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Volume 2 Response to Category 3 MAN Ethernet Requirements Final Bid

Amendment No. 1

California Department of Technology

IFB STPD 12-001-B Refresh for CALNET
3 Category 3

C3-B-15-03-TS-40

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Exhibit 8: Contractor's License Information

(Installation Services Only)

Exhibit 8: Contractor's License information is attached.



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Exhibit 9: Service Taxes, Fees, Surcharges and Surcredits

Exhibit 9: Service Taxes, Fees, Surcharges and Surcredits will be submitted as required after contract award.



Exhibit 10: Bidding Preferences and Incentives

Exhibit 10: Bidding Preferences and Incentives is attached.



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Exhibit 11: STD 843, DVBE Declarations

Comcast is not claiming DVBE status.



Exhibit 12: GSPD 05-105, Bidder Declaration

Exhibit 12: GSPD 05-105, Bidder Declaration is attached.



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Exhibit 13: STD 830, TACPA Preference Request

Comcast is not claiming TACPA preference.



Exhibit 14: Commercially Useful Function Statement

Comcast is not claiming an SB subcontracting preference or a DVBE subcontracting incentive.



Statement of Work for Category 3

Category 3 – Metropolitan Area Network ETHERNET

3.1 OVERVIEW

This Category 3 IFB provides the State's solicitation for best value solutions for Metropolitan Area Network Ethernet (MAE) services. This IFB Refresh describes the CALNET 3 technical requirements necessary to support the CALNET 3 program requirements.

This IFB Refresh will be awarded to Bidders that meet the award criteria as described in IFB Refresh Section 4. The CALNET 3 Contract(s) that result from the award of this IFB Refresh will be managed on a day-to-day basis by the CALNET 3 Contract Management and Oversight (CALNET 3 CMO).

3.1.1 BIDDER RESPONSE REQUIREMENTS

Throughout this IFB Refresh, Bidders are required to acknowledge acceptance of the requirements described herein by responding to one (1) of the following:

Example A (for requirements that require confirmation that the Bidder understands and accepts the requirement):

"Bidder understands the Requirement and shall meet or exceed it? Yes_____ No_____"

Or,

Example B (for responses that require the Bidder to provide a description or written response to the requirement):

"Bidder understands the requirements in Section xxx and shall meet or exceed them? Yes_____ No_____"

Description:"

3.1.2 DESIGNATION OF REQUIREMENTS

All Technical Requirements specified in this IFB Refresh Section are Mandatory and must be responded to as identified in IFB Refresh Section 3.3.2.5 by the Bidder. Additionally, some Mandatory requirements are "Mandatory-Scorable" and are designated as "(M-S)". The State will have the option of whether or not to include each item in the Contract, based on the best interest of the State. Furthermore, Customers will have the option whether or not to order services or features included in the Contract. Service Requests for some CALNET 3 services or features may require CALNET 3 CMO approval.



Costs associated with services shall be included in the prices provided by the Bidder for the individual items included in the Cost Worksheets. Items not listed in the Cost Worksheets will not be billable by the Contractor. If additional unsolicited items include the features described in the IFB Refresh and are not included as billable in the Cost Worksheets, the cost associated with the features shall not be included in the unsolicited price.

Services and features included in the Cost Worksheets are those that the Bidder must provide. All Bidders must provide individual prices as indicated in the Cost Worksheets in the Bidder's Final Proposal. Items submitted with no price will be considered as offered at no cost.

3.1.3 PACIFIC TIME ZONE

Unless specific otherwise, all times stated herein are times in the Pacific Time Zone.

3.2 ETHERNET SERVICES

Contractors shall provide Ethernet network services in specific geographic locations throughout the state. The service shall provide for the transmission of digital signals in a dedicated high capacity channel. The service shall be available in multiple configurations, enabling Customers to connect two (2) or more Local Area Networks (LANs) at the native speed of the LAN backbone.

3.2.1 METROPOLITAN AREA NETWORK ETHERNET (MAE) SERVICES

Contractors shall provide switched Ethernet point-to-point and multipoint LAN services for use in a metropolitan area which allows Customers to connect two (2) or more locations.

Bidder understands the Requirement and shall meet or exceed it? Yes X No _____

3.2.1.1 General Requirements

3.2.1.1.1 Standards

Contractor's service shall provide Ethernet services that comply with all applicable standards as set by the following standard bodies:

1. Metro Ethernet Forum (MEF);
2. Internet Engineering Task Force;
3. International Telecommunications Union (ITU); and,
4. Institute of Electrical and Electronics Engineers, Inc. (IEEE).

Bidder understands the Requirement and shall meet or exceed it? Yes X No _____

3.2.1.1.2 End-to-End Ethernet Delivery

Contractors shall provide a seamless end-to-end service traversing from the Customer Premise Equipment (CPE) through the Contractor's network minimizing conversion of protocols.

Bidder understands the Requirement and shall meet or exceed it? Yes X No _____

3.2.1.1.3 Ethernet Virtual Connections (EVC)

Contractor's service shall provide EVCs, which are used to define the association of two (2) or more User-to-Network Interfaces (UNI's).

Bidder understands the Requirement and shall meet or exceed it? Yes X No _____

3.2.1.1.4 Ethernet User-to-Network Interface (UNI)

Contractor's service shall provide delivery of the service via a User-to-Network Interface (UNI). The service shall provide bidirectional, full duplex transmission of Ethernet frames using a standard IEEE 802.3 Ethernet interface (UNI). Table 3.2.1.1.4 lists the UNI physical interfaces.

Table 3.2.1.1.4 – UNI Physical Interfaces

UNI Speed	UNI Physical Interface
10 Mbps	10BaseT
100 Mbps	100BaseT
1 Gbps	1000BaseT or 1000BaseSX

Bidder understands the Requirement and shall meet or exceed it? Yes X No _____

3.2.1.1.5 Multiple Classes of Service (CoS)

The service shall provide Class of Service (CoS) options that allow for differentiated service performance levels for different types of network traffic.

Bidder understands the Requirement and shall meet or exceed it? Yes X No _____

3.2.1.1.6 Service Frame Delivery Options

Service Frame Delivery options supported shall include

1. Unicast Frame Delivery;
2. Multicast Frame Delivery as per RFC 11 12; and,
3. Broadcast Frame Delivery as per IEEE 802.3.

Bidder understands the Requirement and shall meet or exceed it? Yes X No _____

3.2.1.1.7 Ethernet Service Frame Disposition

The service shall deliver all service frames associated with the EVC unconditionally across the network as specified in Table 3.2.1.1.7.

Table 3.2.1.1.7 –Service Frame Delivery Disposition

Service Frame Type	Service Frame Delivery
Unicast	All Frames delivered unconditionally
Multicast	All Frames delivered unconditionally
Broadcast	All Frames delivered unconditionally

Bidder understands the Requirement and shall meet or exceed it? Yes X No _____

3.2.1.1.8 VLAN Tag Preservation

The service shall support IEEE 802.1Q VLAN-tagged Customer packets. All Customer VLAN IDs and priority code points (IEEE 802.1p) for CoS shall be transmitted and received unaltered by the service. Untagged packets shall be mapped to the native VLAN specified by Customer. Customers may configure their own VLANs on their Customer owned CPE without coordination with the Contractor.

Bidder understands the Requirement and shall meet or exceed it? Yes X No _____

3.2.1.1.9 Maximum Frame Size

The service shall support a Maximum Transmission Unit (MTU) packet size of 1600 bytes to support untagged or 802.1Q tagged packet sizes.

Bidder understands the Requirement and shall meet or exceed it? Yes X No _____

3.2.1.1.10 Performance Monitoring

The Contractor shall conduct Performance Monitoring that includes the following:

1. Signal failure;

2. Signal degradation;
3. Connectivity or Loss of connectivity;
4. Frame loss;
5. Errored frames;
6. Looping;
7. Mis-inserted frames; and,
8. Maintenance parameters.

Bidder shall describe their Performance Monitoring (PM) that will be deployed for CALNET 3.

Bidder understands the requirements in Section 3.2.1.1.10 and shall meet or exceed them?
Yes X No _____

Description:

Monitoring the Network

The Network Operations organization provides World Class Enterprise Customer Care, which includes surveillance, trouble-shooting, and resolution through its state-of-the-art 24 x 7 x 365 Network Operations Center (NOC) with two redundant Customer Care Centers in Naperville, IL and Denver, CO. Each staffed to answer any questions, perform changes to existing services and assist with technical troubles. Both Customer Care Centers are collocated with Enterprise Tier II and Tier III repair groups, easily facilitating higher level technical support. The NOC continuously monitors the network equipment, service health, and performance of the Comcast network, responds to network events and service degradations, dispatches local field technicians, and informs customers of service issues, in many cases before the customer has noticed the problem.

3.2.1.1.11 Network Monitoring

The Contractor shall monitor all services on a 24x365 basis.

Bidder understands the Requirement and shall meet or exceed it? Yes X No _____

3.2.1.1.12 Technical Support

Contractor shall provide technical support service issues via a toll-free telephone number that operates on a 24x365 basis.

Bidder understands the Requirement and shall meet or exceed it? Yes X No _____

3.2.1.1.13 Maintenance

The Contractor shall perform maintenance during a set maintenance window. Maintenance shall be coordinated between the Contractor and the Customer. Contractor shall provide a minimum of 48 hour notice to the Customer for non-service impacting scheduled maintenance. Contractor shall provide a minimum of seven (7) days' notice for service impacting planned maintenance. Emergency maintenance shall be performed as needed.

Bidder understands the Requirement and shall meet or exceed it? Yes X No _____

3.2.1.1.14 Equipment and Environment

The Contractor shall provide and install all network terminating Equipment (NTE) in Customer provided racking and utilize State provided AC power. The NTE shall connect to either a Customer router with an Ethernet blade or a Customer Ethernet switch equipped to support Ethernet located within fifty feet.

All Equipment shall adhere to the Telcordia Network Equipment Building System (NEBS).

Bidder understands the Requirement and shall meet or exceed it? Yes X No _____

3.2.1.2 Ethernet Private Line (EPL) MAE Service

The Contractor shall provide Ethernet Private Line (EPL) MAE service. This service shall provide a logical Point-to-Point connection between two (2) Customer locations or a Customer location and an Internet Service Provider Point of Presence (POP), Interexchange Carrier POP, or another 3rd party location. EPL service shall enable Customers to use any VLANs or Ethernet control protocol across the service without coordination with the Contractor.

EPL service shall enable Customers to connect their Customer Premise Equipment (CPE) using an Ethernet interface and provide one (1) Ethernet Virtual Connection (EVC) between two (2) Customer locations.

Bidder understands the Requirement and shall meet or exceed it? Yes X No _____

3.2.1.3 Ethernet Virtual Private Line (EVPL) MAE Service

The Contractor shall provide Ethernet Virtual Private Line (EVPL) MAE service. This service shall provide an Ethernet Virtual Connection (EVC) between two (2) Customer locations similar to Ethernet Private Line service but shall support the added flexibility to multiplex multiple services (EVCs) on a single UNI at a Customer's hub or aggregation site.

Bidder understands the Requirement and shall meet or exceed it? Yes X No _____

3.2.1.4 EVPL MAE Service Multiplexing

The EVPL MAE service shall enable Customers to multiplex multiple services (EVCs) on a given UNI eliminating the need for multiple ports on the Customer's router or Ethernet switch.

Bidder understands the Requirement and shall meet or exceed it? Yes X No _____

3.2.1.5 EPL and EVPL MAE Classes of Service (CoS)

Contractor shall provide three (3) Classes of Service (CoS) options for the EPL/EVPL MAE service: BASIC, PRIORITY and PREMIUM. The CoS options shall allow for differentiated service performance levels for different types of network traffic. CoS options shall allow Customers to prioritize mission-critical traffic from lesser priority traffic in the network. The CoS shall be associated with the bandwidth usage rate Committed Information Rate (CIR) ordered by the Customer for each connection at the Customer locations. If the Customer requests multiple EVCs per location, then a CoS will be associated with each EVC.

3.2.1.5.1 BASIC CoS MAE

BASIC CoS supports data applications with more tolerance for delay and/or those with least priority. There are no service performance parameters associated with this Class of Service.

Bidders shall describe in detail their Basic CoS MAE service that will be deployed to satisfy this requirement.

Bidder understands the requirements in Section 3.2.1.5.1 and shall meet or exceed them? Yes X No _____

Description:

Comcast supports a Basic CoS for data applications with more tolerance for delay and/or those with least priority.

Comcast's Ethernet service offers three different classes of service. The CoS options allow for differentiated service performance levels for different types of network traffic. It is used to

prioritize customer mission-critical traffic from lesser priority traffic in the network. The customer must specify a CIR for each CoS to indicate how much bandwidth should be assigned to each CoS.

For Basic CoS MAE, the customer must mark all Basic CoS packets using 802.1p CoS values 0-1 to ensure the service will provide the intended CoS performance objectives.

3.2.1.5.2 PRIORITY CoS MAE

PRIORITY CoS shall support data applications with more tolerance for delay and/or those that are lower in priority. The service parameters associated with this class of service are listed in Table 3.2.1.5.2.

Table 3.2.1.5.2 lists the service performance objectives for PRIORITY CoS for distances within 250 network miles.

Table 3.2.1.5.2 – PRIORITY CoS Performance Objectives

Performance Objective (≤ 250 miles)	PRIORITY CoS
Latency (one way)	<35ms
Jitter (one way)	<40ms
Packet Loss (one way)	<0.5%
Availability	>99.99%

Bidders shall describe in detail their Priority CoS MAE service that will be deployed to satisfy this requirement.

Bidder understands the requirements in Section 3.2.1.5.2 and shall meet or exceed them?
Yes X No _____

Description:

Comcast supports a Priority CoS for data applications with more tolerance for delay and/or those that are lower in priority.

Comcast's Ethernet service offers three different classes of service. The CoS options allow for differentiated service performance levels for different types of network traffic. It is used to prioritize customer mission-critical traffic from lesser priority traffic in the network. The customer must specify a CIR for each CoS to indicate how much bandwidth should be assigned to each CoS.

For Priority CoS MAE, the customer must mark all Priority CoS packets using 802.1p CoS values 2-3 to ensure the service will provide the intended CoS performance objectives.

3.2.1.5.3 PREMIUM CoS MAE

PREMIUM CoS shall support applications that require minimal loss and low latency variation (i.e., jitter). The network will provision data in this class of service in a priority queue indicating that it is delay sensitive. The service parameters associated with this class of service are listed in Table 3.2.1.5.3.

Table 3.2.1.5.3 lists the service performance objectives for PREMIUM CoS for distances within 250 network miles.

Table 3.2.1.5.3 – Class of Service Options

Performance Objective (≤ 250 miles)	PREMIUM CoS
Latency (one way)	<25ms
Jitter (one way)	<25ms
Packet Loss (one way)	<0.1%
Availability	>99.99%

Bidders shall describe in detail their Premium CoS MAE service that will be deployed to satisfy this requirement.

Bidder understands the requirements in Section 3.2.1.5.3 and shall meet or exceed them?
Yes X No

Description:

Comcast supports a Premium CoS for data applications with more tolerance for delay and/or those that are lower in priority.

Comcast's Ethernet service offers three different classes of service. The CoS options allow for differentiated service performance levels for different types of network traffic. It is used to prioritize customer mission-critical traffic from lesser priority traffic in the network. The customer must specify a CIR for each CoS to indicate how much bandwidth should be assigned to each CoS.

For Premium CoS MAE, the customer must mark all Premium CoS packets using 802.1p CoS value 5 to ensure the service will provide the intended CoS performance objectives.

3.2.1.6 EPL and EVPL MAE Service Feature Description

Contractor shall provide MAE services as described below.

3.2.1.6.1 EPL and EVPL MAE Service Connections

EPL and EVPL MAE Service Connections shall include the Network Interface and the Access Link from the Customer premises to the Ethernet network, a port on the Ethernet network, the assigned bandwidth usage and one (1) Ethernet Virtual Connection (EVC).

1. Network Interface (NI): The point that the Customer's data transmission enters the network. The point of interconnection between the Contractor's communication facility and your end-user's terminal equipment.
2. Access Link: Connects a Customer facility at the NI to an Ethernet port on the Metro Ethernet network with a standard optical or copper connection.
3. Port: An Ethernet port is the physical entry point to the shared Metro Ethernet Network. Virtual Local Area Networks (VLANs) Ethernet Virtual Connections (EVCs) originate and terminate on a Metro Ethernet Port.

3.2.1.6.2 Managed Router Service:

Contractor shall offer a managed router service that includes the components described in Section 3.2.1.6.1 in a bundled format which includes a Contractor owned, maintained and managed router as **identified in Table 3.2.1.6.a.**

The Contractor's managed router service shall include proactive Customer notification.



Bidder shall describe in detail all equipment, maintenance and management services that, as the awarded Contractor, will be deployed to satisfy this requirement.

Bidder understands the requirements in Section 3.2.1.6.2 and shall meet or exceed them?
Yes X No _____

Description:

The Comcast Managed Router Service provides basic routing, QOS and network address translation. When Comcast provides the managed router, the exact configuration for Comcast's managed router will be agreed to between the Customer and Comcast including WAN Protocols, Static routes, OSPF: 1 area. No multiple OSPF's, BGP router, LAN Protocols, class of service.

Comcast includes the services below as standard with this service:

- Proactive management by Comcast of the equipment at the Customer premise requires Comcast to configure access to pull the necessary SNMP traps or use other mechanisms to properly access alarms and other equipment data.
- Four hour, 24 hour-a-day repair coverage for the managed router.
- 24x7 Tier 2 support is provided with this service. Tier 2 support provides a Comcast Help Desk to support a Customer Tier 1 help desk.
- Support for Change Requests. Comcast enables the Customer to request changes to the router configuration due to Customer policy changes or normal evolution of service.

Contractors shall provide the services and Features described in Table 3.2.1.6.a

Table 3.2.1.6.a –MAE Services and Features

	Feature Name	Feature Description	Bidder Meets or Exceeds? Y N		Bidder's Product Identifier
1	EPL MAE Service Connection 10/100 Mbps	10/100 Mbps Ethernet port per location; Assessed per interface at bandwidths of 10/100 Mbps (10/100BASE-T). The EPL connection rate element includes the physical connection (Access Link) between the Customer's demarcation and the core Ethernet network, the port, one (1) EVC and the NI.	Y		EPLUNI100
Bidder's Product Description: The service provides bidirectional, full duplex transmission of Ethernet frames using a standard IEEE 802.3 10/100 Mbps (10/100BASE-T) Ethernet interface (UNI).					
2	EPL MAE Service Connection 10/100 Mbps with Managed Router	10/100 Mbps Ethernet port per location with managed router; Assessed per interface at bandwidths of 10/100 Mbps (10/100BASE-T). The EPL connection rate element includes the physical connection (Access Link) between the Customer's demarcation and the core Ethernet network, the port, one (1) EVC and the NI.	Y		NSX0697
Bidder's Product Description: The service provides bidirectional, full duplex transmission of Ethernet frames using a standard IEEE 802.3 10/100 Mbps (10/100BASE-T) Ethernet interface (UNI) with managed router.					

	Feature Name	Feature Description	Bidder Meets or Exceeds? Y N		Bidder's Product Identifier
3	EPL MAE Service Connection Gigabit Ethernet (1 Gbps)	1000 Mbps Ethernet port per location; Assessed per interface at bandwidths of 1Gbps Ethernet. The EPL connection rate element includes the physical connection (Access Link) between the Customer's demarcation and the core Ethernet network, the port, one (1) EVC and the NI.	Y		EPLUNIGIG
Bidder's Product Description: The service provides bidirectional, full duplex transmission of Ethernet frames using a standard IEEE 802.3 1 Gbps (1000BaseT or 1000BaseSX) Ethernet interface (UNI).					
4	EPL MAE Service Connection Gigabit Ethernet (1 Gbps) with Managed Router	1000 Mbps Ethernet port per location, with managed router; Assessed per interface at bandwidths of 1Gbps Ethernet. The EPL connection rate element includes the physical connection (Access Link) between the Customer's demarcation and the core Ethernet network, the port, one (1) EVC and the NI.	Y		NSX0698
Bidder's Product Description: The service provides bidirectional, full duplex transmission of Ethernet frames using a standard IEEE 802.3 1 Gbps (1000BaseT or 1000BaseSX) Ethernet interface (UNI) with managed router.					

	Feature Name	Feature Description	Bidder Meets or Exceeds? Y N		Bidder's Product Identifier
5	EVPL MAE Service Connection 10/100 Mbps	Assessed per interface at bandwidths of 10/100 Mbps (10/100BASE-T). The EVPL connection rate element includes the physical connection (Access Link) between the Customer's demarcation and the core Ethernet network, the port, one (1) EVC and the NI.	Y		EVPLUNI100
Bidder's Product Description: The service provides bidirectional, full duplex transmission of Ethernet frames using a standard IEEE 802.3 10/100 Mbps (10/100BASE-T) Ethernet interface (UNI). The service enables customers to multiplex multiple services (EVCs) on a given UNI.					
6	EVPL MAE Service Connection 10/100 Mbps with Managed Router	Assessed per interface at bandwidths of 10/100 Mbps (10/100BASE-T) with managed router. The EVPL connection rate element includes the physical connection (Access Link) between the Customer's demarcation and the core Ethernet network, the port, one (1) EVC and the NI.	Y		NSX0699
Bidder's Product Description: The service provides bidirectional, full duplex transmission of Ethernet frames using a standard IEEE 802.3 10/100 Mbps (10/100BASE-T) Ethernet interface (UNI). The service enables customers to multiplex multiple services (EVCs) on a given UNI with managed router.					

	Feature Name	Feature Description	Bidder Meets or Exceeds? Y N		Bidder's Product Identifier
7	EVPL MAE Service Connection Gigabit Ethernet (1 Gbps)	Assessed per interface at bandwidths of 1Gbps Ethernet. The EVPL connection rate element includes the physical connection (Access Link) between the Customer's demarcation and the core Ethernet network, the port, one (1) EVC and the NI.	Y		EVPLUNIGIG
Bidder's Product Description: The service provides bidirectional, full duplex transmission of Ethernet frames using a standard IEEE 802.3 1 Gbps (1000BaseT or 1000BaseSX) Ethernet interface (UNI). The service enables customers to multiplex multiple services (EVCs) on a given UNI.					
8	EVPL MAE Service Connection Gigabit Ethernet (1 Gbps) with Managed Router	Assessed per interface at bandwidths of 1Gbps Ethernet with managed router. The EVPL connection rate element includes the physical connection (Access Link) between the Customer's demarcation and the core Ethernet network, the port, one (1) EVC and the NI.	Y		NSX0700
Bidder's Product Description: The service provides bidirectional, full duplex transmission of Ethernet frames using a standard IEEE 802.3 1 Gbps (1000BaseT or 1000BaseSX) Ethernet interface (UNI). The service enables customers to multiplex multiple services (EVCs) on a given UNI with managed router.					
9	Additional MAE MAC Addresses (51-100)	MAC Address rate element is a data link layer protocol used for Layer 2 connectivity. Standard service allows up to 50 MAC addresses to be present per EPL/EVPL connection. This optional feature increases that limit to up to 100 MAC addresses per EPL/EVPL connection. A technical review will be necessary to determine if service can be provided and for approval to exceed the limit.	Y		NSX0001
Bidder's Product Description: Standard EPL and EVPL services allow 250 MAC addresses to be present.					

