INVITATION FOR BID

IFB C4DNCS19
Data Networks and Communications Services

CATEGORY 23 – METROPOLITAN AREA NETWORK ETHERNET

NWN Corporation

Statement of Work

TECHNICAL REQUIREMENTS

March 5, 2020

BAFO

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AMENDMENT LOG

Amendment #	Date	Amendment Description
3	11/01/2020	Addendum Changed to Amendment, Deleted items 2 - BAFO; and added Item 3, Am 3 Changes. Updated Table of Contents in its entirety. Table 20.2.10; Updated entire table.
23	10/05/2024	Updated Header to Amendment 23. Updated Table of Contents. Reformatted Table 23.2.1.7a for ADA Compliance Added SKUs to Table 23.4.2.2 – Unsolicited Services Related Infrastructure
24	1/15/2025	Updated Amendment Log, Header and Table of Contents. Added SKUs to Table 23.2.1.6.4 – Unsolicited MAE Services and Features with Security services.
27	09/04/2025	Updated Amendment Log, Header and Table of Contents. Added SKUs to Table 23.2.1.6.4 – Unsolicited MAE Services and Features.

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TECHNICAL REQUIREMENTS

Category 23 – METROPOLITAN AREA NETWORK ETHERNET

23.1 OVERVIEW

The California Department of Technology (CDT), Statewide Telecommunications Procurement (STP) is requesting proposals from responsive vendors to provide Metropolitan Area Network (MAN) Ethernet services and features.

This Category 23 IFB C4DNCS19 (IFB) provides the State's solicitation for best value solutions for MAN Ethernet services. This IFB also describes the CALNET technical requirements necessary to support the CALNET program requirements.

This IFB will be awarded to Bidders that meet the award criteria as described in IFB C4DNCS19 Part 1, Bid Evaluation. The CALNET Data Network and Communications Services (DNCS) Contract(s) that result from the award of this IFB will be managed on a day-to-day basis by the CALNET Contractor Management Organization (CALNET CMO).

23.1.1 Bidder Response Requirements

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

1. Example A (for responses that require confirmation that the Bidder understands and accepts the requirement):

"Bidder understands the requirements and shall meet or exceed them? Yes "

Or,

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

"Bidder understands the requirements and shall meet or exceed them? Yes "

Description:"

Or,

3. Example C (for responses contained in Technical Feature and/or Service Tables):

Line Item	Feature Name	Feature Description	Bidder's Product Description, Restrictions and Limitations	Bidders Product Identifier	Bidder Meets or Exceeds? Yes or No
1					Yes

23.1.2 Designation of Requirements

All Technical Requirements specified in this IFB C4DNCS19 are Mandatory and must be responded to as identified in IFB C4DNCS19 Part 1, SOW Mandatory Technical Requirements by the Bidder. Additionally, some Mandatory requirements are "Mandatory-Scorable" and are designated as "(M-S)".

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 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.

23.1.3 Pacific Time Zone

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

Bidder understands the requirements and shall meet or exceed them? Yes

23.2 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 or more Local Area Networks (LANs) at the native speed of the LAN backbone.

Bidder understands the requirements and shall meet or exceed them? Yes

23.2.1 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 or more locations.

Bidder understands the requirements and shall meet or exceed them? Yes

23.2.1.1 General Requirements

23.2.1.1.1 Standards

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

Bidder understands the requirements and shall meet or exceed them? Yes

2. Metro Ethernet Forum (MEF);

Bidder understands the requirements and shall meet or exceed them? Yes

3. Internet Engineering Task Force;

Bidder understands the requirements and shall meet or exceed them? Yes

4. International Telecommunications Union (ITU); and,

Bidder understands the requirements and shall meet or exceed them? Yes

5. Institute of Electrical and Electronics Engineers, Inc. (IEEE).

Bidder understands the requirements and shall meet or exceed them? Yes

23.2.1.1.2 Security

Contractor shall physically secure all data and networking facilities through which data traverses Contractor's WAN complying with the physical security controls of NIST SP 800-53, ISO/IEC 27001, or equivalent standards.

