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1. APPLICATION AND REFERENCE

1.6 EXPLANATION OF ABBREVIATIONS

ACS	- Advanced Communications Services	
ANSI	- American National Standards Institute	
ATM	- Asynchronous Transfer Mode	
BC	- Business Class	(N)
bps	- Bits per second	
BWP	- Bandwidth Profile	(N)
CCITT	- The International Telegraph and Telephone Consultative Committee	
CIR	- Committed Information Rate	
CNM	- Customer Network Management	
COCC	- Central Office Connecting Channel	
CoS	- Class of Service	(N)
DE	- Discard Eligibility	
DSL	- Digital Subscriber Line	
ENNI	- External Network-to-Network Interface	(N)
EVC	- Ethernet Virtual Connection	(N)
EwET	- Ethernet with Extended Transport	(N)
F.C.C.	- Federal Communications Commission	
FDDI	- Fiber Distributed Data Interface	
FRS	- Frame Relay Service	
GD	- Guaranteed Data	(N)
IEEE	- Institute of Electrical and Electronic Engineers	
kbps	- Kilobits per second	
LAN	- Local Area Network	
LATA	- Local Access and Transport Area	
LSS	- LAN Switching Service	

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1. APPLICATION AND REFERENCE

1.6 EXPLANATION OF ABBREVIATIONS

MAN	- Metropolitan Area Network	(M)
Mbps	- Megabits per second	(M)
MBS	- Maximum Burst Size	(M)
MEF	- Metro Ethernet Forum	(N)
MEN	- Metro Ethernet Network	(N)
MOE	- Metro Optical Ethernet	(M)
NI	- Network Interface	(M)
NNI	- Network-To-Network Interface	(M)
NNIT	- Network-To-Network Information Transfer	(M)
No.	- Number	(M)
OAL	- Optical Access Link	(M)
OSI	- Open Systems Interconnection	(M)
OVC	- Operator Virtual Connection	(N)
PCRS	- Peak Cell Rate Service	(M)
PVC	- Permanent Virtual Connection	(M)
QoS	- Quality of Service	(N)
SAOAL	- Stand-Alone Optical Access Link	(M)
SCRS	- Sustained Cell Rate Service	(M)
SIR	- Sustained Information Rate	(M)
SNMP	- Simple Network Management Protocol	(M)
RT	- Real Time	(N)
TDM	- Time Division Multiplexing	(M)
TU-R	- Termination Unit - Remote	(M)
UBRS	- Unspecified Bit Rate Service	(M)
UNI	- User-To-Network Interface	(M)
UNIT	- User-To-Network Information Transfer	(M)
USOC	- Uniform Service Order Code	(M)
VCC	- Virtual Channel Connection	(M)
VPC	- Virtual Path Connection	(M)

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2. GENERAL REGULATIONS

2.6 DEFINITIONS

Certain terms used herein are defined as follows:

ACS Network

The commonly-shared, geographically-distributed arrangement of interoperating advanced communications components. Together, these components provide advanced communications services and/or functionalities of a specified type to multiple customers.

Bit

The smallest unit of information in the binary system of notation.

Carrier Sense Multiple Access with Collision Detection (CSMA/CD)

A method of controlling access to a shared transmission path, particularly in local area networks.

Class of Service (CoS)

Class of Service (CoS) is an optional feature that supports multiple class options to provide a predictable performance based solution by prioritizing customer traffic for traffic management of specific business applications.

Committed Information Rate (CIR)

The number of bits transmitted per second, under normal conditions, over a Permanent Virtual Connection (PVC).

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2. GENERAL REGULATIONS

2.6 DEFINITIONS

Certain terms used herein are defined as follows:

Communication System

Communication links and other facilities which are capable of communications between terminal equipment provided by other than the Company.

Customer

Any individual, partnership, association, joint-stock company, trust, corporation, governmental entity or any other entity which subscribes to the services offered herein.

Discard Eligibility (DE)

A bit in the Frame Relay header that enables the network to manage congestion.

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10. METRO OPTICAL ETHERNET (MOE)

10.1 DESCRIPTION (Cont'd)

10.1.2 SERVICE ELEMENTS

A. Network Interface (NI)

1. Customer Premises NI

The Company network interface is the point of interconnection between Company communications facilities and terminal equipment or other customer-provided facilities. The network interface is the point of demarcation on the customer's premises where the Company's responsibility for the provision of MOE Service ends.

2. Central Office NI

The Company network interface is the point of interconnection between either Company services or Company-provided collocation within the same central office. The network interface is the point of demarcation in the Company's central office.

