access between Centrex Services or Integrated Information Network.
 - d. A customer's premises and a Company office for digital trunk access with Digital Trunking Service and ISDN Prime.
 - e. A customer's premises and a Company office for termination in a Central Office Multiplexer.
 - f. A customer's premises and a Company office for interconnection to Voice Gateway type network equipment as described in Technical Reference AM-OAT-000025.
2. The regulations and rates specified herein are in addition to the applicable regulations and rates specified in this and other Part 15, Section 3.
3. 1.544 Megabits Digital Service is classified as a non-competitive local exchange and interexchange telecommunications service, except as provided for in Part 15, Section 3.

B. Regulations

1. Availability of Service
 - a. 1.544 Mbps Digital Service can only be provided from central offices equipped for appropriate digital transmission.
 - b. Since all central offices are not presently equipped to furnish 1.544 Mbps Digital Service, a service inquiry must be made to determine availability of service.

/1/ 1.544 Mbps service will no longer be available as Direct High Capacity Service under the provisions of this Section, on or after February 11, 1992, except for those Channelization Equipment, Contract Option Plan and Option B customers of record as of February 11, 1992, subject to the provisions of this Guidebook.

On and after February 11, 1992, 1.544 Mbps service will be available to new and existing customers as DS1 Service under the provisions of Part 15, Section 3.

DIRECT HIGH CAPACITY SERVICE^{/1/} (cont'd)**1.544 Megabits Per Second Digital Service (cont'd)****B. Regulations (cont'd)****2. Provision of Service**

- a. 1.544 Mbps Digital Service is available only on a two-point basis.
- b. 1.544 Mbps Digital Service is furnished on a full-time basis (24 hours a day, seven days a week).
- c. Performance Criteria

1.544 Mbps Digital Service is designed to provide an average performance of at least 95% error-free-seconds of transmission measured over a continuous 24 hour period. The service is considered interrupted when the customer reports to the Company that continuity has been lost or that the service is operating at a performance level of 300 or more seconds of transmission containing errors in a consecutive 15 minute period.
- d. 1.544 Mbps Digital Service connecting a customer's premises and a Company office for digital trunk access with Digital Trunking Service and ISDN Prime will be provided in multiples of 24 network access lines for use as P.B.X. trunks or WATS.

3. Customer Signal Constraints

All signals generated by customer terminal equipment must meet the signal and format constraints contained in the following Technical References of the Company:

Interface Specifications for Digital Cross Connects
Digital Channel Bank Requirements and Objectives
DS-1 Customer Installation: Metallic Interface

TA No. 34/CB119
PUB 43801
AM TR-OAT-000033

4. Mileage Measurements

- a. Inter-Office Channel/Channel Mileage
Mileage used to rate the Inter-Office Channel or Channel Mileage is the direct airline distance measured between the central offices.
- b. Local Channel
Mileage used to rate the Local Channel is the direct airline distance measured between the customer's premises and the central offices.

/1/ 1.544 Mbps service will no longer be available as Direct High Capacity Service under the provisions of this Section, on or after February 11, 1992, except for those Channelization Equipment, Contract Option Plan and Option B customers of record as of February 11, 1992, subject to the provisions of this Guidebook.

On and after February 11, 1992, 1.544 Mbps service will be available to new and existing customers as DS1 Service under the provisions of Part 15, Section 3.

DIRECT HIGH CAPACITY SERVICE^{/1/} (cont'd)**1.544 Megabits Per Second Digital Service (cont'd)****C. Service Functions**

1. Channelization^{/2/}
 - a. The Company will provide channelization equipment in the central office.
 - b. Company-provided central office channelization equipment for use in connection with customer provided channelization equipment provides up to 24 voice channels for connection to Centrex Service.
 - c. Company-provided central office channelization equipment will be used in conjunction with customer provided channelization equipment for digital trunk access with Digital Trunking Service.

2. Diverse Routing

The Diverse Routing Arrangements in Part 8, Section 4 may be provided.

3. Clear Channel Capability

Clear Channel Capability is an arrangement which allows a customer to transport 1.536 Mbps of information on a 1.544 Mbps circuit with no constraint on the quantity or sequence of one and zero bits. Clear Channel Capability is only provided on non-channelized circuits and only between two customer premises. Where appropriate facilities are not immediately available, negotiated order intervals may apply. The technical specifications for this feature are as described in Technical Reference TR-NPL-000054.

/1/ 1.544 Mbps service will no longer be available as Direct High Capacity Service under the provisions of this Section, on or after February 11, 1992, except for those Channelization Equipment, Contract Option Plan and Option B customers of record as of February 11, 1992, subject to the provisions of this Guidebook.

On and after February 11, 1992, 1.544 Mbps service will be available to new and existing customers as DS1 Service under the provisions of Part 15, Section 3.

/2/ Company-provided channelization equipment for use at the central office provided to new customers on and after December 7, 1990. Customers having this service on that date may retain it in its present configuration at the rates shown. Additions and rearrangements of plug-ins only are permitted (up to full capacity of the basic equipment).

DIRECT HIGH CAPACITY SERVICE^{/1/} (cont'd)**1.544 Megabits Per Second Digital Service (cont'd)****C. Service Functions (cont'd)****4. Central Office Multiplexing**

Central Office Multiplexing is a central office based optional service offering that provides multiplexing capability at Company central offices in conjunction with Direct High Capacity Service. This arrangement allows a Direct High Capacity Service (1.544 Mbps channel) to be converted to multiple analog or digital Telecommunications Services, or multiple Telecommunications Services to be converted to a Direct High Capacity Service (1.544 Mbps). Specific telecommunications services allowed to interconnect with a central office multiplexer are described below.

This arrangement allows up to twenty-four voice grade channels to be combined into one Direct High Capacity Service (1.544 Mbps), or one Direct High Capacity Service (1.544 Mbps) to be converted to twenty-four voice grade channels.

Telecommunications Channel Services, except those described as not suitable in Part 15, Section 2, may be connected to the central office multiplexer location via an appropriate Local Channel, and Interoffice Mileage, where applicable. Connections to the multiplexer are allowed under the provisions of the Telecommunications Channel Services offering.

Local exchange services, as described in Part 4, Section 2, may be connected to the central office multiplexer location at the wire center where the local exchange services originate. Local Exchange Service may only be multiplexed at the customer's serving wire center for transport via Direct High Capacity Service to the customer's premises located within that serving wire center area.

Digital services, as described in Part 15, Section 3, may be connected to the Central Office Multiplexer via a Local Distribution Channel and Channel Mileage Termination and Channel Mileage, where applicable.

Foreign District Service may be connected to the central office multiplexer subject to the following:

- Connection to the multiplexer may be via Interoffice Mileage where applicable, or at the central office where the Foreign District exchange service originates.
- Mileage from the multiplexer location via Direct High Capacity Service transport to the customer's serving wire center will be at appropriate Foreign District mileage rates, as specified in Part 4, Section 22, for transport via Direct High Capacity Service.

/1/ 1.544 Mbps service will no longer be available as Direct High Capacity Service under the provisions of this Section, on or after February 11, 1992, except for those Channelization Equipment, Contract Option Plan and Option B customers of record as of February 11, 1992, subject to the provisions of this Guidebook.

On and after February 11, 1992, 1.544 Mbps service will be available to new and existing customers as DS1 Service under the provisions of Part 15, Section 3.

DIRECT HIGH CAPACITY SERVICE^{/1/} (cont'd)**1.544 Megabits Per Second Digital Service (cont'd)****C. Service Functions (cont'd)****4. Central Office Multiplexing (cont'd)**

Analog and digital channels occupy one digital port per channel. No more than 16 channels of a Direct High Capacity Service can be utilized for transmission of 56 Kbps Service channels without compromising the Standard performance criteria of both the Direct High Capacity Service and all the channels that comprise it. Standard performance criteria and service interruptions definition and credit allowance will not apply when overutilization of digital channels on the Direct High Capacity Service causes performance of any of the channels or the Direct High Capacity Service itself to fall below the standard performance criteria.

Central office multiplexing is available at all appropriately equipped central offices. The multiplexing site will be of the customer's choosing subject to the above restrictions.

/1/ 1.544 Mbps service will no longer be available as Direct High Capacity Service under the provisions of this Section, on or after February 11, 1992, except for those Channelization Equipment, Contract Option Plan and Option B customers of record as of February 11, 1992, subject to the provisions of this Guidebook.

On and after February 11, 1992, 1.544 Mbps service will be available to new and existing customers as DS1 Service under the provisions of Part 15, Section 3.

DIRECT HIGH CAPACITY SERVICE^{/1/} (cont'd)**1.544 Megabits Per Second Digital Service (cont'd)****D. Rates and Charges**

Rates and charges for the Contract Payment Plan, the Optional Payment Plan and the Month-to-Month Rate Plan are specified in E., F. and G. following.

	Option A				Option B			
	1st Channel		Additional Channels		1st Channel		Additional Channels	
	Maximum Termination Liability*	Per Mo.	Maximum Termination Liability*	Per Mo.	I.N.C.	Per Mo.	I.N.C.	Per Mo.
1. Local Channel	<u>/1LDPX/</u>		<u>/1LDP2/</u>		<u>/1LDPX/</u>		<u>/1LDP2/</u>	
First mile or fraction thereof	\$4,401.00	\$440.00	\$1,513.00	\$132.00	\$4,401.00	\$337.00	\$1,513.00	\$97.00
Each additional mile or fraction thereof	<u>/1LDPB/</u>		<u>/1LDP4/</u>		<u>/1LDPB/</u>		<u>/1LDP4/</u>	
	2,342.00	95.00	897.00	50.00	2,342.00	40.00	897.00	

* Reduces 1/60 for each month in service.

/1/ These payment plans will no longer be available to new customers on or after February 23, 1990. Option A customers of record as of February 23, 1990, will be billed at rates established for the Month-to-Month Payment Plan in G. following. Maximum Termination Liability for those Option A customers of record who choose to terminate their circuits in advance of the specified liability period of five years will still apply. The Maximum Termination Liability for those Option A customers of record who choose to convert to an Optional Payment Plan equal to or greater than the time period remaining on their Option A liability period will not apply since conversion to an Optional Payment Plan is not considered a termination of the service. Option B customers of record as of February 23, 1990, will be billed at rates discounted from those established for the Month-to-Month Payment Plan in G. following unless the customer converts to an Optional Payment Plan contract. The discounted rate will be in effect until February 23, 1993, on which date the full month-to-month rates will be applied.

DIRECT HIGH CAPACITY SERVICE^{/1/} (cont'd)**1.544 Megabits Per Second Digital Service (cont'd)****D. Rates and Charges (cont'd)**

2. Inter-Office Channel	<u>Per Mo.</u>
First mile or fraction thereof /ILNPX/	\$120.00
Each additional mile or fraction thereof /ILNPR/	25.00

/1/ These payment plans will no longer be available to new customers on or after February 23, 1990. Option A customers of record as of February 23, 1990, will be billed at rates established for the Month-to-Month Payment Plan in G. following. Maximum Termination Liability for those Option A customers of record who choose to terminate their circuits in advance of the specified liability period of five years will still apply. The Maximum Termination Liability for those Option A customers of record who choose to convert to an Optional Payment Plan equal to or greater than the time period remaining on their Option A liability period will not apply since conversion to an Optional Payment Plan is not considered a termination of the service. Option B customers of record as of February 23, 1990, will be billed at rates discounted from those established for the Month-to-Month Payment Plan in G. following unless the customer converts to an Optional Payment Plan contract. The discounted rate will be in effect until February 23, 1993, on which date the full month-to-month rates will be applied.

DIRECT HIGH CAPACITY SERVICE^{/1/} (cont'd)**1.544 Megabits Per Second Digital Service (cont'd)****D. Rates and Charges (cont'd)**

3. Channelization Equipment

	<u>Option A</u> <u>Central Office</u>		<u>Option B</u> <u>Central Office</u>	
	<u>Maximum</u> <u>Termination</u> <u>Liability</u> ^{***}	<u>Per Mo.</u>	<u>I.N.C.</u>	<u>Per Mo.</u>
a. Basic equipment to derive up to 48 nominal four kilo-Hertz voice grade channels (24 on each of two 1.544 Mbps lines)	<u>/VUM/</u>		<u>/VUM/</u>	
	-	\$199.85	-	\$199.85
b. Channel plug-ins, per location; includes required signaling				

Note: When ordering 1.544 Mbps Digital Service components, customers are restricted to one pricing option and may not mix components from Option A and Option B.

*** Reduces 1/60 for each month in service.

/1/ Company provided channelization equipment will not be provided to new customers on and after December 7, 1990. Customers having those services on that date may retain them in their present configuration at the rates shown. Additions and rearrangements of plug-ins only are permitted (up to full capacity of the basic equipment). Option B customers of record may retain their services at Option B rates until February 23, 1993. On and after December 7, 1990, Option A rates will apply. Additions and rearrangements of plug-ins only are permitted for Option B customers of record (up to full capacity of the basic equipment).

DIRECT HIGH CAPACITY SERVICE^{/1/} (cont'd)**1.544 Megabits Per Second Digital Service (cont'd)****D. Rates and Charges (cont'd)**

3. Channelization Equipment (cont'd)

	Option A <u>Central Office</u>		Option B <u>Central Office</u>	
	Maximum Termination <u>Liability</u> ^{***}	<u>Per Mo.</u>	<u>I.N.C.</u>	<u>Per Mo.</u>
c. Off-premises station (Type 2001C/D 2-Wire termination)* (24 on each of two 1.544 Mbps lines)		<u>/VOM/</u>		<u>/VOM/</u>
	\$35.00	\$6.50	\$55.00	\$3.04
c. Tie Line (2 or 4 wire termination)	30.00	<u>/VQB/</u> 4.50	30.00	<u>/VQB/</u> 2.45
d. 56 Kbps Service**	-			

Note: When ordering 1.544 Mbps Digital Service components, customers are restricted to one pricing option and may not mix components from Option A and Option B.

* Signaling Arrangement Type A, B or C as provided in Part 15, Section 2, must be specified for Type 2001C channels. However, no charge applies.

** The number of 56 Kbps Services that can be combined with other channels on a single 1.544 Mbps is as follows:

# of 56 Kbps Channels	# of other Channels	# of 56 Kbps Channels	# of other Channels
0	24	7	11
1	23	8	10
2	22	9	9
3	21	10	6
4	18	11	3
5	15	12	0
6	12		

*** Reduces 1/60 for each month in service.

/1/ Company provided channelization equipment will not be provided to new customers on and after December 7, 1990. Customers having those services on that date may retain them in their present configuration at the rates shown. Additions and rearrangements of plug-ins only are permitted (up to full capacity of the basic equipment). Option B customers of record may retain their services at Option B rates until February 23, 1993. On and after December 7, 1990, Option A rates will apply. Additions and rearrangements of plug-ins only are permitted for Option B customers of record (up to full capacity of the basic equipment).

DIRECT HIGH CAPACITY SERVICE^{/1/} (cont'd)**1.544 Megabits Per Second Digital Service (cont'd)****D. Rates and Charges (cont'd)****4. Explanation of Maximum Termination Liability**

Maximum Termination Liability (MTL) as used with Direct High Capacity Service denotes a financial obligation assumed by the customer, due and payable upon termination of the service short of the specified Liability Period of 5 Years. The amount due, will be determined upon termination of the service and will be based upon the unamortized portion of the Company's investment which has no further use at the time of termination, but will in no case exceed the maximum amounts described in 1. and 3. preceding.

Service will not be considered terminated if a customer moves the Service Interface of the service to another location within the customer's premises. Appropriate Service Charges for establishing 1.544 Mbps Digital Service will apply.

Termination charges will be calculated as the lesser of the following:

1. Maximum Termination Liability.

OR

2. In addition to any unpaid Special Construction or nonrecurring charges, excluding any waived charges, customer termination liability for cancellation of Direct High Capacity Service shall be equal to fifty percent (50%) of all recurring charges for the remaining months of the customer's term.

/1/ 1.544 Mbps service will no longer be available as Direct High Capacity Service under the provisions of this Section, on or after February 11, 1992, except for those Channelization Equipment, Contract Option Plan and Option B customers of record as of February 11, 1992, subject to the provisions of this Guidebook.

On and after February 11, 1992, 1.544 Mbps service will be available to new and existing customers as DS1 Service under the provisions in Part 15, Section 3.

DIRECT HIGH CAPACITY SERVICE^{/1/} (cont'd)**1.544 Megabits Per Second Digital Service (cont'd)****E. Contract Option Plan****1. General**

1.544 Mbps Digital Service is offered under Contract Option Plans of 3, 5 or 7 years. Each customer's contract charge becomes fixed at the rate level specified in E.5. following at the time the equipment is installed and is not subject to Company initiated changes during the contract period.

2. Terminations

Termination charges will be calculated as the lesser of the following:

1. In the event of termination of the service provided under the Contract Option Plan during the contract period, the customer will remain liable for the balance of the contract charges adjusted to their present worth equivalent, which shall upon any such termination immediately become due and payable in their entirety.

OR

2. In addition to any unpaid Special Construction or nonrecurring charges, excluding any waived charges, customer termination liability for cancellation of Direct High Capacity Service shall be equal to fifty percent (50%) of all recurring charges for the remaining months of the customer's term.

Neither the service provided under this payment plan nor the plan itself will be available to customers on and after February 23, 1990. Contracts in effect on February 23, 1990, will remain in effect for the remainder of their term, unless customers of record choose to convert to an Optional Payment Plan equal to or greater than the time period remaining on their current contracts.