Bidder understands the requirements and shall meet or exceed them? Yes

23.2.1.1.3 Data Breach Reporting

If Contractor determines that a breach of data has occurred that may involve CALNET Customer data, the nature and scope of the breach (as it affects Customer data) shall be reported to both the Customer and the CALNET CMO within 24 hours of that determination.

Bidder understands the requirements and shall meet or exceed them? Yes

23.2.1.1.4 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 requirements and shall meet or exceed them? Yes

23.2.1.1.5 Ethernet Virtual Connections (EVC)

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

Bidder understands the requirements and shall meet or exceed them? Yes

23.2.1.1.6 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 23.2.1.1.6 lists the UNI physical interfaces.

Table 23.2.1.1.6 – UNI Physical Interfaces

UNI Speed	UNI Physical Interface
10 Mbps	10/100/1000Base-Tx
100 Mbps	10/100/1000Base-Tx or Sx
1 Gbps	1000Base-Tx or 1000Base-SX
10 Gbps	10GBase-SR or 10GBase-LR

Bidder understands the requirements and shall meet or exceed them? Yes

23.2.1.1.7 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 requirements and shall meet or exceed them? Yes

23.2.1.1.8 Service Frame Delivery Options

Service Frame Delivery options supported shall include:

1. Unicast Frame Delivery;

Bidder understands the requirements and shall meet or exceed them? Yes

2. Multicast Frame Delivery as per RFC 11 12;

Bidder understands the requirements and shall meet or exceed them? Yes

3. IEEE 802.1 Bridging and Management Standards; and,

Bidder understands the requirements and shall meet or exceed them? Yes

4. Broadcast Frame Delivery as per IEEE 802.3.

Bidder understands the requirements and shall meet or exceed them? Yes

23.2.1.1.9 Ethernet Service Frame Disposition

The service shall deliver all service frames associated with the EVC unconditionally across the network as specified in Table 23.2.1.1.19.

Table 23.2.1.1.9 –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 requirements and shall meet or exceed them? Yes

23.2.1.1.10 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 requirements and shall meet or exceed them? Yes

23.2.1.1.11 Maximum Frame Size

The service shall support a Maximum Transmission Unit (MTU) packet size of 1,600 bytes to support untagged or 802.1Q tagged packet sizes.

Bidder understands the requirements and shall meet or exceed them? Yes

23.2.1.1.12 Jumbo Frames

The Contractor's network shall support Jumbo Frames.

Bidder understands the requirements and shall meet or exceed them? Yes

23.2.1.1.13 Performance Monitoring

The Contractor shall conduct Performance Monitoring that includes the following:

1. Signal failure;

Bidder understands the requirements and shall meet or exceed them? Yes

2. Signal degradation;

Bidder understands the requirements and shall meet or exceed them? Yes

3. Connectivity or Loss of connectivity;

Bidder understands the requirements and shall meet or exceed them? Yes

4. Frame loss;

Bidder understands the requirements and shall meet or exceed them? Yes

5. Errored frames;

Bidder understands the requirements and shall meet or exceed them? Yes

6. Looping;

Bidder understands the requirements and shall meet or exceed them? Yes

7. Mis-inserted frames; and,

Bidder understands the requirements and shall meet or exceed them? Yes

8. Maintenance parameters.

Bidder understands the requirements and shall meet or exceed them? Yes

23.2.1.1.14 Network Monitoring

The Contractor shall monitor all services on a 24x7 basis.

Bidder understands the requirements and shall meet or exceed them? Yes

23.2.1.1.15 Technical Support

Contractor shall provide technical support for service issues via a toll-free telephone number that operates on a 24x7 basis.

Bidder understands the requirements and shall meet or exceed them? Yes

23.2.1.1.16 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 days' notice for service impacting planned maintenance. Emergency maintenance shall be performed as needed.

Bidder understands the requirements and shall meet or exceed them? Yes

23.2.1.1.17 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.

Bidder understands the requirements and shall meet or exceed them? Yes

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

Bidder understands the requirements and shall meet or exceed them? Yes

23.2.1.1.18 Contractor Wi-Fi Hotspot Service Offerings

The Contractor shall not configure services utilizing state-funded (or leased) infrastructure or resources to provide Contractor branded Wi-Fi hotspots for a fee/subscription to the general public. Use of any publicly funded power, facilities, or infrastructure in State leased or owned buildings to provide Contractor fee based Wi-Fi services is considered a gift of public funds.