B. Access Link

A MOE Access Link connects a customer facility at the Customer Premises NI to an Ethernet port on the MOE network with a standard optical or copper connection.

C. MOE Port

MOE Port is an Ethernet port that is the physical entry point to the shared Metro Optical Ethernet Network. Ethernet Virtual Connections (EVCs) or Operator Virtual Connections (OVCs), originate and terminate on a MOE Port. Customers may choose to connect to an electrical 10/100 port or an electrical or optical 1,000 Mbps port on the Company network.

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10. METRO OPTICAL ETHERNET (MOE)

10.1 DESCRIPTION

10.1.2 SERVICE ELEMENTS(Cont'd)

D. Bandwidth Profile (BWP)

The Bandwidth Profile (BWP) is provisioned over the MOE Port in three distinct designs:

- Customer Premises Bandwidth Profile is the standard MOE offering which uses the native Ethernet protocol to connect multiple enterprise locations with the customer's premises.
- Central Office Bandwidth Profile is a MOE offering that originates and terminates in the same central office for use with SST, GeoMax and SHNS Ethernet Ports.
- EwET Bandwidth Profile offers MOE outside the designated MOE service area via Ethernet with Extended Transport (EwET) using the EwET customer interface.

10.2 GENERAL TERMS AND CONDITIONS

In addition to the terms and conditions in Section 2 and Section 3 of this Tariff, the terms and conditions in this section also apply for MOE

- A. The provisioning of MOE contemplates the use of existing facilities. There may be occasions when MOE is not available due to facilities limitations, or when it may be necessary to construct facilities. If Special Construction is involved, the regulations as set forth in Section 3.6, preceding will apply.
- B. For MOE, the Company will secure equipment space furnished by the customer under the terms of 2.3.4. This space must be accessible exclusively to the Company, as if the Company is the lessee.

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10. METRO OPTICAL ETHERNET (MOE)

10.3 RATE ELEMENTS

A. MOE Port

A nonrecurring charge applies per new MOE Port. A nonrecurring charge for a MOE Port will also be assessed when an electrical port is changing to an optical port or an optical port is changing to an electrical port. There will be no charge if a customer goes from one electrical port to another electrical port or from one optical port to another optical port. Customers may choose to connect to an electrical 10/100 port or an electrical or optical 1,000 Mbps port on the Company network. This charge is associated with all three Bandwidth Profile designs.

B. Bandwidth Profile (BWP)

A monthly rate is assessed per Bandwidth Profile (BWP) subscribed to and the term plan chosen as set forth in 8.8.3, following. Customers may subscribe to one of the following:

1. Customer Premises Bandwidth

- 10 Mbps Ports: 3 Mbps, 5 Mbps, 7 Mbps and 10 Mbps
- 100 Mbps Ports: 3 Mbps, 5 Mbps, 7 Mbps, 10 Mbps, 20 Mbps, 30 Mbps, 40 Mbps, 50 Mbps, 60 Mbps, 70 Mbps, 80 Mbps, 90 Mbps and 100 Mbps
- 1,000 Mbps Ports: 10 Mbps, 20 Mbps, 30 Mbps, 40 Mbps, 50 Mbps, 60 Mbps, 70 Mbps, 80 Mbps, 90 Mbps, 100 Mbps, 200 Mbps, 300 Mbps, 400 Mbps, 500 Mbps, 600 Mbps, 700 Mbps, 800 Mbps, 900 Mbps and 1,000 Mbps

2. Central Office Bandwidth

- 1,000 Mbps Ports: 100 Mbps, 600 Mbps and 1,000 Mbps

3. EwET Bandwidth[1]

- 10/100 Mbps Ports: 5 Mbps, 10 Mbps, 20 Mbps, 30 Mbps and 40 Mbps

[1] A Company-provided DS3 Channel Termination and Transport Channel Mileage (for distance between a MOE Central Office Switch and Company Non-MOE Central Office) at rates set forth in Section 6 of the Competitive Private Line Transport Services Price Cap Tariff will be assessed when MOE is connected to EwET. An EwET Customer Interface will also be assessed.

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10. METRO OPTICAL ETHERNET (MOE)

10.3 RATE ELEMENTS(Cont'd)

C. EwET Customer Interface

The EwET Customer Interface rate is monthly recurring rate assessed when EwET Bandwidth is connected at the customer's premises.