DIRECT HIGH CAPACITY SERVICE^{/1/} (cont'd)**1.544 Megabits Per Second Digital Service (cont'd)****E. Contract Option Plan (cont'd)****3. Changes**

- a. With the written permission of the Company, consistent with other regulations of this guidebook, the obligation to pay the Contract Option Plan Charges may be assumed by another customer if the service has not been terminated and if the other customer intends to continue using the service at the present location and actually continues such use. Such assumption of service does not relieve or discharge the original customer from remaining jointly or severally liable with the transferee for any and all obligations existing at the time of the transfer.
- b. At any time during their contract period customers may change to a new Contract Option Plan as long as it is equal to or greater than the time period remaining on their current Contract Option Plan. The new contract becomes effective upon execution. Customers may also change from Option A monthly rate plan or Option B monthly rate plan to a Contract Option Plan. No credit for months under the previous contract or under Option A or Option B may be transferred to the new contract. In all situations described in this paragraph, the customer incurs no liability for the remaining months on the original Contract Option Plan or Maximum Termination Liability, since the change is not considered a termination as defined in E.2 preceding or in D. preceding.
- c. Service Ordering Charges for 1.544 Mbps Digital Service will not apply when customers (1) change the length of their Contract Option Plan payment period, (2) change from Option A monthly rate plan to a Contract Option Plan, or (3) change from Option B monthly rate plan to a Contract Option Plan. The rates applicable for the new period are those currently in effect for new customers. A Service Ordering Charge-Record Work Only for Business Service applies for any of these changes.
- d. During the term of their Contract Option Plan, customers may move the Service Interface of their Contract Option Plan service to another location within their premises without incurring the termination liability described in (2) preceding. Service Charges to establish 1.544 Mbps Digital Service, however, will apply. Any interpositioned wire or additional equipment needed is the responsibility of the customer, as it is for a new installation.

/1/ Neither the service provided under this payment plan nor the plan itself will be available to customers on and after February 23, 1990. Contracts in effect on February 23, 1990, will remain in effect for the remainder of their term, unless customers of record choose to convert to an Optional Payment Plan equal to or greater than the time period remaining on their current contracts.

DIRECT HIGH CAPACITY SERVICE^{/1/} (cont'd)**1.544 Megabits Per Second Digital Service (cont'd)****E. Contract Option Plan (cont'd)****4. Renewal Options**

- a. Six months prior to completion of the customer contract period, any period then available under the Contract Option Plan may be selected at the rates currently in effect for new customers at the time of the renewal. The customer will be charged the then current rate for the renewal payment period upon execution of the new contract.
- b. Service may be continued on a month-to-month basis at the rates currently in effect for new customers for the non-contract option plan monthly rate under Option B pursuant to the terms and conditions of this Section. The customer has no additional service commitment and, consequently, when service is terminated will not be subject to any termination charge. This monthly rate will be subject to Company initiated rate adjustments when approved by the appropriate regulatory authority.
- c. If the customer does not elect a new contract option plan and does not request discontinuance of service, service will be continued at the monthly rate then currently in effect for the non-contract option plan under the terms described in b. preceding. At a later date, the customer may elect any contract option currently in effect for new customers.
- d. Initial Nonrecurring Charges and Service Charges for 1.544 Mbps Service do not apply to renewals. The monthly contract rates applicable for the new period are those currently in effect for new customers. A Service Ordering Charge-Record Work Only for Business Service applies for renewals.

/1/ Neither the service provided under this payment plan nor the plan itself will be available to customers on and after February 23, 1990. Contracts in effect on February 23, 1990, will remain in effect for the remainder of their term.

DIRECT HIGH CAPACITY SERVICE^{/1/} (cont'd)**1.544 Megabits Per Second Digital Service (cont'd)****E. Contract Option Plan (cont'd)**

5. Rates and Charges

	1st Channel <u>Per Mo.</u>	Additional Channels <u>Per Mo.</u>
a. Local Channel		
First mile, or fraction thereof		
3 Year /LLHP6, LLHP7/	\$440.00	\$132.00
5 Year /LLHP6, LLHP7/	440.00	132.00
7 Year /LLHP6, LLHP7/	440.00	132.00
Each additional mile, or fraction thereof		
3 Year /LLHPA, LLHPB/	115.00	50.00
5 Year /LLHPA, LLHPB/	95.00	50.00
7 Year /LLHPA, LLHPB/	95.00	50.00
	<u>Per Mo.</u>	
b. Inter-Office Channel		
First mile, or fraction thereof		
3 Year /1LNXP/	\$120.00	
5 Year /1LNXP/	120.00	
7 Year /1LNXP/	120.00	
Each additional mile, or fraction thereof		
3 Year /1LNPR/	25.00	
5 Year /1LNPR/	25.00	
7 Year /1LNPR/	25.00	

/1/ Neither the service provided under this payment plan nor the plan itself will be available to customers on and after February 23, 1990. Contracts in effect on February 23, 1990, will remain in effect for the remainder of their term.

DIRECT HIGH CAPACITY SERVICE^{/1/} (cont'd)**1.544 Megabits Per Second Digital Service (cont'd)****F. Optional Payment Plan (OPP)****1. General**

1.544 Mbps Digital Service is offered under OPPs of 1, 3, 5 or 7 years. Each customer's contract charge becomes fixed at the per month rate level specified in G. following at the time the equipment is installed and is not subject to Company initiated changes during the contract period. Customers may, at any time during an OPP term, prepay the remaining charges of the contract in accordance with paragraph 5. following.

2. Terminations

In addition to any unpaid Special Construction or nonrecurring charges, excluding any waived charges, customer termination liability for cancellation of Direct High Capacity Service shall be equal to fifty percent (50%) of all recurring charges for the remaining months of the customer's term.

3. Changes

- a. With the written permission of the Company, consistent with other regulations of this guidebook, the obligation to pay the OPP Charges may be assumed by another customer if the service has not been terminated and if the other customer intends to continue using the service at the present location and actually continues such use. Such assumption of service does not relieve or discharge the original customer from remaining jointly or severally liable with the transferee for any and all obligations existing at the time of the transfer.

/1/ 1.544 Mbps service will no longer be available as Direct High Capacity Service under the provisions of this Section, on or after February 11, 1992, except for those Channelization Equipment, Contract Option Plan and Option B customers of record as of February 11, 1992, subject to the provisions of this Guidebook.

On and after February 11, 1992, 1.544 Mbps service will be available to new and existing customers as DS1 Service under the provisions in Part 15, Section 3.

DIRECT HIGH CAPACITY SERVICE^{/1/} (cont'd)**1.544 Megabits Per Second Digital Service (cont'd)****F. Optional Payment Plan (OPP) (cont'd)****3. Changes (cont'd)**

- b. At any time during their contract period customers may change to a new OPP as long as it is equal to or greater than the time period remaining on their current OPP or Contract Option Plan. The new contract becomes effective upon execution. Month-to-Month Payment Plan customers and Option A customers may also change to an OPP. No credit for months under the previous contract or Month-to-Month Payment Plan may be transferred to the new contract. In all situations described in this paragraph, the customer incurs no liability for the remaining months on the original OPP, Contract Option Plan or Option A Plan since the change is not considered a termination as defined in 2. preceding.
- c. Service Ordering Charges for 1.544 Mbps Digital Service will not apply when customers (1) change the length of their OPP payment period, (2) change from the month-to-month rate plan to an OPP, or (3) change from the Contract Option Plan or Option A Plan to an OPP. The rates applicable for the new period are those currently in effect for new customers. A Service Ordering Charge-Record Work Only for Business Service applies for these changes.
- d. During the term of their OPP contract, customers may move the Service Interface of their OPP service to another location within their premises without incurring the termination liability described in 2. preceding. Service Charges to establish 1.544 Mbps Digital Service, however, will apply. Any interpositioned wire or additional equipment needed is the responsibility of the customer, as it is for a new installation.

/1/ 1.544 Mbps service will no longer be available as Direct High Capacity Service under the provisions of this Section, on or after February 11, 1992, except for those Channelization Equipment, Contract Option Plan and Option B customers of record as of February 11, 1992, subject to the provisions of this Guidebook.

On and after February 11, 1992, 1.544 Mbps service will be available to new and existing customers as DS1 Service under the provisions in Part 15, Section 3.

DIRECT HIGH CAPACITY SERVICE^{/1/} (cont'd)**1.544 Megabits Per Second Digital Service (cont'd)****F. Optional Payment Plan (OPP) (cont'd)****4. Renewal Options**

- a. Six months prior to completion of the customer contract period, any period then available under the OPP may be selected at the rates currently in effect for new customers at the time of the renewal. The customer will be charged the then current rate for the renewal payment period upon execution of the new contract.
- b. Extension of a contract may be made for any number of months not less than twelve months nor greater than the length of the existing contract term. The rates applied to the extension will be those currently in effect at the time of the extension for a new contract of the same length as the existing contract.
- c. If the customer does not elect a new OPP and does not request discontinuance of service, service will be continued at the monthly rate then currently in effect for the Month-to-Month Payment Plan. At a later date, the customer may elect any contract option currently in effect for new customers.
- d. Initial Nonrecurring Charges and Service Charges for 1.544 Mbps Service do not apply to renewals. The monthly contract rates applicable for the new period are those currently in effect for new customers. A Service Ordering Charge-Record Work Only for Business Service applies for renewals.

/1/ 1.544 Mbps service will no longer be available as Direct High Capacity Service under the provisions of this Section, on or after February 11, 1992, except for those Channelization Equipment, Contract Option Plan and Option B customers of record as of February 11, 1992, subject to the provisions of this Guidebook.

On and after February 11, 1992, 1.544 Mbps service will be available to new and existing customers as DS1 Service under the provisions in Part 15, Section 3.

DIRECT HIGH CAPACITY SERVICE^{/1/} (cont'd)**1.544 Megabits Per Second Digital Service (cont'd)****F. Optional Payment Plan (OPP) (cont'd)****5. Prepayment of Monthly Charges**

- a. For Direct High Capacity Service, customers with multi-year OPP contracts for service may elect to prepay the monthly charges for the remaining term of their contract.
- b. Customers who choose the prepayment option will receive a credit on their monthly bill which will reflect the value of their prepayment amount over the life of the customer's contract. The credit will be used to offset the monthly guidebook rates which will continue to be billed. The prepayment amount will reflect the present worth of the monthly credit using an interest rate of 11.3% per year for customers who sign a new contract, extend an existing contract or prepay the monthly charges for the remaining term of their contract.
- c. Customers' selection of prepayment does not alter any other conditions of the service contract.
- d. Prepayment of monthly charges is allowed only for the length of time remaining under the contract for the relevant service.
- e. Should a customer's monthly billing fall below the monthly credit as determined in b. preceding, any remaining credit will not be applied to any subsequent month's bill.
- f. Service Ordering - Record Work Only Charges will apply to customers electing the prepayment option, unless the prepayment option is selected in connection with other service order activity, in which case no additional Service Ordering Charge applies.
- g. No refund will be given for cancellation of a contract once the prepayment option has been exercised.

/1/ 1.544 Mbps service will no longer be available as Direct High Capacity Service under the provisions of this Section, on or after February 11, 1992, except for those Channelization Equipment, Contract Option Plan and Option B customers of record as of February 11, 1992, subject to the provisions of this Guidebook.

On and after February 11, 1992, 1.544 Mbps service will be available to new and existing customers as DS1 Service under the provisions in Part 15, Section 3.

DIRECT HIGH CAPACITY SERVICE^{/1/} (cont'd)**1.544 Megabits Per Second Digital Service (cont'd)****G. Optional Payment Plan and Month-to-Month Rate Plan Charges**

	<i>Optional Payment Plan – Per Mo.</i>			<i>Option B</i>	<i>Month-to-Month Payment Plan</i>	
	<u>1</u> <u>Year</u>	<u>3</u> <u>Year</u>	<u>5 and 7</u> <u>Year</u>		<u>I.N.C.</u>	<u>Per Mo.</u>
1. Local Distribution Channel Within Network Access Area:						
Area A						
First LDC /FQA1A/	\$390.00	\$360.00	\$340.00	\$300.00	\$1,000.00	\$399.00
Additional LDC /FQS1A/	142.00	131.00	124.00	109.00	600.00	145.00
Area B						
First LDC /FQA1B/	434.00	401.00	379.00	334.00	1,200.00	445.00
Additional LDC /FQS1B/	171.00	158.00	149.00	132.00	625.00	175.00
Area C						
First LDC /FQA1C/	468.00	432.00	408.00	360.00	1,350.00	480.00
Additional LDC /FQS1C/	200.00	185.00	175.00	154.00	800.00	205.00
2. Channel Mileage Termination Per end /2UN15/	47.50	47.50	47.50	47.50	--	47.50
3. Channel Mileage Per Mile /3LNNS/	25.00	25.00	25.00	25.00	--	25.00

Notes:

- A. Initial Non-recurring Charges (I.N.C.s) will apply to each Local Distribution Channel (LDC) established for the Month-to-Month Payment Plan. Customers may move the Service Interface of their month-to-month service to another location within their premises without incurring an I.N.C. Service Charges will apply.
- B. Additional Local Distribution Channel rates apply to customers having Direct High Capacity Service Local Distribution First Channels between the same premises and serving wire center or to customers having Direct High Capacity Service and DELTA-24 Service between the same premises and serving wire center. In the latter case, DELTA-24 Service shall always be considered the Local Distribution First Channel for administration purposes.
- C. Option B customers of record prior to the withdrawal of that rate plan will be billed at the rates shown above until February 23, 1993. On and after February 23, 1993, full Month-to-Month Payment Plan rates will apply unless the customer converts to an OPP Contract. Option B customers of record who have been converted to the Month-to-Month Payment Plan will not be subject to an I.N.C.

/1/ 1.544 Mbps service will no longer be available as Direct High Capacity Service under the provisions of this Section, on or after February 11, 1992, except for those Channelization Equipment, Contract Option Plan and Option B customers of record as of February 11, 1992, subject to the provisions of this Guidebook.

On and after February 11, 1992, 1.544 Mbps service will be available to new and existing customers as DS1 Service under the provisions in Part 15, Section 3.

DIRECT HIGH CAPACITY SERVICE^{/1/} (cont'd)**1.544 Megabits Per Second Digital Service (cont'd)****G. Optional Payment Plan and Month-to-Month Rate Plan Charges (cont'd)**

<i>Optional Payment Plan – Per Mo.</i>				<i>Month-to-Month Payment Plan</i>	
<u>1</u>	<u>3</u>	<u>5 and 7</u>	<u>Option B</u>	<u>I.N.C.</u>	<u>Per Mo.</u>
<u>Year</u>	<u>Year</u>	<u>Year</u>			
4. Optional Features and Functions					
a. Central Office Multiplexing Common Equipment					
/MX6/	\$157.00	\$145.00	\$135.00	--	\$165.00
Per Analog Connection					
/PUG1X/	9.50	9.50	9.50	--	9.50
Per Digital Connection					
/PUG3X/	9.50	9.50	9.50	--	9.50
b. Clear Channel Capability					
Per DS1 circuit arranged					<u>I.N.C.</u>
/CLR/					\$350.00

Notes:

- A. Initial Non-recurring Charges (I.N.C.s) will apply to each Local Distribution Channel (LDC) established for the Month-to-Month Payment Plan. Customers may move the Service Interface of their month-to-month service to another location within their premises without incurring an I.N.C. Service Charges will apply.
- B. Additional Local Distribution Channel rates apply to customers having Direct High Capacity Service Local Distribution First Channels between the same premises and serving wire center or to customers having Direct High Capacity Service and DELTA-24 Service between the same premises and serving wire center. In the latter case, DELTA-24 Service shall always be considered the Local Distribution First Channel for administration purposes.
- C. Option B customers of record prior to the withdrawal of that rate plan will be billed at the rates shown above until February 23, 1993. On and after February 23, 1993, full Month-to-Month Payment Plan rates will apply unless the customer converts to an OPP Contract. Option B customers of record who have been converted to the Month-to-Month Payment Plan will not be subject to an I.N.C.

/1/ 1.544 Mbps service will no longer be available as Direct High Capacity Service under the provisions of this Section, on or after February 11, 1992, except for those Channelization Equipment, Contract Option Plan and Option B customers of record as of February 11, 1992, subject to the provisions of this Guidebook.

On and after February 11, 1992, 1.544 Mbps service will be available to new and existing customers as DS1 Service under the provisions in Part 15, Section 3.

DELTA - 24 CHANNEL SERVICES^{/1/}**A. General**

1. Delta-24 Service provides nominal 4 kiloHertz voice grade channel base capacity in multiples of 24 channels between:
 - a. two customer premises,
 - b. a customer's premises and a Company office for access to Centrex,
 - c. between Company offices for access between Centrex Services. Voice grade channels are arranged for use as specified in this Guidebook.
2. The regulations and rates specified herein are in addition to the applicable regulations and rates specified in other Parts of this guidebook.

B. Regulations**1. Availability of Service**

Delta-24 Service can only be provided from appropriately equipped central offices. A service inquiry is therefore necessary to determine availability of service.

2. Provision of Service

- a. Delta-24 Service is available on a two-point basis only, 24-hours a day, seven days a week.
- b. Delta-24 Service is only provided in base capacities of 24 channels (First or Additional Base Capacities). Voice Grade Channel Types to be used with that base capacity may be ordered after the initial group of 24 in smaller increments of Six Voice Grade Channel Types all of which are arranged for voice grade use.

3. Mileage Measurements**a. Inter-Office Delta-24 Base Capacity**

Mileage used to rate Inter-Office Base Capacity is the airline distance measured between the wire centers which serve the customer premises.

b. Local Delta-24 Base Capacity

Mileage used to rate Local Base Capacity is the direct airline distance measured between the customer's premises and the serving wire center.

^{/1/} This service will not be provided to new customers on or after June 26, 1990. Customers having this service on that date may retain it in its present configuration at the rates shown. Additions and rearrangements of plug-ins only are permitted (up to full capacity of the basic equipment).