The Contractor shall not provide Contractor branded Wi-Fi hotspot services for non-CALNET users by piggybacking onto CALNET Customer primary installations or by any other means that utilize publicly funded assets. This restriction includes but is not limited to installation of secondary equipment, circuits, or data channels both land based and wireless.

Bidder understands the requirements and shall meet or exceed them? Yes

23.2.1.2 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 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 Ethernet Virtual Connection (EVC) between two Customer locations.

Bidder understands the requirements and shall meet or exceed them? Yes

23.2.1.3 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

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 requirements and shall meet or exceed them? Yes

23.2.1.4 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 physical interfaces on the Customer's router or Ethernet switch.

Bidder understands the requirements and shall meet or exceed them? Yes

23.2.1.5 EPL and EVPL MAE Classes of Service (CoS)

Contractor shall provide three Classes of Service (CoS) options for the EPL/EVPL MAE services – 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.

Bidder understands the requirements and shall meet or exceed them? Yes

23.2.1.5.1 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.

The Contractor shall offer CIR - BASIC CoS services and features detailed in Table 23.2.1.6.b.

Bidder understands the requirements and shall meet or exceed them? Yes

23.2.1.5.2 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 23.2.1.5.2.

Table 23.2.1.5.2 lists the service performance objectives for PRIORITY CoS for distances within 250 network miles.

The Contractor shall offer CIR – PRIORITY CoS services and features detailed in Table 23.2.1.6.c.

Table 23.2.1.5.2 – PRIORITY CoS Performance Objectives

Performance Objective (≤ 250 miles)	PRIORITY CoS
Latency (one way)	<25ms
Jitter (one way)	<15ms
Packet Loss (one way)	<0.5%
Availability	>99.99%

Bidder understands the requirements and shall meet or exceed them? Yes

23.2.1.5.3 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 23.2.1.5.3.

Table 23.2.1.5.3 lists the service performance objectives for PREMIUM CoS for distances within 250 network miles.

The Contractor shall offer CIR - PREMIUM CoS services and features detailed in Table 23.2.1.6.d.

Table 23.2.1.5.3 – PREMIUM CoS Performance Objectives

Performance Objective (≤ 250 miles)	PREMIUM CoS
Latency (one way)	<15ms
Jitter (one way)	<5ms
Packet Loss (one way)	<0.1%
Availability	>99.99%

Bidder understands the requirements and shall meet or exceed them? Yes

23.2.1.6 EPL and EVPL MAE Service Feature Description

Contractor shall provide MAE services as described below.

23.2.1.6.1 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 Ethernet Virtual Connection (EVC).

1. Network Interface (NI): The point that the Customer's data transmission enters the Contractor's network. The point of interconnection between the Contractor's communication facility and Customer end-user's terminal equipment.

Bidder understands the requirements and shall meet or exceed them? Yes

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.

Bidder understands the requirements and shall meet or exceed them? Yes

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.

Bidder understands the requirements and shall meet or exceed them? Yes

23.2.1.6.2 Managed IP Enabled Routing Service:

1. Contractor shall offer a managed router or IP enabled routing device service that includes the components described in Section 23.2.1.6.1 in a bundled format which includes a Contractor owned, maintained and managed router or managed IP enabled routing device as identified in Table 23.2.1.6.a.

Bidder understands the requirements and shall meet or exceed them? Yes

2. The Contactor's managed routing service shall include proactive Customer notification.

Bidder understands the requirements and shall meet or exceed them? Yes

3. The Contractor shall provide customers full read only access to the managed router or managed IP enabled routing device.