D. Central Office Connecting Channel (COCC)

The Central Office Connecting Channel (COCC) rate is comprised of a monthly recurring rate and a nonrecurring rate per connection. This rate will apply when a MOE Bandwidth Port connects to another service.

E. Optional Features

1. Multiple Ethernet Virtual Connections (EVCs) or Operator Virtual Connections (OVCs)

Each MOE Port provided by the Company will come standard with the capability to provide one Ethernet Virtual Connection (EVC) or Operator Virtual Connection (OVC) at no additional charge. An OVC is associated with an ENNI port type. Customers may order more than one EVC or OVC per port, but for each additional EVC or OVC, the Company will bill a monthly EVC or OVC charge per port that the EVC or OVC terminate on, at rates set forth in 10.5.E, following.

2. Quality of Service (QoS)

Quality of Service (QoS) allows customers to prioritize their traffic managed through the Company's MOE Service. QoS supports two different Class of Service management options set forth below:

- Committed Information Rate (CIR) Class of Service or
- Priority Class of Service

Customers must choose the Class of Service management option that will support their Metro Ethernet Network (MEN) requirements. The MOE Service Technical Publication PUB 77411 has specific details to assist in this decision.

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10. METRO OPTICAL ETHERNET (MOE)

10.3 RATE ELEMENTS

E. Optional Features

2. Quality of Service (QoS) (Cont'd)

- a. Committed Information Rate (CIR) Class of Service offers three options ordered on a per Mbps basis. CIR bandwidths include:

- 1 Mbps through 10 Mbps in 1 Mbps increments
- 10 Mbps through 100 Mbps in 10 Mbps increments
- 100 Mbps through 1000 Mbps in 100 Mbps increments
- CIR bandwidths greater than 1000 Mbps are available on an Individual Case Basis (ICB)

Class of Service defines performance characteristics of the network that manages business applications designating with the following classes:

- Real Time (RT): Supports enterprise applications with the highest prioritization that require low frame delay, minimal frame loss and requires low jitter. Applications include voice, video and Telepresence.
- Guaranteed Data (GD): Supports high priority enterprise application with tolerance for frame delay, frame loss and jitter. Applications include interactive services such as web conferencing, CCTV, video and voice.
- Business Class (BC): Supports enterprise data applications with greater tolerance for frame delay, frame loss and jitter. BC is the baseline class for serving MOE so there are no additional charges for associated CIR bandwidth. Ordering procedures for BC is assigned for remaining CIR within the Bandwidth Profile.

- b. Priority Class of Service QoS for MOE allows customers to prioritize their traffic in four levels which are: Priority 1, Priority 2, Priority 3 and Priority 4 with preset templates based on percent allocation for class by the Bandwidth Profile (BWP). The four classes of service or priority levels uses are described below:

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10. METRO OPTICAL ETHERNET (MOE)

10.3 RATE ELEMENTS

E. Optional Features

2. Quality of Service (QoS)

b. (Cont'd)

- Priority 1 – This Quality of Service class of service supports VoIP (Voice of Internet Protocol) and other near real time applications. A Quality of Service Guarantee is provided in 3, following. (M)
- Priority 2 – This Quality of Service class of service supports interactive Video applications.
- Priority 3 - This Quality of Service class of service supports business data applications.
- Priority 4 - This Quality of Service is the default for all other traffic that is not defined in Priorities 1, 2 or 3 above. Priority 4 traffic will have the lowest priority on the network.

In all Quality of Service options, at least 3 Mbps or 5 Mbps of the Bandwidth Profile will be Priority 1 traffic. Priority 1 traffic is ordered in 3 Mbps or 5 Mbps increments and customers may order multiples of Quality of Service at monthly and Pricing Plan rates set forth in 10.5.E., following. The 3 Mbps increment of Priority 1 traffic option is only available for 3 Mbps, 5 Mbps and 7 Mbps Bandwidth Profiles. The 5 Mbps increment of Priority 1 traffic is available for 5 Mbps Bandwidth Profiles and higher. (T)

Each individual Quality of Service reserves either 3 Mbps or 5 Mbps of the Bandwidth Profile for Priority 1 traffic. Customers may order multiple increments, but 3 Mbps and 5 Mbps increments may not be combined. For example: if a customer orders 4 increments of 5 Mbps of Quality of Service the customer would receive 20 Mbps of the Bandwidth Profile for Priority 1 traffic. In addition to the Priority 1 traffic, customers must specify the traffic percentage levels for Priorities 2, 3 and 4 for the remainder of the Bandwidth using the templates are described below: (M)