DELTA - 24 CHANNEL SERVICES^{/1/} (cont'd)**C. Service Types and Descriptions**

Delta-24 Service may be used to provide the following voice grade telecommunications channel services in any combination between points as specified in this Guidebook.

1. All Series 2000 Channels except Types 2001A, 2001E and 2001 when used as an interconnecting channel for Concentrator/Identifier Systems,
2. Type 3002 Channels.

/1/ This service will not be provided to new customers on or after June 26, 1990. Customers having this service on that date may retain it in its present configuration at the rates shown. Additions and rearrangements of plug-ins only are permitted (up to full capacity of the basic equipment).

DELTA - 24 CHANNEL SERVICES^{/1/} (cont'd)**D. Rates and Charges**

<i>Option A</i> Base Capabilities				
	<u>First 24 Channels</u>		<u>Each Additional 24 Channels</u>	
	<u>Maximum Termination Liability*</u>	<u>Per Mo.</u>	<u>Maximum Termination Liability*</u>	<u>Per Mo.</u>
1. Local Base Capacity				
Provides capacity for 24-voice grade circuits				
a. First mile or fraction thereof	/1LDPX/ \$5,475.00	\$650.00	/1LDP2/ \$1,985.00	\$260.00
b. Each additional mile or fraction thereof	/1LDPB/ 2,342.00	95.00	/1LDP4/ 897.00	50.00
2. Centrex Local Base Capacity				
Provides capacity for 24-voice grade circuits				
Cannot be counted with 1. preceding for rate administration of First and Additional Base capacities /24K/				
3. Inter-Office Base Capacity				
a. First mile or fraction thereof /ILNPX/				
b. Each additional mile or fraction thereof /ILNPR/				

<i>Option B</i> Base Capabilities				
	<u>First 24 Channels</u>		<u>Each Additional 24 Channels</u>	
	<u>Maximum Termination Liability*</u>	<u>Per Mo.</u>	<u>Maximum Termination Liability*</u>	<u>Per Mo.</u>
1. Local Base Capacity				
Provides capacity for 24-voice grade circuits				
b. First mile or fraction thereof	/1LDPX/ \$5,475.00	\$522.00	/1LDP2/ \$1,985.00	\$212.00
b. Each additional mile or fraction thereof	/1LDPB/ 2,342.00	40.00	/1LDP4/ 897.00	29.00
2. Centrex Local Base Capacity				
Provides capacity for 24-voice grade circuits				
Cannot be counted with 1. preceding for rate administration of First and Additional Base capacities /24K/				
3. Inter-Office Base Capacity				<u>Per Mo.</u> \$150.00
c. First mile or fraction thereof /ILNPX/			\$31.05	
d. Each additional mile or fraction thereof /ILNPR/			19.40	

* Liability Period 5 Years

/1/ This service will not be provided to new customers on or after June 26, 1990. Customers having this service on that date may retain it in its present configuration at the rates shown. Additions and rearrangements of plug-ins only are permitted (up to full capacity of the basic equipment).

DELTA - 24 CHANNEL SERVICES^{/1/} (cont'd)**D. Rates and Charges (cont'd)**

	<i>Option A</i>		<i>Option B</i>	
	Maximum Termination <u>Liability*</u>	<u>Per Mo.</u>	<u>I.N.C.</u>	<u>Per Mo.</u>
4. Voice Grade Channel Types per use with Local Base Capacity or Centrex Local Base Capacity, includes required signaling except where indicated:				
a. Two-Wire Terminations				
1. 2001 (without conference capability, signaling or talk battery), 2301 /2P3/	\$35.00	\$5.50	\$35.00	\$4.50
2. 2001C, 2001D /2PT/	35.00	6.50	35.00	5.50
b. Four-Wire Terminations				
2001 (with conference capability, but without signaling or talk battery), 2301 /4P3/	68.00	7.25	68.00	5.40
c. Two-Wire or Four-Wire Terminations				
1. 2002 /SQH/	68.00	7.85	68.00	6.00
2. 3002 /SQK/	120.00	12.85	120.00	9.55
3. 2001B /SQQ/	30.00	4.50	30.00	3.50
d. Two-way Automatic Signaling with talk battery for Type 2001 Channel 1.a. and 2. preceding /SV8/	6.00	8.00	6.00	8.00

Notes:

1. When ordering Voice Grade Channel Types, customers are restricted to one pricing option and may not mix Channel Types from Option A and Option B.
2. Signaling Arrangement Type A, B or C as provided in Part 15, Section 2 must be specified for Type 2001C Channels. No charge applies for these signaling arrangements unless the cable distance between the Delta-24 Channel Interface and Customer-Provided Communications System exceeds 2400 feet. Additional Charges for such installations, if applicable, will be determined on an individual case bases.
3. Rate specified for Type 2001B Channel Types assume a distance of 600 cable feet, or less, between the Delta-24 Channel Interface and the Customer-Provided Communications System. Where the cable distance exceeds 600 feet, additional charges, as appropriate, will be determined on an individual case basis.

* Liability Period 5 Years

/1/ This service will not be provided to new customers on or after June 26, 1990. Customers having this service on that date may retain it in its present configuration at the rates shown. Additions and rearrangements of plug-ins only are permitted (up to full capacity of the basic equipment).

DELTA - 24 CHANNEL SERVICES^{/1/} (cont'd)**D. Rates and Charges (cont'd)**

5. Explanation of Maximum Termination Liability

Maximum Termination Liability (MTL) as used with Delta-24 Channel Service denotes a financial obligation assumed by the customer, due and payable upon termination of the service short of the specified Liability Period of 5 Years. The amount due, Termination Charge, will be determined upon termination of the service and will be based upon the unamortized portion of the specified MTL at the time of termination adjusted for tax effects. The following expression delineates components of this calculation.

$$\begin{array}{rclclcl} \text{Termination Charge} & & & & & & \\ \text{(End of the Month} & = & \text{Depreciation} & + & \text{Accrued} & - & \text{Accrued Payments} \\ \text{in which termination} & & \text{Balance} & & \text{Investment} & & \text{towards Investment Costs} \\ \text{occurs)} & & & & \text{Cost and} & & \text{and Income Tax} \\ & & & & \text{Income Tax} & & \end{array}$$

/1/ This service will not be provided to new customers on or after June 26, 1990. Customers having this service on that date may retain it in its present configuration at the rates shown. Additions and rearrangements of plug-ins only are permitted (up to full capacity of the basic equipment).

BRIDGED TELEMETRY AND ALARM SERVICE^{/1/}**A. Provision of Service**

1. Bridged Telemetry and Alarm Service (BTAS) is a multi-station, voice frequency, private line service. This service provides for the transmission of tone type signals up to a rate of 400 baud for purposes of operating customer-provided alarm, remote control, or remote metering equipment.
2. Series Tandem Bridging (STB) of BTAS channels is available when specific transmission parameters can be met without incurring unusual costs. This service arrangement can be inherently unstable under certain conditions, therefore limitations described in B.2. must be strictly adhered to.

B. General Regulations

In addition to the regulations contained elsewhere in this guidebook, the regulations following apply for BTAS service as indicated.

1. Bridged Telemetry and Alarm Service
 - a. BTAS includes one Master Station, furnished with a Four-Wire Interface, and Remote Stations, furnished with either Two-Wire Interfaces or Four-Wire Interfaces. Remote Stations are defined as any stations connected as a part of this service, other than the one Master Station.
 - b. The Master Station is capable of simultaneous transmission to all Remote Stations. Remote Stations are capable of transmitting to the Master Station, but not to another Remote Station.
 - c. BTAS may be furnished with band-splitting filters capable of limiting transmission and reception to certain selected frequencies. Filters are for use with Master Stations arranged with Two-Wire Remote Stations, and will provide full duplex capability. This service configuration requires filters at each bridging location.
 - d. Remote Stations may be furnished with either a Two-Wire Interface, or a Four-Wire Interface. Each individual service configuration for BTAS is furnished with exclusively Two-Wire or exclusively Four-Wire Remote Stations.
 - e. BTAS furnished without the use of filters and composed exclusively of Two-Wire Remote Stations are limited to a maximum of five Remote Stations.

^{/1/} Effective July 26, 2002, BTAS will no longer be available to new customers. Existing customers may retain the service at existing locations until July 1, 2003, when the service will be completely discontinued.

BRIDGED TELEMETRY AND ALARM SERVICE^{/1/} (cont'd)**B. General Regulations (cont'd)****2. Series Tandem Bridging of Bridged Telemetry Alarm Service**

- a. For STB of BTAS Channels a maximum of three bridges is permitted in any transmission path between the master station and any one remote station. However, this number may be reduced in some cases due to the delay characteristics of certain frequencies used by some alarm companies' master station equipment. Remote stations are exclusively Two-Wire.
- b. One set of filters is required in an STB type BTAS circuit and that set is in the primary bridge only, i.e., the bridge that directly serves the master station. BTAS circuits arranged for STB may be equipped with no more than one set of filters
- c. An STB of BTAS circuit may not exceed a maximum of 60 remote stations. A maximum of 20 stations is permitted in the second or third bridge of an STB arrangement. The actual maximums may be less depending upon the transmission characteristics and configuration of the specific facilities involved.
- d. The loss on any loop between the serving or last bridge and the served station may not exceed 6.0db loss per local serving loop. Loop loss is not guaranteed for any station. Changes in telephone facilities may increase the loss to a station necessitating its removal from the STB of BTAS circuit.
- e. Due to the unique serving arrangement, maintenance of Series Tandem Bridging of BTAS Channels may require additional downtime on the circuit and can generally be expected to affect a greater percentage of total stations.
- f. A Series Tandem Bridging configuration cannot be mixed with a 'hub and spoke' arrangement which is the normal serving configuration.

/1/ Effective July 26, 2002, BTAS will no longer be available to new customers. Existing customers may retain the service at existing locations until July 1, 2003, when the service will be completely discontinued.

BRIDGED TELEMETRY AND ALARM SERVICE^{/1/} (cont'd)**C. Common Equipment Regulations****1. Bridged Telemetry and Alarm Service**

- a. Bridge locations for BTAS can be established at most Company central offices, and will be designated as either Primary or Secondary. Since not all central offices are appropriately equipped to provide bridging capability for BTAS, a service inquiry must be made to determine availability of service.
- b. The bridge location which provides the connection between the Master Station and Remote Stations, either directly or through a Secondary Bridge location, is designated the Primary Bridge location. Secondary Bridge locations are defined as any other bridge location on the circuit, other than the one Primary Bridge location. Multiple bridge locations are permissible on BTAS, with the restriction that each Secondary Bridge location must be connected directly to the Primary Bridge location, and not through another Secondary Bridge location.
- c. The selection of bridging locations in a BTAS service configuration is the responsibility of the customer, in compliance with a. above.
- d. Service Charges apply for BTAS Channel Services (Type 2335 and Type 2336) as set forth in Part 3, Section 1 for Type 2301 Channel Services. For an initial BTAS configuration, apply one Service Ordering and one Line Connection Charge as applicable for establishing an individual Type 2301 Channel Service. For subsequent modifications to a BTAS configuration, apply add or change Service Charges on an individual channel basis for each Type 2335 and Type 2336 Channel Service.
- e. Port charges apply in addition to the common bridging charge, as indicated in E. following, for connection of a Type 2335 or Type 2336 channel at a bridging location.

/1/ Effective July 26, 2002, BTAS will no longer be available to new customers. Existing customers may retain the service at existing locations until July 1, 2003, when the service will be completely discontinued.

BRIDGED TELEMETRY AND ALARM SERVICE^{/1/} (cont'd)**D. Channel Service Regulations**

1. General

- a. Channel Services included in this Section are provided for use with Bridged Telemetry and Alarm Service (BTAS) or for interconnection with Other Telecommunications Carriers (OTC) Facilities for use by the OTC in provisioning its services.
- b. BTAS Channel Services are furnished subject to the regulations for Channel Services in Part 15, Section 2.
- c. Connection of customer-provided equipment to BTAS Channel Services is subject to the provisions of Part 2, Section 9.
- d. The Network Access Areas for BTAS Channel Services are identified in Part 4, Section 2.

2. Types and Description

Channels are furnished as individual two-point channels between the Master Station and the Primary Bridge location, between Remote Stations and a bridge location, (either Primary or Secondary), or between the Primary and a Secondary Bridge location. These channels are not suitable for transmission of direct current pulses.

Type 2335 Channel	This is a Four-Wire only channel used to connect a Master Station with the Primary Bridge location, or a Two-Wire or Four-Wire channel used to connect a Remote Station with the Primary or a Secondary Bridge location.
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Type 2336 Channel	This is a Four-Wire only channel used to connect the Primary Bridge location with a Secondary Bridge location or for Series Tandem Bridging, a Secondary Bridge location to another Secondary Bridge location. A port charge applies for Type 2336 Channels at each bridging location (Primary and Secondary).
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/1/ Effective July 26, 2002, BTAS will no longer be available to new customers. Existing customers may retain the service at existing locations until July 1, 2003, when the service will be completely discontinued.

BRIDGED TELEMETRY AND ALARM SERVICE^{/1/} (cont'd)**D. Channel Service Regulations (cont'd)****3. Mileage Measurement**

- a. When BTAS Channel Services are furnished between Service Areas (S.A.), the determination of airline mileage is in accordance with Part 15, Section 2.
- b. When the Master Station or Remote Station is in the same Service Area as the bridge location, one Type 2335 Intra S.A. Local Channel charge applies. When the Master Station or Remote Station is in a different Service Area than the bridge location, one Type 2335 Inter S.A. Local Channel charge applies in addition to Type 2335 Inter S.A. mileage.
- c. When the Primary Bridge location and the Secondary Bridge location are in different Service Areas one Type 2336 Inter S.A. Local Channel charge applies in addition to Type 2336 Inter S.A. mileage.
- d. When the Primary Bridge location and the Secondary Bridge location are in different central offices within a Service Area, i.e., S.A. 105 or Champaign-Urbana, one Type 2336 Intra S.A. Local Channel charge applies, only.

4. Service Transport Facilities

- a. Service Transport Facilities (STF) are subject to the rates and regulations as specified in Part 4, Section 2.
- b. Service Transport Facilities provided on a complement basis may be used in conjunction with local channels provided in this Section. STF provided on a one facility pair-at-a-time basis are not permitted for use with these channels.
- c. Type 2335 local channels utilizing pairs from Service Transport Facility Complements have the following requirements:
 - 2335 Two-Wire Interface requires one pair per local channel
 - 2335 Four-Wire Interface requires two pairs of local channel

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BRIDGED TELEMETRY AND ALARM SERVICE^{/1/} (cont'd)**E. Rates and Charges**

The Company may offer these competitive services on such terms and for such rates and charges as it deems reasonable without regard to this or other referenced guidebooks. Individual contracts will specify the terms, length of service, conditions, and rate levels applicable to those specific customers.

1. Bridged Telemetry and Alarm Service Common Equipment

<u>Description /Billing Code/</u>	<u>Monthly Price</u>
a. Primary Bridging Location	
Per Bridging Location	
Common Bridging /BRM/	\$30.55 ^{/2/}
Per Port	
Master Station	
- Without Filters /BPE/	13.35
- With Filters /BPG/	33.20
Remote Station	
- 2-Wire Interface /BPH2X/	4.60
- 4-Wire Interface /BPH4X/	10.25
2336 Channel Connected /JM6PX/	10.60
b. Secondary Bridging Location	
Per Bridging Location	
Common Bridging /BRN/	26.90 ^{/2/}
Per Port	
Remote Station	
- 2-Wire Interface /BPY2X/	2.70
- 4-Wire Interface /BPY4X/	5.10
2336 Channel Connected /JM6SX/	10.60
c. Filters	
Per Bridging Location	
Primary and Secondary /FIE/	1.75

^{/1/} Effective July 26, 2002, BTAS will no longer be available to new customers. Existing customers may retain the service at existing locations until July 1, 2003, when the service will be completely discontinued.

^{/2/} Minimum contract period is six months.

BRIDGED TELEMETRY AND ALARM SERVICE^{/1/} (cont'd)**E. Rates and Charges (cont'd)**

2. Channel Services

a. Within the Same Service Area

<u>Description /Billing Code/</u>	Monthly Payment <i>Network Access Area</i>		
	<u>A</u>	<u>B</u>	<u>C</u>
1. Intra Service Area Local Channels, per primary termination			
a. Type 2335 - Two-Wire Remote Station			
Same C.O. as Bridging Location			
STF Not Applicable			
/WWSOA, WWSOB, WWSOC/	\$ 4.65	\$9.33	\$17.42
Different C.O. from Bridging Location			
STF Not Applicable			
/WWSDA, WWSDC/	45.96	--	58.82
b. Type 2335 - Master Station/Four-Wire Remote Station			
Same C.O. as Bridging Location			
STF Not Applicable			
/WWSPA, WWSPB, WWSPC/	8.82	17.46	33.64
Different C.O. from Bridging Location			
STF Not Applicable			
/WWSFPA, WWSFC/	33.22	--	58.04
c. Type 2336			
Different Bridging Locations Within a Service Area			
STF Not Applicable			
/WWMAA, WWMAC/	25.75	--	25.75

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BRIDGED TELEMETRY AND ALARM SERVICE^{/1/} (cont'd)**E. Rates and Charges (cont'd)**

2. Channel Services (cont'd)

b. Between Service Areas

<u>Description /Billing Code/</u>	Monthly Price	
	First <u>1/4 Mile</u>	Additional <u>1/4 Mile</u>

1. Inter Service Area Channels

- a. Short Haul Mileage - where the airline distance between S.A. centers is less than 12 miles as determined in accordance with Part 15, Section 2

Type 2335 - Two-Wire Interface /JZN4J, JZN4C/	\$20.70	\$0.40
Type 2335 - Four-Wire Interface /JZN5J, JZN5C/	20.70	0.40
Type 2336 /JZN6J, JZN6C/	20.70	0.40

Monthly Price	
First <u>Mile</u>	Additional <u>Mile</u>

- b. Long Haul Mileage - where the airline distance between S.A. centers is 12 or more miles as determined in accordance with Part 15, Section 2

Type 2335 - Two-Wire Interface /JZN4X, JZN4B/	\$31.10	\$1.70
Type 2335 - Four-Wire Interface /JZN5X, JZN5B/	31.10	1.70
Type 2336 /JZN6X, JZN6B/	31.10	1.70

/1/ Effective July 26, 2002, BTAS will no longer be available to new customers. Existing customers may retain the service at existing locations until July 1, 2003, when the service will be completely discontinued.