Bidder understands the requirements and shall meet or exceed them? Yes

Contractors shall provide the services and Features described in Table 23.2.1.6.a

Table 23.2.1.6.a – MAE Services and Features

Line Item	Feature Name	Feature Description	Bidder's Product Description, Restrictions and Limitations	Bidder's Product Identifier	Bidder Meets or Exceeds? Yes or No
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 EVC and the NI.		ATS-BUN-MAE-EPL100M	Yes
2	EPL MAE Service Connection 10/100 Mbps with Managed IP Enabled Routing Device	10/100 Mbps Ethernet port per location with managed IP enabled routing device; Assessed per interface at bandwidths of 10/100 Mbps (10/100BASE-T). The EPL connection rate element includes the physical		ATS-BUN-MAE-EPL100MR	Yes

Line Item	Feature Name	Feature Description	Bidder's Product Description, Restrictions and Limitations	Bidder's Product Identifier	Bidder Meets or Exceeds? Yes or No
		connection (Access Link) between the Customer's demarcation and the core Ethernet network, the port, one EVC and the NI.			
3	EPL MAE Service Connection Gigabit Ethernet (1 Gbps)	1 Gbps Ethernet port per location; Assessed per interface at bandwidths of 1 Gbps 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 EVC and the NI.		ATS-BUN-MAE-EPL1G	Yes
4	EPL MAE Service Connection Gigabit Ethernet (1 Gbps) with Managed IP Enabled Routing Device	1 Gbps Ethernet port per location, with managed IP enabled routing device; Assessed per interface at bandwidths of 1 Gbps Ethernet. The EPL connection rate		ATS-BUN-MAE-EPL1GR	Yes

Line Item	Feature Name	Feature Description	Bidder's Product Description, Restrictions and Limitations	Bidder's Product Identifier	Bidder Meets or Exceeds? Yes or No
		element includes the physical connection (Access Link) between the Customer's demarcation and the core Ethernet network, the port, one EVC and the NI.			
5	EPL MAE Service Connection Gigabit Ethernet (10 GE)	10 Gbps Ethernet port per location; Assessed per interface at bandwidths of 10 Gbps 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 EVC and the NI.		ATS-BUN-MAE-EPL10GE	Yes
6	EPL MAE Service Connection Gigabit Ethernet (10 GE) with Managed IP Enabled	10 Gbps Ethernet port per location, with managed IP enabled routing device; Assessed per interface at bandwidths of 10 Gbps Ethernet.		ATS-BUN-MAE-EPL10GER	Yes

Line Item	Feature Name	Feature Description	Bidder's Product Description, Restrictions and Limitations	Bidder's Product Identifier	Bidder Meets or Exceeds? Yes or No
	Routing Device	The EPL connection rate element includes the physical connection (Access Link) between the Customer's demarcation and the core Ethernet network, the port, one EVC and the NI.			
7	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 EVC and the NI.		ATS-BUN-MAE-EVPL100M	Yes
8	EVPL MAE Service Connection 10/100 Mbps with Managed IP Enabled	Assessed per interface at bandwidths of 10/100 Mbps (10/100BASE-T) with managed IP enabled routing		ATS-BUN-MAE-EVPL100MR	Yes

Line Item	Feature Name	Feature Description	Bidder's Product Description, Restrictions and Limitations	Bidder's Product Identifier	Bidder Meets or Exceeds? Yes or No
	Routing Device	device. The EVPL connection rate element includes the physical connection (Access Link) between the Customer's demarcation and the core Ethernet network, the port, one EVC and the NI.			
9	EVPL MAE Service Connection Gigabit Ethernet (1 Gbps)	Assessed per interface at bandwidths of 1 Gbps 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 EVC and the NI.		ATS-BUN-MAE-EVPL1G	Yes
10	EVPL MAE Service Connection Gigabit Ethernet (1 Gbps) with Managed IP Enabled	Assessed per interface at bandwidths of 1 Gbps Ethernet with managed IP Enabled routing device. The EVPL connection rate		ATS-BUN-MAE-EVPL1GR	Yes

Line Item	Feature Name	Feature Description	Bidder's Product Description, Restrictions and Limitations	Bidder's Product Identifier	Bidder Meets or Exceeds? Yes or No
	Routing Device	element includes the physical connection (Access Link) between the Customer's demarcation and the core Ethernet network, the port, one EVC and the NI.			
11	EVPL MAE Service Connection 10 Gigabit Ethernet (10 GE)	Assessed per interface at bandwidths of 10 GE. The EVPL connection rate element includes the physical connection (Access Link) between the Customer's demarcation and the core Ethernet network, the port, one EVC and the NI.		ATS-BUN-MAE-EVPL10GE	Yes
12	EVPL MAE Service Connection 10 Gigabit Ethernet (10 GE) with Managed IP Enabled Routing Device	Assessed per interface at bandwidths of 10 GE with managed IP Enabled routing device. The EVPL connection rate element includes the physical connection (Access Link)		ATS-BUN-MAE-EVPL10GER	Yes