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10. METRO OPTICAL ETHERNET (MOE)

10.3 RATE ELEMENTS

- E. Optional Features
 - 2. Quality of Service (QoS) (Cont'd)

When Quality of Service is ordered 8 different options or templates will be available. Each template specifies how the remaining Bandwidth Profile will be distributed to Priorities 2, 3 and 4 as set forth in the 8 templates, below:

	<u>Priority 2</u>	<u>Priority 3</u>	<u>Priority 4</u>
Template 1	20%	40%	40%
Template 2	25%	35%	40%
Template 3	30%	30%	40%
Template 4	35%	25%	40%
Template 5	40%	20%	40%
Template 6	45%	15%	40%
Template 7	50%	10%	40%
Template 8	55%	5%	40%

Quality of Service comes with a service guarantee for every 3 or 5 megabit increments of Priority 1 traffic. The SLA credit will be based on a specific calendar month's performance set forth in Section 2.4.4.B., preceding.

- 3. Protect Routing

Protect Routing provides added reliability to MOE transported over fiber optic facilities. Protect Routing provides a separate facility path for the protection system between the serving wire center and the Company point of termination located in the same building as the customers designated premises when the customer or building owner provide the structure for diverse entrance facilities into the building. The Company will bill a monthly Protect Routing Charge as set forth in 10.5.E, following.

This added protection is provided by ensuring that backup electronics and two physically separate facility paths are used in the provisioning of the service. One primary (or working) service path is established between the serving wire center and the customer designated premises. In addition, a protect path is provisioned between the customer designated premises and the serving wire center via a Company designated alternate route. In the event that the working facility or electronics fail or the service performance becomes impaired, the facility automatically switches to the service protect path in order to maintain a near continuous flow of information between locations.

Protect Routing comes with a service guarantee should the continuity between the customer designated premises and serving wire center fail as set forth in Section 2.4.4.B.1, preceding.

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10. METRO OPTICAL ETHERNET (MOE)

10.5 RATES AND CHARGES (Cont'd)

E. Optional Features

1. Ethernet Virtual Connection (EVC) or Operator Virtual Connection (OVC)

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	USOC	MAXIMUM MONTHLY RATE	CURRENT MONTHLY RATE
• Monthly: per EVC or OVC, per port	MEOVL	\$150.00	\$50.00

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2. Quality of Service (QoS)

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(N)

a. Committed Information Rate (CIR)
Class of Service

(1) Real Time

• 1 Mbps	EYZR1	\$54.00	\$18.00
• 2 Mbps	EYZR2	78.00	26.00
• 3 Mbps	EYZR3	102.00	34.00
• 4 Mbps	EYZR4	126.00	42.00
• 5 Mbps	EYZR5	150.00	50.00
• 6 Mbps	EYZR6	174.00	58.00
• 7 Mbps	EYZR7	198.00	66.00
• 8 Mbps	EYZR8	222.00	74.00
• 9 Mbps	EYZR9	246.00	82.00
• 10 Mbps	EYZRA	270.00	90.00

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10. METRO OPTICAL ETHERNET (MOE)

10.5 RATES AND CHARGES

E. Optional Features

2. Quality of Service (QoS)

a. Committed Information Rate (CIR)

Class of Service

(1) Real Time (Cont'd)

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	USOC	MAXIMUM MONTHLY RATE	CURRENT MONTHLY RATE	
• 20 Mbps	EYZRB	\$ 330.00	\$110.00	(N)
• 30 Mbps	EYZRC	390.00	130.00	
• 40 Mbps	EYZRD	450.00	150.00	
• 50 Mbps	EYZRE	510.00	170.00	
• 60 Mbps	EYZRF	570.00	190.00	
• 70 Mbps	EYZRG	630.00	210.00	
• 80 Mbps	EYZRH	690.00	230.00	
• 90 Mbps	EYZRJ	750.00	250.00	
• 100 Mbps	EYZRK	810.00	270.00	
• 200 Mbps	EYZRL	1,032.00	344.00	
• 300 Mbps	EYZRM	1,254.00	418.00	
• 400 Mbps	EYZRN	1,476.00	492.00	
• 500 Mbps	EYZRO	1,698.00	566.00	(N)

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10. METRO OPTICAL ETHERNET (MOE)

10.5 RATES AND CHARGES

- E. Optional Features
 - 2. Quality of Service (QoS)
 - a. Committed Information Rate (CIR)
 - Class of Service
 - (1) Real Time (Cont'd)