BRIDGED TELEMETRY AND ALARM SERVICE^{/1/} (cont'd)**E. Rates and Charges (cont'd)**

2. Channel Services (cont'd)

b. Between Service Areas (cont'd)

<u>Description /Billing Code/</u>	Monthly Payment Network Access Area		
	<u>A</u>	<u>B</u>	<u>C</u>
2. Inter Service Area Local Channel, per primary termination			
(a) Type 2335 - Two-Wire Remote Station			
<i>Short Haul Mileage</i>			
STF Not Applicable			
/WWTOA, WWTOB, WWTOC/	\$21.06	\$25.83	\$33.92
STF Applicable			
/OWTOA, OWTOB, OWTOC/	19.05	19.05	19.05
<i>Long Haul Mileage</i>			
STF Not Applicable			
/WWT3A, WWT3B, WWT3C/	21.06	25.83	33.92
(b) Type 2335 - Master Station/Four-Wire Remote Station			
<i>Short Haul Mileage</i>			
STF Not Applicable			
/WWTPA, WWTPB, WWTPC/	11.17	19.76	35.94
<i>Long Haul Mileage</i>			
STF Not Applicable			
/WWT4A, WWT4B, WWT4C/	11.17	19.76	35.94
(c) Type 2336			
<i>Short Haul Mileage</i>			
STF Applicable			
/WWPAA, WWPAB, WWPAC/	3.70	3.70	3.70
<i>Long Haul Mileage</i>			
STF Not Applicable			
/WWPBA, WWPBB, WWPBC/	3.70	3.70	3.70

/1/ Effective July 26, 2002, BTAS will no longer be available to new customers. Existing customers may retain the service at existing locations until July 1, 2003, when the service will be completely discontinued.

BRIDGED TELEMETRY AND ALARM SERVICE^{/1/} (cont'd)**E. Rates and Charges (cont'd)**

3. STB Circuits

<u>Description</u>	<u>Nonrecurring Charge</u>
Per STB circuit installed or converted	\$32.00
Per bridge added to existing circuit	5.00
Per station added to existing circuit	5.00

/1/ Effective July 26, 2002, BTAS will no longer be available to new customers. Existing customers may retain the service at existing locations until July 1, 2003, when the service will be completely discontinued.

SERIES 1000 CHANNEL SERVICES**A. Rates and Charges**

Where airline distance between S.A. centers is determined in accordance with **MILEAGE MEASUREMENT**, paragraph B. *V-H Coordinate System* in Part 15, Section 2.

1. Two-Point Service

<u>Description /Billing Code/</u>	Monthly Rate	
	First <u>1/4 Mile</u>	Additional <u>1/4 Mile</u>
a. Between Service Areas		
1. Inter Service Area Channel		
a. Short Haul mileage - where the airline distance between S.A. centers is less than 12 miles		
Per 1/4 mile, or fraction thereof		
With Digital Carrier Conditioning /JZNFJ, JZNFC/	\$970.00(I)	\$18.00(I)
b. Long Haul mileage - where the airline distance between S.A. centers is 12 or more miles		
Per mile, or fraction thereof		
With Digital Carrier Conditioning /JZNFX, JZNFB/	1,306.00(I)	105.00(I)

2. Multi-Point Service

<u>Description /Billing Code/</u>	Monthly Rate	
	First <u>1/4 Mile</u>	Additional <u>1/4 Mile</u>
a. Between Service Areas		
1. Inter Service Area Channel		
a. Short Haul mileage - where the airline distance between S.A. centers is less than 12 miles		
Per 1/4 mile, or fraction thereof		
With Digital Carrier Conditioning /JZNKJ, JZKNC/	\$970.00(I)	\$18.00(I)
b. Long Haul mileage - where the airline distance between S.A. centers is 12 or more miles		
Per mile, or fraction thereof		
Type 1001A		
With Digital Carrier Conditioning /JZNKX, JZKNC/	1,306.00(I)	105.00(I)

DS3 SERVICE PACKAGES^{/1/}**A. Term Payment Plans**Termination Charges

Will be calculated as the lesser of Method A or Method B as follows:

METHOD A

In addition to any unpaid Special Construction or nonrecurring charges, excluding any waived charges, customer termination liability for cancellation of DS3 Service Packages shall be equal to fifty percent (50%) of all recurring charges for the remaining months of the customer's term.

METHOD B

1. DS3 Service Packages

Service discontinued in the first through 11th month

$$((.85 \times 12\text{-month TPP price}) \times (12 - \text{number of months in service})) + ((12\text{-month TPP price} - \text{subscribed to TPP price}) \times \text{number of months in service}) = \text{Termination Charge}$$

Example:

A customer subscribed to a 36-month TPP term and disconnected service at the end of the fifth month. This customer's termination charge would be:

$$((.85 \times 12\text{-month TPP price}) \times (12 - 5 \text{ months})) + ((12\text{-month TPP price} - 36\text{-month TPP price}) \times 5 \text{ months}) = \text{Termination Charge}$$

All recurring price termination charges will be based on the TPP prices in effect at the time of termination.

/1/ DS3 Service Packages will not be available to new customers after March 13, 2000. Customers with existing DS3 Service Packages may maintain their service as currently configured, or may add/reduce the number of active Service Channels within their existing Service Package configuration subject to the terms and conditions of this Guidebook. However, existing customers may not order new DS3 Service Packages, renew their DS3 Service Package TPP, or upgrade to other DS3 Service Packages after March 13, 2000. Customers may convert their existing DS3 Service Package(s) to DS3 Service as offered after March 13, 2000 at no charge as long as the new TPP is of equal or longer term as their previous Service Package TPP and there is no decrease in the quantity of DS3 channels. DS3 Service Packages will not be available after March 12, 2005.

DS3 SERVICE PACKAGES^{/1/} (cont'd)**A. Term Payment Plans (cont'd)**Termination Charges (cont'd)

1. DS3 Service Packages (cont'd)

Service discontinued in the 12th through 60th month

The dollar difference between the current TPP price for the TPP term that could have been completed during the time the service was actually in service and the customer's current TPP price for each month the service was provided.

Example:

A customer subscribed to a 60-month TPP term and disconnected service during the 37th month. This customer's termination charge would be:

$$(36\text{-month TPP price} - 60\text{-month TPP price}) \times 37 = \text{Termination Charge}$$

The 36-month TPP term could have been completed during the months the service was actually in service.

All recurring price termination charges will be based on the TPP prices in effect at the time of termination.

/1/ DS3 Service Packages will not be available to new customers after March 13, 2000. Customers with existing DS3 Service Packages may maintain their service as currently configured, or may add/reduce the number of active Service Channels within their existing Service Package configuration subject to the terms and conditions of this Guidebook. However, existing customers may not order new DS3 Service Packages, renew their DS3 Service Package TPP, or upgrade to other DS3 Service Packages after March 13, 2000. Customers may convert their existing DS3 Service Package(s) to DS3 Service as offered after March 13, 2000 at no charge as long as the new TPP is of equal or longer term as their previous Service Package TPP and there is no decrease in the quantity of DS3 channels. DS3 Service Packages will not be available after March 12, 2005.

DS3 SERVICE PACKAGES^{/1/} (cont'd)**B. Definitions**DS3 Service Channel

The individually activated DS3 channel(s) within a DS3 Service Package.

DS3 Service Package

Provides the capability to provision a maximum number of DS3 channels.

Local Distribution Channel^{/2/}

Provides interconnection between the Company Serving Wire Center (SWC) and the customer premises. Consists of two rate elements: DS3 Service Packages and DS3 Service Channels.

C. Terms and Conditions

In addition to the Terms and Conditions set forth in Part 15, Section 1, the following applies to DS3 Service.

1. DS3 Service Package

Each DS3 Service Package must have a minimum number of service channels activated at all times. A new DS3 Service Package must be installed with at least the minimum required Service Channels. A customer may not disconnect Service Channels from an existing DS3 Service Package below the minimum required in that package without downgrading the Service Package size or terminating the DS3 LDC Service.

<u>DS3 Service Package (with Electrical Interface)</u>	<u>Minimum Required Service Channels</u>	<u>Maximum Available Service Channels</u>
DS3	1	1
DS3B	1	2
DS3C	1	3
DS3F	3	6
DS3L	7	12
DS3X	13	24

/1/ DS3 Service Packages will not be available to new customers after March 13, 2000. Customers with existing DS3 Service Packages may maintain their service as currently configured, or may add/reduce the number of active Service Channels within their existing Service Package configuration subject to the terms and conditions of this Guidebook. However, existing customers may not order new DS3 Service Packages, renew their DS3 Service Package TPP, or upgrade their DS3 Service Packages after March 13, 2000. Customers may convert their existing DS3 Service Package(s) to DS3 Service as offered after March 13, 2000 at no charge as long as the new TPP is of equal or longer term as their previous Service Package TPP and there is no decrease in the quantity of DS3 channels. DS3 Service Packages will not be available after March 12, 2005.

/2/ For DS3 Service ordered on or after March 13, 2000, the Local Distribution Channel will consist of only one rate element.

DS3 SERVICE PACKAGES^{/1/} (cont'd)**C. Terms and Conditions (cont'd)****1. DS3 Service Package (cont'd)**

All DS3 service channels within the package must be ordered for termination at the same customer designated premises, billed to the same customer and in the same Serving Wire Center (SWC). All service channels in a package are required to be connected to other service components (i.e., channel mileage, multiplexing, or another service channel) at the time the service channel is installed, except at the fiber hub.

The interconnection of individual service channels with other components, such as channel mileage and multiplexing, may be different. For example, one service channel within the package may have multiplexing, while another service channel may have channel mileage associated with it. Components connected to each service channel in the service package may have different Term Payment Plans periods from the service package in which the service channels reside.

/1/ DS3 Service Packages will not be available to new customers after March 13, 2000. Customers with existing DS3 Service Packages may maintain their service as currently configured, or may add/reduce the number of active Service Channels within their existing Service Package configuration subject to the terms and conditions of this Guidebook. However, existing customers may not order new DS3 Service Packages, renew their DS3 Service Package TPP, or upgrade their DS3 Service Packages after March 13, 2000. Customers may convert their existing DS3 Service Package(s) to DS3 Service as offered after March 13, 2000 at no charge as long as the new TPP is of equal or longer term as their previous Service Package TPP and there is no decrease in the quantity of DS3 channels. DS3 Service Packages will not be available after March 12, 2005.

DS3 SERVICE PACKAGES^{/1/} (cont'd)**D. Prices**

1. Service Elements

Description /Billing Code/	Monthly Payment Term Payment Plans			Monthly Extension
	12 Months	36 Months	60 Months	
Local Distribution Channel, per point of termination				
Electrical Interface, per service package				
Access Area A				
DS3 /PCGAA/	\$2,295.00	\$1,710.00	\$1,170.00	\$2,650.00
DS3B /PCGBA/	3,015.00	2,250.00	1,575.00	3,450.00
DS3C /PCGCA/	3,915.00	2,970.00	1,860.00	4,500.00
DS3F /PCGFA/	6,840.00	4,590.00	2,740.00	7,875.00
DS3L /PCGLA/	10,350.00	6,660.00	3,940.00	11,900.00
DS3X /PCGXA/	15,750.00	9,450.00	6,750.00	18,100.00
Access Area B				
DS3 /PCGAB/	2,139.00	1,395.00	906.75	2,450.00
DS3B /PCGBB/	2,790.00	2,046.00	1,348.50	3,200.00
DS3C /PCGCB/	3,813.00	2,790.00	1,860.00	4,400.00
DS3F /PCGFB/	6,835.00	4,743.00	3,069.00	7,850.00
DS3L /PCGLB/	10,695.00	6,883.00	4,557.00	12,300.00
DS3X /PCGXB/	16,275.00	9,765.00	6,975.00	18,700.00
Access Area C				
DS3 /PCGAC/	2,300.00	1,500.00	975.00	2,675.00
DS3B /PCGBC/	3,000.00	2,200.00	1,450.00	3,450.00
DS3C /PCGCC/	4,100.00	3,000.00	2,000.00	4,700.00
DS3F /PCGFC/	7,350.00	5,100.00	3,300.00	8,450.00
DS3L /PCGLC/	11,500.00	7,400.00	4,900.00	13,225.00
DS3X /PCGXC/	17,500.00	10,500.00	7,500.00	20,125.00
DS3 Service Channel, per termination				Monthly Rate
Electrical				
Access Area A /HDZLX/				\$475.00
Access Area B /HDZLX/				475.00
Access Area C /HDZLX/				475.00

/1/ DS3 Service Packages will not be available to new customers after March 13, 2000. Customers with existing DS3 Service Packages may maintain their service as currently configured, or may add/reduce the number of active Service Channels within their existing Service Package configuration subject to the terms and conditions of this Guidebook. However, existing customers may not order new DS3 Service Packages, renew their DS3 Service Package TPP, or upgrade their DS3 Service Packages after March 13, 2000. Customers may convert their existing DS3 Service Package(s) to DS3 Service as offered after March 13, 2000 at no charge as long as the new TPP is of equal or longer term as their previous Service Package TPP and there is no decrease in the quantity of DS3 channels. DS3 Service Packages will not be available after December 1, 2006.

GIGAMAN® SERVICE

/1/

Effective September 30, 2017, GigaMAN Service will no longer be available for purchase by new or existing customers. The Company will no longer accept orders for adds, moves, changes or new term plans for GigaMAN Service, and existing term plans may not be renewed, converted or extended. Following the expiration of a customer's existing GigaMAN term agreement, service will be provided on a month-to-month basis at the applicable monthly extension rates until the service is discontinued.

(N)

(N)

A. Description

/1/

GigaMAN Service is a service which provides the transmission of data at a discrete bit rate of 1 Gbps, in Ethernet format. This service can be used to connect customer-designated premises in a Node-to-Node configuration. Within a single network, one or more channels may be provided.

GigaMAN Service can be used to seamlessly extend customer local area networks to off-site locations such as data centers, storage locations or satellite office locations within the same metro area. Applications that could be used with GigaMAN Service include LAN-to-LAN connectivity, CAD/CAM file transfer, telemedicine and business continuity transport.

B. DefinitionsChannel Mileage (CM)

Provides for the transmission facilities between the serving wire centers associated with the designated customer premises.

Repeater (RPTR)

A repeater (circuit regenerator) will be used to extend the transmission of GigaMAN Service. The Company will determine when repeaters are necessary. In addition, the first repeater in a multi-repeater circuit will be used for service alarming and monitoring purposes.

Node Termination (NT)

Provides for the communications path between the customer-designated premises and the serving wire center of that premise, or between two customer-designated premises.

Wire Center Termination (WCT)

Provides for the termination of digital transmission facilities between two or more serving wire centers. These transmission facilities are categorized as channel mileage, as described above.

/1/

® GigaMAN is a registered trademark of AT&T Intellectual Property

(C) /1/

/1/ Material formerly appeared in Part 15, Section 4, Sheet 1.

GIGAMAN® SERVICE (cont'd)

/1/

C. Terms and Conditions

In addition to regulations set forth elsewhere in this Guidebook, the following regulations apply to GigaMAN Service:

1. The customer provided equipment (CPE) must deliver the data signal for the GigaMAN transport within the industry specification for the subscribed data service. See Paragraph E. – *Technical References*.
2. GigaMAN provides physical layer transport only. The Company assumes no responsibility for the through transmission of signals generated by CPE, for the quality of or defects in such transmission, for the reception of signals by CPE, or address signaling to the extent addressing is performed by CPE. Error detection and correction of data generated by CPE is the customer's responsibility.
3. GigaMAN is designed to provide connectivity at the discrete bit rate of 1 Gbps. The service is considered interrupted when the customer reports to the Company and the Company confirms that continuity has been lost.
4. GigaMAN Service is provided at the option of the Company where facilities permit. If appropriate facilities are not available, *Special Construction* charges may apply.
5. Node terminations are not allowed in Company wire centers.
6. Interoffice mileage is calculated using the V and H coordinate method described in Part 15, Section 1.
7. Repeaters (circuit regenerators) will be located in Company wire centers as required. A monthly charge will be associated with each repeater network element, except for the first repeater in a circuit path (as the first repeater is also used for service alarming and monitoring purposes). GigaMAN circuits provisioned prior to November 19, 2003 may not have required a repeater.
8. Route diversity options are available where facilities exist. If appropriate facilities do not exist, *Special Construction* charges may apply. Route diversity is only available to customers with service installed after November 19, 2003.
9. Additional repeaters (circuit regenerators) may be required on the diverse or alternately routed path when Protection Options are ordered by the customer. The need for repeaters on the protected path will be determined by the Company. Additional charges will apply.
10. Channel Mileage charges are applicable on both paths of the GigaMAN Service when any of the Protection Options are ordered.

/1/

/1/ Material formerly appeared in Part 15, Section 4, Sheet 2.