Line Item	Feature Name	Feature Description	Bidder's Product Description, Restrictions and Limitations	Bidder's Product Identifier	Bidder Meets or Exceeds? Yes or No
		between the Customer's demarcation and the core Ethernet network, the port, one EVC and the NI.			
13	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 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.		ATS-PRO-CIR-MAC100	Yes
14	Ethernet Virtual Connection (EVC) MAE	EVC rate element. EVCs shall be assigned in 1 Mbps increments within each port range. Customer may order		ATS-PRO-CIR-EVC	Yes

Line Item	Feature Name	Feature Description	Bidder's Product Description, Restrictions and Limitations	Bidder's Product Identifier	Bidder Meets or Exceeds? Yes or No
		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.			

Contractor shall provide the Services and Features described in Table 23.2.1.6.b.

Table 23.2.1.6.b – CIR Basic Class of Service MAE

Line Item	Feature Name	Feature Description	Bidder's Product Description, Restrictions and Limitations	Bidder's Product Identifier	Meets or Exceeds? Yes or No
1	BASIC CIR MAE - 2 Mbps	The guaranteed average bandwidth of the virtual circuit.		ATS-BUN-MAE-CIRB2M	Yes
2	BASIC CIR MAE - 4 Mbps	The guaranteed average bandwidth of the virtual circuit.		ATS-BUN-MAE-CIRB4M	Yes
3	BASIC CIR MAE - 5 Mbps	The guaranteed average bandwidth of the virtual circuit.		ATS-BUN-MAE-CIRB5M	Yes
4	BASIC CIR MAE - 8 Mbps	The guaranteed average		ATS-BUN-MAE-CIRB8M	Yes

Line Item	Feature Name	Feature Description	Bidder's Product Description, Restrictions and Limitations	Bidder's Product Identifier	Meets or Exceeds? Yes or No
		bandwidth of the virtual circuit.			
5	BASIC CIR MAE - 10 Mbps	The guaranteed average bandwidth of the virtual circuit.		ATS-BUN-MAE-CIRB10M	Yes
6	BASIC CIR MAE - 20 Mbps	The guaranteed average bandwidth of the virtual circuit.		ATS-BUN-MAE-CIRB20M	Yes
7	BASIC CIR MAE - 50 Mbps	The guaranteed average bandwidth of the virtual circuit.		ATS-BUN-MAE-CIRB50M	Yes
8	BASIC CIR MAE - 100 Mbps	The guaranteed average bandwidth of the virtual circuit.		ATS-BUN-MAE-CIRB100M	Yes
9	BASIC CIR MAE - 150 Mbps	The guaranteed average bandwidth of the virtual circuit.		ATS-BUN-MAE-CIRB150M	Yes
10	BASIC CIR MAE - 200 Mbps	The guaranteed average bandwidth of the virtual circuit.		ATS-BUN-MAE-CIRB200M	Yes
11	BASIC CIR MAE - 250 Mbps	The guaranteed average bandwidth of the virtual circuit.		ATS-BUN-MAE-CIRB250M	Yes
12	BASIC CIR MAE - 400 Mbps	The guaranteed average bandwidth of the virtual circuit.		ATS-BUN-MAE-CIRB400M	Yes
13	BASIC CIR MAE - 500 Mbps	The guaranteed average bandwidth of the virtual circuit.		ATS-BUN-MAE-CIRB500M	Yes

Line Item	Feature Name	Feature Description	Bidder's Product Description, Restrictions and Limitations	Bidder's Product Identifier	Meets or Exceeds? Yes or No
14	BASIC CIR MAE - 600 Mbps	The guaranteed average bandwidth of the virtual circuit.		ATS-BUN-MAE-CIRB600M	Yes
15	BASIC CIR MAE - 1 Gbps	The guaranteed average bandwidth of the virtual circuit.		ATS-BUN-MAE-CIRB1G	Yes
16	BASIC CIR MAE - 10 Gbps	The guaranteed average bandwidth of the virtual circuit.		ATS-BUN-MAE-CIRB10G	Yes

Contractor shall provide the Services and Features described in Table 23.2.1.6.c.