	Feature Name	Feature Description	Bidder Meets or Exceeds? Y N		Bidder's Product Identifier
10	Ethernet Virtual Connection (EVC) MAE	EVC rate element. EVCs shall be assigned in 1 Mbps increments within each port range. Customer may order additional EVCs to establish additional virtual connections over the same physical connections. When additional EVCs are ordered, the Customer must designate the portion of the CIR bandwidth assigned to each EVC.	Y		NSX0002
	Bidder's Product Description: Ethernet Virtual Connection (EVC) shall be assigned in 1 Mbps increments within each port range.				
11	CIR (BASIC CoS MAE):				
11a	BASIC CIR - 2 Mbps	The guaranteed average bandwidth of the virtual circuit.	Y		NSX0667
	Bidder's Product Description: 2Mbps Committed Information Rate with Basic CoS				
11b	BASIC CIR MAE - 4 Mbps	The guaranteed average bandwidth of the virtual circuit.	Y		NSX0668
	Bidder's Product Description: 4Mbps Committed Information Rate with Basic CoS				
11c	BASIC CIR MAE - 8 Mbps	The guaranteed average bandwidth of the virtual circuit.	Y		NSX0669
	Bidder's Product Description: 8Mbps Committed Information Rate with Basic CoS				
12	CIR (PRIORITY CoS):				
12a	PRIORITY CIR MAE - 2 Mbps	The guaranteed average bandwidth of the virtual circuit.	Y		NSX0670
	Bidder's Product Description: 2Mbps Committed Information Rate with Priority CoS				
12b	PRIORITY CIR MAE - 4 Mbps	The guaranteed average bandwidth of the virtual circuit.	Y		NSX0671
	Bidder's Product Description: 4Mbps Committed Information Rate with Priority CoS				

	Feature Name	Feature Description	Bidder Meets or Exceeds? Y N		Bidder's Product Identifier
12c	PRIORITY CIR MAE - 5 Mbps	The guaranteed average bandwidth of the virtual circuit.	Y		NSX0672
	Bidder's Product Description: 5Mbps Committed Information Rate with Priority CoS				
12d	PRIORITY CIR MAE - 8 Mbps	The guaranteed average bandwidth of the virtual circuit.	Y		NSX0673
	Bidder's Product Description: 8Mbps Committed Information Rate with Priority CoS				
12e	PRIORITY CIR MAE - 10 Mbps	The guaranteed average bandwidth of the virtual circuit.	Y		NSX0674
	Bidder's Product Description: 10Mbps Committed Information Rate with Priority CoS				
12f	PRIORITY CIR MAE - 20 Mbps	The guaranteed average bandwidth of the virtual circuit.	Y		NSX0675
	Bidder's Product Description: 20Mbps Committed Information Rate with Priority CoS				
12g	PRIORITY CIR MAE - 50 Mbps	The guaranteed average bandwidth of the virtual circuit.	Y		NSX0676
	Bidder's Product Description: 50Mbps Committed Information Rate with Priority CoS				
12h	PRIORITY CIR MAE - 100 Mbps	The guaranteed average bandwidth of the virtual circuit.	Y		NSX0677
	Bidder's Product Description: 100Mbps Committed Information Rate with Priority CoS				
12i	PRIORITY CIR MAE - 150 Mbps	The guaranteed average bandwidth of the virtual circuit.	Y		NSX0678
	Bidder's Product Description: 200Mbps Committed Information Rate with Priority CoS				

	Feature Name	Feature Description	Bidder Meets or Exceeds? Y N		Bidder's Product Identifier
12j	PRIORITY CIR MAE - 250 Mbps	The guaranteed average bandwidth of the virtual circuit.	Y		NSX0679
	Bidder's Product Description: 300Mbps Committed Information Rate with Priority CoS				
12k	PRIORITY CIR MAE - 500 Mbps	The guaranteed average bandwidth of the virtual circuit.	Y		NSX0680
	Bidder's Product Description: 500Mbps Committed Information Rate with Priority CoS				
12l	PRIORITY CIR MAE - 600 Mbps	The guaranteed average bandwidth of the virtual circuit.	Y		NSX0681
	Bidder's Product Description: 600Mbps Committed Information Rate with Priority CoS				
12m	PRIORITY CIR MAE - 1000 Mbps	The guaranteed average bandwidth of the virtual circuit.	Y		NSX0682
	Bidder's Product Description: 1000Mbps Committed Information Rate with Priority CoS				
13	CIR (PREMIUM CoS):				
13a	PREMIUM CIR MAE - 2 Mbps	The guaranteed average bandwidth of the virtual circuit.	Y		NSX0683
	Bidder's Product Description: 2Mbps Committed Information Rate with Premium CoS				
13b	PREMIUM CIR MAE - 4 Mbps	The guaranteed average bandwidth of the virtual circuit.	Y		NSX0684
	Bidder's Product Description: 4Mbps Committed Information Rate with Premium CoS				
13c	PREMIUM CIR MAE - 5 Mbps	The guaranteed average bandwidth of the virtual circuit.	Y		NSX0685
	Bidder's Product Description: 5Mbps Committed Information Rate with Premium CoS				

	Feature Name	Feature Description	Bidder Meets or Exceeds? Y N		Bidder's Product Identifier
13d	PREMIUM CIR MAE – 8 Mbps	The guaranteed average bandwidth of the virtual circuit.	Y		NSX0686
	Bidder's Product Description: 8Mbps Committed Information Rate with Premium CoS				
13e	PREMIUM CIR MAE – 10 Mbps	The guaranteed average bandwidth of the virtual circuit.	Y		NSX0687
	Bidder's Product Description: 10Mbps Committed Information Rate with Premium CoS				
13f	PREMIUM CIR MAE – 20 Mbps	The guaranteed average bandwidth of the virtual circuit.	Y		NSX0688
	Bidder's Product Description: 20Mbps Committed Information Rate with Premium CoS				
13g	PREMIUM CIR MAE – 50 Mbps	The guaranteed average bandwidth of the virtual circuit.	Y		NSX0689
	Bidder's Product Description: 50Mbps Committed Information Rate with Premium CoS				
13h	PREMIUM CIR MAE – 100 Mbps	The guaranteed average bandwidth of the virtual circuit.	Y		NSX0690
	Bidder's Product Description: 100Mbps Committed Information Rate with Premium CoS				
13i	PREMIUM CIR MAE – 150 Mbps	The guaranteed average bandwidth of the virtual circuit.	Y		NSX0691
	Bidder's Product Description: 200Mbps Committed Information Rate with Premium CoS				
13j	PREMIUM CIR MAE – 250 Mbps	The guaranteed average bandwidth of the virtual circuit.	Y		NSX0692
	Bidder's Product Description: 300Mbps Committed Information Rate with Premium CoS				

	Feature Name	Feature Description	Bidder Meets or Exceeds? Y N		Bidder's Product Identifier
13k	PREMIUM CIR MAE – 500 Mbps	The guaranteed average bandwidth of the virtual circuit.	Y		NSX0693
	Bidder's Product Description: 500Mbps Committed Information Rate with Premium CoS				
13l	PREMIUM CIR MAE – 600 Mbps	The guaranteed average bandwidth of the virtual circuit.	Y		NSX0694
	Bidder's Product Description: 600Mbps Committed Information Rate with Premium CoS				
13m	PREMIUM CIR MAE – 1000 Mbps	The guaranteed average bandwidth of the virtual circuit.	Y		NSX0695
	Bidder's Product Description: 1000Mbps Committed Information Rate with Premium CoS				

The Contractor may offer additional unsolicited MAE services and features in Table 3.2.1.6.b.

Table 3.2.1.6.b Unsolicited MAE Services and Features

	Feature Name	Feature Description	Bidder's Product Identifier
1.	Managed Router Service - 10Mbps	Managed Router Service -- Cisco, Juniper, or equivalent for MAE Services purchased from Comcast. Supports up to 10Mbps throughput.	MR0010
	Bidder's Product Description: Comcast owned and managed router. Includes installation, configuration, maintenance, and diagnostic monitoring for MAE services purchased from Comcast. Supports up to 10Mbps throughput.		
2.	Managed Router Service - 50Mbps	Managed Router Service -- Cisco, Juniper, or equivalent for MAE Services purchased from Comcast. Supports up to 50Mbps throughput.	MR0050
	Bidder's Product Description: Comcast owned and managed router. Includes installation, configuration, maintenance, and diagnostic monitoring for MAE services purchased from Comcast. Supports up to 50Mbps throughput.		

	Feature Name	Feature Description	Bidder's Product Identifier
3.	Managed Router Service - 100Mbps	Managed Router Service -- Cisco, Juniper, or equivalent for MAE Services purchased from Comcast. Supports up to 100Mbps throughput.	MR0100
	Bidder's Product Description: Comcast owned and managed router. Includes installation, configuration, maintenance, and diagnostic monitoring for MAE services purchased from Comcast. Supports up to 100Mbps throughput.		
4.	Managed Router Service - 300Mbps	Managed Router Service -- Cisco, Juniper, or equivalent for MAE Services purchased from Comcast. Supports up to 300Mbps throughput.	MR0300
	Bidder's Product Description: Comcast owned and managed router. Includes installation, configuration, maintenance, and diagnostic monitoring for MAE services purchased from Comcast. Supports up to 300Mbps throughput.		
5.	Managed Router Service - 500Mbps	Managed Router Service -- Cisco, Juniper, or equivalent for MAE Services purchased from Comcast. Configured to support up to 500Mbps throughput.	MR0500
	Bidder's Product Description: Comcast owned and managed router. Includes installation, configuration, maintenance, and diagnostic monitoring for MAE services purchased from Comcast. Configured to support up to 500Mbps throughput.		
6.	Managed Router Service - GigE	Managed Router Service -- Cisco, Juniper, or equivalent for MAE Services purchased from Comcast. Configured to support up to 1Gbps throughput.	MR1000
	Bidder's Product Description: Comcast owned and managed router. Includes installation, configuration, maintenance, and diagnostic monitoring for MAE services purchased from Comcast. Configured to supports up to 1Gbps throughput.		
7.	Managed Router Service - 10 GigE	Managed Router Service -- Cisco, Juniper, or equivalent for MAE Services purchased from Comcast. Supports up to 10Gbps throughput	MR010G

	Feature Name	Feature Description	Bidder's Product Identifier
	Bidder's Product Description: Comcast owned and managed router. Includes installation, configuration, maintenance, and diagnostic monitoring for MAE services purchased from Comcast. Supports up to 10Gbps throughput.		
	Ethernet Network Service (ENS) MAE		
	ENS MAE Service Connection Gigabit Ethernet (10/100 Mbps)	Assessed per interface at bandwidths of 10/100 Mbps Ethernet. The ENS connection rate element includes the physical connection (Access Link) between the Customer's demarcation and the core Ethernet network, the port, one (1) EVC and the NI.	ENSUNI100
8.	Bidder's Product Description: The service provides bidirectional, full duplex transmission of Ethernet frames using a standard IEEE 802.3 10/100 Mbps (10/100BASE-T) Ethernet interface (UNI). The service enables customers to multiplex multiple services (EVCs) on a given UNI, and connect multi-point to multi-point. Ethernet Network Services (ENS) are ideal for connecting your locations with a network that can meet the demands of high data traffic. Features include: • Redundant links for all locations, ensuring maximum network availability. • Easily scale network capacity from 10Mbps to 10Gbps Ethernet. • Implement your own VLANs without coordination with Comcast. • Transmit data with low-latency across a Wide Area Network, allowing applications to perform as if users were on the same Local Area Network (LAN).		
9.	ENS MAE Service Connection Gigabit Ethernet (1 Gbps)	Assessed per interface at bandwidths of 1Gbps Ethernet. The ENS connection rate element includes the physical connection (Access Link) between the Customer's demarcation and the core Ethernet network, the port, one (1) EVC and the NI.	ENSUNIGIG

	Feature Name	Feature Description	Bidder's Product Identifier
	Bidder's Product Description: The service provides bidirectional, full duplex transmission of Ethernet frames using a standard IEEE 802.3 1Gbps (1000BaseT or 1000BaseSX) Ethernet interface (UNI). The service enables customers to multiplex multiple services (EVCs) on a given UNI, and connect multi-point to multi-point. Ethernet Network Services (ENS) are ideal for connecting your locations with a network that can meet the demands of high data traffic. Features include: • Scale network capacity from 10Mbps to 10Gbps Ethernet. • Implement your own VLANs without coordination with Comcast. • Transmit data with low-latency across a Wide Area Network, allowing applications to perform as if users were on the same Local Area Network (LAN).		
	ENS MAE Service Connection Gigabit Ethernet (10 Gbps)	Assessed per interface at bandwidths of 10Gbps Ethernet. The ENS connection rate element includes the physical connection (Access Link) between the Customer's demarcation and the core Ethernet network, the port, one (1) EVC and the NI.	ENSUNI10G
10.	Bidder's Product Description: The service provides bidirectional, full duplex transmission of Ethernet frames using a standard IEEE 802.3 10Gbps (1000BASE-SR or 10GBASE-LR) Ethernet interface (UNI). The service enables customers to multiplex multiple services (EVCs) on a given UNI, and connect multi-point to multi-point. Ethernet Network Services (ENS) are ideal for connecting your locations with a network that can meet the demands of high data traffic. Features include: • Scale network capacity from 10Mbps to 10Gbps Ethernet. • Implement your own VLANs without coordination with Comcast. • Transmit data with low-latency across a Wide Area Network, allowing applications to perform as if users were on the same Local Area Network (LAN).		
ENS CIR (BASIC CoS MAE)			
11.	ENS BASIC CIR MAE - 1 Mbps	The guaranteed average bandwidth of the virtual circuit.	ENSEVC0001 BAS
	Bidder's Product Description: 1Mbps Committed Information Rate with Basic CoS		
12.	ENS BASIC CIR MAE - 2 Mbps	The guaranteed average bandwidth of the virtual circuit.	ENSEVC0002 BAS
	Bidder's Product Description: 2Mbps Committed Information Rate with Basic CoS		
13.	ENS BASIC CIR MAE - 3 Mbps	The guaranteed average bandwidth of the virtual circuit.	ENSEVC0003 BAS

	Feature Name	Feature Description	Bidder's Product Identifier
	Bidder's Product Description: 3Mbps Committed Information Rate with Basic CoS		
14.	ENS BASIC CIR MAE - 4 Mbps	The guaranteed average bandwidth of the virtual circuit.	ENSEVC0004 BAS
	Bidder's Product Description: 4Mbps Committed Information Rate with Basic CoS		
15.	ENS BASIC CIR MAE - 5 Mbps	The guaranteed average bandwidth of the virtual circuit.	ENSEVC0005 BAS
	Bidder's Product Description: 5Mbps Committed Information Rate with Basic CoS		
16.	ENS BASIC CIR MAE - 6 Mbps	The guaranteed average bandwidth of the virtual circuit.	ENSEVC0006 BAS
	Bidder's Product Description: 6Mbps Committed Information Rate with Basic CoS		
17.	ENS BASIC CIR MAE - 7 Mbps	The guaranteed average bandwidth of the virtual circuit.	ENSEVC0007 BAS
	Bidder's Product Description: 7Mbps Committed Information Rate with Basic CoS		
18.	ENS BASIC CIR MAE - 8 Mbps	The guaranteed average bandwidth of the virtual circuit.	ENSEVC0008 BAS
	Bidder's Product Description: 8Mbps Committed Information Rate with Basic CoS		
19.	ENS BASIC CIR MAE - 9 Mbps	The guaranteed average bandwidth of the virtual circuit.	ENSEVC0009 BAS
	Bidder's Product Description: 9Mbps Committed Information Rate with Basic CoS		
20.	ENS BASIC CIR MAE - 10 Mbps	The guaranteed average bandwidth of the virtual circuit.	ENSEVC0010 BAS
	Bidder's Product Description: 10Mbps Committed Information Rate with Basic CoS		
21.	ENS BASIC CIR MAE - 20 Mbps	The guaranteed average bandwidth of the virtual circuit.	ENSEVC0020 BAS
	Bidder's Product Description: 20Mbps Committed Information Rate with Basic CoS		
22.	ENS BASIC CIR MAE - 30 Mbps	The guaranteed average bandwidth of the virtual circuit.	ENSEVC0030 BAS

	Feature Name	Feature Description	Bidder's Product Identifier
	Bidder's Product Description: 30Mbps Committed Information Rate with Basic CoS		
23.	ENS BASIC CIR MAE - 40 Mbps	The guaranteed average bandwidth of the virtual circuit.	ENSEVC0040 BAS
	Bidder's Product Description: 40Mbps Committed Information Rate with Basic CoS		
24.	ENS BASIC CIR MAE - 50 Mbps	The guaranteed average bandwidth of the virtual circuit.	ENSEVC0050 BAS
	Bidder's Product Description: 50Mbps Committed Information Rate with Basic CoS		
25.	ENS BASIC CIR MAE - 60 Mbps	The guaranteed average bandwidth of the virtual circuit.	ENSEVC0060 BAS
	Bidder's Product Description: 60Mbps Committed Information Rate with Basic CoS		
26.	ENS BASIC CIR MAE - 70 Mbps	The guaranteed average bandwidth of the virtual circuit.	ENSEVC0070 BAS
	Bidder's Product Description: 70Mbps Committed Information Rate with Basic CoS		
27.	ENS BASIC CIR MAE - 80 Mbps	The guaranteed average bandwidth of the virtual circuit.	ENSEVC0080 BAS
	Bidder's Product Description: 80Mbps Committed Information Rate with Basic CoS		
28.	ENS BASIC CIR MAE - 90 Mbps	The guaranteed average bandwidth of the virtual circuit.	ENSEVC0090 BAS
	Bidder's Product Description: 90Mbps Committed Information Rate with Basic CoS		
29.	ENS BASIC CIR MAE - 100 Mbps	The guaranteed average bandwidth of the virtual circuit.	ENSEVC0100 BAS
	Bidder's Product Description: 100Mbps Committed Information Rate with Basic CoS		
30.	ENS BASIC CIR MAE - 200 Mbps	The guaranteed average bandwidth of the virtual circuit.	ENSEVC0200 BAS
	Bidder's Product Description: 200Mbps Committed Information Rate with Basic CoS		
31.	ENS BASIC CIR MAE - 300 Mbps	The guaranteed average bandwidth of the virtual circuit.	ENSEVC0300 BAS

	Feature Name	Feature Description	Bidder's Product Identifier
	Bidder's Product Description: 300Mbps Committed Information Rate with Basic CoS		
32.	ENS BASIC CIR MAE - 400 Mbps	The guaranteed average bandwidth of the virtual circuit.	ENSEVC0400 BAS
	Bidder's Product Description: 400Mbps Committed Information Rate with Basic CoS		
33.	ENS BASIC CIR MAE - 500 Mbps	The guaranteed average bandwidth of the virtual circuit.	ENSEVC0500 BAS
	Bidder's Product Description: 500Mbps Committed Information Rate with Basic CoS		
34.	ENS BASIC CIR MAE - 600 Mbps	The guaranteed average bandwidth of the virtual circuit.	ENSEVC0600 BAS
	Bidder's Product Description: 600Mbps Committed Information Rate with Basic CoS		
35.	ENS BASIC CIR MAE - 700 Mbps	The guaranteed average bandwidth of the virtual circuit.	ENSEVC0700 BAS
	Bidder's Product Description: 700Mbps Committed Information Rate with Basic CoS		
36.	ENS BASIC CIR MAE - 800 Mbps	The guaranteed average bandwidth of the virtual circuit.	ENSEVC0800 BAS
	Bidder's Product Description: 800Mbps Committed Information Rate with Basic CoS		
37.	ENS BASIC CIR MAE - 900 Mbps	The guaranteed average bandwidth of the virtual circuit.	ENSEVC0900 BAS
	Bidder's Product Description: 900Mbps Committed Information Rate with Basic CoS		
38.	ENS BASIC CIR MAE - 1000 Mbps	The guaranteed average bandwidth of the virtual circuit.	ENSEVC1000 BAS
	Bidder's Product Description: 1000Mbps Committed Information Rate with Basic CoS		
39.	ENS BASIC CIR MAE - 2000 Mbps	The guaranteed average bandwidth of the virtual circuit.	ENSEVC2000 BAS
	Bidder's Product Description: 2000Mbps Committed Information Rate with Basic CoS		

	Feature Name	Feature Description	Bidder's Product Identifier
40.	ENS BASIC CIR MAE - 3000 Mbps	The guaranteed average bandwidth of the virtual circuit.	ENSEVC3000 BAS
	Bidder's Product Description: 3000Mbps Committed Information Rate with Basic CoS		
41.	ENS BASIC CIR MAE - 4000 Mbps	The guaranteed average bandwidth of the virtual circuit.	ENSEVC4000 BAS
	Bidder's Product Description: 4000Mbps Committed Information Rate with Basic CoS		
42.	ENS BASIC CIR MAE - 5000 Mbps	The guaranteed average bandwidth of the virtual circuit.	ENSEVC5000 BAS
	Bidder's Product Description: 5000Mbps Committed Information Rate with Basic CoS		
43.	ENS BASIC CIR MAE - 6000 Mbps	The guaranteed average bandwidth of the virtual circuit.	ENSEVC6000 BAS
	Bidder's Product Description: 6000Mbps Committed Information Rate with Basic CoS		
44.	ENS BASIC CIR MAE - 7000 Mbps	The guaranteed average bandwidth of the virtual circuit.	ENSEVC7000 BAS
	Bidder's Product Description: 7000Mbps Committed Information Rate with Basic CoS		
45.	ENS BASIC CIR MAE - 8000 Mbps	The guaranteed average bandwidth of the virtual circuit.	ENSEVC8000 BAS
	Bidder's Product Description: 8000Mbps Committed Information Rate with Basic CoS		
46.	ENS BASIC CIR MAE - 9000 Mbps	The guaranteed average bandwidth of the virtual circuit.	ENSEVC9000 BAS
	Bidder's Product Description: 9000Mbps Committed Information Rate with Basic CoS		
47.	ENS BASIC CIR MAE - 10000 Mbps	The guaranteed average bandwidth of the virtual circuit.	ENSEVC010G BAS

	Feature Name	Feature Description	Bidder's Product Identifier
	Bidder's Product Description: 10000Mbps Committed Information Rate with Basic CoS		
ENS CIR (PRIORITY CoS MAE)			
48.	ENS PRIORITY CIR MAE - 1 Mbps	The guaranteed average bandwidth of the virtual circuit.	ENSEVC0001 PRI
	Bidder's Product Description: 1Mbps Committed Information Rate with PRIORITY CoS		
49.	ENS PRIORITY CIR MAE - 2 Mbps	The guaranteed average bandwidth of the virtual circuit.	ENSEVC0002 PRI
	Bidder's Product Description: 2Mbps Committed Information Rate with PRIORITY CoS		
50.	ENS PRIORITY CIR MAE - 3 Mbps	The guaranteed average bandwidth of the virtual circuit.	ENSEVC0003 PRI
	Bidder's Product Description: 3Mbps Committed Information Rate with PRIORITY CoS		
51.	ENS PRIORITY CIR MAE - 4 Mbps	The guaranteed average bandwidth of the virtual circuit.	ENSEVC0004 PRI
	Bidder's Product Description: 4Mbps Committed Information Rate with PRIORITY CoS		
52.	ENS PRIORITY CIR MAE - 5 Mbps	The guaranteed average bandwidth of the virtual circuit.	ENSEVC0005 PRI
	Bidder's Product Description: 5Mbps Committed Information Rate with PRIORITY CoS		
53.	ENS PRIORITY CIR MAE - 6 Mbps	The guaranteed average bandwidth of the virtual circuit.	ENSEVC0006 PRI
	Bidder's Product Description: 6Mbps Committed Information Rate with PRIORITY CoS		
54.	ENS PRIORITY CIR MAE - 7 Mbps	The guaranteed average bandwidth of the virtual circuit.	ENSEVC0007 PRI