GIGAMAN® SERVICE (cont'd)

/1/

C. Terms and Conditions

11. If Protection Options are added to an existing GigaMAN circuit that was installed after November 19, 2003, a temporary service interruption will result as the new protected circuit must be re-designed and re-installed. Termination Charges will not apply for the circuit redesign (see *Term Pricing Plan* following for requirements). This installation must occur during an agreed-upon maintenance window between a designated customer representative and the Company. The customer will be responsible for providing adequate floor space, as determined by the Company, to accommodate additional equipment bays and related power protection equipment (such as batteries). Protection Options are contingent on availability of equipment and fiber facilities from premise to premise. Other Special Construction charges, as necessary, may apply.
12. GigaMAN Service is not available in a meet-point billing arrangement involving other Carrier's.
13. At the Company's discretion, service may be provided to a customer's locations found in Verizon Territory where facilities permit.

D. Features

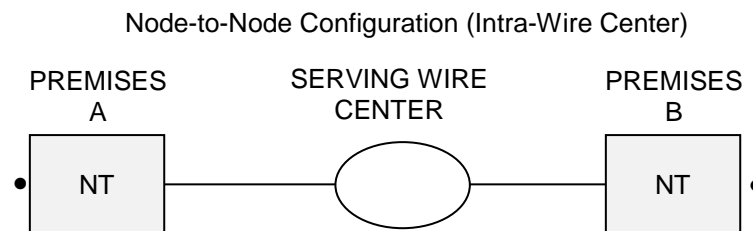
1. Standard Features

All basic service configurations provide full duplex transmission. There is one type of GigaMAN Service configuration: Node-to-Node Service.

Node-To-Node Service

A Node-to-Node configuration connects two customer-designated premises, either inter- or intra-wire center.

The following diagram depicts a Node-to-Node configuration connecting two customer-designated premises served from the same wire center.



NT = Node Termination

Applicable service elements are:

- Node Termination (two applicable)

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/1/ Material formerly appeared in Part 15, Section 4, Sheet 3.

GIGAMAN® SERVICE (cont'd)

/1/

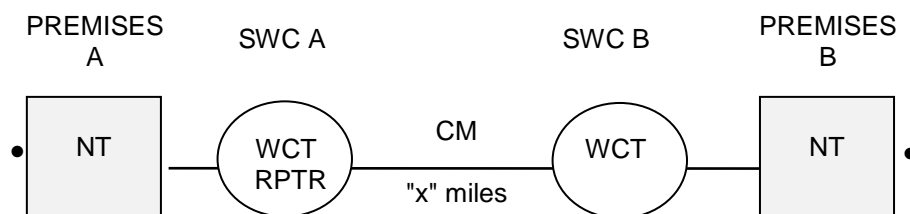
D. Features (cont'd)

1. Standard Features (cont'd)

Node-To-Node Service (cont'd)

The following diagram depicts a Node-to-Node configuration connecting two customer-designated premises with serving wire centers located "x" miles apart.

Node-to-Node Configuration ("x" miles apart)
(Inter-Wire Center)



NT = Node Termination

WCT = Wire Center Termination

CM = Channel Mileage

SWC = Serving Wire Center

RPTR = Repeater (where required)

Applicable service elements are:

- Node Termination (two applicable)
- Wire Center Termination (two applicable)
- Channel Mileage ("x" miles)
- Repeater (where required)

/1/

/1/ Material formerly appeared in Part 15, Section 4, Sheet 4.

GIGAMAN® SERVICE (cont'd)

/2/

D. Features (cont'd)

2. Optional Features

Diversity and Protection Options are available where facilities exist. If appropriate facilities do not exist, Special Construction charges may apply. End-to-end diversity can be achieved by coupling Alternative Wire Center Diversity with Inter-Wire Center Diversity, in those instances where each end of a circuit is served out of different serving wire centers. Diversity and Protection Options are only available to customers with service installed after November 19, 2003. In addition to charges for the various Protection Options, normal charges for the Node Termination, Wire Center Termination and Channel Mileage will apply. Protection Options provide additional levels of reliability to GigaMAN Service. There are multiple options for Protection at each end of a two point circuit. The options at each end do not need to be the same, but both ends must include some form of Protection, for any to be offered. A GigaMAN circuit cannot include Protection at only one end (excluding Power Protection which can be at just one end, or both ends, of the circuit).

The following options are available for Diversity:

- Local Channel Diversity
- Inter-Wire Center Diversity
- Alternate Wire Center Diversity

The following options are available for Protection:

- Equipment Only Protection
- Equipment Plus Fiber Path Protection, with ...
 - Alternate Wire Center Path Protection, or
 - Local Channel Path Protection
- Inter-Wire Center Path Protection^{/1/}
- Power Protection

/2/

/1/ Inter-Wire Center Path Protection must be ordered in conjunction with an Equipment Protection option at each end of the circuit.

/2/

/2/ Material formerly appeared in Part 15, Section 4, Sheet 5.

GIGAMAN® SERVICE (cont'd)

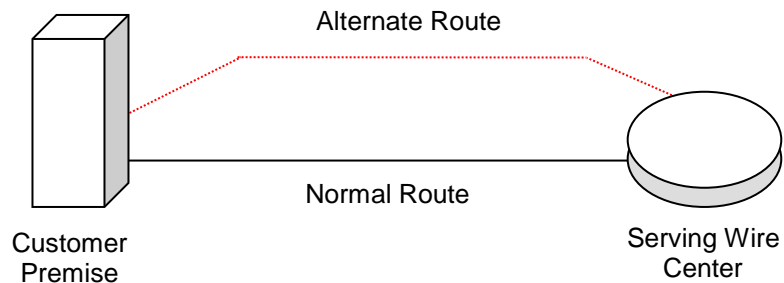
/1/

D. Features (cont'd)

2. Optional Features (cont'd)

Local Channel Diversity

Local Channel Diversity provides for a transmission path between a designated customer premise and the standard serving wire center (SWC) that is diverse from the normal/standard transmission path. Local Channel Diversity requires two eligible services purchased by (or for the benefit of) the same customer. The Company will determine which services are eligible based on technical or operational limitations. With this arrangement, one or more node termination channels will be provisioned over the standard route and one or more node termination channels will be provisioned over a diverse route. Local channel diversity does not provide for full diversity; it only allows for diversity from the splice point closest to the customer's property line to the SWC. If a customer desires full diversity, arrangements must be made for constructing dual entrance facilities into the customer's premise, at the customer's expense.



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/1/ Material formerly appeared in Part 15, Section 4, Sheet 6.

GIGAMAN® SERVICE (cont'd)

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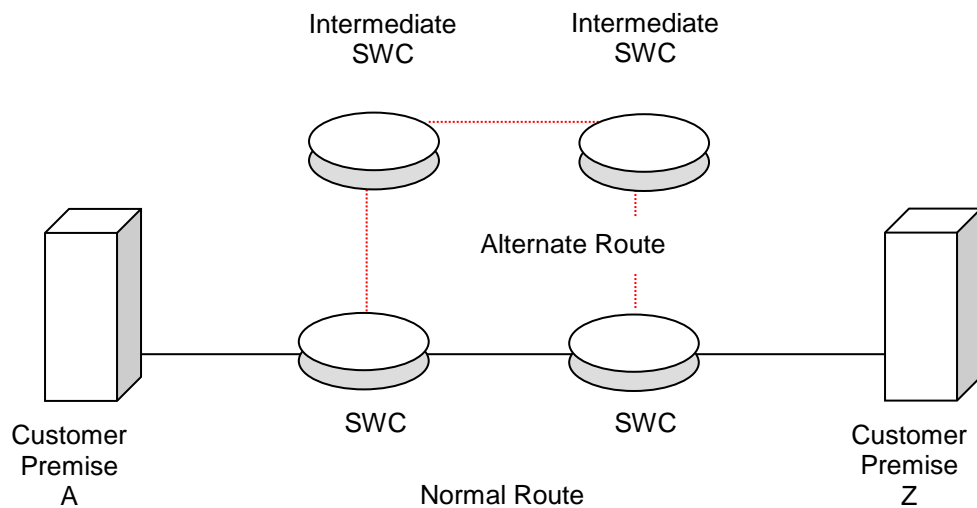
D. Features (cont'd)

2. Optional Features (cont'd)

Inter-Wire Center Diversity

Inter-Wire Center Diversity arrangements presume that each end of a GigaMAN node termination channel is served out of a different serving wire center (SWC). This arrangement provides a transmission path for GigaMAN node termination channels between the customer's designated SWC and the serving wire center at the distant end of the circuit, over a transmission path that is separate from the standard transmission path between the two wire centers. Interoffice mileage will be calculated between the intermediate serving wire centers along the circuit path of the diversely routed GigaMAN Service. Inter-Wire Center Diversity requires two eligible services purchased by (or for the benefit of) the same customer. The Company will determine which services are eligible based on technical or operational limitations.

Inter-wire center diversity does not provide for full diversity; it only offers interoffice diversity. If a customer desires full diversity, Alternate Wire Center Diversity must be implemented along with Inter-Wire Center Diversity. Additionally, arrangements must be made for constructing dual entrance facilities at the customer's premise, at the customer's expense.



/1/

/1/ Material formerly appeared in Part 15, Section 4, Sheet 7.

GIGAMAN® SERVICE (cont'd)

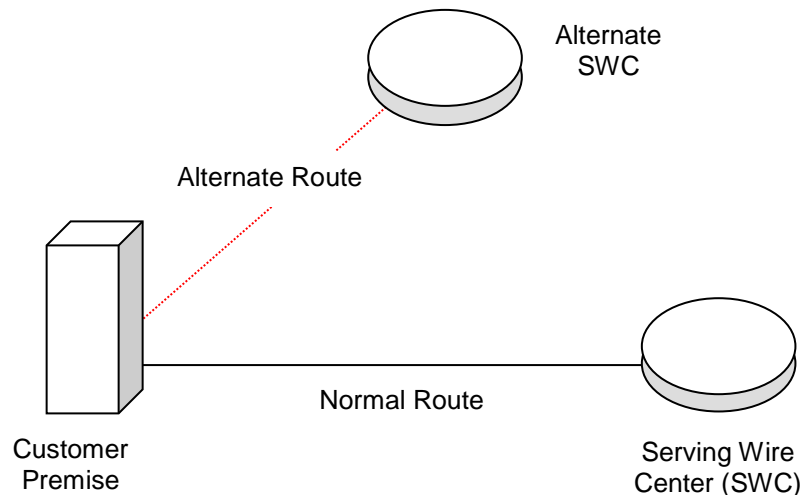
/1/

D. Features (cont'd)

2. Optional Features (cont'd)

Alternate Wire Center Diversity

Alternate Wire Center Diversity is for the local loop only. It provides a node termination transmission path for GigaMAN service between the customer's designated premises and a wire center that is not the normal (or standard) serving wire center. The Company will choose the alternate wire center closest to the customers designated premise that is capable of providing GigaMAN Service over the alternate route. Alternate Wire Center Diversity does not require the purchase of two GigaMAN Services by (or for the benefit of) the same customer, nor does it require the customer to have an existing GigaMAN circuit operating over the normal (or standard) route to the normal (or standard) serving wire center. With this arrangement, one or more node termination channels will be provisioned over the alternate route. If a customer desires full diversity, arrangements must be made for constructing dual entrance facilities into the customer's premise, at the customer's expense.



/1/

/1/ Material formerly appeared in Part 15, Section 4, Sheet 8.

GIGAMAN® SERVICE (cont'd)

/1/

D. Features (cont'd)

2. Optional Features (cont'd)

Equipment Only Protection

Equipment Only Protection offers a network design where one GigaMAN signal will be routed down two different fiber pairs that co-exist in the same cable and conduit structure, and terminate at the customer's premise in the same device (but into separate and distinct modules). Protection switching will occur between the two modules if necessary. Should one fiber pair or network element become defective, service will be maintained through 50 millisecond protection switching within the Network Terminating Equipment (NTE) at the customer's demarcation point. If both fiber pairs are cut, an Out Of Service condition will result. This form of protection can only be ordered per loop (per end) for each circuit the customer wishes to protect.

Equipment Plus Fiber Path Protection

Equipment Plus Fiber Path Protection offers varying degrees of path protection for each terminating end of the circuit. For circuits that are served by different wire centers, Equipment Plus Fiber Path Protection may be combined with Inter-Wire Center Path Protection, to ensure a fully-protected circuit.

Equipment Plus Fiber Path Protection, with ...

Alternate Wire Center Path Protection

One GigaMAN (1 Gbps) signal will be routed over one fiber pair of the protected circuit from the customer's premise to the normal serving wire center, and a duplicate GigaMAN (1 Gbps) signal will be routed over a diversely routed fiber pair to the Alternate Wire Center selected by the Company. If any location between the fiber paths is closer than 10 feet, the location or locations will be disclosed to the customer. The customer will determine whether to accept the engineered path, or agree to pay Special Construction Charges to have a completely diverse route constructed in those instances where there is not a minimum separation of 10 feet between paths. The customer can also select Equipment Only Protection for an inter-office segment where facilities are not available. This option can be selected for one or both terminating ends. If an equipment failure or fiber cable cut occurs in a segment of the circuit that has this form of protection, the circuit will be switched to the alternate path in 50 milliseconds or less. If a customer desires full path diversity, arrangements must be made for constructing dual entrance facilities into the customer's premise, at the customer's expense.

/1/

/1/ Material formerly appeared in Part 15, Section 4, Sheet 9.

GIGAMAN® SERVICE (cont'd)

/1/

D. Features (cont'd)

2. Optional Features (cont'd)

Equipment Plus Fiber Path Protection (cont'd)

Equipment Plus Fiber Path Protection, with ... (cont'd)

Local Channel Path Protection

The two fiber pairs of the protected service will be routed diversely to the normal serving wire center. If any location between the fiber paths is closer than 10 feet, the location or locations will be disclosed to the customer. The customer will determine whether to accept the engineered path, or agree to pay Special Construction Charges to have a completely diverse route constructed. This option can be selected for one or both terminating ends. If an equipment failure or fiber cable cut occurs in a segment of the circuit that has this form of protection, the circuit will be switched to the alternate path in 50 milliseconds or less. If a customer desires full path diversity, arrangements must be made for constructing dual entrance facilities into the customer's premise, at the customer's expense.

Inter-Wire Center Path Protection

Each fiber pair is routed through different Central Offices between the two serving wire centers, or between the standard serving wire center and an alternate serving wire center. Inter-Wire Center Protection begins at the first manhole out of the Central Office. If only the two serving wire centers are involved, the two fiber pairs will be routed down two fiber paths that are separated by at least 10 feet. If any location between the fiber paths is closer than 10 feet, the location or locations will be disclosed to the customer. The customer will determine whether to accept the engineered path, or agree to pay Special Construction Charges to have a completely diverse route constructed. The customer will receive Equipment Only Protection for an inter-office segment where facilities are not available. If an equipment failure or fiber cable cut occurs on one of the inter-office routes, the circuit will be switched to the alternate path in 50 milliseconds or less. Interoffice mileage will be calculated between the intermediate serving wire centers along the circuit paths of both protected fiber pairs.

Power Protection

Power Protection provides customers with battery back-up for up to eight (8) hours to maintain GigaMAN equipment in case of a power failure. Power Protection is provided on a per rack or cabinet basis, and customers in a multi-tenant building will require separate equipment and bays dedicated to each customer. Power Protection is not available for installations using a wall mounted cabinet. Request for Power Protection are subject to equipment availability and compatibility. Upon receipt of a customer request for Power Protection, the Company will determine the availability, design and engineering requirement for Power Protection, and the appropriate number of service element charges to apply. The addition of Power Protection to existing GigaMAN Service will result in a temporary service interruption.

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/1/ Material formerly appeared in Part 15, Section 4, Sheet 10.

GIGAMAN® SERVICE (cont'd)

/1/

E. Technical References

The customer interface to GigaMAN Service is as specified in:

SubjectTechnical Reference

Ethernet Standards for the SBC Local Exchange Companies

SBC-TP-76412-000

Network Performance Parameters for Dedicated
Digital Services – Definitions and Measurements

ANSI T1.503-2002

The Technical Reference can be obtained from:

APEX Support Team
(734) 523-7348

The ANSI publication can be obtained from:

Alliance for Telecommunications Industry Solutions
1200 G. Street, NW Suite 500
Washington, DC 20005

/1/

/1/ Material formerly appeared in Part 15, Section 4, Sheet 11.

GIGAMAN® SERVICE (cont'd)

/3/

F. Prices

1. Service Elements

<u>Description /Billing Code/</u>	<u>Nonrecurring Charge</u>
Administrative Charge ^{/1/}	
- per service order /ORCMX/	\$140.00
Design and Central Office Connection Charge ^{/1/}	
- per circuit /NRBCL/	230.00
Customer Connection Charge ^{/1/}	
- per premises node and wire center terminations /NRBBL/	755.00
Protection Options	
Per terminating end	
- Equipment Only /CPAEX/	625.00
- Equipment Plus Fiber Path Protection, with ...	
Alternate Wire Center Path Protection /CPAFX/, or	1,400.00
Local Channel Path Protection /CPAGX/	1,225.00
Per rack or cabinet	
- Power Protection /VBBGX/	475.00
Per circuit	
- Inter-Wire Center Path Protection ^{/2/} /CPAHX/	625.00

/3/

/1/ Nonrecurring charges will be waived for those customers selecting the 36 or 60 month Term Payment Plan (TPP) period for new service. /3/

/2/ Inter-Wire Center Path Protection must be ordered in conjunction with an Equipment Protection option at each end of the circuit. /3/

/3/ Material formerly appeared in Part 15, Section 4, Sheet 12.