Table 23.2.1.6.c – CIR Priority Class of Service MAE

Line Item	Feature Name	Feature Description	Bidder's Product Description, Restrictions and Limitations	Bidder's Product Identifier	Meets or Exceeds? Yes or No
1	PRIORITY CIR MAE - 2 Mbps	The guaranteed average bandwidth of the virtual circuit.		ATS-BUN-MAE-CIRP2M	Yes
2	PRIORITY CIR MAE - 4 Mbps	The guaranteed average bandwidth of the virtual circuit.		ATS-BUN-MAE-CIRP4M	Yes
3	PRIORITY CIR MAE - 5 Mbps	The guaranteed average bandwidth of the virtual circuit.		ATS-BUN-MAE-CIRP5M	Yes
4	PRIORITY CIR MAE - 8 Mbps	The guaranteed average bandwidth of the virtual circuit.		ATS-BUN-MAE-CIRP8M	Yes

Line Item	Feature Name	Feature Description	Bidder's Product Description, Restrictions and Limitations	Bidder's Product Identifier	Meets or Exceeds? Yes or No
5	PRIORITY CIR MAE - 10 Mbps	The guaranteed average bandwidth of the virtual circuit.		ATS-BUN-MAE-CIRP10M	Yes
6	PRIORITY CIR MAE - 20 Mbps	The guaranteed average bandwidth of the virtual circuit.		ATS-BUN-MAE-CIRP20M	Yes
7	PRIORITY CIR MAE - 50 Mbps	The guaranteed average bandwidth of the virtual circuit.		ATS-BUN-MAE-CIRP50M	Yes
8	PRIORITY CIR MAE - 100 Mbps	The guaranteed average bandwidth of the virtual circuit.		ATS-BUN-MAE-CIRP100M	Yes
9	PRIORITY CIR MAE - 150 Mbps	The guaranteed average bandwidth of the virtual circuit.		ATS-BUN-MAE-CIRP150M	Yes
10	PRIORITY CIR MAE - 200 Mbps	The guaranteed average bandwidth of the virtual circuit.		ATS-BUN-MAE-CIRP200M	Yes
11	PRIORITY CIR MAE - 250 Mbps	The guaranteed average bandwidth of the virtual circuit.		ATS-BUN-MAE-CIRP250M	Yes
12	PRIORITY CIR MAE - 400 Mbps	The guaranteed average bandwidth of the virtual circuit.		ATS-BUN-MAE-CIRP400M	Yes
13	PRIORITY CIR MAE - 500 Mbps	The guaranteed average bandwidth of the virtual circuit.		ATS-BUN-MAE-CIRP500M	Yes

Line Item	Feature Name	Feature Description	Bidder's Product Description, Restrictions and Limitations	Bidder's Product Identifier	Meets or Exceeds? Yes or No
14	PRIORITY CIR MAE - 600 Mbps	The guaranteed average bandwidth of the virtual circuit.		ATS-BUN-MAE-CIRP600M	Yes
15	PRIORITY CIR MAE - 1 Gbps	The guaranteed average bandwidth of the virtual circuit.		ATS-BUN-MAE-CIRP1G	Yes
16	PRIORITY CIR MAE - 10 Gbps	The guaranteed average bandwidth of the virtual circuit.		ATS-BUN-MAE-CIRP10G	Yes

Contractor shall provide the Services and Features described in Table 23.2.1.6.d.