	Feature Name	Feature Description	Bidder's Product Identifier
	Bidder's Product Description: 7Mbps Committed Information Rate with PRIORITY CoS		
55.	ENS PRIORITY CIR MAE - 8 Mbps	The guaranteed average bandwidth of the virtual circuit.	ENSEVC0008 PRI
	Bidder's Product Description: 8Mbps Committed Information Rate with PRIORITY CoS		
56.	ENS PRIORITY CIR MAE - 9 Mbps	The guaranteed average bandwidth of the virtual circuit.	ENSEVC0009 PRI
	Bidder's Product Description: 9Mbps Committed Information Rate with PRIORITY CoS		
57.	ENS PRIORITY CIR MAE - 10 Mbps	The guaranteed average bandwidth of the virtual circuit.	ENSEVC0010 PRI
	Bidder's Product Description: 10Mbps Committed Information Rate with PRIORITY CoS		
58.	ENS PRIORITY CIR MAE - 20 Mbps	The guaranteed average bandwidth of the virtual circuit.	ENSEVC0020 PRI
	Bidder's Product Description: 20Mbps Committed Information Rate with PRIORITY CoS		
59.	ENS PRIORITY CIR MAE - 30 Mbps	The guaranteed average bandwidth of the virtual circuit.	ENSEVC0030 PRI
	Bidder's Product Description: 30Mbps Committed Information Rate with PRIORITY CoS		
60.	ENS PRIORITY CIR MAE - 40 Mbps	The guaranteed average bandwidth of the virtual circuit.	ENSEVC0040 PRI
	Bidder's Product Description: 40Mbps Committed Information Rate with PRIORITY CoS		
61.	ENS PRIORITY CIR MAE - 50 Mbps	The guaranteed average bandwidth of the virtual circuit.	ENSEVC0050 PRI
	Bidder's Product Description: 50Mbps Committed Information Rate with PRIORITY CoS		

	Feature Name	Feature Description	Bidder's Product Identifier
62.	ENS PRIORITY CIR MAE - 60 Mbps	The guaranteed average bandwidth of the virtual circuit.	ENSEVC0060 PRI
	Bidder's Product Description: 60Mbps Committed Information Rate with PRIORITY CoS		
63.	ENS PRIORITY CIR MAE - 70 Mbps	The guaranteed average bandwidth of the virtual circuit.	ENSEVC0070 PRI
	Bidder's Product Description: 70Mbps Committed Information Rate with PRIORITY CoS		
64.	ENS PRIORITY CIR MAE - 80 Mbps	The guaranteed average bandwidth of the virtual circuit.	ENSEVC0080 PRI
	Bidder's Product Description: 80Mbps Committed Information Rate with PRIORITY CoS		
65.	ENS PRIORITY CIR MAE - 90 Mbps	The guaranteed average bandwidth of the virtual circuit.	ENSEVC0090 PRI
	Bidder's Product Description: 90Mbps Committed Information Rate with PRIORITY CoS		
66.	ENS PRIORITY CIR MAE - 100 Mbps	The guaranteed average bandwidth of the virtual circuit.	ENSEVC0100 PRI
	Bidder's Product Description: 100Mbps Committed Information Rate with PRIORITY CoS		
67.	ENS PRIORITY CIR MAE - 200 Mbps	The guaranteed average bandwidth of the virtual circuit.	ENSEVC0200 PRI
	Bidder's Product Description: 200Mbps Committed Information Rate with PRIORITY CoS		
68.	ENS PRIORITY CIR MAE - 300 Mbps	The guaranteed average bandwidth of the virtual circuit.	ENSEVC0300 PRI
	Bidder's Product Description: 300Mbps Committed Information Rate with PRIORITY CoS		

	Feature Name	Feature Description	Bidder's Product Identifier
69.	ENS PRIORITY CIR MAE - 400 Mbps	The guaranteed average bandwidth of the virtual circuit.	ENSEVC0400 PRI
	Bidder's Product Description: 400Mbps Committed Information Rate with PRIORITY CoS		
70.	ENS PRIORITY CIR MAE - 500 Mbps	The guaranteed average bandwidth of the virtual circuit.	ENSEVC0500 PRI
	Bidder's Product Description: 500Mbps Committed Information Rate with PRIORITY CoS		
71.	ENS PRIORITY CIR MAE - 600 Mbps	The guaranteed average bandwidth of the virtual circuit.	ENSEVC0600 PRI
	Bidder's Product Description: 600Mbps Committed Information Rate with PRIORITY CoS		
72.	ENS PRIORITY CIR MAE - 700 Mbps	The guaranteed average bandwidth of the virtual circuit.	ENSEVC0700 PRI
	Bidder's Product Description: 700Mbps Committed Information Rate with PRIORITY CoS		
73.	ENS PRIORITY CIR MAE - 800 Mbps	The guaranteed average bandwidth of the virtual circuit.	ENSEVC0800 PRI
	Bidder's Product Description: 800Mbps Committed Information Rate with PRIORITY CoS		
74.	ENS PRIORITY CIR MAE - 900 Mbps	The guaranteed average bandwidth of the virtual circuit.	ENSEVC0900 PRI
	Bidder's Product Description: 900Mbps Committed Information Rate with PRIORITY CoS		
75.	ENS PRIORITY CIR MAE - 1000 Mbps	The guaranteed average bandwidth of the virtual circuit.	ENSEVC1000 PRI

	Feature Name	Feature Description	Bidder's Product Identifier
	Bidder's Product Description: 1000Mbps Committed Information Rate with PRIORITY CoS		
76.	ENS PRIORITY CIR MAE - 2000 Mbps	The guaranteed average bandwidth of the virtual circuit.	ENSEVC2000 PRI
	Bidder's Product Description: 2000Mbps Committed Information Rate with PRIORITY CoS		
77.	ENS PRIORITY CIR MAE - 3000 Mbps	The guaranteed average bandwidth of the virtual circuit.	ENSEVC3000 PRI
	Bidder's Product Description: 3000Mbps Committed Information Rate with PRIORITY CoS		
78.	ENS PRIORITY CIR MAE - 4000 Mbps	The guaranteed average bandwidth of the virtual circuit.	ENSEVC4000 PRI
	Bidder's Product Description: 4000Mbps Committed Information Rate with PRIORITY CoS		
79.	ENS PRIORITY CIR MAE - 5000 Mbps	The guaranteed average bandwidth of the virtual circuit.	ENSEVC5000 PRI
	Bidder's Product Description: 5000Mbps Committed Information Rate with PRIORITY CoS		
80.	ENS PRIORITY CIR MAE - 6000 Mbps	The guaranteed average bandwidth of the virtual circuit.	ENSEVC6000 PRI
	Bidder's Product Description: 6000Mbps Committed Information Rate with PRIORITY CoS		
81.	ENS PRIORITY CIR MAE - 7000 Mbps	The guaranteed average bandwidth of the virtual circuit.	ENSEVC7000 PRI
	Bidder's Product Description: 7000Mbps Committed Information Rate with PRIORITY CoS		

	Feature Name	Feature Description	Bidder's Product Identifier
82.	ENS PRIORITY CIR MAE - 8000 Mbps	The guaranteed average bandwidth of the virtual circuit.	ENSEVC8000 PRI
	Bidder's Product Description: 8000Mbps Committed Information Rate with PRIORITY CoS		
83.	ENS PRIORITY CIR MAE - 9000 Mbps	The guaranteed average bandwidth of the virtual circuit.	ENSEVC9000 PRI
	Bidder's Product Description: 9000Mbps Committed Information Rate with PRIORITY CoS		
84.	ENS PRIORITY CIR MAE - 10000 Mbps	The guaranteed average bandwidth of the virtual circuit.	ENSEVC010G PRI
	Bidder's Product Description: 10000Mbps Committed Information Rate with PRIORITY CoS		
ENS CIR (PREMIUM CoS MAE)			
85.	ENS PREMIUM CIR MAE - 1 Mbps	The guaranteed average bandwidth of the virtual circuit.	ENSEVC0001 PRE
	Bidder's Product Description: 1Mbps Committed Information Rate with PREMIUM CoS		
86.	ENS PREMIUM CIR MAE - 2 Mbps	The guaranteed average bandwidth of the virtual circuit.	ENSEVC0002 PRE
	Bidder's Product Description: 2Mbps Committed Information Rate with PREMIUM CoS		
87.	ENS PREMIUM CIR MAE - 3 Mbps	The guaranteed average bandwidth of the virtual circuit.	ENSEVC0003 PRE
	Bidder's Product Description: 3Mbps Committed Information Rate with PREMIUM CoS		
88.	ENS PREMIUM CIR MAE - 4 Mbps	The guaranteed average bandwidth of the virtual circuit.	ENSEVC0004 PRE

	Feature Name	Feature Description	Bidder's Product Identifier
	Bidder's Product Description: 4Mbps Committed Information Rate with PREMIUM CoS		
89.	ENS PREMIUM CIR MAE - 5 Mbps	The guaranteed average bandwidth of the virtual circuit.	ENSEVC0005 PRE
	Bidder's Product Description: 5Mbps Committed Information Rate with PREMIUM CoS		
90.	ENS PREMIUM CIR MAE - 6 Mbps	The guaranteed average bandwidth of the virtual circuit.	ENSEVC0006 PRE
	Bidder's Product Description: 6Mbps Committed Information Rate with PREMIUM CoS		
91.	ENS PREMIUM CIR MAE - 7 Mbps	The guaranteed average bandwidth of the virtual circuit.	ENSEVC0007 PRE
	Bidder's Product Description: 7Mbps Committed Information Rate with PREMIUM CoS		
92.	ENS PREMIUM CIR MAE - 8 Mbps	The guaranteed average bandwidth of the virtual circuit.	ENSEVC0008 PRE
	Bidder's Product Description: 8Mbps Committed Information Rate with PREMIUM CoS		
93.	ENS PREMIUM CIR MAE - 9 Mbps	The guaranteed average bandwidth of the virtual circuit.	ENSEVC0009 PRE
	Bidder's Product Description: 9Mbps Committed Information Rate with PREMIUM CoS		
94.	ENS PREMIUM CIR MAE - 10 Mbps	The guaranteed average bandwidth of the virtual circuit.	ENSEVC0010 PRE
	Bidder's Product Description: 10Mbps Committed Information Rate with PREMIUM CoS		
95.	ENS PREMIUM CIR MAE - 20 Mbps	The guaranteed average bandwidth of the virtual circuit.	ENSEVC0020 PRE
	Bidder's Product Description: 20Mbps Committed Information Rate with PREMIUM CoS		

	Feature Name	Feature Description	Bidder's Product Identifier
96.	ENS PREMIUM CIR MAE - 30 Mbps	The guaranteed average bandwidth of the virtual circuit.	ENSEVC0030 PRE
	Bidder's Product Description: 30Mbps Committed Information Rate with PREMIUM CoS		
97.	ENS PREMIUM CIR MAE - 40 Mbps	The guaranteed average bandwidth of the virtual circuit.	ENSEVC0040 PRE
	Bidder's Product Description: 40Mbps Committed Information Rate with PREMIUM CoS		
98.	ENS PREMIUM CIR MAE - 50 Mbps	The guaranteed average bandwidth of the virtual circuit.	ENSEVC0050 PRE
	Bidder's Product Description: 50Mbps Committed Information Rate with PREMIUM CoS		
99.	ENS PREMIUM CIR MAE - 60 Mbps	The guaranteed average bandwidth of the virtual circuit.	ENSEVC0060 PRE
	Bidder's Product Description: 60Mbps Committed Information Rate with PREMIUM CoS		
100.	ENS PREMIUM CIR MAE - 70 Mbps	The guaranteed average bandwidth of the virtual circuit.	ENSEVC0070 PRE
	Bidder's Product Description: 70Mbps Committed Information Rate with PREMIUM CoS		
101.	ENS PREMIUM CIR MAE - 80 Mbps	The guaranteed average bandwidth of the virtual circuit.	ENSEVC0080 PRE
	Bidder's Product Description: 80Mbps Committed Information Rate with PREMIUM CoS		
102.	ENS PREMIUM CIR MAE - 90 Mbps	The guaranteed average bandwidth of the virtual circuit.	ENSEVC0090 PRE
	Bidder's Product Description: 90Mbps Committed Information Rate with PREMIUM CoS		
103.	ENS PREMIUM CIR MAE - 100 Mbps	The guaranteed average bandwidth of the virtual circuit.	ENSEVC0100 PRE

	Feature Name	Feature Description	Bidder's Product Identifier
	Bidder's Product Description: 100Mbps Committed Information Rate with PREMIUM CoS		
104.	ENS PREMIUM CIR MAE - 200 Mbps	The guaranteed average bandwidth of the virtual circuit.	ENSEVC0200 PRE
	Bidder's Product Description: 200Mbps Committed Information Rate with PREMIUM CoS		
105.	ENS PREMIUM CIR MAE - 300 Mbps	The guaranteed average bandwidth of the virtual circuit.	ENSEVC0300 PRE
	Bidder's Product Description: 300Mbps Committed Information Rate with PREMIUM CoS		
106.	ENS PREMIUM CIR MAE - 400 Mbps	The guaranteed average bandwidth of the virtual circuit.	ENSEVC0400 PRE
	Bidder's Product Description: 400Mbps Committed Information Rate with PREMIUM CoS		
107.	ENS PREMIUM CIR MAE - 500 Mbps	The guaranteed average bandwidth of the virtual circuit.	ENSEVC0500 PRE
	Bidder's Product Description: 500Mbps Committed Information Rate with PREMIUM CoS		
108.	ENS PREMIUM CIR MAE - 600 Mbps	The guaranteed average bandwidth of the virtual circuit.	ENSEVC0600 PRE
	Bidder's Product Description: 600Mbps Committed Information Rate with PREMIUM CoS		
109.	ENS PREMIUM CIR MAE - 700 Mbps	The guaranteed average bandwidth of the virtual circuit.	ENSEVC0700 PRE
	Bidder's Product Description: 700Mbps Committed Information Rate with PREMIUM CoS		

	Feature Name	Feature Description	Bidder's Product Identifier
110.	ENS PREMIUM CIR MAE - 800 Mbps	The guaranteed average bandwidth of the virtual circuit.	ENSEVC0800 PRE
	Bidder's Product Description: 800Mbps Committed Information Rate with PREMIUM CoS		
111.	ENS PREMIUM CIR MAE - 900 Mbps	The guaranteed average bandwidth of the virtual circuit.	ENSEVC0900 PRE
	Bidder's Product Description: 900Mbps Committed Information Rate with PREMIUM CoS		
112.	ENS PREMIUM CIR MAE - 1000 Mbps	The guaranteed average bandwidth of the virtual circuit.	ENSEVC1000 PRE
	Bidder's Product Description: 1000Mbps Committed Information Rate with PREMIUM CoS		
113.	ENS PREMIUM CIR MAE - 2000 Mbps	The guaranteed average bandwidth of the virtual circuit.	ENSEVC2000 PRE
	Bidder's Product Description: 2000Mbps Committed Information Rate with PREMIUM CoS		
114.	ENS PREMIUM CIR MAE - 3000 Mbps	The guaranteed average bandwidth of the virtual circuit.	ENSEVC3000 PRE
	Bidder's Product Description: 3000Mbps Committed Information Rate with PREMIUM CoS		
115.	ENS PREMIUM CIR MAE - 4000 Mbps	The guaranteed average bandwidth of the virtual circuit.	ENSEVC4000 PRE
	Bidder's Product Description: 4000Mbps Committed Information Rate with PREMIUM CoS		
116.	ENS PREMIUM CIR MAE - 5000 Mbps	The guaranteed average bandwidth of the virtual circuit.	ENSEVC5000 PRE

	Feature Name	Feature Description	Bidder's Product Identifier
	Bidder's Product Description: 5000Mbps Committed Information Rate with PREMIUM CoS		
117.	ENS PREMIUM CIR MAE - 6000 Mbps	The guaranteed average bandwidth of the virtual circuit.	ENSEVC6000 PRE
	Bidder's Product Description: 6000Mbps Committed Information Rate with PREMIUM CoS		
118.	ENS PREMIUM CIR MAE - 7000 Mbps	The guaranteed average bandwidth of the virtual circuit.	ENSEVC7000 PRE
	Bidder's Product Description: 7000Mbps Committed Information Rate with PREMIUM CoS		
119.	ENS PREMIUM CIR MAE - 8000 Mbps	The guaranteed average bandwidth of the virtual circuit.	ENSEVC8000 PRE
	Bidder's Product Description: 8000Mbps Committed Information Rate with PREMIUM CoS		
120.	ENS PREMIUM CIR MAE - 9000 Mbps	The guaranteed average bandwidth of the virtual circuit.	ENSEVC9000 PRE
	Bidder's Product Description: 9000Mbps Committed Information Rate with PREMIUM CoS		
121.	ENS PREMIUM CIR MAE - 10000 Mbps	The guaranteed average bandwidth of the virtual circuit.	ENSEVC010G PRE
	Bidder's Product Description: 10000Mbps Committed Information Rate with PREMIUM CoS		
Ethernet Private Line (EPL) MAE			
122.	EPL MAE Service Connection Gigabit Ethernet (10 Gbps)	10000 Mbps Ethernet port per location; Assessed per interface at bandwidths of 10Gbps Ethernet. The EPL connection rate element includes the physical connection (Access Link) between the Customer's demarcation and the core Ethernet network, the port, one (1) EVC and the NI.	EPLUNI10G

	Feature Name	Feature Description	Bidder's Product Identifier
	Bidder's Product Description: The service provides bidirectional, full duplex transmission of Ethernet frames using a standard IEEE 802.3 1 Gbps (1000BaseT or 1000BaseSX) Ethernet interface (UNI).		
EPL CIR (BASIC CoS MAE)			
123.	EPL BASIC CIR MAE - 1 Mbps	The guaranteed average bandwidth of the virtual circuit.	EPLEVC0001B AS
	Bidder's Product Description: 1Mbps Committed Information Rate with Basic CoS		
124.	EPL BASIC CIR MAE- 2 Mbps	The guaranteed average bandwidth of the virtual circuit.	EPLEVC0002B AS
	Bidder's Product Description: 2Mbps Committed Information Rate with Basic CoS		
125.	EPL BASIC CIR MAE - 3 Mbps	The guaranteed average bandwidth of the virtual circuit.	EPLEVC0003B AS
	Bidder's Product Description: 3Mbps Committed Information Rate with Basic CoS		
126.	EPL BASIC CIR MAE - 4 Mbps	The guaranteed average bandwidth of the virtual circuit.	EPLEVC0004B AS
	Bidder's Product Description: 4Mbps Committed Information Rate with Basic CoS		
127.	EPL BASIC CIR MAE - 5 Mbps	The guaranteed average bandwidth of the virtual circuit.	EPLEVC0005B AS
	Bidder's Product Description: 5Mbps Committed Information Rate with Basic CoS		
128.	EPL BASIC CIR MAE - 6 Mbps	The guaranteed average bandwidth of the virtual circuit.	EPLEVC0006B AS
	Bidder's Product Description: 6Mbps Committed Information Rate with Basic CoS		
129.	EPL BASIC CIR MAE - 7 Mbps	The guaranteed average bandwidth of the virtual circuit.	EPLEVC0007B AS
	Bidder's Product Description: 7Mbps Committed Information Rate with Basic CoS		
130.	EPL BASIC CIR MAE - 8 Mbps	The guaranteed average bandwidth of the virtual circuit.	EPLEVC0008B AS

	Feature Name	Feature Description	Bidder's Product Identifier
	Bidder's Product Description: 8Mbps Committed Information Rate with Basic CoS		
131.	EPL BASIC CIR MAE - 9 Mbps	The guaranteed average bandwidth of the virtual circuit.	EPLEVC0009B AS
	Bidder's Product Description: 9Mbps Committed Information Rate with Basic CoS		
132.	EPL BASIC CIR MAE - 10 Mbps	The guaranteed average bandwidth of the virtual circuit.	EPLEVC0010B AS
	Bidder's Product Description: 10Mbps Committed Information Rate with Basic CoS		
133.	EPL BASIC CIR MAE - 20 Mbps	The guaranteed average bandwidth of the virtual circuit.	EPLEVC0020B AS
	Bidder's Product Description: 20Mbps Committed Information Rate with Basic CoS		
134.	EPL BASIC CIR MAE - 30 Mbps	The guaranteed average bandwidth of the virtual circuit.	EPLEVC0030B AS
	Bidder's Product Description: 30Mbps Committed Information Rate with Basic CoS		
135.	EPL BASIC CIR MAE - 40 Mbps	The guaranteed average bandwidth of the virtual circuit.	EPLEVC0040B AS
	Bidder's Product Description: 40Mbps Committed Information Rate with Basic CoS		
136.	EPL BASIC CIR MAE - 50 Mbps	The guaranteed average bandwidth of the virtual circuit.	EPLEVC0050B AS
	Bidder's Product Description: 50Mbps Committed Information Rate with Basic CoS		
137.	EPL BASIC CIR MAE - 60 Mbps	The guaranteed average bandwidth of the virtual circuit.	EPLEVC0060B AS
	Bidder's Product Description: 60Mbps Committed Information Rate with Basic CoS		
138.	EPL BASIC CIR MAE - 70 Mbps	The guaranteed average bandwidth of the virtual circuit.	EPLEVC0070B AS
	Bidder's Product Description: 70Mbps Committed Information Rate with Basic CoS		
139.	EPL BASIC CIR MAE - 80 Mbps	The guaranteed average bandwidth of the virtual circuit.	EPLEVC0080B AS

	Feature Name	Feature Description	Bidder's Product Identifier
	Bidder's Product Description: 80Mbps Committed Information Rate with Basic CoS		
140.	EPL BASIC CIR MAE - 90 Mbps	The guaranteed average bandwidth of the virtual circuit.	EPLEVC0090B AS
	Bidder's Product Description: 90Mbps Committed Information Rate with Basic CoS		
141.	EPL BASIC CIR MAE - 100 Mbps	The guaranteed average bandwidth of the virtual circuit.	EPLEVC0100B AS
	Bidder's Product Description: 100Mbps Committed Information Rate with Basic CoS		
142.	EPL BASIC CIR MAE - 200 Mbps	The guaranteed average bandwidth of the virtual circuit.	EPLEVC0200B AS
	Bidder's Product Description: 200Mbps Committed Information Rate with Basic CoS		
143.	EPL BASIC CIR MAE - 300 Mbps	The guaranteed average bandwidth of the virtual circuit.	EPLEVC0300B AS
	Bidder's Product Description: 300Mbps Committed Information Rate with Basic CoS		
144.	EPL BASIC CIR MAE - 400 Mbps	The guaranteed average bandwidth of the virtual circuit.	EPLEVC0400B AS
	Bidder's Product Description: 400Mbps Committed Information Rate with Basic CoS		
145.	EPL BASIC CIR MAE - 500 Mbps	The guaranteed average bandwidth of the virtual circuit.	EPLEVC0500B AS
	Bidder's Product Description: 500Mbps Committed Information Rate with Basic CoS		
146.	EPL BASIC CIR MAE - 600 Mbps	The guaranteed average bandwidth of the virtual circuit.	EPLEVC0600B AS
	Bidder's Product Description: 600Mbps Committed Information Rate with Basic CoS		
147.	EPL BASIC CIR MAE - 700 Mbps	The guaranteed average bandwidth of the virtual circuit.	EPLEVC0700B AS
	Bidder's Product Description: 700Mbps Committed Information Rate with Basic CoS		
148.	EPL BASIC CIR MAE - 800 Mbps	The guaranteed average bandwidth of the virtual circuit.	EPLEVC0800B AS