GIGAMAN® SERVICE (cont'd)

/2/

F. Prices (cont'd)

1. Service Elements (cont'd)

<u>Description /Billing Code/</u>	<u>Monthly Payment Term Payment Plans</u>					<u>Monthly Extension</u>
	<u>12 Months</u>	<u>24 Months</u>	<u>36 Months</u>	<u>60 Months</u>		
Node Termination						
- per point of termination /N2TDX/	\$3,300.00	\$3,100.00	\$2,850.00	\$2,500.00		\$3,800.00
Wire Center Termination						
- per termination /CTJ/	125.00	110.00	100.00	50.00		125.00
Channel Mileage						
- per inter-wire center mile /3LN5S/	125.00	115.00	100.00	75.00		125.00
Repeater						
- each /VU4/	2,400.00	1,700.00	1,150.00	850.00		2,500.00
- each /M1RGX// ^{1/}	2,400.00	---	1,150.00	850.00		2,500.00
Diversity Options						
- Local Channel /CPALX/	750.00	750.00	750.00	750.00		750.00
- Inter-Wire Center /CPATX/	500.00	500.00	500.00	500.00		500.00
- Alternate Wire Center /CPAAX/	1,200.00	1,200.00	1,200.00	1,200.00		1,200.00

/2/

/1/ Effective September 24, 2003, service arrangements utilizing a mid-span repeater (/M1RGX/) are grandfathered and no longer available for new customers. Should existing customers utilizing a mid-span repeater disconnect (or relocate one end of) their service, the mid-span repeater will no longer be available. The new equipment platform must be used in those scenarios.

/2/

/2/ Material formerly appeared in Part 15, Section 4, Sheet 13.

/2/

GIGAMAN® SERVICE (cont'd)

/2/

F. Prices (cont'd)

1. Service Elements (cont'd)

<u>Description /Billing Code/</u>	Monthly Payment <i>Term Payment Plans</i>				<u>Monthly Extension</u>
	<u>12 Months</u>	<u>24 Months</u>	<u>36 Months</u>	<u>60 Months</u>	
Protection Options					
<i>Per terminating end</i>					
- Equipment Only /CPAEX/	\$1,375.00	\$1,225.00	\$1,050.00	\$900.00	\$1,500.00
- Equipment Plus Fiber Path Protection, with ... Alternate Wire Center Path Protection /CPAFX/	2,050.00	1,840.00	1,600.00	1,400.00	2,460.00
- Local Channel Path Protection /CPAGX/	1,825.00	1,650.00	1,425.00	1,225.00	2,190.00
<i>Per rack or cabinet</i>					
- Power Protection /VBBGX/	625.00	525.00	480.00	435.00	700.00
<i>Per circuit</i>					
- Inter-Wire Center Path Protection ^{/1/} /CPAHX/	375.00	200.00	150.00	100.00	475.00

/2/

/1/ Inter-Wire Center Path Protection must be ordered in conjunction with an Equipment Protection option at each end of the circuit.

/2/

/2/ Material formerly appeared in Part 25, Section 4, Sheet 14.

GIGAMAN® SERVICE (cont'd)

/1/

F. Prices (cont'd)**2. Payment Plans****- Term Payment Plans**

GigaMAN Service is only available under the Term Payment Plan (TPP) whereby customers must select either a 12-, 24-, 36- or 60-month period. After the selected Term Payment Plan period is satisfied, the monthly extension price will apply unless a new TPP is selected. Refer to Term Payment Plans in Part 15, Section 1. Customers re-negotiating an existing term payment plan contract expiring after November 19, 2003 will be required to migrate to the new equipment platform.

- Single Payment Option (SPO)

A single payment option is available for this service. Refer to Term Payment Plans in Part 15, Section 1 for calculating Single Payment Options.

- Deferred Payment Option (DPO)

A deferred payment option is not available for this service.

3. Termination Charges

Termination Charges will apply to service terminated prior to the contracted period. Refer to *Termination Charges* in Part 15, Section 1, for calculating Termination Charges.

Effective September 24, 2003, the Company migrated to a new equipment platform in support of GigaMAN Service. As of September 24, 2003, customers who request a conversion from the existing GigaMAN platform to the new equipment platform will be allowed to do so under the following conditions:

- The customer must issue a disconnect order for their existing GigaMAN Service and place a service order for GigaMAN Service using the new equipment platform. Termination Charges for the existing service will be waived. Standard nonrecurring charges to install GigaMAN Service using the new equipment platform will apply.
- The term of the new contract must be equal to or greater than the remaining time left on the existing GigaMAN contract.

Migration is contingent on availability of fiber from premise to premise. Other Special Construction charges, as necessary, may apply.

/1/

/1/ Material formerly appeared in Part 15, Section 4, Sheet 15.

GIGAMAN® SERVICE (cont'd)

/1/

F. Prices (cont'd)**3. Termination Charges (cont'd)**

For circuits installed after November 19, 2003, customers will be permitted to move one end of a GigaMAN Service to another location, without incurring Termination Charges, given the following conditions are met:

- The customer must issue a disconnect order for the existing location and place a new service order for GigaMAN Service at the new location. Termination Charges for the existing location will be waived. Standard nonrecurring charges to install GigaMAN Service as a new circuit will apply.
- Negotiated down time will apply, as the new circuit will need to be designed and installed.
- The term of the new contract must be equal to or greater than the remaining time left on the existing GigaMAN contract.
- The existing GigaMAN Service must have been in service for a minimum period of 12 months for a 2-year contract, 15 months for a 3-year contract or 18 months for a 5-year contract. Existing GigaMAN Service with 1-year contracts will not be eligible for this Moves option.

Moves are contingent on availability of fiber from premise to premise. Other Special Construction charges, as necessary, may apply.

Customers will be permitted to add Protection Options to existing GigaMAN Service that was installed after November 19, 2003, without incurring Termination Charges, given the following conditions are met:

- The customer must issue a disconnect order for the existing circuit and place a service order for the newly protected circuit. Termination Charges for the existing circuit will be waived. Standard nonrecurring charges to install the newly protected GigaMAN Service will apply. (the conditions described here do not apply to Power Protection added to an existing GigaMAN circuit).
- Negotiated down time will apply, as the new circuit will need to be designed and installed.
- The term of the new contract must be equal to or greater than the remaining time left on the existing GigaMAN contract. (the conditions described here do not apply to Power Protection added to an existing GigaMAN circuit).
- The existing GigaMAN Service must have been in service for a minimum period of 12 months for a 2-year contract, 15 months for a 3-year contract or 18 months for a 5-year contract. Existing GigaMAN Service with 1-year contracts will not be eligible for this option. (The conditions described here do not apply to Power Protection added to an existing GigaMAN circuit).

Addition of Protection Options are contingent on availability of equipment and fiber facilities from premise to premise. Other Special Construction charges, as necessary, may apply.

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/1/ Material formerly appeared in Part 15, Section 4, Sheet 16.

GIGAMAN® SERVICE (cont'd)

/1/

F. Prices (cont'd)**3. Termination Charges (cont'd)**

For service installed after July 10, 2007, customers will be permitted to upgrade to a higher-speed service provided by the Company, without incurring Termination Charges, given the following conditions are met:

- an upgrade is considered an increase in speed or capacity when comparing GigaMAN Service to the new service.
- the customer must issue a disconnect order for the existing GigaMAN Service and place a service order for the new, higher-speed service, such that there is no more than 90 days overlap in service.
- the same customer locations must be utilized for the new, higher-speed service.
- the expiration date for the new, higher-speed service is beyond the end of the original TPP term associated with the existing GigaMAN Service.
- the existing GigaMAN Service must have been in service for a minimum period of 12 months for a 24-month contract, 15 months for a 36-month contract or 18 months for a 60-month contract. Existing GigaMAN Service with 12-month contracts will not be eligible for this Upgrade option.

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/1/ Material formerly appeared in Part 15, Section 4, Sheet 17.

GIGAMAN® SERVICE (cont'd)

/1/

F. Prices (cont'd)

3. Termination Charges (cont'd)

Migration to AT&T Dedicated Ethernet

Customers subscribing to GigaMAN Service may migrate to AT&T Dedicated Ethernet provided by the Company without incurring Termination Charges, subject to the following conditions:

- The new AT&T Dedicated Ethernet and the existing GigaMAN Service must be billed to the same customer of record at the same customer locations.
- The customer's existing service must have been in place for at least 12 months.
- The minimum term for the new service must be at least 12 months and must be equal to or greater than the number of months remaining in the customer's existing Term Payment Plan (TPP) term.
- The speed (capacity/bandwidth) of the new service must be equal to or greater than that of the existing service.
- The customer must issue a disconnect order for the replaced GigaMAN Service to be effective within 90 days after the AT&T Dedicated Ethernet installation date. The disconnect and new orders must be coordinated through the Company.
- If overlapping service is required, the period will be limited to not more than 90 days and billing will apply to both services during the time both services are available.

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/1/ Material formerly appeared in Part 15, Section 4, Sheet 17.1.

GIGAMAN® SERVICE (cont'd)

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F. Prices (cont'd)

4. Credit Allowance

A service is interrupted when it becomes unusable to the customer because of a failure of a facility component used to furnish service under this tariff or in the event that the protective controls applied by the Company result in the complete loss of service by the customer. An interruption period starts when an inoperative service is reported to the Company and the Company confirms that continuity has been lost, and ends when the service is operative.

In case of an interruption to service, allowance for the period of interruption, if not due to the negligence of the customer or the customer's end user, shall be as follows: no credit shall be allowed for an interruption of less than 10 seconds. The customer shall be credited for an interruption of 10 seconds or more as follows: the credit shall be at the rate of 10/8640 of the monthly charges for the service for each period of 5 minutes or major fraction thereof that the interruption continues. The credit allowance(s) for service interruptions shall not exceed 100% of the applicable monthly rates.

The Company's failure to provide or maintain services under this tariff shall be excused by force majeure events such as, but not limited to, an earthquake, hurricane, flood, fire, storms, tornadoes, explosion, lightning, power surges or failure, fiber cuts, strikes or labor disputes, acts of war, civil disturbances, acts of civil or military authorities or public enemy, governmental orders, civil commotion, criminal actions taken against the Company, acts of God and other circumstances beyond the Company's reasonable control.

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/1/ Material formerly appeared in Part 15, Section 4, Sheet 18.

GIGAMAN® SERVICE (cont'd)

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F. Prices (cont'd)

4. Credit Allowance (cont'd)

Protection Options

A Service Level Agreement (SLA) is offered with fully-protected GigaMAN Service, which provides the customer with a performance commitment that includes a service credit if the service does not perform as described. An SLA of 99.999% Service Availability performance is offered on a GigaMAN circuit with Protection (defined as Equipment Plus Fiber Path Protection for every segment of the circuit). Service Availability will be determined using unavailable seconds as defined in ANSI T1.503-2002 (see *Technical References*).

- SLAs are applicable to customers who purchase Equipment Plus Fiber Path Protection with Alternate Wire Center Path Protection or Equipment Plus Fiber Path Protection with Local Channel Path Protection on both ends of a circuit (both local channels), as well as Inter-Wire Center Path Protection, when applicable.
- If this SLA is not met, or if there is any single event of unavailability of service of 10 seconds or more, the customer will be entitled to a credit equal to 100% of the monthly rate for the circuit. Only one such credit in a billing period will apply.
- In order to qualify for this credit, the event causing the unavailability must be determined by the Company to be in its network and the failure occurred in that part of the service with Protection.
- SLA adjustments are not available in the event of a cable cut in any unprotected portion of the GigaMAN Service fiber path or due to customer-requested modifications to the service that may require down time. Routine maintenance is not counted against unavailability.
- The customer is responsible for notifying the Company when the service parameter within the calendar month falls below the committed level.
- The customer must request a service credit within 25 calendar days after the end of the month when the unavailability event occurred.

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/1/ Material formerly appeared in Part 15, Section 4, Sheet 19.

DecaMAN® SERVICE

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Effective September 30, 2017, DecaMAN Service will no longer be available for purchase by new or existing customers. The Company will no longer accept orders for adds, moves, changes or new term plans for DecaMAN Service, and existing term plans may not be renewed, converted or extended. Following the expiration of a customer's existing DecaMAN term agreement, service will be provided on a month-to-month basis at the applicable monthly extension rates until the service is discontinued.

(N)

(N)

A. Description

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DecaMAN Service is an intraLATA, dedicated high capacity service limited to the transport of data signals between customer locations. DecaMAN provides for the transmission of data at a discrete bit rate of 10 Gbps in Ethernet format (10 Gigabit Ethernet IEEE 802.3ae). DecaMAN is available in a point-to-point (node-to-node) configuration. DecaMAN is a fiber-based transport service that enables LAN PHY and WAN PHY connectivity between customer LANs, MANs and WANs within the same LATA.

DecaMAN Service can be used to seamlessly extend customer local area networks to off-site locations such as data centers, storage locations or satellite office locations within the same metro area. Applications that could be used with DecaMAN Service include LAN-to-LAN connectivity, CAD/CAM file transfer, telemedicine and business continuity transport.

The 802.3ae 10 GigE standard defines two OSI Layer 1 Physical ("PHY") specifications:

WAN PHY provides a carrier-grade interface capability at a discrete bit rate of 9.95 Gbps (physical layer rate), allowing customers to transport data signals over a SONET infrastructure.

LAN PHY provides a carrier-grade interface capability at a discrete bit rate of 10.3125 Gbps (physical layer rate), allowing customers to interconnect Ethernet LANs.

DecaMAN is provisioned over dedicated fiber-optic channels, which may include Wave Division Multiplexing in all or part of the network. Each DecaMAN Service provides dedicated bandwidth to the customer. All DecaMAN Services traverse through a Company Central Office gateway that serves to regenerate the DecaMAN signal and provides the Company with in-band monitoring and maintenance capability. Network Terminating Equipment (NTE) may be required on customer premises, at the discretion of the Company based on technical design criteria.

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DecaMAN is a registered trademark of AT&T Intellectual Property

/1/(C)

/1/ Material formerly appeared in Part 15, Section 4, Sheet 20.

DecaMAN® SERVICE (cont'd)

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B. Terms and Conditions

In addition to regulations set forth elsewhere in this Guidebook, the following regulations apply to DecaMAN Service:

1. The customer provided equipment (CPE) must deliver the data signal for the DecaMAN transport within the industry specification for the subscribed data service. See *Technical References*.
2. DecaMAN provides physical layer transport only. The Company assumes no responsibility for the through transmission of signals generated by the customer's CPE, for the quality of or defects in such transmission, for the reception of signals by the customer's CPE, or address signaling to the extent addressing is performed by CPE. Error detection and correction of data generated by the customer's CPE is the customer's responsibility.
3. DecaMAN is designed to provide connectivity at the discrete bit rate of 9.95 Gbps physical layer rate (WAN PHY) or 10.3125 Gbps physical layer rate (LAN PHY). The service is considered interrupted when the customer reports to the Company and the Company confirms that continuity has been lost.
4. DecaMAN Service is provided at the option of the Company where facilities permit. If appropriate facilities are not available, Special Construction charges may apply.
5. DecaMAN Service can be distance-limited, based on circuit configuration and signal loss parameters, as determined by the Company. One repeater (signal regenerator) is included in all DecaMAN Service designs. Additional repeaters may be used to extend the transmission of DecaMAN Service, where technically feasible. See Repeater under *Standard Features* and *Prices* following for further definition and charge application.
6. DecaMAN Service is not available in a meet-point billing arrangement involving other Carriers.
7. Interoffice channel mileage is calculated using the V and H coordinate method described in Part 15, Section 1.
8. Repeaters (circuit regenerators) will be located in Company wire centers as required. A monthly charge will be associated with each repeater network element, except for the first repeater in a circuit path (as the first repeater is also used for service alarming and monitoring purposes).
9. Diversity and Protection Options are available where facilities exist. If appropriate facilities do not exist, Special Construction charges may apply. In addition to charges for the various Diversity and Protection Options, normal charges for the Local Distribution Channel and Interoffice Channel Mileage will apply.
10. Additional repeaters (circuit regenerators) may be required on the diverse or alternately routed path when Diversity or Protection options are ordered by the customer. The need for repeaters on the diverse or protected path will be determined by the Company. Additional charges will apply.

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/1/ Material formerly appeared in Part 15, Section 4, Sheet 21.

DecaMAN® SERVICE (cont'd)

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B. Terms and Conditions

11. If Protection Options are later added to an existing DecaMAN circuit, a temporary service interruption will result as the new protected circuit must be re-designed and re-installed. Termination Charges will not apply for the circuit redesign (see *Termination Charges* under *Prices* following for requirements). This installation must occur during an agreed-upon maintenance window between a designated customer representative and the Company. The customer will be responsible for providing adequate floor space, as determined by the Company, to accommodate additional equipment bays and related power protection equipment (such as batteries). Protection Options are contingent on availability of equipment and fiber facilities from premises to premises. Other Special Construction charges, as necessary, may apply.
12. Interoffice Channel Mileage charges are applicable on both paths of the DecaMAN Service when any of the Diversity or Protection Options are ordered.

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/1/ Material formerly appeared in Part 15, Section 4, Sheet 22.

DecaMAN® SERVICE (cont'd)

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C. Features

1. Standard Features

Local Distribution Channel (LDC)

Defined as the channel between the customer's premises and the serving wire center that provides service to that customer's premises.

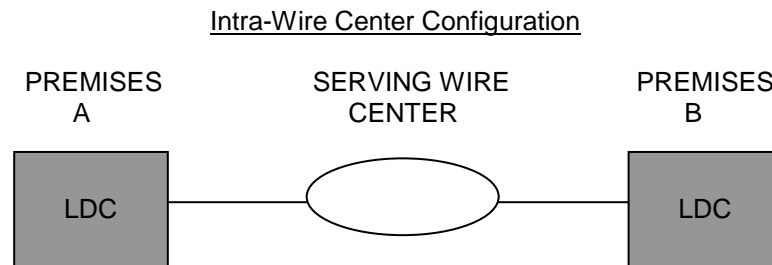
Interoffice Channel Mileage (ICM)

Defined as the component of the service between serving wire centers, consisting of a fixed charge and a per mile charge.