	USOC	MAXIMUM MONTHLY RATE	CURRENT MONTHLY RATE
• 600 Mbps	EYZRP	\$1,920.00	\$640.00
• 700 Mbps	EYZRQ	2,142.00	714.00
• 800 Mbps	EYZRR	2,364.00	788.00
• 900 Mbps	EYZRS	2,586.00	862.00
• 1000 Mbps	EYZRT	2,808.00	936.00
(2) Guaranteed Data			
• 1 Mbps	EYZG1	33.00	11.00
• 2 Mbps	EYZG2	48.00	16.00
• 3 Mbps	EYZG3	60.00	20.00
• 4 Mbps	EYZG4	75.00	25.00
• 5 Mbps	EYZG5	90.00	30.00
• 6 Mbps	EYZG6	105.00	35.00
• 7 Mbps	EYZG7	120.00	40.00
• 8 Mbps	EYZG8	132.00	44.00
• 9 Mbps	EYZG9	147.00	49.00
• 10 Mbps	EYZGA	162.00	54.00

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10. METRO OPTICAL ETHERNET (MOE)

10.5 RATES AND CHARGES

- E. Optional Features
 - 2. Quality of Service (QoS)
 - a. Committed Information Rate (CIR)
 - Class of Service
 - (2) Guaranteed Data (Cont'd)

	USOC	MAXIMUM MONTHLY RATE	CURRENT MONTHLY RATE
• 20 Mbps	EYZGB	\$ 198.00	\$ 66.00
• 30 Mbps	EYZGC	234.00	78.00
• 40 Mbps	EYZGD	270.00	90.00
• 50 Mbps	EYZGE	306.00	102.00
• 60 Mbps	EYZGF	342.00	114.00
• 70 Mbps	EYZGG	378.00	126.00
• 80 Mbps	EYZGH	414.00	138.00
• 90 Mbps	EYZGJ	450.00	150.00
• 100 Mbps	EYZGK	486.00	162.00
• 200 Mbps	EYZGL	618.00	206.00
• 300 Mbps	EYZGM	753.00	251.00
• 400 Mbps	EYZGN	885.00	295.00
• 500 Mbps	EYZGO	1,020.00	340.00

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10. METRO OPTICAL ETHERNET (MOE)

10.5 RATES AND CHARGES

- E. Optional Features
 - 2. Quality of Service (QoS)
 - a. Committed Information Rate (CIR)
 - Class of Service
 - (2) Guaranteed Data (Cont'd)

	USOC	MAXIMUM MONTHLY RATE	CURRENT MONTHLY RATE	
• 600 Mbps	EYZGP	\$1,152.00	\$384.00	(N)
• 700 Mbps	EYZGQ	1,284.00	428.00	
• 800 Mbps	EYZGR	1,419.00	473.00	
• 900 Mbps	EYZGS	1,551.00	517.00	
• 1000 Mbps	EYZGT	1,686.00	562.00	(N)

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10. METRO OPTICAL ETHERNET (MOE)

10.5 RATES AND CHARGES

E. Optional Features

2. Quality of Service (Cont'd)

b. Priority Class of Service

	USOC	MAXIMUM MONTHLY RATE	CURRENT MONTHLY RATE	
(1) Per 3 Mbps of Priority 1 Traffic [1]; per EVC or OVC, per port				(T) (C)
• Monthly	MEO3M	\$120.00	\$40.00	
• 12 Months	MEO31	105.00	35.00	
• 24 Months	MEO32	90.00	30.00	
• 36 Months	MEO33	75.00	25.00	
• 60 Months	MEO35	60.00	20.00	(M)
(2) Per 5 Mbps of Priority 1 Traffic; per EVC or OVC, per port				(T)(M1) (C)
• Monthly	MEO1M	\$195.00	\$65.00	
• 12 Months	MEO11	165.00	55.00	
• 24 Months	MEO12	150.00	50.00	
• 36 Months	MEO13	120.00	40.00	
• 60 Months	MEO15	105.00	35.00	
	USOC	NONRECURRING CHARGE MAXIMUM CURRENT		
(3) Per Change to an Existing Template [2];				(T) (T)
• per Template	NHCE9	\$350.00	\$175.00	(M1)

[1] 3 Mbps of Priority 1 is only available for 3 Mbps, 5 Mbps and 7 Mbps Bandwidth Profiles. (M)

[2] When the initial order is placed for Quality of Service, a Nonrecurring Charge (NRC) per Template will not apply. However, an NRC will apply any time an existing template is changed. (T)(M1)

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