	Feature Name	Feature Description	Bidder's Product Identifier
	Bidder's Product Description: 800Mbps Committed Information Rate with Basic CoS		
	EPL BASIC CIR MAE - 900 Mbps	The guaranteed average bandwidth of the virtual circuit.	EPLEVC0900B AS
149.	Bidder's Product Description: 900Mbps Committed Information Rate with Basic CoS		
	EPL BASIC CIR MAE - 1000 Mbps	The guaranteed average bandwidth of the virtual circuit.	EPLEVC1000B AS
150.	Bidder's Product Description: 1000Mbps Committed Information Rate with Basic CoS		
	EPL BASIC CIR MAE - 2000 Mbps	The guaranteed average bandwidth of the virtual circuit.	EPLEVC2000B AS
151.	Bidder's Product Description: 2000Mbps Committed Information Rate with Basic CoS		
	EPL BASIC CIR MAE - 3000 Mbps	The guaranteed average bandwidth of the virtual circuit.	EPLEVC3000B AS
152.	Bidder's Product Description: 3000Mbps Committed Information Rate with Basic CoS		
	EPL BASIC CIR MAE - 4000 Mbps	The guaranteed average bandwidth of the virtual circuit.	EPLEVC4000B AS
153.	Bidder's Product Description: 4000Mbps Committed Information Rate with Basic CoS		
	EPL BASIC CIR MAE - 5000 Mbps	The guaranteed average bandwidth of the virtual circuit.	EPLEVC5000B AS
154.	Bidder's Product Description: 5000Mbps Committed Information Rate with Basic CoS		
	EPL BASIC CIR MAE - 6000 Mbps	The guaranteed average bandwidth of the virtual circuit.	EPLEVC6000B AS
155.	Bidder's Product Description: 6000Mbps Committed Information Rate with Basic CoS		

	Feature Name	Feature Description	Bidder's Product Identifier
156.	EPL BASIC CIR MAE - 7000 Mbps	The guaranteed average bandwidth of the virtual circuit.	EPLEVC7000B AS
	Bidder's Product Description: 7000Mbps Committed Information Rate with Basic CoS		
157.	EPL BASIC CIR MAE - 8000 Mbps	The guaranteed average bandwidth of the virtual circuit.	EPLEVC8000B AS
	Bidder's Product Description: 8000Mbps Committed Information Rate with Basic CoS		
158.	EPL BASIC CIR MAE - 9000 Mbps	The guaranteed average bandwidth of the virtual circuit.	EPLEVC9000B AS
	Bidder's Product Description: 9000Mbps Committed Information Rate with Basic CoS		
159.	EPL BASIC CIR MAE - 10000 Mbps	The guaranteed average bandwidth of the virtual circuit.	EPLEVC010G BAS
	Bidder's Product Description: 10000Mbps Committed Information Rate with Basic CoS		
EPL CIR (PRIORITY CoS MAE)			
160.	EPL PRIORITY CIR MAE - 1 Mbps	The guaranteed average bandwidth of the virtual circuit.	EPLEVC0001P RI
	Bidder's Product Description: 1Mbps Committed Information Rate with PRIORITY CoS		
161.	EPL PRIORITY CIR MAE - 2 Mbps	The guaranteed average bandwidth of the virtual circuit.	EPLEVC0002P RI
	Bidder's Product Description: 2Mbps Committed Information Rate with PRIORITY CoS		
162.	EPL PRIORITY CIR MAE - 3 Mbps	The guaranteed average bandwidth of the virtual circuit.	EPLEVC0003P RI
	Bidder's Product Description: 3Mbps Committed Information Rate with PRIORITY CoS		

	Feature Name	Feature Description	Bidder's Product Identifier
163.	EPL PRIORITY CIR MAE - 4 Mbps	The guaranteed average bandwidth of the virtual circuit.	EPLEVC0004P RI
	Bidder's Product Description: 4Mbps Committed Information Rate with PRIORITY CoS		
164.	EPL PRIORITY CIR MAE - 5 Mbps	The guaranteed average bandwidth of the virtual circuit.	EPLEVC0005P RI
	Bidder's Product Description: 5Mbps Committed Information Rate with PRIORITY CoS		
165.	EPL PRIORITY CIR MAE - 6 Mbps	The guaranteed average bandwidth of the virtual circuit.	EPLEVC0006P RI
	Bidder's Product Description: 6Mbps Committed Information Rate with PRIORITY CoS		
166.	EPL PRIORITY CIR MAE - 7 Mbps	The guaranteed average bandwidth of the virtual circuit.	EPLEVC0007P RI
	Bidder's Product Description: 7Mbps Committed Information Rate with PRIORITY CoS		
167.	EPL PRIORITY CIR MAE - 8 Mbps	The guaranteed average bandwidth of the virtual circuit.	EPLEVC0008P RI
	Bidder's Product Description: 8Mbps Committed Information Rate with PRIORITY CoS		
168.	EPL PRIORITY CIR MAE - 9 Mbps	The guaranteed average bandwidth of the virtual circuit.	EPLEVC0009P RI
	Bidder's Product Description: 9Mbps Committed Information Rate with PRIORITY CoS		
169.	EPL PRIORITY CIR MAE - 10 Mbps	The guaranteed average bandwidth of the virtual circuit.	EPLEVC0010P RI
	Bidder's Product Description: 10Mbps Committed Information Rate with PRIORITY CoS		
170.	EPL PRIORITY CIR MAE - 20 Mbps	The guaranteed average bandwidth of the virtual circuit.	EPLEVC0020P RI

	Feature Name	Feature Description	Bidder's Product Identifier
	Bidder's Product Description: 20Mbps Committed Information Rate with PRIORITY CoS		
171.	EPL PRIORITY CIR MAE - 30 Mbps	The guaranteed average bandwidth of the virtual circuit.	EPLEVC0030PRI
	Bidder's Product Description: 30Mbps Committed Information Rate with PRIORITY CoS		
172.	EPL PRIORITY CIR MAE - 40 Mbps	The guaranteed average bandwidth of the virtual circuit.	EPLEVC0040PRI
	Bidder's Product Description: 40Mbps Committed Information Rate with PRIORITY CoS		
173.	EPL PRIORITY CIR MAE - 50 Mbps	The guaranteed average bandwidth of the virtual circuit.	EPLEVC0050PRI
	Bidder's Product Description: 50Mbps Committed Information Rate with PRIORITY CoS		
174.	EPL PRIORITY CIR MAE - 60 Mbps	The guaranteed average bandwidth of the virtual circuit.	EPLEVC0060PRI
	Bidder's Product Description: 60Mbps Committed Information Rate with PRIORITY CoS		
175.	EPL PRIORITY CIR MAE - 70 Mbps	The guaranteed average bandwidth of the virtual circuit.	EPLEVC0070PRI
	Bidder's Product Description: 70Mbps Committed Information Rate with PRIORITY CoS		
176.	EPL PRIORITY CIR MAE - 80 Mbps	The guaranteed average bandwidth of the virtual circuit.	EPLEVC0080PRI
	Bidder's Product Description: 80Mbps Committed Information Rate with PRIORITY CoS		
177.	EPL PRIORITY CIR MAE - 90 Mbps	The guaranteed average bandwidth of the virtual circuit.	EPLEVC0090PRI
	Bidder's Product Description: 90Mbps Committed Information Rate with PRIORITY CoS		

	Feature Name	Feature Description	Bidder's Product Identifier
178.	EPL PRIORITY CIR MAE - 100 Mbps	The guaranteed average bandwidth of the virtual circuit.	EPLEVC0100P RI
	Bidder's Product Description: 100Mbps Committed Information Rate with PRIORITY CoS		
179.	EPL PRIORITY CIR MAE - 200 Mbps	The guaranteed average bandwidth of the virtual circuit.	EPLEVC0200P RI
	Bidder's Product Description: 200Mbps Committed Information Rate with PRIORITY CoS		
180.	EPL PRIORITY CIR MAE - 300 Mbps	The guaranteed average bandwidth of the virtual circuit.	EPLEVC0300P RI
	Bidder's Product Description: 300Mbps Committed Information Rate with PRIORITY CoS		
181.	EPL PRIORITY CIR MAE - 400 Mbps	The guaranteed average bandwidth of the virtual circuit.	EPLEVC0400P RI
	Bidder's Product Description: 400Mbps Committed Information Rate with PRIORITY CoS		
182.	EPL PRIORITY CIR MAE - 500 Mbps	The guaranteed average bandwidth of the virtual circuit.	EPLEVC0500P RI
	Bidder's Product Description: 500Mbps Committed Information Rate with PRIORITY CoS		
183.	EPL PRIORITY CIR MAE - 600 Mbps	The guaranteed average bandwidth of the virtual circuit.	EPLEVC0600P RI
	Bidder's Product Description: 600Mbps Committed Information Rate with PRIORITY CoS		
184.	EPL PRIORITY CIR MAE - 700 Mbps	The guaranteed average bandwidth of the virtual circuit.	EPLEVC0700P RI

	Feature Name	Feature Description	Bidder's Product Identifier
	Bidder's Product Description: 700Mbps Committed Information Rate with PRIORITY CoS		
185.	EPL PRIORITY CIR MAE - 800 Mbps	The guaranteed average bandwidth of the virtual circuit.	EPLEVC0800P RI
	Bidder's Product Description: 800Mbps Committed Information Rate with PRIORITY CoS		
186.	EPL PRIORITY CIR MAE - 900 Mbps	The guaranteed average bandwidth of the virtual circuit.	EPLEVC0900P RI
	Bidder's Product Description: 900Mbps Committed Information Rate with PRIORITY CoS		
187.	EPL PRIORITY CIR MAE - 1000 Mbps	The guaranteed average bandwidth of the virtual circuit.	EPLEVC1000P RI
	Bidder's Product Description: 1000Mbps Committed Information Rate with PRIORITY CoS		
188.	EPL PRIORITY CIR MAE - 2000 Mbps	The guaranteed average bandwidth of the virtual circuit.	EPLEVC2000P RI
	Bidder's Product Description: 2000Mbps Committed Information Rate with PRIORITY CoS		
189.	EPL PRIORITY CIR MAE - 3000 Mbps	The guaranteed average bandwidth of the virtual circuit.	EPLEVC3000P RI
	Bidder's Product Description: 3000Mbps Committed Information Rate with PRIORITY CoS		
190.	EPL PRIORITY CIR MAE - 4000 Mbps	The guaranteed average bandwidth of the virtual circuit.	EPLEVC4000P RI
	Bidder's Product Description: 4000Mbps Committed Information Rate with PRIORITY CoS		

	Feature Name	Feature Description	Bidder's Product Identifier
191.	EPL PRIORITY CIR MAE - 5000 Mbps	The guaranteed average bandwidth of the virtual circuit.	EPLEVC5000P RI
	Bidder's Product Description: 5000Mbps Committed Information Rate with PRIORITY CoS		
192.	EPL PRIORITY CIR MAE - 6000 Mbps	The guaranteed average bandwidth of the virtual circuit.	EPLEVC6000P RI
	Bidder's Product Description: 6000Mbps Committed Information Rate with PRIORITY CoS		
193.	EPL PRIORITY CIR MAE - 7000 Mbps	The guaranteed average bandwidth of the virtual circuit.	EPLEVC7000P RI
	Bidder's Product Description: 7000Mbps Committed Information Rate with PRIORITY CoS		
194.	EPL PRIORITY CIR MAE - 8000 Mbps	The guaranteed average bandwidth of the virtual circuit.	EPLEVC8000P RI
	Bidder's Product Description: 8000Mbps Committed Information Rate with PRIORITY CoS		
195.	EPL PRIORITY CIR MAE - 9000 Mbps	The guaranteed average bandwidth of the virtual circuit.	EPLEVC9000P RI
	Bidder's Product Description: 9000Mbps Committed Information Rate with PRIORITY CoS		
196.	EPL PRIORITY CIR MAE - 10000 Mbps	The guaranteed average bandwidth of the virtual circuit.	EPLEVC010G PRI
	Bidder's Product Description: 10000Mbps Committed Information Rate with PRIORITY CoS		

	Feature Name	Feature Description	Bidder's Product Identifier
EPL CIR (PREMIUM CoS MAE)			
197.	EPL PREMIUM CIR MAE - 1 Mbps	The guaranteed average bandwidth of the virtual circuit.	EPLEVC0001PRE
	Bidder's Product Description: 1Mbps Committed Information Rate with PREMIUM CoS		
198.	EPL PREMIUM CIR MAE - 2 Mbps	The guaranteed average bandwidth of the virtual circuit.	EPLEVC0002PRE
	Bidder's Product Description: 2Mbps Committed Information Rate with PREMIUM CoS		
199.	EPL PREMIUM CIR MAE - 3 Mbps	The guaranteed average bandwidth of the virtual circuit.	EPLEVC0003PRE
	Bidder's Product Description: 3Mbps Committed Information Rate with PREMIUM CoS		
200.	EPL PREMIUM CIR MAE - 4 Mbps	The guaranteed average bandwidth of the virtual circuit.	EPLEVC0004PRE
	Bidder's Product Description: 4Mbps Committed Information Rate with PREMIUM CoS		
201.	EPL PREMIUM CIR MAE - 5 Mbps	The guaranteed average bandwidth of the virtual circuit.	EPLEVC0005PRE
	Bidder's Product Description: 5Mbps Committed Information Rate with PREMIUM CoS		
202.	EPL PREMIUM CIR MAE - 6 Mbps	The guaranteed average bandwidth of the virtual circuit.	EPLEVC0006PRE
	Bidder's Product Description: 6Mbps Committed Information Rate with PREMIUM CoS		
203.	EPL PREMIUM CIR MAE - 7 Mbps	The guaranteed average bandwidth of the virtual circuit.	EPLEVC0007PRE
	Bidder's Product Description: 7Mbps Committed Information Rate with PREMIUM CoS		

	Feature Name	Feature Description	Bidder's Product Identifier
204.	EPL PREMIUM CIR MAE - 8 Mbps	The guaranteed average bandwidth of the virtual circuit.	EPLEVC0008P RE
	Bidder's Product Description: 8Mbps Committed Information Rate with PREMIUM CoS		
205.	EPL PREMIUM CIR MAE - 9 Mbps	The guaranteed average bandwidth of the virtual circuit.	EPLEVC0009P RE
	Bidder's Product Description: 9Mbps Committed Information Rate with PREMIUM CoS		
206.	EPL PREMIUM CIR MAE - 10 Mbps	The guaranteed average bandwidth of the virtual circuit.	EPLEVC0010P RE
	Bidder's Product Description: 10Mbps Committed Information Rate with PREMIUM CoS		
207.	EPL PREMIUM CIR MAE - 20 Mbps	The guaranteed average bandwidth of the virtual circuit.	EPLEVC0020P RE
	Bidder's Product Description: 20Mbps Committed Information Rate with PREMIUM CoS		
208.	EPL PREMIUM CIR MAE - 30 Mbps	The guaranteed average bandwidth of the virtual circuit.	EPLEVC0030P RE
	Bidder's Product Description: 30Mbps Committed Information Rate with PREMIUM CoS		
209.	EPL PREMIUM CIR MAE - 40 Mbps	The guaranteed average bandwidth of the virtual circuit.	EPLEVC0040P RE
	Bidder's Product Description: 40Mbps Committed Information Rate with PREMIUM CoS		
210.	EPL PREMIUM CIR MAE - 50 Mbps	The guaranteed average bandwidth of the virtual circuit.	EPLEVC0050P RE
	Bidder's Product Description: 50Mbps Committed Information Rate with PREMIUM CoS		
211.	EPL PREMIUM CIR MAE - 60 Mbps	The guaranteed average bandwidth of the virtual circuit.	EPLEVC0060P RE

	Feature Name	Feature Description	Bidder's Product Identifier
	Bidder's Product Description: 60Mbps Committed Information Rate with PREMIUM CoS		
212.	EPL PREMIUM CIR MAE - 70 Mbps	The guaranteed average bandwidth of the virtual circuit.	EPLEVC0070PRE
	Bidder's Product Description: 70Mbps Committed Information Rate with PREMIUM CoS		
213.	EPL PREMIUM CIR MAE - 80 Mbps	The guaranteed average bandwidth of the virtual circuit.	EPLEVC0080PRE
	Bidder's Product Description: 80Mbps Committed Information Rate with PREMIUM CoS		
214.	EPL PREMIUM CIR MAE - 90 Mbps	The guaranteed average bandwidth of the virtual circuit.	EPLEVC0090PRE
	Bidder's Product Description: 90Mbps Committed Information Rate with PREMIUM CoS		
215.	EPL PREMIUM CIR MAE - 100 Mbps	The guaranteed average bandwidth of the virtual circuit.	EPLEVC0100PRE
	Bidder's Product Description: 100Mbps Committed Information Rate with PREMIUM CoS		
216.	EPL PREMIUM CIR MAE - 200 Mbps	The guaranteed average bandwidth of the virtual circuit.	EPLEVC0200PRE
	Bidder's Product Description: 200Mbps Committed Information Rate with PREMIUM CoS		
217.	EPL PREMIUM CIR MAE - 300 Mbps	The guaranteed average bandwidth of the virtual circuit.	EPLEVC0300PRE
	Bidder's Product Description: 300Mbps Committed Information Rate with PREMIUM CoS		
218.	EPL PREMIUM CIR MAE - 400 Mbps	The guaranteed average bandwidth of the virtual circuit.	EPLEVC0400PRE

	Feature Name	Feature Description	Bidder's Product Identifier
	Bidder's Product Description: 400Mbps Committed Information Rate with PREMIUM CoS		
219.	EPL PREMIUM CIR MAE - 500 Mbps	The guaranteed average bandwidth of the virtual circuit.	EPLEVC0500PRE
	Bidder's Product Description: 500Mbps Committed Information Rate with PREMIUM CoS		
220.	EPL PREMIUM CIR MAE - 600 Mbps	The guaranteed average bandwidth of the virtual circuit.	EPLEVC0600PRE
	Bidder's Product Description: 600Mbps Committed Information Rate with PREMIUM CoS		
221.	EPL PREMIUM CIR MAE - 700 Mbps	The guaranteed average bandwidth of the virtual circuit.	EPLEVC0700PRE
	Bidder's Product Description: 700Mbps Committed Information Rate with PREMIUM CoS		
222.	EPL PREMIUM CIR MAE - 800 Mbps	The guaranteed average bandwidth of the virtual circuit.	EPLEVC0800PRE
	Bidder's Product Description: 800Mbps Committed Information Rate with PREMIUM CoS		
223.	EPL PREMIUM CIR MAE - 900 Mbps	The guaranteed average bandwidth of the virtual circuit.	EPLEVC0900PRE
	Bidder's Product Description: 900Mbps Committed Information Rate with PREMIUM CoS		
224.	EPL PREMIUM CIR MAE - 1000 Mbps	The guaranteed average bandwidth of the virtual circuit.	EPLEVC1000PRE
	Bidder's Product Description: 1000Mbps Committed Information Rate with PREMIUM CoS		

	Feature Name	Feature Description	Bidder's Product Identifier
225.	EPL PREMIUM CIR MAE - 2000 Mbps	The guaranteed average bandwidth of the virtual circuit.	EPLEVC2000P RE
	Bidder's Product Description: 2000Mbps Committed Information Rate with PREMIUM CoS		
226.	EPL PREMIUM CIR MAE - 3000 Mbps	The guaranteed average bandwidth of the virtual circuit.	EPLEVC3000P RE
	Bidder's Product Description: 3000Mbps Committed Information Rate with PREMIUM CoS		
227.	EPL PREMIUM CIR MAE - 4000 Mbps	The guaranteed average bandwidth of the virtual circuit.	EPLEVC4000P RE
	Bidder's Product Description: 4000Mbps Committed Information Rate with PREMIUM CoS		
228.	EPL PREMIUM CIR MAE - 5000 Mbps	The guaranteed average bandwidth of the virtual circuit.	EPLEVC5000P RE
	Bidder's Product Description: 5000Mbps Committed Information Rate with PREMIUM CoS		
229.	EPL PREMIUM CIR MAE - 6000 Mbps	The guaranteed average bandwidth of the virtual circuit.	EPLEVC6000P RE
	Bidder's Product Description: 6000Mbps Committed Information Rate with PREMIUM CoS		
230.	EPL PREMIUM CIR MAE - 7000 Mbps	The guaranteed average bandwidth of the virtual circuit.	EPLEVC7000P RE
	Bidder's Product Description: 7000Mbps Committed Information Rate with PREMIUM CoS		
231.	EPL PREMIUM CIR MAE - 8000 Mbps	The guaranteed average bandwidth of the virtual circuit.	EPLEVC8000P RE

	Feature Name	Feature Description	Bidder's Product Identifier
	Bidder's Product Description: 8000Mbps Committed Information Rate with PREMIUM CoS		
232.	EPL PREMIUM CIR MAE - 9000 Mbps	The guaranteed average bandwidth of the virtual circuit.	EPLEVC9000PRE
	Bidder's Product Description: 9000Mbps Committed Information Rate with PREMIUM CoS		
233.	EPL PREMIUM CIR MAE - 10000 Mbps	The guaranteed average bandwidth of the virtual circuit.	EPLEVC010GPRE
	Bidder's Product Description: 10000Mbps Committed Information Rate with PREMIUM CoS		
Ethernet Virtual Private Line (EVPL) MAE			
234.	EVPL MAE Service Connection Gigabit Ethernet (10 Gbps)	10000 Mbps Ethernet port per location; Assessed per interface at bandwidths of 10Gbps Ethernet. The EVPL connection rate element includes the physical connection (Access Link) between the Customer's demarcation and the core Ethernet network, the port, one (1) EVC and the NI.	EVPLUNI10G
	Bidders' Product Description: The service provides bidirectional, full duplex transmission of Ethernet frames using a standard IEEE 802.3 1 Gbps (1000BaseT or 1000BaseSX) Ethernet interface (UNI). The service enables customers to multiplex multiple services (EVCs) on a given UNI.		
EVPL CIR (BASIC CoS MAE)			
235.	EVPL BASIC CIR MAE - 1 Mbps	The guaranteed average bandwidth of the virtual circuit.	EVPLEVC0001BAS
	Bidder's Product Description: 1Mbps Committed Information Rate with Basic CoS		
236.	EVPL BASIC CIR MAE - 2 Mbps	The guaranteed average bandwidth of the virtual circuit.	EVPLEVC0002BAS
	Bidder's Product Description: 2Mbps Committed Information Rate with Basic CoS		