Repeater

A repeater (circuit regenerator) will be used to extend the transmission of DecaMAN Service. The Company will determine when repeaters are necessary. In addition, the first repeater in a multi-repeater circuit will be used for service alarming and monitoring purposes.

The following diagram depicts a service configuration connecting two customer-designated premises served from the same wire center.



LDC = Local Distribution Channel

Applicable service elements are:

- Local Distribution Channel (two applicable)

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/1/ Material formerly appeared in Part 15, Section 4, Sheet 23.

DecaMAN® SERVICE (cont'd)

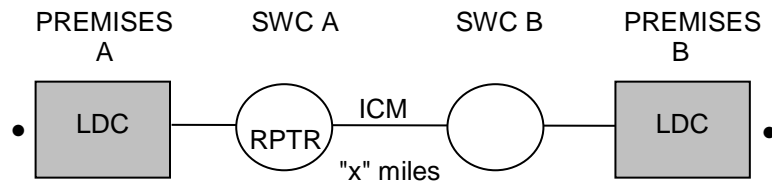
/1/

C. Features (cont'd)

1. Standard Features (cont'd)

The following diagram depicts a service configuration connecting two customer-designated premises with serving wire centers located "x" miles apart using a Repeater (where required).

Inter-Wire Center Configuration ("x" miles apart)



LDC = Local Distribution Channel
 ICM = Interoffice Channel Mileage
 SWC = Serving Wire Center
 RPTR = Repeater (where required)

Applicable service elements are:

- Local Distribution Channel (two applicable)
- Interoffice Channel Mileage, Fixed (two applicable)
- Interoffice Channel Mileage, Per Mile ("x" applicable)
- Repeater (where required)

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/1/ Material formerly appeared in Part 15, Section 4, Sheet 24.

DecaMAN® SERVICE (cont'd)

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C. Features (cont'd)**2. Optional Features**Diversity Options

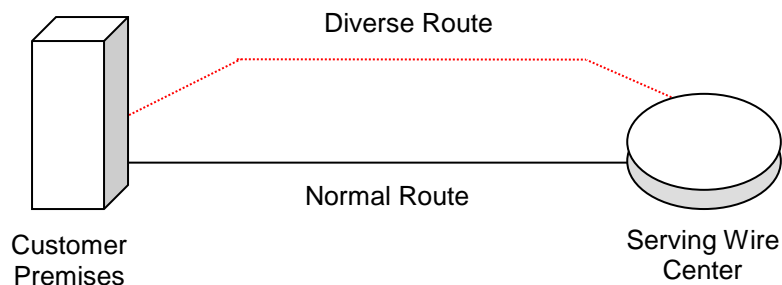
The following options are available with Diversity:

- Local Channel Diversity
- Alternate Wire Center Diversity
- Inter-Wire Center Diversity

End-to-end diversity can be achieved by coupling Alternate Wire Center Diversity with Inter-Wire Center Diversity, in those instances where each end of a circuit is served out of different serving wire centers.

Local Channel Diversity

Local Channel Diversity provides for a transmission path between a designated customer premises and the standard serving wire center (SWC) that is diverse from the normal/standard transmission path. Local Channel Diversity requires two eligible services purchased by (or for the benefit of) the same customer. The Company will determine which services are eligible based on technical or operational limitations. With this arrangement, one or more local distribution channels will be provisioned over the standard route and one or more local distribution channels will be provisioned over a diverse route. Local Channel Diversity does not provide for full diversity; it only allows for diversity from the splice point closest to the customer's property line to the SWC. If a customer desires full diversity, arrangements must be made for constructing dual entrance facilities into the customer's premises, at the customer's expense.



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/1/ Material formerly appeared in Part 15, Section 4, Sheet 25.

DecaMAN® SERVICE (cont'd)

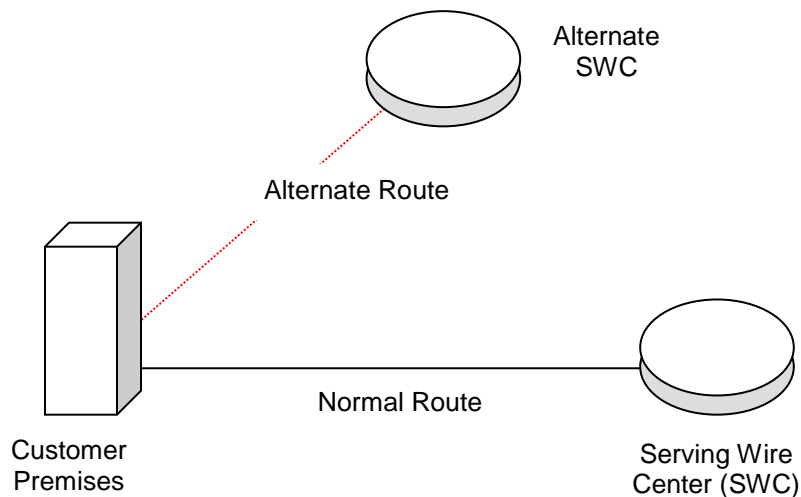
/1/

C. Features (cont'd)

2. Optional Features (cont'd)

Diversity Options (cont'd)Alternate Wire Center Diversity

Alternate Wire Center Diversity is for the local loop only. It provides a local channel transmission path for DecaMAN service between the customer's designated premises and a wire center that is not the normal (or standard) serving wire center. The Company will choose the alternate wire center closest to the customer's designated premises that is capable of providing DecaMAN Service over the alternate route. Alternate Wire Center Diversity does not require the purchase of two DecaMAN Services by (or for the benefit of) the same customer, nor does it require the customer to have an existing DecaMAN circuit operating over the normal (or standard) route to the normal (or standard) serving wire center. With this arrangement, one or more local distribution channels will be provisioned over the alternate route. If a customer desires full diversity, arrangements must be made for constructing dual entrance facilities into the customer's premises, at the customer's expense.



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/1/ Material formerly appeared in Part 15, Section 4, Sheet 26.

DecaMAN® SERVICE (cont'd)

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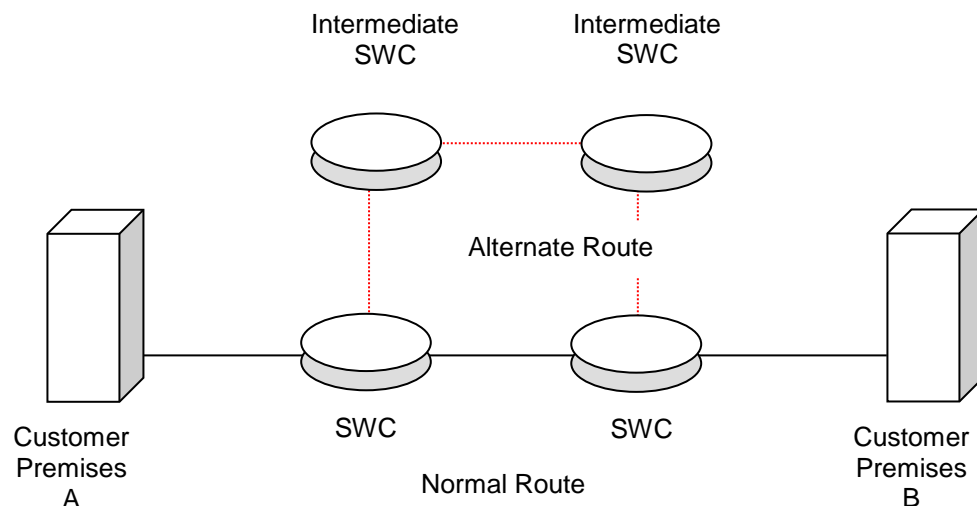
C. Features (cont'd)

2. Optional Features (cont'd)

Diversity Options (cont'd)Inter-Wire Center Diversity

Inter-Wire Center Diversity arrangements presume that each end of a DecaMAN local distribution channel is served out of a different serving wire center (SWC). This arrangement provides a transmission path for DecaMAN local distribution channels between the customer's designated SWC and the serving wire center at the distant end of the circuit, over a transmission path that is separate from the standard transmission path between the two wire centers. Interoffice mileage will be calculated between the intermediate serving wire centers along the circuit path of the diversely routed DecaMAN Service. Inter-Wire Center Diversity requires two eligible services purchased by (or for the benefit of) the same customer. The Company will determine which services are eligible based on technical or operational limitations.

Inter-wire center diversity does not provide for full diversity; it only offers interoffice diversity. If a customer desires full diversity, Alternate Wire Center Diversity must be implemented along with Inter-Wire Center Diversity. Additionally, arrangements must be made for constructing dual entrance facilities at the customer's premises, at the customer's expense.



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/1/ Material formerly appeared in Part 15, Section 4, Sheet 27.

DecaMAN® SERVICE (cont'd)

/1/

C. Features (cont'd)

2. Optional Features (cont'd)

Protection Options

The following options are available for Protection:

- Equipment Only Protection
- Equipment Plus Fiber Path Protection, with ...
 - Alternate Wire Center Path Protection, or
 - Local Channel Path Protection
- Inter-Wire Center Path Protection
- Power Protection

Protection Options provide additional levels of reliability to DecaMAN Service. All Protection Options utilize NTE at the customer's premises. There are multiple options for Protection at each end of a two point circuit. The options at each end do not need to be the same, but both ends must include some form of Protection for any to be offered. A DecaMAN circuit cannot include Protection at only one end (excluding Power Protection which can be at just one end, or both ends, of the circuit).

Equipment Only Protection

Equipment Only Protection offers a network design where one DecaMAN signal will be routed down two different fiber pairs that co-exist in the same cable and conduit structure, and terminate at the customer's premises in the same device (but into separate and distinct modules). Protection switching will occur between the two modules if necessary. Should one fiber pair or network element become defective, service will be maintained through 50 millisecond protection switching within the network terminating equipment (NTE) at the customer's demarcation point. If both fiber pairs are cut, an Out-Of-Service condition will result. This form of protection can only be ordered per loop (per end) for each circuit the customer wishes to protect.

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/1/ Material formerly appeared in Part 15, Section 4, Sheet 28.

DecaMAN® SERVICE (cont'd)

/1/

C. Features (cont'd)

2. Optional Features (cont'd)

Protection Options (cont'd)Equipment Plus Fiber Path Protection

Equipment Plus Fiber Path Protection offers varying degrees of path protection for each terminating end of the circuit. For circuits that are served by different wire centers, Equipment Plus Fiber Path Protection may be combined with Inter-Wire Center Path Protection, to ensure a fully-protected circuit.

Equipment Plus Fiber Path Protection, with ...

Alternate Wire Center Path Protection

One DecaMAN signal will be routed over one fiber pair of the protected circuit from the customer's premises to the normal serving wire center, and a duplicate DecaMAN signal will be routed over a diversely routed fiber pair to the Alternate Wire Center selected by the Company. If any location between the fiber paths is closer than 10 feet, the location or locations will be disclosed to the customer. The customer will determine whether to accept the engineered path, or agree to pay Special Construction Charges to have a completely diverse route constructed in those instances where there is not a minimum separation of 10 feet between paths. The customer can also select Equipment Only Protection for an inter-office segment where facilities are not available. This option can be selected for one or both terminating ends. If an equipment failure or fiber cable cut occurs in a segment of the circuit that has this form of protection, the circuit will be switched to the alternate path in 50 milliseconds or less. If a customer desires full path diversity, arrangements must be made for constructing dual entrance facilities into the customer's premises, at the customer's expense.

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/1/ Material formerly appeared in Part 15, Section 4, Sheet 29.

DecaMAN® SERVICE (cont'd)

/1/

C. Features (cont'd)

2. Optional Features (cont'd)

Protection Options (cont'd)Equipment Plus Fiber Path Protection (cont'd)

Equipment Plus Fiber Path Protection, with ... (cont'd)

Local Channel Path Protection

The two fiber pairs of the protected service will be routed diversely to the normal serving wire center. If any location between the fiber paths is closer than 10 feet, the location or locations will be disclosed to the customer. The customer will determine whether to accept the engineered path, or agree to pay Special Construction Charges to have a completely diverse route constructed. This option can be selected for one or both terminating ends. If an equipment failure or fiber cable cut occurs in a segment of the circuit that has this form of protection, the circuit will be switched to the alternate path in 50 milliseconds or less. If a customer desires full path diversity, arrangements must be made for constructing dual entrance facilities into the customer's premises, at the customer's expense.

Inter-Wire Center Path Protection

Each fiber pair is routed through different Central Offices between the two serving wire centers, or between the standard serving wire center and an alternate serving wire center. Inter-Wire Center Protection begins at the first manhole out of the Central Office. If only the two serving wire centers are involved, the two fiber pairs will be routed down two fiber paths that are separated by at least 10 feet. If any location between the fiber paths is closer than 10 feet, the location or locations will be disclosed to the customer. The customer will determine whether to accept the engineered path, or agree to pay Special Construction Charges to have a completely diverse route constructed. If an equipment failure or fiber cable cut occurs on one of the inter-office routes, the circuit will be switched to the alternate path in 50 milliseconds or less. Interoffice mileage will be calculated between the intermediate serving wire centers along the circuit paths of both protected fiber pairs.

Power Protection

Power Protection provides customers with battery back-up for up to eight (8) hours to maintain DecaMAN equipment in case of a power failure. Power Protection is provided on a per rack or cabinet basis, and customers in a multi-tenant building will require separate equipment and bays dedicated to each customer. Power Protection is not available for installations using a wall mounted cabinet. Request for Power Protection are subject to equipment availability and compatibility. Upon receipt of a customer request for Power Protection, the Company will determine the availability, design and engineering requirements for Power Protection, and the appropriate number of service element charges to apply. The addition of Power Protection to existing DecaMAN Service will result in a temporary service interruption.

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/1/ Material formerly appeared in Part 15, Section 4, Sheet 30.

DecaMAN® SERVICE (cont'd)

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D. Technical References

DecaMAN standards are defined in IEEE Std 802.3ae™-2002 (Amendment to IEEE Std 802.3-2002): Media Access Control (MAC) Parameters, Physical Layers, and Management Parameters for 10 Gbps Operation.

The customer interface to DecaMAN Service is as specified in:

<u>Subject</u>	<u>Technical Reference</u>
SBC Customer Interface Standards for 100 Mbps and Higher	SBC-TP-76412
Ethernet suite standards for D5 10GBASE-LR and D5 10GBASE-LW	IEEE 802.3ae
Network Performance Parameters for Dedicated Digital Services – Definitions and Measurements	ANSI T1.503-2002

The Technical References can be obtained from:

APEX Support Team
734-523-7348

The ANSI publication can be obtained from:

Alliance for Telecommunications Industry Solutions
1200 G. Street, NW Suite 500
Washington, DC 20005

The IEEE publication can be obtained from:

<http://standards.ieee.org/catalog/olis/lanman.html>

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/1/ Material formerly appeared in Part 15, Section 4, Sheet 31.

DecaMAN® SERVICE (cont'd)

/3/

E. Prices

1. Service Elements

<u>Description /Billing Code/</u>	<u>Nonrecurring Charge</u>
Installation Charge ^{/1/}	
- per channel /1RSTX/	\$1,500.00
Diversity Options	
<i>Per terminating end</i>	
- Local Channel /CPALX/	850.00
- Alternate Wire Center /CPAAX/	950.00
<i>Per circuit</i>	
- Inter-Wire Center /CPATX/	700.00
Protection Options	
<i>Per terminating end</i>	
- Equipment Only /CPAEX/	3,000.00
- Equipment Plus Fiber Path Protection, with ...	
Alternate Wire Center Path Protection /CPAFX/, or	4,500.00
Local Channel Path Protection /CPAGX/	4,200.00
<i>Per circuit</i>	
- Inter-Wire Center Path Protection ^{/2/} /CPAHX/	625.00
Per rack or cabinet	
- Power Protection /VBBGX/	475.00

/3/

/1/ The Installation Charge will be waived for those customers selecting the 36 or 60-month Term Payment Plan (TPP) period for new service.

/3/

/2/ Inter-Wire Center Path Protection must be ordered in conjunction with an Equipment Protection option at each end of the circuit.

/3/

/3/ Material formerly appeared in Part 15, Section 4, Sheet 32.

DecaMAN® SERVICE (cont'd)

/1/

E. Prices (cont'd)

1. Service Elements (cont'd)

<u>Description /Billing Code/</u>	Monthly Payment <i>Term Payment Plans</i>					<u>Monthly Extension</u>
	<u>12 Months</u>	<u>24 Months</u>	<u>36 Months</u>	<u>60 Months</u>		
Local Distribution Channel (LDC)						
- per channel /1RSTX/						
LAN PHY	\$15,000.00	\$12,000.00	\$8,500.00	\$7,250.00		\$18,000.00
WAN PHY	16,500.00	13,200.00	9,600.00	8,200.00		19,800.00
Interoffice Channel Mileage (ICM)						
- Fixed, Per End /CTJ/	1,350.00	900.00	637.50	575.00		1,800.00
- Per Mile /JZ68S/	300.00	250.00	125.00	100.00		425.00
Repeater						
- each /VU4/	6,000.00	4,800.00	3,400.00	2,900.00		7,200.00
Diversity Options						
<i>Per terminating end</i>						
- Local Channel /CPALX/	3,038.00	2,700.00	2,250.00	2,025.00		3,938.00
- Alternate Wire Center						
/CPAAX/	4,860.00	4,320.00	3,600.00	3,240.00		6,300.00
<i>Per circuit</i>						
- Inter-Wire Center						
/CPATX/	2,025.00	1,800.00	1,500.00	1,350.00		2,625.00

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/1/ Material formerly appeared in Part 15, Section 4, Sheet 33.