	Feature Name	Feature Description	Bidder's Product Identifier
237.	EVPL BASIC CIR MAE - 3 Mbps	The guaranteed average bandwidth of the virtual circuit.	EVPLEVC0003 BAS
	Bidder's Product Description: 3Mbps Committed Information Rate with Basic CoS		
238.	EVPL BASIC CIR MAE - 4 Mbps	The guaranteed average bandwidth of the virtual circuit.	EVPLEVC0004 BAS
	Bidder's Product Description: 4Mbps Committed Information Rate with Basic CoS		
239.	EVPL BASIC CIR MAE - 5 Mbps	The guaranteed average bandwidth of the virtual circuit.	EVPLEVC0005 BAS
	Bidder's Product Description: 5Mbps Committed Information Rate with Basic CoS		
240.	EVPL BASIC CIR MAE - 6 Mbps	The guaranteed average bandwidth of the virtual circuit.	EVPLEVC0006 BAS
	Bidder's Product Description: 6Mbps Committed Information Rate with Basic CoS		
241.	EVPL BASIC CIR MAE - 7 Mbps	The guaranteed average bandwidth of the virtual circuit.	EVPLEVC0007 BAS
	Bidder's Product Description: 7Mbps Committed Information Rate with Basic CoS		
242.	EVPL BASIC CIR MAE - 8 Mbps	The guaranteed average bandwidth of the virtual circuit.	EVPLEVC0008 BAS
	Bidder's Product Description: 8Mbps Committed Information Rate with Basic CoS		
243.	EVPL BASIC CIR MAE - 9 Mbps	The guaranteed average bandwidth of the virtual circuit.	EVPLEVC0009 BAS
	Bidder's Product Description: 9Mbps Committed Information Rate with Basic CoS		
244.	EVPL BASIC CIR MAE - 10 Mbps	The guaranteed average bandwidth of the virtual circuit.	EVPLEVC0010 BAS
	Bidder's Product Description: 10Mbps Committed Information Rate with Basic CoS		
245.	EVPL BASIC CIR MAE - 20 Mbps	The guaranteed average bandwidth of the virtual circuit.	EVPLEVC0020 BAS
	Bidder's Product Description: 20Mbps Committed Information Rate with Basic CoS		

	Feature Name	Feature Description	Bidder's Product Identifier
246.	EVPL BASIC CIR MAE - 30 Mbps	The guaranteed average bandwidth of the virtual circuit.	EVPLEVC0030 BAS
	Bidder's Product Description: 30Mbps Committed Information Rate with Basic CoS		
247.	EVPL BASIC CIR MAE - 40 Mbps	The guaranteed average bandwidth of the virtual circuit.	EVPLEVC0040 BAS
	Bidder's Product Description: 40Mbps Committed Information Rate with Basic CoS		
248.	EVPL BASIC CIR MAE - 50 Mbps	The guaranteed average bandwidth of the virtual circuit.	EVPLEVC0050 BAS
	Bidder's Product Description: 50Mbps Committed Information Rate with Basic CoS		
249.	EVPL BASIC CIR MAE - 60 Mbps	The guaranteed average bandwidth of the virtual circuit.	EVPLEVC0060 BAS
	Bidder's Product Description: 60Mbps Committed Information Rate with Basic CoS		
250.	EVPL BASIC CIR MAE - 70 Mbps	The guaranteed average bandwidth of the virtual circuit.	EVPLEVC0070 BAS
	Bidder's Product Description: 70Mbps Committed Information Rate with Basic CoS		
251.	EVPL BASIC CIR MAE - 80 Mbps	The guaranteed average bandwidth of the virtual circuit.	EVPLEVC0080 BAS
	Bidder's Product Description: 80Mbps Committed Information Rate with Basic CoS		
252.	EVPL BASIC CIR MAE - 90 Mbps	The guaranteed average bandwidth of the virtual circuit.	EVPLEVC0090 BAS
	Bidder's Product Description: 90Mbps Committed Information Rate with Basic CoS		
253.	EVPL BASIC CIR MAE - 100 Mbps	The guaranteed average bandwidth of the virtual circuit.	EVPLEVC0100 BAS
	Bidder's Product Description: 100Mbps Committed Information Rate with Basic CoS		
254.	EVPL BASIC CIR MAE - 200 Mbps	The guaranteed average bandwidth of the virtual circuit.	EVPLEVC0200 BAS
	Bidder's Product Description: 200Mbps Committed Information Rate with Basic CoS		

	Feature Name	Feature Description	Bidder's Product Identifier
255.	EVPL BASIC CIR MAE - 300 Mbps	The guaranteed average bandwidth of the virtual circuit.	EVPLEVC0300 BAS
	Bidder's Product Description: 300Mbps Committed Information Rate with Basic CoS		
256.	EVPL BASIC CIR MAE - 400 Mbps	The guaranteed average bandwidth of the virtual circuit.	EVPLEVC0400 BAS
	Bidder's Product Description: 400Mbps Committed Information Rate with Basic CoS		
257.	EVPL BASIC CIR MAE - 500 Mbps	The guaranteed average bandwidth of the virtual circuit.	EVPLEVC0500 BAS
	Bidder's Product Description: 500Mbps Committed Information Rate with Basic CoS		
258.	EVPL BASIC CIR MAE - 600 Mbps	The guaranteed average bandwidth of the virtual circuit.	EVPLEVC0600 BAS
	Bidder's Product Description: 600Mbps Committed Information Rate with Basic CoS		
259.	EVPL BASIC CIR MAE - 700 Mbps	The guaranteed average bandwidth of the virtual circuit.	EVPLEVC0700 BAS
	Bidder's Product Description: 700Mbps Committed Information Rate with Basic CoS		
260.	EVPL BASIC CIR MAE - 800 Mbps	The guaranteed average bandwidth of the virtual circuit.	EVPLEVC0800 BAS
	Bidder's Product Description: 800Mbps Committed Information Rate with Basic CoS		
261.	EVPL BASIC CIR MAE - 900 Mbps	The guaranteed average bandwidth of the virtual circuit.	EVPLEVC0900 BAS
	Bidder's Product Description: 900Mbps Committed Information Rate with Basic CoS		
262.	EVPL BASIC CIR MAE - 1000 Mbps	The guaranteed average bandwidth of the virtual circuit.	EVPLEVC1000 BAS
	Bidder's Product Description: 1000Mbps Committed Information Rate with Basic CoS		
263.	EVPL BASIC CIR MAE - 2000 Mbps	The guaranteed average bandwidth of the virtual circuit.	EVPLEVC2000 BAS

	Feature Name	Feature Description	Bidder's Product Identifier
	Bidder's Product Description: 2000Mbps Committed Information Rate with Basic CoS		
264.	EVPL BASIC CIR MAE - 3000 Mbps	The guaranteed average bandwidth of the virtual circuit.	EVPLEVC3000 BAS
	Bidder's Product Description: 3000Mbps Committed Information Rate with Basic CoS		
265.	EVPL BASIC CIR MAE - 4000 Mbps	The guaranteed average bandwidth of the virtual circuit.	EVPLEVC4000 BAS
	Bidder's Product Description: 4000Mbps Committed Information Rate with Basic CoS		
266.	EVPL BASIC CIR MAE - 5000 Mbps	The guaranteed average bandwidth of the virtual circuit.	EVPLEVC5000 BAS
	Bidder's Product Description: 5000Mbps Committed Information Rate with Basic CoS		
267.	EVPL BASIC CIR MAE - 6000 Mbps	The guaranteed average bandwidth of the virtual circuit.	EVPLEVC6000 BAS
	Bidder's Product Description: 6000Mbps Committed Information Rate with Basic CoS		
268.	EVPL BASIC CIR MAE - 7000 Mbps	The guaranteed average bandwidth of the virtual circuit.	EVPLEVC7000 BAS
	Bidder's Product Description: 7000Mbps Committed Information Rate with Basic CoS		
269.	EVPL BASIC CIR MAE - 8000 Mbps	The guaranteed average bandwidth of the virtual circuit.	EVPLEVC8000 BAS
	Bidder's Product Description: 8000Mbps Committed Information Rate with Basic CoS		
270.	EVPL BASIC CIR MAE - 9000 Mbps	The guaranteed average bandwidth of the virtual circuit.	EVPLEVC9000 BAS
	Bidder's Product Description: 9000Mbps Committed Information Rate with Basic CoS		

	Feature Name	Feature Description	Bidder's Product Identifier
271.	EVPL BASIC CIR MAE - 10000 Mbps	The guaranteed average bandwidth of the virtual circuit.	EVPLEVC010 GBAS
	Bidder's Product Description: 10000Mbps Committed Information Rate with Basic CoS		
EVPL CIR (PRIORITY CoS MAE)			
272.	EVPL PRIORITY CIR MAE - 1 Mbps	The guaranteed average bandwidth of the virtual circuit.	EVPLEVC0001 PRI
	Bidder's Product Description: 1Mbps Committed Information Rate with PRIORITY CoS		
273.	EVPL PRIORITY CIR MAE - 2 Mbps	The guaranteed average bandwidth of the virtual circuit.	EVPLEVC0002 PRI
	Bidder's Product Description: 2Mbps Committed Information Rate with PRIORITY CoS		
274.	EVPL PRIORITY CIR MAE - 3 Mbps	The guaranteed average bandwidth of the virtual circuit.	EVPLEVC0003 PRI
	Bidder's Product Description: 3Mbps Committed Information Rate with PRIORITY CoS		
275.	EVPL PRIORITY CIR MAE - 4 Mbps	The guaranteed average bandwidth of the virtual circuit.	EVPLEVC0004 PRI
	Bidder's Product Description: 4Mbps Committed Information Rate with PRIORITY CoS		
276.	EVPL PRIORITY CIR MAE - 5 Mbps	The guaranteed average bandwidth of the virtual circuit.	EVPLEVC0005 PRI
	Bidder's Product Description: 5Mbps Committed Information Rate with PRIORITY CoS		
277.	EVPL PRIORITY CIR MAE - 6 Mbps	The guaranteed average bandwidth of the virtual circuit.	EVPLEVC0006 PRI
	Bidder's Product Description: 6Mbps Committed Information Rate with PRIORITY CoS		

	Feature Name	Feature Description	Bidder's Product Identifier
278.	EVPL PRIORITY CIR MAE - 7 Mbps	The guaranteed average bandwidth of the virtual circuit.	EVPLEVC0007 PRI
	Bidder's Product Description: 7Mbps Committed Information Rate with PRIORITY CoS		
279.	EVPL PRIORITY CIR MAE - 8 Mbps	The guaranteed average bandwidth of the virtual circuit.	EVPLEVC0008 PRI
	Bidder's Product Description: 8Mbps Committed Information Rate with PRIORITY CoS		
280.	EVPL PRIORITY CIR MAE - 9 Mbps	The guaranteed average bandwidth of the virtual circuit.	EVPLEVC0009 PRI
	Bidder's Product Description: 9Mbps Committed Information Rate with PRIORITY CoS		
281.	EVPL PRIORITY CIR MAE - 10 Mbps	The guaranteed average bandwidth of the virtual circuit.	EVPLEVC0010 PRI
	Bidder's Product Description: 10Mbps Committed Information Rate with PRIORITY CoS		
282.	EVPL PRIORITY CIR MAE - 20 Mbps	The guaranteed average bandwidth of the virtual circuit.	EVPLEVC0020 PRI
	Bidder's Product Description: 20Mbps Committed Information Rate with PRIORITY CoS		
283.	EVPL PRIORITY CIR MAE - 30 Mbps	The guaranteed average bandwidth of the virtual circuit.	EVPLEVC0030 PRI
	Bidder's Product Description: 30Mbps Committed Information Rate with PRIORITY CoS		
284.	EVPL PRIORITY CIR MAE - 40 Mbps	The guaranteed average bandwidth of the virtual circuit.	EVPLEVC0040 PRI
	Bidder's Product Description: 40Mbps Committed Information Rate with PRIORITY CoS		
285.	EVPL PRIORITY CIR MAE - 50 Mbps	The guaranteed average bandwidth of the virtual circuit.	EVPLEVC0050 PRI

	Feature Name	Feature Description	Bidder's Product Identifier
	Bidder's Product Description: 50Mbps Committed Information Rate with PRIORITY CoS		
286.	EVPL PRIORITY CIR MAE - 60 Mbps	The guaranteed average bandwidth of the virtual circuit.	EVPLEVC0060 PRI
	Bidder's Product Description: 60Mbps Committed Information Rate with PRIORITY CoS		
287.	EVPL PRIORITY CIR MAE - 70 Mbps	The guaranteed average bandwidth of the virtual circuit.	EVPLEVC0070 PRI
	Bidder's Product Description: 70Mbps Committed Information Rate with PRIORITY CoS		
288.	EVPL PRIORITY CIR MAE - 80 Mbps	The guaranteed average bandwidth of the virtual circuit.	EVPLEVC0080 PRI
	Bidder's Product Description: 80Mbps Committed Information Rate with PRIORITY CoS		
289.	EVPL PRIORITY CIR MAE - 90 Mbps	The guaranteed average bandwidth of the virtual circuit.	EVPLEVC0090 PRI
	Bidder's Product Description: 90Mbps Committed Information Rate with PRIORITY CoS		
290.	EVPL PRIORITY CIR MAE - 100 Mbps	The guaranteed average bandwidth of the virtual circuit.	EVPLEVC0100 PRI
	Bidder's Product Description: 100Mbps Committed Information Rate with PRIORITY CoS		
291.	EVPL PRIORITY CIR MAE - 200 Mbps	The guaranteed average bandwidth of the virtual circuit.	EVPLEVC0200 PRI
	Bidder's Product Description: 200Mbps Committed Information Rate with PRIORITY CoS		
292.	EVPL PRIORITY CIR MAE - 300 Mbps	The guaranteed average bandwidth of the virtual circuit.	EVPLEVC0300 PRI

	Feature Name	Feature Description	Bidder's Product Identifier
	Bidder's Product Description: 300Mbps Committed Information Rate with PRIORITY CoS		
293.	EVPL PRIORITY CIR MAE - 400 Mbps	The guaranteed average bandwidth of the virtual circuit.	EVPLEVC0400 PRI
	Bidder's Product Description: 400Mbps Committed Information Rate with PRIORITY CoS		
294.	EVPL PRIORITY CIR MAE - 500 Mbps	The guaranteed average bandwidth of the virtual circuit.	EVPLEVC0500 PRI
	Bidder's Product Description: 500Mbps Committed Information Rate with PRIORITY CoS		
295.	EVPL PRIORITY CIR MAE - 600 Mbps	The guaranteed average bandwidth of the virtual circuit.	EVPLEVC0600 PRI
	Bidder's Product Description: 600Mbps Committed Information Rate with PRIORITY CoS		
296.	EVPL PRIORITY CIR MAE - 700 Mbps	The guaranteed average bandwidth of the virtual circuit.	EVPLEVC0700 PRI
	Bidder's Product Description: 700Mbps Committed Information Rate with PRIORITY CoS		
297.	EVPL PRIORITY CIR MAE - 800 Mbps	The guaranteed average bandwidth of the virtual circuit.	EVPLEVC0800 PRI
	Bidder's Product Description: 800Mbps Committed Information Rate with PRIORITY CoS		
298.	EVPL PRIORITY CIR MAE - 900 Mbps	The guaranteed average bandwidth of the virtual circuit.	EVPLEVC0900 PRI
	Bidder's Product Description: 900Mbps Committed Information Rate with PRIORITY CoS		

	Feature Name	Feature Description	Bidder's Product Identifier
299.	EVPL PRIORITY CIR MAE - 1000 Mbps	The guaranteed average bandwidth of the virtual circuit.	EVPLEVC1000 PRI
	Bidder's Product Description: 1000Mbps Committed Information Rate with PRIORITY CoS		
300.	EVPL PRIORITY CIR MAE - 2000 Mbps	The guaranteed average bandwidth of the virtual circuit.	EVPLEVC2000 PRI
	Bidder's Product Description: 2000Mbps Committed Information Rate with PRIORITY CoS		
301.	EVPL PRIORITY CIR MAE - 3000 Mbps	The guaranteed average bandwidth of the virtual circuit.	EVPLEVC3000 PRI
	Bidder's Product Description: 3000Mbps Committed Information Rate with PRIORITY CoS		
302.	EVPL PRIORITY CIR MAE - 4000 Mbps	The guaranteed average bandwidth of the virtual circuit.	EVPLEVC4000 PRI
	Bidder's Product Description: 4000Mbps Committed Information Rate with PRIORITY CoS		
303.	EVPL PRIORITY CIR MAE - 5000 Mbps	The guaranteed average bandwidth of the virtual circuit.	EVPLEVC5000 PRI
	Bidder's Product Description: 5000Mbps Committed Information Rate with PRIORITY CoS		
304.	EVPL PRIORITY CIR MAE - 6000 Mbps	The guaranteed average bandwidth of the virtual circuit.	EVPLEVC6000 PRI
	Bidder's Product Description: 6000Mbps Committed Information Rate with PRIORITY CoS		
305.	EVPL PRIORITY CIR MAE - 7000 Mbps	The guaranteed average bandwidth of the virtual circuit.	EVPLEVC7000 PRI

	Feature Name	Feature Description	Bidder's Product Identifier
	Bidder's Product Description: 7000Mbps Committed Information Rate with PRIORITY CoS		
306.	EVPL PRIORITY CIR MAE - 8000 Mbps	The guaranteed average bandwidth of the virtual circuit.	EVPLEVC8000 PRI
	Bidder's Product Description: 8000Mbps Committed Information Rate with PRIORITY CoS		
307.	EVPL PRIORITY CIR MAE - 9000 Mbps	The guaranteed average bandwidth of the virtual circuit.	EVPLEVC9000 PRI
	Bidder's Product Description: 9000Mbps Committed Information Rate with PRIORITY CoS		
308.	EVPL PRIORITY CIR MAE - 10000 Mbps	The guaranteed average bandwidth of the virtual circuit.	EVPLEVC010 GPRI
	Bidder's Product Description: 10000Mbps Committed Information Rate with PRIORITY CoS		
EVPL CIR (PREMIUM CoS MAE)			
309.	EVPL PREMIUM CIR MAE - 1 Mbps	The guaranteed average bandwidth of the virtual circuit.	EVPLEVC0001 PRE
	Bidder's Product Description: 1Mbps Committed Information Rate with PREMIUM CoS		
310.	EVPL PREMIUM CIR MAE - 2 Mbps	The guaranteed average bandwidth of the virtual circuit.	EVPLEVC0002 PRE
	Bidder's Product Description: 2Mbps Committed Information Rate with PREMIUM CoS		
311.	EVPL PREMIUM CIR MAE - 3 Mbps	The guaranteed average bandwidth of the virtual circuit.	EVPLEVC0003 PRE
	Bidder's Product Description: 3Mbps Committed Information Rate with PREMIUM CoS		

	Feature Name	Feature Description	Bidder's Product Identifier
312.	EVPL PREMIUM CIR MAE - 4 Mbps	The guaranteed average bandwidth of the virtual circuit.	EVPLEVC0004 PRE
	Bidder's Product Description: 4Mbps Committed Information Rate with PREMIUM CoS		
313.	EVPL PREMIUM CIR MAE - 5 Mbps	The guaranteed average bandwidth of the virtual circuit.	EVPLEVC0005 PRE
	Bidder's Product Description: 5Mbps Committed Information Rate with PREMIUM CoS		
314.	EVPL PREMIUM CIR MAE - 6 Mbps	The guaranteed average bandwidth of the virtual circuit.	EVPLEVC0006 PRE
	Bidder's Product Description: 6Mbps Committed Information Rate with PREMIUM CoS		
315.	EVPL PREMIUM CIR MAE - 7 Mbps	The guaranteed average bandwidth of the virtual circuit.	EVPLEVC0007 PRE
	Bidder's Product Description: 7Mbps Committed Information Rate with PREMIUM CoS		
316.	EVPL PREMIUM CIR MAE - 8 Mbps	The guaranteed average bandwidth of the virtual circuit.	EVPLEVC0008 PRE
	Bidder's Product Description: 8Mbps Committed Information Rate with PREMIUM CoS		
317.	EVPL PREMIUM CIR MAE - 9 Mbps	The guaranteed average bandwidth of the virtual circuit.	EVPLEVC0009 PRE
	Bidder's Product Description: 9Mbps Committed Information Rate with PREMIUM CoS		
318.	EVPL PREMIUM CIR MAE - 10 Mbps	The guaranteed average bandwidth of the virtual circuit.	EVPLEVC0010 PRE
	Bidder's Product Description: 10Mbps Committed Information Rate with PREMIUM CoS		
319.	EVPL PREMIUM CIR MAE - 20 Mbps	The guaranteed average bandwidth of the virtual circuit.	EVPLEVC0020 PRE

	Feature Name	Feature Description	Bidder's Product Identifier
	Bidder's Product Description: 20Mbps Committed Information Rate with PREMIUM CoS		
320.	EVPL PREMIUM CIR MAE - 30 Mbps	The guaranteed average bandwidth of the virtual circuit.	EVPLEVC0030 PRE
	Bidder's Product Description: 30Mbps Committed Information Rate with PREMIUM CoS		
321.	EVPL PREMIUM CIR MAE - 40 Mbps	The guaranteed average bandwidth of the virtual circuit.	EVPLEVC0040 PRE
	Bidder's Product Description: 40Mbps Committed Information Rate with PREMIUM CoS		
322.	EVPL PREMIUM CIR MAE - 50 Mbps	The guaranteed average bandwidth of the virtual circuit.	EVPLEVC0050 PRE
	Bidder's Product Description: 50Mbps Committed Information Rate with PREMIUM CoS		
323.	EVPL PREMIUM CIR MAE - 60 Mbps	The guaranteed average bandwidth of the virtual circuit.	EVPLEVC0060 PRE
	Bidder's Product Description: 60Mbps Committed Information Rate with PREMIUM CoS		
324.	EVPL PREMIUM CIR MAE - 70 Mbps	The guaranteed average bandwidth of the virtual circuit.	EVPLEVC0070 PRE
	Bidder's Product Description: 70Mbps Committed Information Rate with PREMIUM CoS		
325.	EVPL PREMIUM CIR MAE - 80 Mbps	The guaranteed average bandwidth of the virtual circuit.	EVPLEVC0080 PRE
	Bidder's Product Description: 80Mbps Committed Information Rate with PREMIUM CoS		
326.	EVPL PREMIUM CIR MAE - 90 Mbps	The guaranteed average bandwidth of the virtual circuit.	EVPLEVC0090 PRE
	Bidder's Product Description: 90Mbps Committed Information Rate with PREMIUM CoS		

	Feature Name	Feature Description	Bidder's Product Identifier
327.	EVPL PREMIUM CIR MAE - 100 Mbps	The guaranteed average bandwidth of the virtual circuit.	EVPLEVC0100 PRE
	Bidder's Product Description: 100Mbps Committed Information Rate with PREMIUM CoS		
328.	EVPL PREMIUM CIR MAE - 200 Mbps	The guaranteed average bandwidth of the virtual circuit.	EVPLEVC0200 PRE
	Bidder's Product Description: 200Mbps Committed Information Rate with PREMIUM CoS		
329.	EVPL PREMIUM CIR MAE - 300 Mbps	The guaranteed average bandwidth of the virtual circuit.	EVPLEVC0300 PRE
	Bidder's Product Description: 300Mbps Committed Information Rate with PREMIUM CoS		
330.	EVPL PREMIUM CIR MAE - 400 Mbps	The guaranteed average bandwidth of the virtual circuit.	EVPLEVC0400 PRE
	Bidder's Product Description: 400Mbps Committed Information Rate with PREMIUM CoS		
331.	EVPL PREMIUM CIR MAE - 500 Mbps	The guaranteed average bandwidth of the virtual circuit.	EVPLEVC0500 PRE
	Bidder's Product Description: 500Mbps Committed Information Rate with PREMIUM CoS		
332.	EVPL PREMIUM CIR MAE - 600 Mbps	The guaranteed average bandwidth of the virtual circuit.	EVPLEVC0600 PRE
	Bidder's Product Description: 600Mbps Committed Information Rate with PREMIUM CoS		
333.	EVPL PREMIUM CIR MAE - 700 Mbps	The guaranteed average bandwidth of the virtual circuit.	EVPLEVC0700 PRE

	Feature Name	Feature Description	Bidder's Product Identifier
	Bidder's Product Description: 700Mbps Committed Information Rate with PREMIUM CoS		
334.	EVPL PREMIUM CIR MAE - 800 Mbps	The guaranteed average bandwidth of the virtual circuit.	EVPLEVC0800 PRE
	Bidder's Product Description: 800Mbps Committed Information Rate with PREMIUM CoS		
335.	EVPL PREMIUM CIR MAE - 900 Mbps	The guaranteed average bandwidth of the virtual circuit.	EVPLEVC0900 PRE
	Bidder's Product Description: 900Mbps Committed Information Rate with PREMIUM CoS		
336.	EVPL PREMIUM CIR MAE - 1000 Mbps	The guaranteed average bandwidth of the virtual circuit.	EVPLEVC1000 PRE
	Bidder's Product Description: 1000Mbps Committed Information Rate with PREMIUM CoS		
337.	EVPL PREMIUM CIR MAE - 2000 Mbps	The guaranteed average bandwidth of the virtual circuit.	EVPLEVC2000 PRE
	Bidder's Product Description: 2000Mbps Committed Information Rate with PREMIUM CoS		
338.	EVPL PREMIUM CIR MAE - 3000 Mbps	The guaranteed average bandwidth of the virtual circuit.	EVPLEVC3000 PRE
	Bidder's Product Description: 3000Mbps Committed Information Rate with PREMIUM CoS		
339.	EVPL PREMIUM CIR MAE - 4000 Mbps	The guaranteed average bandwidth of the virtual circuit.	EVPLEVC4000 PRE
	Bidder's Product Description: 4000Mbps Committed Information Rate with PREMIUM CoS		

	Feature Name	Feature Description	Bidder's Product Identifier
340.	EVPL PREMIUM CIR MAE - 5000 Mbps	The guaranteed average bandwidth of the virtual circuit.	EVPLEVC5000 PRE
	Bidder's Product Description: 5000Mbps Committed Information Rate with PREMIUM CoS		
341.	EVPL PREMIUM CIR MAE - 6000 Mbps	The guaranteed average bandwidth of the virtual circuit.	EVPLEVC6000 PRE
	Bidder's Product Description: 6000Mbps Committed Information Rate with PREMIUM CoS		
342.	EVPL PREMIUM CIR MAE - 7000 Mbps	The guaranteed average bandwidth of the virtual circuit.	EVPLEVC7000 PRE
	Bidder's Product Description: 7000Mbps Committed Information Rate with PREMIUM CoS		
343.	EVPL PREMIUM CIR MAE - 8000 Mbps	The guaranteed average bandwidth of the virtual circuit.	EVPLEVC8000 PRE
	Bidder's Product Description: 8000Mbps Committed Information Rate with PREMIUM CoS		
344.	EVPL PREMIUM CIR MAE - 9000 Mbps	The guaranteed average bandwidth of the virtual circuit.	EVPLEVC9000 PRE
	Bidder's Product Description: 9000Mbps Committed Information Rate with PREMIUM CoS		
345.	EVPL PREMIUM CIR MAE - 10000 Mbps	The guaranteed average bandwidth of the virtual circuit.	EVPLEVC010 GPRE

	Feature Name	Feature Description	Bidder's Product Identifier
	Bidder's Product Description: 10000Mbps Committed Information Rate with PREMIUM CoS		

3.2.1.7 MAE Service Geographic Requirements

Bidders shall identify the locations where their Ethernet Services are available in Table 3.2.1.7.a. By indicating "X" in the table below, Contractor commits to provide the services in the cities identified below. Commitment is subject to facility availability either through Contractor owned facilities or third-party agreements. Contractor's rates for the MAE services shall be the same for all geographic locations. Bidders may reference Table 3.2.1.7.a or Table 3.2.1.7.b in their Catalog A, Geographic Availability response. Bidders Catalog A language shall not conflict with the requirements described herein.

Table 3.2.1.7.a – Bidder's EVL and EVPL Services Available Areas

	Service Location	EPL MAE Service Connections		EVPL MAE Service Connections	
		10/100 Mbps	1 Gbps	10/100 Mbps	1 Gbps
1	Adelanto	X	X	X	X
2	Agoura Hills	X	X	X	X
3	Alameda	X	X	X	X
4	Albany	X	X	X	X
5	Alhambra	X	X	X	X
6	Aliso Viejo	X	X	X	X
7	Alturas				
8	Amador	X	X	X	X
9	American Canyon	X	X	X	X
10	Anaheim	X	X	X	X
11	Anderson				
12	Angels Camp	X	X	X	X
13	Antioch	X	X	X	X
14	Apple Valley	X	X	X	X
15	Arcadia	X	X	X	X
16	Arcata				

COMCAST BUSINESS

	Service Location	EPL MAE Service Connections		EVPL MAE Service Connections	
		10/100 Mbps	1 Gbps	10/100 Mbps	1 Gbps
17	Arroyo Grande				
18	Artesia	X	X	X	X
19	Arvin				
20	Atascadero				
21	Atherton	X	X	X	X
22	Atwater	X	X	X	X
23	Auburn	X	X	X	X
24	Avalon				
25	Avenal				
26	Azusa	X	X	X	X
27	Bakersfield				
28	Baldwin Park	X	X	X	X
29	Banning	X	X	X	X
30	Barstow	X	X	X	X
31	Beaumont	X	X	X	X
32	Bell	X	X	X	X
33	Bell Gardens				
34	Bellflower	X	X	X	X
35	Belmont	X	X	X	X
36	Belvedere	X	X	X	X
37	Benicia	X	X	X	X
38	Berkeley	X	X	X	X
39	Beverly Hills	X	X	X	X
40	Big Bear Lake	X	X	X	X
41	Biggs	X	X	X	X
42	Bishop	X	X	X	X
43	Blue Lake	X	X	X	X
44	Blythe	X	X	X	X
45	Bradbury				
46	Brawley				

COMCAST BUSINESS

	Service Location	EPL MAE Service Connections		EVPL MAE Service Connections	
		10/100 Mbps	1 Gbps	10/100 Mbps	1 Gbps
47	Brea	X	X	X	X
48	Brentwood	X	X	X	X
49	Brisbane	X	X	X	X
50	Buellton	X	X	X	X
51	Buena Park	X	X	X	X
52	Burbank	X	X	X	X
53	Burlingame	X	X	X	X
54	Calabasas	X	X	X	X
55	Calexico	X	X	X	X
56	California City				
57	Calimesa	X	X	X	X
58	Calipatria				
59	Calistoga				
60	Camarillo	X	X	X	X
61	Campbell	X	X	X	X
62	Canyon Lake				
63	Capitola	X	X	X	X
64	Carlsbad	X	X	X	X
65	Carmel-By-The-Sea				
66	Carpinteria				
67	Carson	X	X	X	X
68	Cathedral City	X	X	X	X
69	Ceres	X	X	X	X
70	Cerritos	X	X	X	X
71	Chico	X	X	X	X
72	Chino	X	X	X	X
73	Chino Hills	X	X	X	X
74	Chowchilla	X	X	X	X
75	Chula Vista	X	X	X	X
76	Citrus Heights				

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	Service Location	EPL MAE Service Connections		EVPL MAE Service Connections	
		10/100 Mbps	1 Gbps	10/100 Mbps	1 Gbps
77	Claremont	X	X	X	X
78	Clayton	X	X	X	X
79	Clearlake				
80	Cloverdale	X	X	X	X
81	Coachella	X	X	X	X
82	Coalinga	X	X	X	X
83	Colfax				
84	Colma	X	X	X	X
85	Colton	X	X	X	X
86	Colusa	X	X	X	X
87	Commerce				
88	Compton	X	X	X	X
89	Concord	X	X	X	X
90	Corcoran	X	X	X	X
91	Corning	X	X	X	X
92	Corona	X	X	X	X
93	Coronado	X	X	X	X
94	Corte Madera				
95	Costa Mesa	X	X	X	X
96	Cotati	X	X	X	X
97	Covina	X	X	X	X
98	Crescent City				
99	Cudahy				
100	Culver City	X	X	X	X
101	Cupertino	X	X	X	X
102	Cypress	X	X	X	X
103	Daly City	X	X	X	X
104	Dana Point	X	X	X	X
105	Danville	X	X	X	X
106	Davis	X	X	X	X

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	Service Location	EPL MAE Service Connections		EVPL MAE Service Connections	
		10/100 Mbps	1 Gbps	10/100 Mbps	1 Gbps
107	Del Mar	X	X	X	X
108	Del Rey Oaks	X	X	X	X
109	Delano				
110	Desert Hot Springs	X	X	X	X
111	Diamond Bar	X	X	X	X
112	Dinuba	X	X	X	X
113	Dixon				
114	Dorris				
115	Dos Palos	X	X	X	X
116	Downey	X	X	X	X
117	Duarte	X	X	X	X
118	Dublin	X	X	X	X
119	Dunsmuir				
120	East Palo Alto	X	X	X	X
121	El Cajon	X	X	X	X
122	El Centro	X	X	X	X
123	El Cerrito	X	X	X	X
124	El Monte	X	X	X	X
125	El Paso De Robles				
126	El Segundo	X	X	X	X
127	Elk Grove	X	X	X	X
128	Emeryville	X	X	X	X
129	Encinitas	X	X	X	X
130	Escalon	X	X	X	X
131	Escondido	X	X	X	X
132	Etna				
133	Eureka				
134	Exeter				
135	Fairfax	X	X	X	X
136	Fairfield	X	X	X	X

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	Service Location	EPL MAE Service Connections		EVPL MAE Service Connections	
		10/100 Mbps	1 Gbps	10/100 Mbps	1 Gbps
137	Farmersville				
138	Ferndale				
139	Fillmore				
140	Firebaugh	X	X	X	X
141	Folsom	X	X	X	X
142	Fontana	X	X	X	X
143	Fort Bragg	X	X	X	X
144	Fort Jones				
145	Fortuna				
146	Foster City	X	X	X	X
147	Fountain Valley	X	X	X	X
148	Fowler	X	X	X	X
149	Fremont	X	X	X	X
150	Fresno	X	X	X	X
151	Fullerton	X	X	X	X
152	Galt	X	X	X	X
153	Garden Grove	X	X	X	X
154	Gardena	X	X	X	X
155	Gilroy				
156	Glendale	X	X	X	X
157	Glendora	X	X	X	X
158	Goleta	X	X	X	X
159	Gonzales				
160	Grand Terrace	X	X	X	X
161	Grass Valley	X	X	X	X
162	Greenfield				
163	Gridley	X	X	X	X
164	Grover Beach				
165	Guadalupe				
166	Gustine	X	X	X	X

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	Service Location	EPL MAE Service Connections		EVPL MAE Service Connections	
		10/100 Mbps	1 Gbps	10/100 Mbps	1 Gbps
167	Half Moon Bay	X	X	X	X
168	Hanford	X	X	X	X
169	Hawaiian Gardens	X	X	X	X
170	Hawthorne	X	X	X	X
171	Hayward	X	X	X	X
172	Healdsburg	X	X	X	X
173	Hemet	X	X	X	X
174	Hercules	X	X	X	X
175	Hermosa Beach	X	X	X	X
176	Hesperia	X	X	X	X
177	Hidden Hills				
178	Highland	X	X	X	X
179	Hillsborough	X	X	X	X
180	Hollister				
181	Holtville				
182	Hughson	X	X	X	X
183	Humboldt				
184	Huntington Beach	X	X	X	X
185	Huntington Park	X	X	X	X
186	Huron	X	X	X	X
187	Imperial				
188	Imperial Beach	X	X	X	X
189	Indian Wells	X	X	X	X
190	Indio	X	X	X	X
191	Industry				
192	Inglewood	X	X	X	X
193	Inyo				
194	Ione				
195	Irvine	X	X	X	X
196	Irwindale				

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	Service Location	EPL MAE Service Connections		EVPL MAE Service Connections	
		10/100 Mbps	1 Gbps	10/100 Mbps	1 Gbps
197	Isleton	X	X	X	X
198	Jackson	X	X	X	X
199	Kerman	X	X	X	X
200	Kern				
201	King City				
202	Kings				
203	Kingsburg	X	X	X	X
204	La Canada Flintridge				
205	La Habra	X	X	X	X
206	La Habra Heights				
207	La Mesa	X	X	X	X
208	La Mirada	X	X	X	X
209	La Palma	X	X	X	X
210	La Puente	X	X	X	X
211	La Quinta	X	X	X	X
212	La Verne	X	X	X	X
213	Lafayette	X	X	X	X
214	Laguna Beach	X	X	X	X
215	Laguna Hills	X	X	X	X
216	Laguna Niguel	X	X	X	X
217	Laguna Woods	X	X	X	X
218	Lake				
219	Lake Elsinore	X	X	X	X
220	Lake Forest	X	X	X	X
221	Lakeport				
222	Lakewood	X	X	X	X
223	Lancaster	X	X	X	X
224	Larkspur	X	X	X	X
225	Lassen				
226	Lathrop	X	X	X	X

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	Service Location	EPL MAE Service Connections		EVPL MAE Service Connections	
		10/100 Mbps	1 Gbps	10/100 Mbps	1 Gbps
227	Lawndale	X	X	X	X
228	Lemon Grove	X	X	X	X
229	Lemoore	X	X	X	X
230	Lincoln	X	X	X	X
231	Lindsay				
232	Live Oak	X	X	X	X
233	Livermore	X	X	X	X
234	Livingston				
235	Lodi	X	X	X	X
236	Loma Linda	X	X	X	X
237	Lomita	X	X	X	X
238	Lompoc	X	X	X	X
239	Long Beach	X	X	X	X
240	Loomis				
241	Los Alamitos	X	X	X	X
242	Los Altos	X	X	X	X
243	Los Altos Hills	X	X	X	X
244	Los Angeles	X	X	X	X
245	Los Banos	X	X	X	X
246	Los Gatos	X	X	X	X
247	Loyalton				
248	Lynwood	X	X	X	X
249	Madera	X	X	X	X
250	Malibu	X	X	X	X
251	Mammoth Lakes				
252	Manhattan Beach	X	X	X	X
253	Manteca	X	X	X	X
254	Maricopa				
255	Marina	X	X	X	X
256	Martinez	X	X	X	X

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	Service Location	EPL MAE Service Connections		EVPL MAE Service Connections	
		10/100 Mbps	1 Gbps	10/100 Mbps	1 Gbps
257	Marysville	X	X	X	X
258	Maywood	X	X	X	X
259	Mcfarland				
260	Mendota	X	X	X	X
261	Menlo Park	X	X	X	X
262	Merced	X	X	X	X
263	Mill Valley	X	X	X	X
264	Millbrae	X	X	X	X
265	Milpitas	X	X	X	X
266	Mission Viejo	X	X	X	X
267	Modesto	X	X	X	X
268	Monrovia	X	X	X	X
269	Montague				
270	Montclair	X	X	X	X
271	Monte Sereno	X	X	X	X
272	Montebello	X	X	X	X
273	Monterey	X	X	X	X
274	Monterey Park	X	X	X	X
275	Moorpark	X	X	X	X
276	Moraga	X	X	X	X
277	Moreno Valley	X	X	X	X
278	Morgan Hill	X	X	X	X
279	Morro Bay				
280	Mount Shasta				
281	Mountain View	X	X	X	X
282	Murrieta	X	X	X	X
283	Napa	X	X	X	X
284	National City	X	X	X	X
285	Needles				
286	Nevada City				

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	Service Location	EPL MAE Service Connections		EVPL MAE Service Connections	
		10/100 Mbps	1 Gbps	10/100 Mbps	1 Gbps
287	Newark	X	X	X	X
288	Newman	X	X	X	X
289	Newport Beach	X	X	X	X
290	Norco	X	X	X	X
291	Norwalk	X	X	X	X
292	Novato	X	X	X	X
293	Oakdale	X	X	X	X
294	Oakland	X	X	X	X
295	Oakley	X	X	X	X
296	Oceanside	X	X	X	X
297	Ojai	X	X	X	X
298	Ontario	X	X	X	X
299	Orange	X	X	X	X
300	Orange Cove				
301	Orinda	X	X	X	X
302	Orland	X	X	X	X
303	Oroville	X	X	X	X
304	Oxnard	X	X	X	X
305	Pacific Grove	X	X	X	X
306	Pacifica	X	X	X	X
307	Palm Desert	X	X	X	X
308	Palm Springs	X	X	X	X
309	Palmdale	X	X	X	X
310	Palo Alto	X	X	X	X
311	Palos Verdes Estates				
312	Paradise	X	X	X	X
313	Paramount	X	X	X	X
314	Parlier	X	X	X	X
315	Pasadena	X	X	X	X
316	Patterson	X	X	X	X

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	Service Location	EPL MAE Service Connections		EVPL MAE Service Connections	
		10/100 Mbps	1 Gbps	10/100 Mbps	1 Gbps
317	Perris	X	X	X	X
318	Petaluma	X	X	X	X
319	Pico Rivera	X	X	X	X
320	Piedmont	X	X	X	X
321	Pinole	X	X	X	X
322	Pismo Beach				
323	Pittsburg	X	X	X	X
324	Placentia	X	X	X	X
325	Placerville	X	X	X	X
326	Pleasant Hill	X	X	X	X
327	Pleasanton	X	X	X	X
328	Plymouth	X	X	X	X
329	Point Arena				
330	Pomona	X	X	X	X
331	Port Hueneme	X	X	X	X
332	Porterville				
333	Portola				
334	Portola Valley	X	X	X	X
335	Poway	X	X	X	X
336	Rancho Cordova	X	X	X	X
337	Rancho Cucamonga	X	X	X	X
338	Rancho Mirage	X	X	X	X
339	Rancho Palos Verdes	X	X	X	X
340	Rancho Santa Margarita	X	X	X	X
341	Red Bluff				
342	Redding				
343	Redlands	X	X	X	X
344	Redondo Beach	X	X	X	X

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	Service Location	EPL MAE Service Connections		EVPL MAE Service Connections	
		10/100 Mbps	1 Gbps	10/100 Mbps	1 Gbps
345	Redwood City	X	X	X	X
346	Reedley	X	X	X	X
347	Rialto	X	X	X	X
348	Richmond	X	X	X	X
349	Ridgecrest				
350	Rio Dell				
351	Rio Vista	X	X	X	X
352	Ripon				
353	Riverbank	X	X	X	X
354	Riverside	X	X	X	X
355	Rocklin				
356	Rohnert Park	X	X	X	X
357	Rolling Hills				
358	Rolling Hills Estates				
359	Rosemead				
360	Roseville	X	X	X	X
361	Ross	X	X	X	X
362	Sacramento	X	X	X	X
363	Salinas	X	X	X	X
364	San Anselmo	X	X	X	X
365	San Bernardino	X	X	X	X
366	San Bruno				
367	San Buenaventura				
368	San Carlos	X	X	X	X
369	San Clemente	X	X	X	X
370	San Diego	X	X	X	X
371	San Dimas	X	X	X	X
372	San Fernando	X	X	X	X
373	San Francisco	X	X	X	X
374	San Gabriel	X	X	X	X

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	Service Location	EPL MAE Service Connections		EVPL MAE Service Connections	
		10/100 Mbps	1 Gbps	10/100 Mbps	1 Gbps
375	San Jacinto	X	X	X	X
376	San Joaquin				
377	San Jose	X	X	X	X
378	San Juan Bautista				
379	San Juan Capistrano	X	X	X	X
380	San Leandro	X	X	X	X
381	San Luis Obispo				
382	San Marcos	X	X	X	X
383	San Marino				
384	San Mateo	X	X	X	X
385	San Pablo	X	X	X	X
386	San Rafael	X	X	X	X
387	San Ramon	X	X	X	X
388	Sand City	X	X	X	X
389	Sanger	X	X	X	X
390	Santa Ana	X	X	X	X
391	Santa Barbara	X	X	X	X
392	Santa Clara	X	X	X	X
393	Santa Clarita	X	X	X	X
394	Santa Cruz	X	X	X	X
395	Santa Fe Springs	X	X	X	X
396	Santa Maria	X	X	X	X
397	Santa Monica	X	X	X	X
398	Santa Paula	X	X	X	X
399	Santa Rosa	X	X	X	X
400	Santee	X	X	X	X
401	Saratoga	X	X	X	X
402	Sausalito	X	X	X	X
403	Scotts Valley	X	X	X	X

	Service Location	EPL MAE Service Connections		EVPL MAE Service Connections	
		10/100 Mbps	1 Gbps	10/100 Mbps	1 Gbps
404	Seal Beach	X	X	X	X
405	Seaside	X	X	X	X
406	Sebastopol	X	X	X	X
407	Selma	X	X	X	X
408	Shafter				
409	Shasta Lake				
410	Sierra Madre	X	X	X	X
411	Signal Hill	X	X	X	X
412	Simi Valley	X	X	X	X
413	Solana Beach	X	X	X	X
414	Soledad				
415	Solvang	X	X	X	X
416	Sonoma	X	X	X	X
417	Sonora	X	X	X	X
418	South El Monte	X	X	X	X
419	South Gate	X	X	X	X
420	South Lake Tahoe				
421	South Pasadena	X	X	X	X
422	South San Francisco	X	X	X	X
423	St Helena				
424	Stanton	X	X	X	X
425	Stockton	X	X	X	X
426	Suisun City	X	X	X	X

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	Service Location	EPL MAE Service Connections		EVPL MAE Service Connections	
		10/100 Mbps	1 Gbps	10/100 Mbps	1 Gbps
427	Sunnyvale	X	X	X	X
428	Susanville				
429	Sutter Creek				
430	Taft				
431	Tehachapi				
432	Tehama				
433	Temecula	X	X	X	X
434	Temple City				
435	Thousand Oaks	X	X	X	X
436	Tiburon	X	X	X	X
437	Torrance	X	X	X	X
438	Tracy	X	X	X	X
439	Trinidad				
440	Truckee				
441	Tulare	X	X	X	X
442	Tulelake				
443	Turlock	X	X	X	X
444	Tustin	X	X	X	X
445	Twentynine Palms				
446	Ukiah	X	X	X	X
447	Union City	X	X	X	X
448	Upland	X	X	X	X
449	Vacaville	X	X	X	X

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	Service Location	EPL MAE Service Connections		EVPL MAE Service Connections	
		10/100 Mbps	1 Gbps	10/100 Mbps	1 Gbps
450	Vallejo	X	X	X	X
451	Vernon	X	X	X	X
452	Victorville	X	X	X	X
453	Villa Park	X	X	X	X
454	Visalia	X	X	X	X
455	Vista	X	X	X	X
456	Walnut	X	X	X	X
457	Walnut Creek	X	X	X	X
458	Wasco				
459	Waterford	X	X	X	X
460	Watsonville	X	X	X	X
461	Weed				
462	West Covina	X	X	X	X
463	West Hollywood	X	X	X	X
464	West Los Angeles				
465	West Sacramento	X	X	X	X
466	Westlake Village	X	X	X	X
467	Westminster	X	X	X	X
468	Westmorland				
469	Wheatland	X	X	X	X
470	Whittier	X	X	X	X
471	Williams	X	X	X	X
472	Willits	X	X	X	X

	Service Location	EPL MAE Service Connections		EVPL MAE Service Connections	
		10/100 Mbps	1 Gbps	10/100 Mbps	1 Gbps
473	Willows	X	X	X	X
474	Windsor	X	X	X	X
475	Winters				
476	Woodlake				
477	Woodland	X	X	X	X
478	Woodside	X	X	X	X
479	Yorba Linda	X	X	X	X
480	Yountville	X	X	X	X
481	Yreka				
482	Yuba City	X	X	X	X
483	Yucaipa	X	X	X	X
484	Yucca Valley	X	X	X	X

Bidders may identify additional unsolicited locations where their Ethernet Services are available in Table 3.2.1.7.b. By indicating “X” in the table below, Contractor commits to providing the Services identified in this section. Commitment is subject to facility availability either through Contractor owned facilities or third-party agreements. Contractor’s rates for the MAE services shall be the same for all geographic locations. Additional lines may be added as necessary. Bidders may reference Table 3.2.1.7.a or Table 3.2.1.7.b in their Catalog A, Geographic Availability response. Bidder’s Catalog A language shall not conflict with the requirements described herein.