DecaMAN® SERVICE (cont'd)

/2/

E. Prices (cont'd)

1. Service Elements (cont'd)

<u>Description /Billing Code/</u>	Monthly Payment <i>Term Payment Plans</i>				
	<u>12 Months</u>	<u>24 Months</u>	<u>36 Months</u>	<u>60 Months</u>	<u>Monthly Extension</u>
<i>Protection Options</i>					
<i>Per terminating end</i>					
- Equipment Only /CPAEX/	\$8,250.00	\$7,350.00	\$6,300.00	\$5,400.00	\$9,000.00
- Equipment Plus Fiber Path Protection, with ... Alternate Wire Center Path Protection /CPAFX/	12,300.00	11,040.00	9,600.00	8,400.00	14,760.00
- Local Channel Path Protection /CPAGX/	10,950.00	9,900.00	8,550.00	7,350.00	13,140.00
<i>Per circuit</i>					
- Inter-Wire Center Path Protection ^{/1/} /CPAHX/	1,125.00	600.00	450.00	300.00	1,425.00
<i>Per rack or cabinet</i>					
- Power Protection /VBBGX/	625.00	525.00	480.00	435.00	700.00

/2/

/1/ Inter-Wire Center Path Protection must be ordered in conjunction with an Equipment Protection option at each end of the circuit.

/2/

/2/ Material formerly appeared in Part 15, Section 4, Sheet 34.

DecaMAN® SERVICE (cont'd)

/1/

E. Prices (cont'd)

2. Payment Plans

- Term Payment Plans

DecaMAN Service is only available under the Term Payment Plan (TPP) whereby customers must select either a 12-, 24-, 36- or 60-month period. After the selected Term Payment Plan period is satisfied, the monthly extension price will apply unless a new TPP is selected. Refer to *Term Payment Plans* in Part 15, Section 1.

- Single Payment Option (SPO)

A single payment option is available for this service. Refer to *Term Payment Plans* in Part 15, Section 1 for calculating Single Payment Options.

- Deferred Payment Option (DPO)

A deferred payment option is not available for this service.

3. Termination Charges (cont'd)

Termination Charges will apply to service terminated prior to the contracted period. Refer to *Termination Charges* in Part 15, Section 1, for calculating Termination Charges.

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/1/ Material formerly appeared in Part 15, Section 4, Sheet 35.

DecaMAN® SERVICE (cont'd)

/1/

E. Prices (cont'd)**3. Termination Charges (cont'd)**

Customers will be permitted to move one end of a DecaMAN Service to another location, without incurring Termination Charges, given the following conditions are met:

- The customer must issue a disconnect order for the existing location and place a new service order for DecaMAN Service at the new location. Termination Charges for the existing location will be waived. Standard nonrecurring charges to install DecaMAN Service as a new circuit will apply.
- Negotiated down time will apply, as the new circuit will need to be designed and installed.
- The term of the new contract must be equal to or greater than the remaining time left on the existing DecaMAN contract.
- The existing DecaMAN Service must have been in service for a minimum period of 12 months for a 2-year contract, 15 months for a 3-year contract or 18 months for a 5-year contract. Existing DecaMAN Service with 1-year contracts will not be eligible for this Moves option.
- Moves are contingent on availability of fiber from premises to premises. Other Special Construction charges, as necessary, may apply.

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/1/ Material formerly appeared in Part 15, Section 4, Sheet 36.

DecaMAN® SERVICE (cont'd)

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E. Prices (cont'd)

3. Termination Charges (cont'd)

Customers will be permitted to add Protection Options at a later date to existing DecaMAN Service without incurring Termination Charges, given the following conditions are met:

- The customer must issue a disconnect order for the existing circuit and place a service order for the newly protected circuit. Termination Charges for the existing circuit will be waived. Standard nonrecurring charges to install the newly protected DecaMAN Service will apply. (the conditions described here do not apply to Power Protection added to an existing DecaMAN circuit).
- Negotiated down time will apply, as the new circuit will need to be designed and installed.
- The term of the new contract must be equal to or greater than the remaining time left on the existing DecaMAN contract. (the conditions described here do not apply to Power Protection added to an existing DecaMAN circuit).
- Addition of Protection Options are contingent on availability of equipment and fiber facilities from premises to premises. Other Special Construction charges, as necessary, may apply.

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/1/ Material formerly appeared in Part 15, Section 4, Sheet 37.

DecaMAN® SERVICE (cont'd)

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E. Prices (cont'd)**3. Termination Charges (cont'd)**

Customers will be permitted to convert DecaMAN Service from a WAN PHY to LAN PHY interface, or vice versa, without incurring Termination Charges, given the following conditions are met:

- The customer must issue a disconnect order for the existing interface and place a new service order for DecaMAN Service using the new interface. Termination Charges for the existing interface will be waived. Standard nonrecurring charges to install DecaMAN Service as a new circuit (using the new interface chosen) will apply.
- Negotiated down time will apply, as the new circuit will need to be designed and installed.
- The term of the new contract must be equal to or greater than the remaining time left on the existing DecaMAN contract.
- Conversions are contingent on availability of equipment, and a determination by the Company that such conversion is technically feasible. Other Special Construction charges, as necessary, may apply.

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/1/ Material formerly appeared in Part 15, Section 4, Sheet 38.

DecaMAN® SERVICE (cont'd)

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E. Prices (cont'd)**3. Termination Charges (cont'd)**

For service installed after July 10, 2007, customers will be permitted to upgrade to a higher-speed service provided by the Company, without incurring Termination Charges, given the following conditions are met:

- an upgrade is considered an increase in speed or capacity when comparing DecaMAN Service to the new service.
- the customer must issue a disconnect order for the existing DecaMAN Service and place a service order for the new, higher-speed service, such that there is no more than 90 days overlap in service.
- the same customer locations must be utilized for the new, higher-speed service.
- the expiration date for the new, higher-speed service is beyond the end of the original TPP term associated with the existing DecaMAN Service.
- the existing DecaMAN Service must have been in service for a minimum period of 12 months for a 2-year contract, 15 months for a 3-year contract or 18 months for a 5-year contract. Existing DecaMAN Service with 1-year contracts will not be eligible for this Upgrade option.

Migration to AT&T Dedicated Ethernet

Customers subscribing to DecaMAN Service may migrate to AT&T Dedicated Ethernet provided by the Company without incurring Termination Charges, subject to the following conditions:

- The new AT&T Dedicated Ethernet and the existing DecaMAN Service must be billed to the same customer of record at the same customer locations.
- The customer's existing service must have been in place for at least 12 months.
- The minimum term for the new service must be at least 12 months and must be equal to or greater than the number of months remaining in the customer's existing Term Payment Plan (TPP) term.
- The speed (capacity/bandwidth) of the new service must be equal to or greater than that of the existing service.
- The customer must issue a disconnect order for the replaced DecaMAN Service to be effective within 90 days after the AT&T Dedicated Ethernet installation date. The disconnect and new orders must be coordinated through the Company.
- If overlapping service is required, the period will be limited to not more than 90 days and billing will apply to both services during the time both services are available.

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/1/ Material formerly appeared in Part 15, Section 4, Sheet 39.

DecaMAN® SERVICE (cont'd)

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E. Prices (cont'd)**4. Credit Allowance**

A service is interrupted when it becomes unusable to the customer because of a failure of a facility component used to furnish service under this tariff or in the event that the protective controls applied by the Company result in the complete loss of service by the customer. An interruption period starts when an inoperative service is reported to the Company and the Company confirms that continuity has been lost, and ends when the service is operative.

In case of an interruption to service, allowance for the period of interruption, if not due to the negligence of the customer or the customer's end user, shall be as follows:

- | | |
|-------------------------|--|
| - 0 to 10 seconds | No credit shall be allowed |
| - 10 seconds to 4 hours | 10% credit of monthly recurring charges |
| - 4 hours to 12 hours | 25% credit of monthly recurring charges |
| - 12 hours to 24 hours | 50% credit of monthly recurring charges |
| - 24 hours or greater | 100% credit of monthly recurring charges |

The credit allowance for service interruptions shall not exceed 100% of the applicable monthly rate during any billing period.

The Company's failure to provide or maintain services under this tariff shall be excused by force majeure events such as, but not limited to, an earthquake, hurricane, flood, fire, storms, tornadoes, explosion, lightning, power surges or failure, fiber cuts, strikes or labor disputes, acts of war, civil disturbances, acts of civil or military authorities or public enemy, governmental orders, civil commotion, criminal actions taken against the Company, acts of God and other circumstances beyond the Company's reasonable control.

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/1/ Material formerly appeared in Part 15, Section 4, Sheet 40.

DecaMAN® SERVICE (cont'd)

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E. Prices (cont'd)

4. Credit Allowance (cont'd)

Protection Options

A Service Level Agreement (SLA) is offered with fully-protected DecaMAN Service, which provides the customer with a performance commitment that includes a service credit if the service does not perform as described. An SLA of 99.999% Service Availability performance is offered on a DecaMAN circuit with Protection (defined as Equipment Plus Fiber Path Protection for every segment of the circuit). Service Availability will be determined using unavailable seconds as defined in ANSI T1.503-2002 (see *Technical References*).

- SLAs are applicable to customers who purchase Equipment Plus Fiber Path Protection with Alternate Wire Center Path Protection or Equipment Plus Fiber Path Protection with Local Channel Path Protection on both ends of a circuit (both local channels), as well as Inter-Wire Center Path Protection, when applicable.
- If this SLA is not met, or if there is any single event of unavailability of service of 10 seconds or more, the customer will be entitled to a credit equal to 100% of the monthly rate for the circuit. Only one such credit in a billing period will apply.
- In order to qualify for this credit, the event causing the unavailability must be determined by the Company to be in its network and the failure occurred in that part of the service with Protection.
- SLA adjustments are not available in the event of a cable cut in any unprotected portion of the DecaMAN Service fiber path or due to customer-requested modifications to the service that may require down time. Routine maintenance is not counted against unavailability.
- The customer is responsible for notifying the Company when the service parameter within the calendar month falls below the committed level.

The customer must request a service credit within 25 calendar days after the end of the month when the unavailability event occurred.

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/1/ Material formerly appeared in Part 15, Section 4, Sheet 41.

NETWORK RECONFIGURATION SERVICE (NRS)

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Effective October 30, 2018, Network Reconfiguration Service (NRS) will no longer be available for purchase by new or existing customers, and NRS service agreements may no longer be renewed. Effective July 31, 2022, the Company will no longer accept new requests for physical changes to existing service arrangements including the upgrade or downgrade of access/port speed, installation of new service, or moves to different service addresses.

(N)

(N)

A. Description

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Network Reconfiguration Service (NRS) gives customers the ability to reconfigure individual channel segments within their networks via electronic cross-connections. These segments may consist of DS3 Service, DS1 Service and Base Rate Service. Customers may also reconfigure individual channels that are part of a reconfigurable multiplexed DS1 Service or multiplexed DS3 Service. Although NRS is focused primarily on digital services, customers may utilize NRS with analog services by ordering reconfigurable DS1s equipped with Central Office Multiplexing in addition to the NRS DS1 Terminations and then using the multiplexed DS1 for the transport of the analog services. Customer access to NRS may be made directly by the customer utilizing customer-provided terminal equipment on the customer's premises in conjunction with a dial-in line. Access is also available through a Company attendant reached by a dial-access telephone line.

B. DefinitionsAccess Arrangement

Provides the interface between the customer and the NRS system. An Access Arrangement must be purchased for each concurrent customer user of the NRS system. The Company issues a SecurID card to the customer user for each Access Arrangement when Attendant Service is not utilized.

NRS Training

Provides for additional training requested by the customer beyond the training session included with the initial installation of the NRS system.

Attendant Access

Provides for reconfiguration activities to be performed by a Company attendant at the direction of the customer. The customer may request that the commands be performed on demand or at a later, scheduled time. Attendant Access cannot be purchased independently, but is available to customers that access NRS through a dial-up arrangement.

Database Modification

A customer initiated change to their network database subsequent to the initial database setup. These changes include:

- Addition or deletion of channel/facility terminations at the NRS system location.
- Addition, deletion or change in the customer's master security password. This charge applies to each change to a customer's database. If more than one change is requested at the same time, the charge is applied to each change requested.

Port Termination

Connects a local distribution channel, or channel mileage, to an NRS location allowing the connected service to be reconfigured. All services in a customer's NRS database must be terminated at an NRS system location. Only services included in a customer's NRS database may utilize the NRS termination feature.

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/1/ Material formerly appeared on Part 15, Section 3, Sheet 103.

NETWORK RECONFIGURATION SERVICE (NRS)

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B. Definitions (cont'd)Service Charge (Ability to Reconfigure Networks)

The ARS Service Charge is a monthly recurring rate that is applied per customer network database that gives the customer the ability to reconfigure their network. The ARS Service Charge applies in each state of the Company operating territory in which the customer intends to reconfigure circuits.

There is also a nonrecurring charge for initially establishing the customer network database. The network database will contain all facilities and channels that a customer will be able to reconfigure.

C. Terms and Conditions

1. NRS will be available on a continuous basis except for the performance of scheduled preventative and routine maintenance or scheduled software updates. The customer will be notified at least 24 hours in advance of any scheduled service interruptions.
2. NRS system locations are found in the National Exchange Carrier Association, Inc., Tariff F.C.C. No. 4.
3. Services that are cross-connected by the Network Reconfiguration Service will not operate properly unless they have identical technical characteristics to ensure compatibility and proper operation. NRS customers are responsible for the compatibility of the services they choose to cross-connect.

If the Company determines that the technical characteristics of services selected for cross-connection by the customer are not compatible, they will advise the customer and give them the opportunity to change the order.

4. Network Reconfiguration Service is provided at the option of the Company where facilities permit. If appropriate facilities are not available, Special Construction charges may apply.
5. Each Company wire center has been assigned to an Access Area. A table listing all wire center Access Area assignments can be found in Part 4, Section 2.

D. Features

1. Optional Features

NRS Training

Additional training, beyond that provided with the initial installation, is available.

Attendant Access

The customer may choose to have reconfiguration activities performed by the Company. (See *Definitions* preceding).

Database Modification

Subsequent to the initial installation, the customer may request modification to the database. (See *Definitions* preceding).

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/1/ Material formerly appeared on Part 15, Section 3, Sheet 104.

NETWORK RECONFIGURATION SERVICE (NRS)

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E. Technical ReferencesSubjectTechnical ReferenceAmeritech OPTINET Reconfiguration
Interface Specifications

AM TR-TMO-000064

The Technical Reference can be obtained from:

APEX Support Team
(734) 523-7348

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/1/ Material formerly appeared on Part 15, Section 3, Sheet 105.

NETWORK RECONFIGURATION SERVICE (NRS)

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F. Prices

1. Service Elements

Description <u>/Billing Code/</u>	Nonrecurring <u>Charge</u>	<u>Monthly</u>	Monthly Payment <i>Term Payment Plans</i>		
			12 <u>Months</u>	36 <u>Months</u>	60 ^{/1/} <u>Months</u>
NRS Service Charge per customer database /FN6DD/	\$4,800.00	\$240.00	\$228.00	\$204.00	\$192.00
NRS Access Arrangement per arrangement /RNQPA/	75.00	210.00	199.50	178.50	168.00

/1/ As of October 1, 2013, Term Payment Plan terms greater than 36 months are no longer available for new or renewing subscribers.

/2/ Material formerly appeared on Part 15, Section 3, Sheet 106.

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NETWORK RECONFIGURATION SERVICE (NRS)

/2/

F. Prices (cont'd)

1. Service Elements (cont'd)

<u>Description /Billing Code/</u>	<u>Monthly</u>	Monthly Payment <i>Term Payment Plans</i>		
		<u>12 Months</u>	<u>36 Months</u>	<u>60^{/1/} Months</u>
NRS System Location Port Termination per termination				
Base Rate /PT5/	\$20.00	\$19.00	\$17.00	\$16.00
DS3				
Access Area A /R6SXA/	175.00	166.25	148.75	140.00
Access Area B /R6SXB/	175.00	166.25	148.75	140.00
Access Area C /R6SXC/	175.00	166.25	148.75	140.00
				<u>Nonrecurring Charge</u>
<i>Optional Features</i>				
Database Modification per modification /FN6DC/				\$50.00
Attendant Access per first 30 minutes (per occurrence) /NRBN1/ per additional 15 minute increments /NRBNA/				55.00 10.00
NRS Training per hour of additional training /NRBNT/				50.00

/1/ As of October 1, 2013, Term Payment Plan terms greater than 36 months are no longer available for new or renewing subscribers.

/2/ Material formerly appeared on Part 15, Section 3, Sheet 107.

/2/

NETWORK RECONFIGURATION SERVICE (NRS) (cont'd)

/2/

F. Prices (cont'd)**2. Payment Plans**Month to Month

Network Reconfiguration Service is available on a month to month basis.

Term Payment Plans

Network Reconfiguration Service is available under the Term Payment Plan (TPP) whereby customers must select either a 12, 36 or 60^{/1/} month period. After the selected Term Payment Plan is satisfied, the monthly rate will apply unless a new TPP is selected. Refer to *Term Payment Plans* in Part 15, Section 1.

Single Payment Option (SPO)

A Single Payment Option is available for this service. Refer to *Term Payment Plans - Single Payment Option* in Part 15, Section 1.

3. Termination Charges

Termination Charges will apply to service terminated prior to the contracted period. The termination charge for all TPP terms for Network Reconfiguration Service will be calculated as described in *Term Payment Plans - Termination Charges* in Part 15, Section 1.

4. Credit Allowance

A credit allowance will be given for failure to meet the installation interval service date or for interruption of service. Refer to *Credit Allowance* in Part 15, Section 1 for calculating credit allowances. (Utilize Step 2 "for two-point services" to compute the credit allowance.) Credit allowances for circuits affected by an NRS failure are calculated on a "by circuit" basis according to the type of circuit affected.

/1/ As of October 1, 2013, Term Payment Plan terms greater than 36 months are no longer available for new or renewing subscribers.

/2/ Material formerly appeared on Part 15, Section 3, Sheet 108.

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