If Bidder is unable to identify all service areas within Table 3.2.1.7.a, Bidder shall provide additional information in the form of a coverage map that includes unincorporated areas.

Table 3.2.1.7.b – Unsolicited Bidder’s EVL and EVPL Services Available Areas

	Service Location	EPL MAE Service Connections		EVPLMAE Service Connections	
		10/100 Mbps	1 Gbps	10/100 Mbps	1 Gbps
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					

3.3 NETWORK DISASTER/OPERATIONAL RECOVERY

3.3.1 TELECOMMUNICATIONS SERVICE PRIORITY (TSP) PROGRAM

The Contractor shall comply with the Telecommunications Service Priority (TSP) Program, a Federal Communications Commission (FCC) mandate for prioritizing service requests by identifying those services critical to National Security and Emergency Preparedness (NS/EP) and be in compliance with all related CPUC and FCC requirements.

Bidder understands the Requirement and shall meet or exceed it? Yes X No _____

3.3.2 DATA NETWORK DISASTER/OPERATIONAL RECOVERY

Public safety agencies, major data centers, agencies with supporting roles during disaster or emergency operations, and agencies with significant roles in post-disaster recovery have mission-critical needs to maintain network availability during disasters or emergencies.

It is essential that service be restored as soon as possible, and the services most critical to State operations remain operational during efforts to achieve full service recovery.

Bidder understands the Requirement and shall meet or exceed it? Yes X No _____

3.4 OTHER SERVICES

3.4.1 HOURLY RATES FOR SERVICES

The hourly classifications of hours worked for services described in this section will be as follows:

1. **Regular Hours – Hours worked between 8:00AM and 4:59PM, Monday through Friday.**
2. **Overtime Hours – Hours worked between 5:00PM and 7:59AM, Monday through Friday and all day Saturday.**
3. **Sunday and Holiday Hours – Any hours worked on Sunday or State of California holidays.**

3.4.2 EXTENDED DEMARCATION WIRING SERVICES

The Contractor shall provide Extended Demarcation (Extended Demarc) wiring to support the services covered by this IFB for all Customer occupied buildings where services under this Contract are being offered. Extended Demarc wiring includes wiring and cable related activities required to extend the service demarcation point to the Customer defined termination location or cross-connect point from the Contractor's Minimum Point of Entry (MPOE).

Extended Demarc wiring shall include all necessary hardware including wire and/or cable, connectors, jumpers, patch panels, minor materials and jacks. Extended Demarc wiring shall also include all necessary labor required to complete the provisioning of service including installation, testing, trouble shooting, labeling and documentation.

Extended Demarc wiring is limited to the following:

1. Installation of cabling for extending services from the MPOE location to the Customer's point of utilization;
2. Installation of cross-connects or rearrangement of existing jumpers;
3. Identification and testing of existing cabling beyond the MPOE to the Customer's equipment location; or,
4. Testing, trouble shooting, labeling and completing documentation.

The Contractor shall provide installations in accordance with the timeframes identified for the services that this cabling will support, and shall be subject to the SLAs detailed in Section 3.5.8.9 (Provisioning SLAs) associated with that service.

The Contractor shall not be required to complete Extended Demarc wiring from the MPOE to the extended Demarc location if:

1. The wire/cable pathway is blocked and cannot be cleared in less than 20 minutes or if the Contractor would cause damage to the Customer site or existing cabling in clearing the pathway;
2. The wire/cable pathway is in an asbestos environment or other environment hazardous to the Contractor's personnel, or where such work would be hazardous to the public or to the Customer's staff; or,

3. Written release of the responsibility to provide the Extended Demarc is provided by either the Customer or by CALNET 3 CMO.

Bidder shall provide a price in the Cost Worksheets for all labor and materials required for Extended Demarc wiring necessary to complete the provisioning of one (1) Demarc extension as described above. Bidder shall provide one (1) price for each media identified.

The Contractor shall install wiring according to industry standards and cabling recommendations published in the State Telecommunications Management Manual (STMM), Facilities Management Chapter, Uniform Building Cabling/Wiring current at the time of this IFB and as periodically updated by CALNET 3 CMO. Additionally, the Contractor shall install and maintain all wiring in accordance with all applicable EIA/TIA, BICSI, and ITU-T recommended standards current at the time of installation or maintenance.

The Contractor shall provide extended Demarcation Services limited to one (1) occurrence or installation for the specific telecommunications service the cabling is meant to support and must be ordered in conjunction with the service being provisioned. All other cabling will be the responsibility of the Customer and will be acquired through other procurement vehicles.

Bidder understands the Requirement and shall meet or exceed it? Yes X No _____

The Contractor shall offer the wiring services for extended demarcation detailed in Table 3.4.2.a.

Table 3.4.2.a Extended Demarcation Wiring Services

	Feature Name	Feature Description	Bidder Meets or Exceeds?		Bidder's Product Identifier
			Y	N	
1	Extended Demarcation – Copper four-Pair – Regular Hours	Wiring services to extend Facilities from the Customer's MPOE to the Customer's point of utilization from a copper trunk or trunking equipment as described above. Includes 300 feet of four-pair cable and an RJ48s or equivalent jack.	Y		NSX0003
	Bidder's Product Description: As standard practice, Comcast will deliver the service with CPE directly to the customer's point of utilization instead of the MPOE.				

	Feature Name	Feature Description	Bidder Meets or Exceeds? Y N		Bidder's Product Identifier
2	Extended Demarcation – Copper four-Pair – Overtime Hours	Wiring services to extend Facilities from the Customer's MPOE to the Customer's point of utilization from a copper trunk or trunking equipment as described above. Includes 300 feet of four-pair cable and an RJ48s or equivalent jack.	Y		NSX0004
	Bidder's Product Description: As standard practice, Comcast will deliver the service with CPE directly to the customer's point of utilization instead of the MPOE.				
3	Extended Demarcation – Copper four-Pair – Sundays and Holiday Hours	Wiring services to extend Facilities from the Customer's MPOE to the Customer's point of utilization from a copper trunk or trunking equipment as described above. Includes 300 feet of four-pair cable and an RJ48s or equivalent jack.	Y		NSX0005
	Bidder's Product Description: As standard practice, Comcast will deliver the service with CPE directly to the customer's point of utilization instead of the MPOE.				

	Feature Name	Feature Description	Bidder Meets or Exceeds? Y N		Bidder's Product Identifier
4	Extended Demarcation – Copper 25 Pair – Regular Hours	Wiring services to extend Facilities from the Customer's MPOE to the Customer's point of utilization from a copper trunk or trunking equipment as described above. Includes 300 feet or less of Category 5 25-pair CMP cable, one (1) patch panel and mounting hardware. Ten (10) Category 5e, three (3) meter jumpers; one (1) 24-port patch panel to be provided in the MPOE and Intermediate Distribution Frame (IDF) for all circuits being extended. Includes associated troubleshooting, testing, and labeling.	Y		NSX0006
	Bidder's Product Description: As standard practice, Comcast will deliver the service with CPE directly to the customer's point of utilization instead of the MPOE.				
5	Extended Demarcation – Copper 25 Pair – Overtime Hours	Wiring services to extend Facilities from the Customer's MPOE to the Customer's point of utilization from a copper trunk or trunking equipment as described above. Includes 300 feet or less of Category 5 25-pair CMP cable, one (1) patch panel and mounting hardware. Ten (10) Category 5e, three (3) meter jumpers; one (1) 24-port patch panel to be provided in the MPOE and Intermediate Distribution Frame (IDF) for all circuits being extended. Includes associated troubleshooting, testing, and labeling.	Y		NSX0007
	Bidder's Product Description: As standard practice, Comcast will deliver the service with CPE directly to the customer's point of utilization instead of the MPOE.				

	Feature Name	Feature Description	Bidder Meets or Exceeds? Y N		Bidder's Product Identifier
6	Extended Demarcation – Copper 25 Pair – Sunday and Holiday Hours	Wiring services to extend Facilities from the Customer's MPOE to the Customer's point of utilization from a copper trunk or trunking equipment as described above. Includes 300 feet or less of Category 5 25-pair CMP cable, one (1) patch panel and mounting hardware. Ten (10) Category 5e, three (3) meter jumpers; one (1) 24-port patch panel to be provided in the MPOE and Intermediate Distribution Frame (IDF) for all circuits being extended. Includes associated troubleshooting, testing, and labeling.	Y		NSX0008
	Bidder's Product Description: As standard practice, Comcast will deliver the service with CPE directly to the customer's point of utilization instead of the MPOE.				
7	Extended Demarcation – Optical Fiber Link – Regular Hours	Wiring services to extend Facilities from the Customer's MPOE to the Customers point of utilization from a fiber trunk or trunking equipment as described above with strand count required to provision one (1) each service only. Includes up to 1,000 feet of 62.5/125 – or 50/125 – micron, two-strand CMP fiber drop cable with adapters, enclosures, connectors, and two (2) SC-SC duplex patch cords for each single circuit extension. Includes associated troubleshooting, testing and labeling.	Y		NSX0009
	Bidder's Product Description: As standard practice, Comcast will deliver the service with CPE directly to the customer's point of utilization instead of the MPOE.				

	Feature Name	Feature Description	Bidder Meets or Exceeds? Y N		Bidder's Product Identifier
8	Extended Demarcation – Optical Fiber Link – Overtime Hours	Wiring services to extend Facilities from the Customer's MPOE to the Customers point of utilization from a fiber trunk or trunking equipment as described above with strand count required to provision one (1) each service only. Includes up to 1,000 feet of 62.5/125 – or 50/125 – micron, two-strand CMP fiber drop cable with adapters, enclosures, connectors, and two (2) SC-SC duplex patch cords for each single circuit extension. Includes associated troubleshooting, testing and labeling.	Y		NSX0010
	Bidder's Product Description: As standard practice, Comcast will deliver the service with CPE directly to the customer's point of utilization instead of the MPOE.				
9	Extended Demarcation – Optical Fiber Link – Sunday and Holiday Hours	Wiring services to extend Facilities from the Customer's MPOE to the Customers point of utilization from a fiber trunk or trunking equipment as described above with strand count required to provision one (1) each service only. Includes up to 1,000 feet of 62.5/125 – or 50/125 – micron, two-strand CMP fiber drop cable with adapters, enclosures, connectors, and two (2) SC-SC duplex patch cords for each single circuit extension. Includes associated troubleshooting, testing and labeling.	Y		NSX0011
	Bidder's Product Description: As standard practice, Comcast will deliver the service with CPE directly to the customer's point of utilization instead of the MPOE.				

The Contractor may offer additional extended demarcation wiring services in Table 3.4.2.b.

Table 3.4.2.b Unsolicited Extended Demarcation Wiring Services

	Feature Name	Feature Description	Bidder's Product Identifier
1			
	Bidder's Product Description:		
2			
	Bidder's Product Description:		
3			
	Bidder's Product Description:		

3.4.3 SERVICES RELATED HOURLY SUPPORT

The Contractor shall provide labor for the diagnosis and/or repair of services listed in this Contract and all costs for repair are the responsibility of the service provider unless it is specifically determined that the cause of service failure is outside the scope of the Contractors responsibilities Work performed under this Section 3.4.3 is authorized only for situations where the Contractor has dispatched personnel to diagnose a service problem that is discovered to be caused by factors outside the responsibility of the Contractor or no trouble is found.

In Cost Worksheet 3.4.3, the Contractor shall provide a fixed hourly rate schedule for the labor classifications required to diagnose and/or repair the contracted services. The rates identified shall only be used for the diagnosis and/or repair of contracted services and no materials shall be included in the rates. The total amount of labor hours permitted to be performed is ten (10) hours per dispatch/occurrence.

Bidder understands the Requirement and shall meet or exceed it? Yes X No

The Contractor shall offer emergency restoration services as detailed in Table 3.4.3.

Table 3.4.3 Services Related Hourly Support

	Labor Classification Name	Classification Description	Bidder Meets or Exceeds? Y N		Bidder's Product Identifier
1	Field Service Repair Technician Regular Hours	Field technician properly trained to an expert level for the service being dispatched to diagnose and/or repair a CALNET 3 service problem that turns out to be caused by factors outside the responsibility of the Contractor.	Y		NSX0012
	Bidder's Product Description: Regular hours for Field technician properly trained to an expert level for the service being dispatched to diagnose and/or repair a CALNET 3 service problem that turns out to be caused by factors outside the responsibility of the Contractor.				
2	Field Service Repair Technician Overtime Hours	Field technician properly trained to an expert level for the service being dispatched to diagnose and/or repair a CALNET 3 service problem that turns out to be caused by factors outside the responsibility of the Contractor.	Y		NSX0013
	Bidder's Product Description: Overtime hours for Field technician properly trained to an expert level for the service being dispatched to diagnose and/or repair a CALNET 3 service problem that turns out to be caused by factors outside the responsibility of the Contractor.				
3	Field Service Repair Technician Sunday and Holiday Hours	Field technician properly trained to an expert level for the service being dispatched to diagnose and/or repair a CALNET 3 service problem that turns out to be caused by factors outside the responsibility of the Contractor.	Y		NSX0014
	Bidder's Product Description: Sunday and Holiday hours for Field technician properly trained to an expert level for the service being dispatched to diagnose and/or repair a CALNET 3 service problem that turns out to be caused by factors outside the responsibility of the Contractor.				

3.5 SERVICE LEVEL AGREEMENTS (SLA)

The Contractor shall provide Service Level Agreements (SLAs) as defined below. The intent of this section is to provide Customers, CALNET 3 CMO and the Contractor with requirements that define and assist in the management of the SLAs. This section includes the SLA formats, general requirements, stop clock conditions, and the Technical SLAs for the services identified in this solicitation.

3.5.1 SERVICE LEVEL AGREEMENT FORMAT

The Contractor shall adhere to the following format and include the content as described below for each Technical SLA added by the Contractor throughout the Term of the Contract:

1. SLA Name - Each SLA Name must be unique;
2. Definition - Describes what performance metric will be measured;
3. Measurements Process - Provides instructions how the Contractor will continuously monitor and measure SLA performance to ensure compliance. The Contractor shall provide details describing how and what will be measured. Details shall include source of data and define the points of measurement within the system, application, or network;
4. Service(s) - All applicable Categories or Subcategories will be listed in each SLA;
5. Objective(s) – Defines the SLA performance goal/parameters; and,
6. Rights and Remedies
 - a. Per Occurrence: Rights and remedies are paid on a per event basis during the bill cycle; and,
 - b. Monthly Aggregated Measurements: Rights and remedies are paid once during the bill cycle based on an aggregate of events over a defined period of time.

The Contractor shall proactively apply an invoice credit or refund when an SLA objective is not met. CALNET SLA Rights and Remedies do not require the Customer to submit a request for credit or refund.

Bidder understands the Requirement and shall meet or exceed it? Yes X No _____

3.5.2 TECHNICAL REQUIREMENTS VERSUS SLA OBJECTIVES

Sections 3.2 (Ethernet Services), 3.3 (Network Disaster/Operational Recovery) and 3.4 (Other Services) define the technical requirements for each service. These requirements are the minimum parameters each Bidder must meet in order to qualify for Contract award. Upon Contract award the committed technical requirements will be maintained throughout the remainder of the Contract.

Committed SLA objectives are minimum parameters which the Contractor shall be held accountable for all rights and remedies throughout Contract Term.

Bidder understands the Requirement and shall meet or exceed it? Yes X No _____

3.5.3 TWO METHODS OF OUTAGE REPORTING: CUSTOMER OR CONTRACTOR

There are two (2) methods in which CALNET 3 service failures or quality of service issues may be reported and Contractor trouble tickets opened: Customer reported or Contractor reported.

The first method of outage reporting results from a Customer reporting service trouble to the Contractor's Customer Service Center via phone call or opening of a trouble ticket using the on-line Trouble Ticket Reporting Tool (IFB STPD 12-001-B Refresh Business Requirements Section B.9.4).

The second method of outage reporting occurs when the Contractor opens a trouble ticket as a result of network/system alarm or other method of service failure identification. In each instance the Contractor shall open a trouble ticket using the Trouble Ticket Reporting Tool (IFB STPD 12-001-B Refresh Business Requirements Section B.9.4) and monitor and report to Customer until service is restored.

Bidder understands the Requirement and shall meet or exceed it? Yes X No _____

3.5.4 BIDDER RESPONSE TO SERVICE LEVEL AGREEMENTS

Many of the Service Level Agreements described below include multiple objective levels – Basic, Standard and Premier. **Bidders shall indicate one (1) specific objective level they are committing to for each service in space provided in the "Objective" section of each SLA description.**

Bidder understands the Requirement and shall meet or exceed it? Yes X No _____

3.5.5 CONTRACTOR SLA MANAGEMENT PLAN

Within 90 calendar days of Contract award, the Contractor shall provide CALNET 3 CMO with a detailed SLA Management Plan that describes how the Contractor will manage the Technical SLAs for services in this IFB. The SLA Management plan shall provide processes and procedures to be implemented by the Contractor. The SLA Management Plan shall define the following:

1. Contractor SLA Manager and supporting staff responsibilities;
2. Contractor's process for measuring objectives for each SLA. The process shall explain how the Contractor will continuously monitor and measure SLA performance to ensure compliance. The Contractor shall provide details describing how and what will be measured. Details should include source of data and define the points of measurement within the system, application, or network;
3. Creation and delivery of SLA Reports (IFB STPD 12-001-B Refresh Business Requirements Section B.9.5). The Contractor shall include a sample report in accordance with IFB STPD 12-001-B Refresh Business Requirements Section B.9.5 (SLA Reports) for the following: SLA Service Performance Report (IFB STPD 12-001-B Refresh Business Requirements Section B.9.5.1), SLA Provisioning Report (IFB STPD 12-001-B Refresh Business Requirements Section B.9.5.2), and SLA Catastrophic Outage Reports (IFB STPD 12-001-B Refresh Business Requirements Section B.9.5.3). The Contractor shall commit to a monthly due date. The reports shall be provided to the CALNET 3 CMO via the Private Oversight Website (IFB STPD 12-001-B Refresh Business Requirements Section B.9.2);
4. SLA invoicing credit and refund process;

5. Contractor SLA problem resolution process for SLA management and SLA reporting. The Contractor shall provide a separate process for Customers and CALNET 3 CMO; and,
6. Contractor SLA Manager to manage all SLA compliance and reporting. The Contractor shall include SLA Manager contact information for SLA inquiries and issue resolution for Customer and CALNET 3 CMO.

Bidder understands the Requirement and shall meet or exceed it? Yes X No _____

3.5.6 TECHNICAL SLA GENERAL REQUIREMENTS

The Contractor shall adhere to the following general requirements which apply to all CALNET 3 Technical SLAs (Section 3.5.8):

1. With the exception of the Provisioning SLA, the total SLA rights and remedies for any given month shall not exceed the sum of 100 percent of the Total Monthly Recurring Charges (TMRC). Services with usage charges shall apply the Average Daily Usage Charge (ADUC) in addition to any applicable TMRC rights and remedies;
2. If a circuit or service fails to meet one (1) or more of the performance objectives, only the SLA with the largest monthly Rights and Remedies will be credited to the Customer, per event;
3. The Contractor shall apply CALNET 3 SLAs and remedies for services provided by Subcontractors and/or Affiliates;
4. The Definition, Measurement Process, Objectives, and Rights and Remedies shall apply to all services identified in each SLA. If a Category or Subcategory is listed in the SLA, then all services under that Category or Subcategory are covered under the SLA. Exceptions must be otherwise stated in the SLA;
5. TMRC rights and remedies shall include the service, option(s), and feature(s) charges;
6. The Contractor shall proactively and continuously monitor and measure all Technical SLA objectives;
7. The Contractor shall proactively credit all rights and remedies to the Customer within 60 calendar days of the trouble resolution date on the trouble ticket or within 60 calendar days of the Due Date on the Service Request for the Provisioning SLA;
8. To the extent that Contractor offers additional SLAs, or SLAs with more advantageous rights and/or remedies for same or similar services offered through tariffs, online service guides, or other similarly situated government contracts (Federal, State, County, City), The State will be entitled to the same rights and/or remedies therein. The Contractor shall present the SLAs to CALNET 3 CMO for possible inclusion via amendments;
9. The Contractor shall apply CALNET 3 SLAs and remedies to services provided in all areas the Contractor provides service and/or open to competition (as defined by the CPUC). Any SLAs and remedies negotiated between Contractor and Incumbent Local Exchange Carriers in territories closed to competition shall be passed through to the CALNET 3 Customer;

10. The election by CALNET 3 CMO of any SLA remedy covered by this Contract shall not exclude or limit CALNET 3 CMO's or any Customer's rights and remedies otherwise available within the Contract or at law or equity;
11. The Contractor shall apply rights and remedies when a service fails to meet the SLA objective even when backup or protected services provide Customer with continuation of services;
12. The Contractor shall act as the single point of contact in coordinating all entities to meet the State's needs for provisioning, maintenance, restoration and resolution of service issues or that of their Subcontractors, Affiliates or resellers under this Contract;
13. The Customer Escalation Process (IFB STPD 12-001-B Refresh Business Requirements Section B.3.4.2) and/or the CALNET 3 CMO Escalation Process (IFB STPD 12-001-B Refresh Business Requirements Section B.3.4.1) shall be considered an additional right and remedy if the Contractor fails to resolve service issues within the SLA objective(s);
14. Trouble reporting and restoration shall be provided 24x365 for CALNET 3 services;
15. SLAs apply 24x365 unless SLA specifies an exception;
16. Contractor invoices shall clearly cross reference the SLA credit to the service Circuit ID in accordance with IFB STPD 12-001-B Refresh Business Requirements Section B.5.1 (Billing and Invoicing Requirements, #14);
17. The Contractor shall provide a CALNET 3 SLA Manager responsible for CALNET 3 SLA compliance. The SLA Manager shall attend regular meetings and be available upon request to address CALNET 3 CMO SLA oversight, report issues, and problem resolution concerns. The CALNET 3 SLA Manager shall also coordinate SLA support for Customer SLA inquiries and issue resolution;
18. The Contractor shall provide Customer and CALNET 3 CMO support for SLA inquiries and issue resolution; and,
19. Any SLAs and remedies negotiated between Contractor and third party service provider in territories closed to competition shall be passed through to the CALNET 3 Customer.

Bidder understands the Requirement and shall meet or exceed it? Yes X No _____

3.5.7 TROUBLE TICKET STOP CLOCK CONDITIONS

The following conditions shall be allowed to stop the trouble ticket Outage Duration for CALNET 3 Contractor trouble tickets. The Contractor shall document the trouble ticket Outage Duration using the Stop Clock Condition (SCC) listed in Table 3.5.7 and include start and stop time stamps in the Contractor's Trouble Ticket Reporting Tool (IFB STPD 12-001-B Refresh Business Requirements Section B.9.4) for each application of a SCC.

Note: The Glossary (SOW Appendix A) defines term "End-User" as the "individual within an Entity that is utilizing the feature or service provided under the Contract."

Stop Clock Conditions are limited to the conditions listed in Table 3.5.7.

Table 3.5.7 – Stop Clock Conditions (SCC)

#	Stop Clock Condition (SCC)	SCC Definition
1	END-USER REQUEST	Periods when a restoration or testing effort is delayed at the specific request of the End-User. The SCC shall exist during the period the Contractor was delayed, provided that the End-User's request is documented and time stamped in the Contractor's trouble ticket or Service Request system and shows efforts are made to contact the End-User during the applicable Stop Clock period.
2	OBSERVATION	Time after a service has been restored but End-User request ticket is kept open for observation. If the service is later determined by the End-User to not have been restored, the Stop Clock shall continue until the time the End-User notifies the Contractor that the Service has not been restored.
3	END-USER NOT AVAILABLE	Time after a service has been restored but End-User is not available to verify that the Service is working. If the service is later determined by the End-User to not have been restored, the Stop Clock shall apply only for the time period between Contractor's reasonable attempt to notify the End-User that Contractor believes the service has been restored and the time the End-User notifies the Contractor that the Service has not been restored.
4	WIRING	Restoration cannot be achieved because the problem has been isolated to wiring that is not maintained by Contractor or any of its Subcontractors or Affiliates. If it is later determined the wiring is not the cause of failure, the SCC shall not apply.
5	POWER	Trouble caused by a power problem outside of the responsibility of the Contractor.
6	FACILITIES	Lack of building entrance Facilities or conduit structure that are the End-User's responsibility to provide.

#	Stop Clock Condition (SCC)	SCC Definition
7	ACCESS	Limited access or contact with End-User provided the Contractor documents in the trouble ticket several efforts to contact End-User for the following: a. Access necessary to correct the problem is not available because access has not been arranged by site contact or End-User representative; b. Site contact refuses access to technician who displays proper identification; c. Customer provides incorrect site contact information which prevents access, provided that Contractor takes reasonable steps to notify End-User of the improper contact information and takes steps to obtain the correct information ; or, d. Site has limited hours of business that directly impacts the Contractor's ability to resolve the problem. If it is determined later that the cause of the problem was not at the site in question, then the Access SCC shall not apply.
8	STAFF	Any problem or delay to the extent caused by End-User's staff that prevents or delays Contractor's resolution of the problem. In such event, Contractor shall make a timely request to End-User staff to correct the problem or delay and document in trouble ticket.
9	APPLICATION	End-User software applications that interfere with repair of the trouble.
10	CPE	Repair/replacement of Customer Premise Equipment (CPE) not provided by Contractor if the problem has been isolated to the CPE. If determined later that the CPE was not the cause of the service outage, the CPE SCC will not apply.
11	NO RESPONSE	Failure of the trouble ticket originator or responsible End-User to return a call from Contractor's technician for on-line close-out of trouble tickets after the Service has been restored as long as Contractor can provide documentation in the trouble ticket substantiating the communication from Contractor's technician.

#	Stop Clock Condition (SCC)	SCC Definition
12	MAINTENANCE	An outage directly related to any properly performed scheduled maintenance or upgrade scheduled for CALNET 3 service. Any such stop clock condition shall not extend beyond the scheduled period of the maintenance or upgrade. SLAs shall apply for any maintenance caused outage beyond the scheduled maintenance period. Outages occurring during a scheduled maintenance or upgrade period and not caused by the scheduled maintenance shall not be subject to the Maintenance SCC.
13	THIRD PARTY	Any problem or delay caused by a third party not under the control of Contractor, not preventable by Contractor, including, at a minimum, cable cuts not caused by the Contractor. Contractor's Subcontractors and Affiliates shall be deemed to be under the control of Contractor with respect to the equipment, services, or Facilities to be provided under this Contract.
14	FORCE MAJEURE	Force Majeure events, as defined in the PMAC General Provisions - Telecommunications, Section 28 (Force Majeure).

Bidder understands the Requirement and shall meet or exceed it? Yes X No _____

3.5.8 TECHNICAL SERVICE LEVEL AGREEMENTS

The Contractor shall provide and manage the following Technical SLAs.

3.5.8.1 Availability (M-S)

SLA Name: Availability					
Definition: The percentage of time a CALNET 3 service is fully functional and available for use each calendar month.					
Measurement Process: The monthly Availability Percentage shall be based on the accumulative total of all Unavailable Time derived from all trouble tickets closed, for the affected service (Per Circuit ID), per calendar month. The monthly Availability Percentage equals the Scheduled Uptime per month less Unavailable Time per month divided by Scheduled Uptime per month multiplied by 100. Scheduled Uptime is 24 x number of days in the month. All Unavailable Time applied to other SLAs, which results in a remedy, will be excluded from the monthly accumulated total.					
Services:					
MAE Service		Managed Router Service			
Ethernet Network Service (ENS)					
Objective(s):					
The objective shall be based on the UNI physical interface:					
		Basic (B)	Standard (S)	Premier (P)	Bidders Objective Commitment (B, S or P)
	EPL and EVPL MAE Service 10/100 Mbps	≥ 99.2%	≥ 99.5%	≥ 99.9%	P
	EPL and EVPL MAE Service 1Gbps	≥ 99.2%	≥ 99.5%	≥ 99.9%	P
	EPL and EVPL, MAE Service 10Gbps	≥ 99.2%	≥ 99.5%	≥ 99.9%	P
	ENS MAE Service 10/100 Mbps	≥ 99.2%	≥ 99.5%	≥ 99.9%	P
	ENS MAE Service 1Gbps	≥ 99.2%	≥ 99.5%	≥ 99.9%	P
	ENS MAE Service 10Gbps	≥ 99.2%	≥ 99.5%	≥ 99.9%	P
	Managed Router Service	≥ 99.2%	≥ 99.5%	≥ 99.9%	P
	Per Occurrence: N/A				

Rights and Remedies	Monthly Aggregated Measurements: First month the service fails to meet the committed SLA objective shall result in a 15 percent rebate of the TMRC. The second consecutive month the service fails to meet the committed SLA objective shall result in a 30 percent rebate of TMRC. Each additional consecutive month the service fails to meet the committed SLA objective shall result in a 50 percent rebate of the TMRC.
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Bidder understands the Requirement and shall meet or exceed it? Yes X No _____

3.5.8.2 Catastrophic Outage 1 (CAT 1) (M-S)

SLA Name: Catastrophic Outage 1 (CAT 1)					
Definition: The total loss of service at a single address based on a common cause resulting in the failure of five (5) UNIs or any cumulative UNI failure equal to, or greater than, 10 Gbps.					
Measurement Process: The Outage Duration begins when a network alarm is received by the Contractor from an outage-causing event or the opening of a trouble ticket by a Customer, or the Contractor, whichever occurs first. The Contractor shall open a trouble ticket for each service (Circuit ID) affected by a common cause. Each End-User service is deemed out of service from the first notification until the Contractor determines the End-User service (Circuit ID) is restored minus SCC. Any service reported by Customer as not having been restored shall have the outage time adjusted to the actual restoration time.					
Service(s):					
MAE Service		Managed Router Service			
Ethernet Network Service (ENS)					
Objective (s): The objective restoral time shall be:					
		Basic (B)	Standard (S)	Premier (P)	Bidders Objective Commitment (B, S or P)
MAE Service		≤ 3 hours	≤ 2 hours	≤ 1 hour	S
Ethernet Network Service (ENS)		≤ 3 hours	≤ 2 hours	≤ 1 hour	S
Managed Router Service		≤ 3 hours	≤ 2 hours	≤ 1 hour	S
Rights and Remedies	Per Occurrence: 100 percent of the TMRC for each End-User service not meeting the committed objective for each CAT 1 fault				
	Monthly Aggregated Measurements: N/A				

Bidder understands the Requirement and shall meet or exceed it? Yes X No _____

3.5.8.3 Catastrophic Outage 2 (CAT 2) (M-S)

SLA Name: Catastrophic Outage 2 (CAT 2)					
Definition: Any service affecting failure in the Contractor's (or subcontractor's or Affiliate's) network up to and including the Provider Edge (PE) equipment.					
Measurement Process: The Outage Duration begins when a network alarm is received by the Contractor from an outage-causing event or the opening of a trouble ticket by the Customer or Contractor, whichever occurs first. Upon notification from the Customer or network alarm, the Contractor shall compile a list for each End-User service affected by a common cause for tracking and reporting of the SLA rights and remedies. Outage Duration shall be measured on a per-End-User service (Circuit ID) basis from information recorded from the network equipment/system or Customer reported trouble ticket. Each End-User service (Circuit ID) is deemed out of service from the first notification until the Contractor determines the End-User service is restored. Any End-User service reported by the End-User/Customer as not having been restored shall have the outage time adjusted to the actual restoration time.					
Service(s):					
MAE Service		Managed Router Service			
Ethernet Network Service (ENS)					
Objective (s): The objective restoral time shall be:					
		Basic (B)	Standard (S)	Premier (P)	Bidders Objective Commitment (B, S or P)
	MAE Service	≤ 1 hour	≤ 30 minutes	≤ 15 minutes	S
	Ethernet Network Service (ENS)	≤ 1 hour	≤ 30 minutes	≤ 15 minutes	S
	Managed Router Service	≤ 1 hour	≤ 30 minutes	≤ 15 minutes	S
Rights and Remedies	Per Occurrence: 100 percent of the TMRC for each End-User service not meeting the committed objective for each CAT 2 fault				
	Monthly Aggregated Measurements: N/A				

Bidder understands the Requirement and shall meet or exceed it? Yes **X** No _____

3.5.8.4 Catastrophic Outage 3 (CAT 3) (M-S)

SLA Name: Catastrophic Outage 3 (CAT 3)					
Definition: The total loss of one (1) or more CALNET 3 services on a system wide basis.					
Measurement Process: The Outage Duration begins when a network alarm is received by the Contractor from an outage-causing event or the opening of a trouble ticket by the Customer or Contractor, whichever occurs first. Upon notification from the Customer or network alarm, the Contractor shall compile a list for each End-User service affected by a common cause. Outage Duration shall be measured on a per-End-User service (Circuit ID) basis from information recorded from the network equipment/system or trouble ticket. Each End-User service (Circuit ID) is deemed out of service from the first notification until the Contractor determines the End-User service is restored. Any End-User service reported by the End-User/Customer as not having been restored shall have the outage time adjusted to the actual restoration time.					
Service(s):					
MAE Service		Managed Router Service			
Ethernet Network Service (ENS)					
Objectives:					
The objective restoral time shall be:					
		Basic (B)	Standard (S)	Premier (P)	Bidders Objective Commitment (B or P)
	MAE Service	≤ 30 minutes	N/A	≤ 15 minutes	P
	Ethernet Network Service (ENS)	≤ 30 minutes	N/A	≤ 15 minutes	P
	Managed Router Service	≤ 30 minutes	N/A	≤ 15 minutes	P
Rights and Remedies	Per Occurrence: 100 percent of the TMRC for each End-User service not meeting the committed objective for each CAT 3 fault.				
	Monthly Aggregated Measurements: N/A				

Bidder understands the Requirement and shall meet or exceed it? Yes **X** No _____

3.5.8.5 Excessive Outage (M-S)

SLA Name: Excessive Outage				
Definition: A service failure that remains unresolved for more than the committed objective level.				
Measurement Process: This SLA is based on trouble ticket Unavailable Time. The circuit or service is unusable during the time the trouble ticket is reported as opened until restoration of the service, minus SCC. If Customer reports a service failure as unresolved after the closure of the trouble ticket by the Contractor, the Unavailable Time shall be adjusted to the actual restoration time.				
Service(s):				
MAE Service		Managed Router Service		
Ethernet Network Service (ENS)				
Objective (s): The Unavailable Time objective shall not exceed:				
	Basic (B)	Standard (S)	Premier (P)	Bidders Objective Commitment (B, S or P)
MAE Service	16 hours	12 hours	8 hours	S
Ethernet Network Service (ENS)	16 hours	12 hours	8 hours	S
Managed Router Service	16 hours	12 hours	8 hours	S
Rights and Remedies	Per Occurrence: 100 percent of the TMRC for each service (Circuit ID) out of service for a period greater than the committed objective level. Upon request from the Customer or the CALNET 3 CMO, the Contractor shall provide a briefing on the excessive outage restoration.			
	Monthly Aggregated Measurements: N/A			

Bidder understands the Requirement and shall meet or exceed it? Yes X No

3.5.8.6 Notification

SLA Name: Notification	
Definition: The Contractor notification to CALNET 3 CMO and designated stakeholders in the event of a CAT 2 or CAT 3 failure, Contractor, Subcontractor or Affiliate network event, terrorist activity, threat of natural disaster, or actual natural disaster which results in a significant loss of telecommunication services to CALNET 3 End-Users or has the potential to impact services in a general or statewide area. The State understands initial information regarding the nature of the outage may be limited.	
Measurement Process: The Contractor shall adhere to the Network Outage Response requirements (IFB STPD 12-001-B Refresh Business Requirements Section B.3.3) and notify the CALNET 3 CMO and designated stakeholders for all CAT 2 and CAT 3 Outages or for network outages resulting in a significant loss of service. Notification objectives will be based on the start time of the outage failure determined by the opening of a trouble ticket or network alarm, whichever occurs first. For events based on information such as terrorist activity or natural disaster, the Contractor shall notify CALNET 3 CMO and designated stakeholder when information is available.	
Service(s): All Services	
Objective (s): Within 60 minutes of the above mentioned failures' start time, the Contractor shall notify CALNET 3 CMO and designated stakeholders using a method defined in IFB STPD 12-001-B Refresh Business Requirements Section B.3.3 (Network Outage Response). At 60 minute intervals, updates shall be given on the above mentioned failures via the method defined in Section IFB STPD 12-001-B Refresh Business Requirements Section B.3.3 (Network Outage Response). This objective is the same for Basic, Standard and Premier commitments.	
Rights and Remedies	Per Occurrence: Senior Management Escalation
	Monthly Aggregated Measurements: N/A

Bidder understands the Requirement and shall meet or exceed it? Yes X No

3.5.8.7 Latency (M-S)

SLA Name: Latency					
Definition: Latency is the amount of time necessary for a typical Ethernet frame to traverse one way from the originating UNI, across the Contractor's, Affiliate, or Subcontractor's network, to the remote UNI(s) on each EVC identified by the Customer.					
Measurement Process: End-User/Customer is responsible for opening a trouble ticket with the Contractor's Customer Service Center (helpdesk) when the Latency exceeds the committed level. Latency shall be measured from the first bit of and Ethernet frame entering the ingress UNI to when the last bit of the same frame leaves the egress UNI. The problem requires timely verification, consistent with industry standards, by the Contractor. Tickets identified as a Latency issue shall not count in Availability or Time-to-Repair measurements unless and until the End-User reports service as unusable for its intended uses. This measurement includes the local loop transport under the control of the Contractor and any local loops acquired from a third party by the Contractor.					
Service(s):					
MAE Service		Managed Router Service			
Ethernet Network Service (ENS)					
Objective (s): The Unavailable Time objective shall not exceed:					
		Basic (B)	Standard (S)	Premier (P)	Bidders Objective Commitment (B, S or P)
	MAE Service	≤ 75ms	≤ 50ms	≤ 25ms	S
	Ethernet Network Service (ENS)	≤ 75ms	≤ 50ms	≤ 25ms	S
	Managed Router Service	≤ 75ms	≤ 50ms	≤ 25ms	S
Rights and Remedies	Per Occurrence: 15 percent of the TMRC for the reported service Next consecutive month to fail to meet the committed SLA objectives shall result in a 25 percent rebate of TMRC. Each additional consecutive month to fail to meet the committed SLA objective shall result in a 35 percent rebate of TMRC.				
	Monthly Aggregated Measurements: N/A				

Bidder understands the Requirement and shall meet or exceed it? Yes X No

3.5.8.8 Packet Loss (M-S)

SLA Name: Packet Loss					
Definition: A measurement of lost or dropped packet traveling across the Contractor's, Affiliate's or Subcontractor's network. Packet loss is the difference between the number of packets transmitted at the ingress UNI and the total number of packets received at the egress UNI.					
Measurement Process: End-User/Customer is responsible for opening a trouble ticket with the Contractor's Customer Service Center (helpdesk) when the packet loss exceeds the committed level. The problem requires timely verification, consistent with industry standards, by the Contractor. Tickets identified as a packet loss issue shall not count in Availability or Time-to-Repair measurements unless and until the End-User reports service as unusable for its intended uses. This measurement includes the local loop transport under the control of the Contractor and any local loops acquired from a third party by the Contractor.					
Service(s):					
MAE Service		Managed Router Service			
Ethernet Network Service (ENS)					
Objective (s): The Packet Loss objective shall not exceed:					
		Basic (B)	Standard (S)	Premier (P)	Bidders Objective Commitment (B, S or P)
	MAE Service	≤ .7% packet loss	≤ .5% packet loss	≤ .2% packet loss	P
	Ethernet Network Service (ENS)	≤ .7% packet loss	≤ .5% packet loss	≤ .2% packet loss	P
	Managed Router Service	≤ .7% packet loss	≤ .5% packet loss	≤ .2% packet loss	P
Rights and Remedies	Per Occurrence: 15 percent of the TMRC for the reported service Next consecutive month to fail to meet the committed SLA objectives shall result in a 25 percent rebate of TMRC. Each additional consecutive month to fail to meet the committed SLA objective shall result in a 35 percent rebate of TMRC.				
	Monthly Aggregated Measurements: N/A				

Bidder understands the Requirement and shall meet or exceed it? Yes X No

3.5.8.9 Provisioning (M-S)

SLA Name: Provisioning		
Definition: Provisioning shall include new services, moves, adds and changes completed by the Contractor on or before the due dates. The Provisioning SLA shall be based on committed installation intervals established in this SLA or due dates negotiated between Customer and Contractor documented on the Contractor's order confirmation notification or Contracted Service Project Work SOW in accordance with IFB STPD 12-001-B Refresh Section B.2.5.4 #7 (Provisioning and Implementation). The Contractor shall meet the committed interval dates or due date negotiated with the Customer. If the Customer agrees to a negotiated due date, the negotiated due date supersedes the committed interval. At the Customer's discretion, if the scope of the Service Request(s) meets the Coordinated or Managed Project criteria, negotiated due dates will be established and documented in the Project Schedule per IFB STPD 12-001-B Refresh Business Requirements Section B.6 (Contracted Service Project Work). Provisioning SLAs have two (2) objectives: Objective 1: Individual Service Request; and Objective 2: Successful Install Monthly Percentage by Service Type. Note: Provisioning timelines include extended demarcation wiring, when appropriate.		
Measurement Process: <u>Objective 1: Individual Service Request:</u> Install intervals are based on the committed installation intervals established in this SLA or due dates negotiated between Customer and Contractor. This objective requires the Contractor to meet the due date for each individual Service Request. <u>Objective 2: Successful Install Monthly Percentage per service Type:</u> The Contractor shall sum all individual Service Requests per service, as listed below, meeting the objective in the measurement period (per month) and divide by the sum of all individual Service Requests due per service in the measurement period and multiply by 100 to equal the percentage of Service Requests installed on time. The Contractor must meet or exceed the objective below in order to avoid the rights and remedies.		
Service (Features must be installed in conjunction with the service except when listed below)	Committed Interval Calendar Days	Coordinated/Managed Project
MAE Service	30	Coordinated/Managed Project
Managed Router Service	30	Coordinated/Managed Project
Ethernet Network Service (ENS)	30	Coordinated/Managed Project

Objective (s):

Objective 1: Individual Service Request: Service installed on or before the Committed Interval or negotiated due date.

Objective 2: Successful Install Monthly Percentage per Service:

	Basic (B)	Standard (S)	Premier (P)	Bidders Objective Commitment (S or P)
MAE Service	N/A	≥ 90%	≥ 95%	P
Ethernet Network Service (ENS)	N/A	≥ 90%	≥ 95%	P
Managed Router Service	N/A	≥ 90%	≥ 95%	P

**Rights and
Remedies**

Per Occurrence:

Objective 1: Individual Service Requests: 50 percent of installation fee credited to Customer for any missed committed objective.

Monthly Aggregated Measurements:

Objective 2: 100 percent of the installation fee credited to Customer for all Service Requests (per service type) that did not complete on time during the month if the Successful Install Monthly Percentage is below the committed objective.

Bidder understands the Requirement and shall meet or exceed it? Yes X No

3.5.8.10 Time to Repair (TTR) (M-S)

SLA Name: Time to Repair (TTR)					
Definition: A service outage that remains unresolved for more than the committed objective level.					
Measurement Process: This SLA is based on trouble ticket Unavailable Time. The circuit or service is unusable during the time the trouble ticket is reported as opened until restoration of the service, minus SCC. If Customer reports a service failure as unresolved after the closure of the trouble ticket by the Contractor, the Unavailable Time shall be adjusted to the actual restoration time. This SLA is applied per occurrence.					
Service(s):					
MAE Service		Managed Router Service			
Ethernet Network Service (ENS)					
Objective (s): The Unavailable Time objective shall not exceed:					
Service		Basic (B)	Standard (S)	Premier (P)	Bidders Objective Commitment (B or S)
MAE Service		6 hours	4 hours	N/A	B
Ethernet Network Service (ENS)		6 hours	4 hours	N/A	B
Managed Router Service		6 hours	4 hours	N/A	B
Rights and Remedies	Per Occurrence: 25 percent of the TMRC per occurrence for each service (Circuit ID) out of service for a period greater than the committed objective level.				
	Monthly Aggregated Measurements: N/A				

Bidder understands the Requirement and shall meet or exceed it? Yes **X** No _____

3.5.8.11 Managed Service Proactive Notification (M-S)

SLA Name: Managed Service Proactive Notification	
Definition: The proactive outage notification provides credits if the Contractor fails to open a trouble ticket and notify Customer of an Outage for a managed router service. Notification to the Customer shall occur through means agreed to by Contractor and CALNET 3 CMO. An Outage is defined as an unscheduled period in which the managed router service is interrupted and unavailable for use by Customer for 60 continuous seconds or more than 60 cumulative seconds within a 15-minute period measured by the Contractor.	
Measurement Process: The Outage Duration start shall be determined by the first Contractor network alarm resulting from the outage-causing event or the opening of a trouble ticket by the Customer, whichever occurs first. The Contractor has fifteen (15) minutes (Notification Period) to notify the Customer from the start point of the first network alarm. The Contractor is in compliance with the proactive outage notification SLA if the Customer opened the trouble ticket prior to the network alarm or Customer is notified by the Contractor within the Notification Period.	
Service(s):	
MAE Services, with Managed Router	Managed Router Service
Objective (s): 15 minutes	
Rights and Remedies	Per Occurrence: Customer will receive a credit equal to ten percent of the TMRC for Managed Internet Service (Circuit ID) that was impacted during an outage if the Customer was not proactively notified within the notification period
	Monthly Aggregated Measurements: N/A

Bidder understands the Requirement and shall meet or exceed it? Yes X No _____

3.5.8.12 Unsolicited Service Enhancement SLAs

All unsolicited service enhancements shall be considered a feature of the service, and therefore shall be included as such under the SLAs as defined in this Section.

Bidder understands the Requirement and shall meet or exceed it? Yes X No _____



3.5.8.13 Proposed Unsolicited Offerings

The Contractor shall provide SLAs as defined in SLA Section 3.5 for each unsolicited offering determined by the CALNET 3 CMO not to be a feature of a service or a component of an unbundled service identified in the technical requirements. SLA tables shall be amended after Contract award to include all new unsolicited services.

Bidder understands the Requirement and shall meet or exceed it? Yes X No _____

3.5.8.14 Contract Amendment Service Enhancement SLAs

All Contract amendment service enhancements shall be considered a feature of the service, therefore included as such under the SLAs as defined in this Section 3.5.8.

Bidder understands the Requirement and shall meet or exceed it? Yes X No _____