Table 23.2.1.6.d CIR – Premium Class of Service MAE

Line Item	Feature Name	Feature Description	Bidder's Product Description, Restrictions and Limitations	Bidder's Product Identifier	Meets or Exceeds? Yes or No
1	PREMIUM CIR MAE - 2 Mbps	The guaranteed average bandwidth of the virtual circuit.		ATS-BUN-MAE-CIRM2M	Yes
2	PREMIUM CIR MAE - 4 Mbps	The guaranteed average bandwidth of the virtual circuit.		ATS-BUN-MAE-CIRM4M	Yes
3	PREMIUM CIR MAE - 5 Mbps	The guaranteed average bandwidth of the virtual circuit.		ATS-BUN-MAE-CIRM5M	Yes
4	PREMIUM CIR MAE - 8 Mbps	The guaranteed average bandwidth of the virtual circuit.		ATS-BUN-MAE-CIRM8M	Yes

Line Item	Feature Name	Feature Description	Bidder's Product Description, Restrictions and Limitations	Bidder's Product Identifier	Meets or Exceeds? Yes or No
5	PREMIUM CIR MAE - 10 Mbps	The guaranteed average bandwidth of the virtual circuit.		ATS-BUN-MAE-CIRM10M	Yes
6	PREMIUM CIR MAE - 20 Mbps	The guaranteed average bandwidth of the virtual circuit.		ATS-BUN-MAE-CIRM20M	Yes
7	PREMIUM CIR MAE - 50 Mbps	The guaranteed average bandwidth of the virtual circuit.		ATS-BUN-MAE-CIRM50M	Yes
8	PREMIUM CIR MAE - 100 Mbps	The guaranteed average bandwidth of the virtual circuit.		ATS-BUN-MAE-CIRM100M	Yes
9	PREMIUM CIR MAE - 150 Mbps	The guaranteed average bandwidth of the virtual circuit.		ATS-BUN-MAE-CIRM150M	Yes
10	PREMIUM CIR MAE - 200Mbps	The guaranteed average bandwidth of the virtual circuit.		ATS-BUN-MAE-CIRM200M	Yes
11	PREMIUM CIR MAE - 250 Mbps	The guaranteed average bandwidth of the virtual circuit.		ATS-BUN-MAE-CIRM250M	Yes
12	PREMIUM CIR MAE - 400 Mbps	The guaranteed average bandwidth of the virtual circuit.		ATS-BUN-MAE-CIRM400M	Yes
13	PREMIUM CIR MAE - 500 Mbps	The guaranteed average bandwidth of the virtual circuit.		ATS-BUN-MAE-CIRM500M	Yes

Line Item	Feature Name	Feature Description	Bidder's Product Description, Restrictions and Limitations	Bidder's Product Identifier	Meets or Exceeds? Yes or No
14	PREMIUM CIR MAE - 600 Mbps	The guaranteed average bandwidth of the virtual circuit.		ATS-BUN-MAE-CIRM600M	Yes
15	PREMIUM CIR MAE -1 Gbps	The guaranteed average bandwidth of the virtual circuit.		ATS-BUN-MAE-CIRM1G	Yes
16	PREMIUM CIR MAE - 10 Gbps	The guaranteed average bandwidth of the virtual circuit.		ATS-BUN-MAE-CIRM10G	Yes

23.2.1.6.3 MAE Backup Options

If the Contractor provides LTE backup services for Managed Equipment the Contractor shall use current CALNET Cellular providers. All Bidders are required to indicate below that they understand the requirement regardless of their intent to provide LTE backup services.

Bidder understands this requirement and shall meet or exceed it? Yes

23.2.1.6.4 Additional Unsolicited MAE Services and Features

The Bidder may offer additional unsolicited MAE services and features in Table 23.2.1.6.4.

Table 23.2.1.6.4 – Unsolicited MAE Services and Features

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
Add-On Service to activate port/access gateway for Internet Access within Core Metro Ethernet Infrastructure. Not available as a standalone dedicated internet access service.			
1	Bundled Internet Access - 5Mbps NRC	ATS-MSN-INT-MPLS5M	Not Applicable for Port Only SKU's
2	Bundled Internet Access - 5Mbps MRC	ATS-MSR-INT-MPLS5M	Not Applicable for Port Only SKU's

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
3	Bundled Internet Access - 10Mbps NRC	ATS-MSN-INT-MPLS10M	Not Applicable for Port Only SKU's
4	Bundled Internet Access - 10Mbps MRC	ATS-MSR-INT-MPLS10M	Not Applicable for Port Only SKU's
5	Bundled Internet Access - 20Mbps NRC	ATS-MSN-INT-MPLS20M	Not Applicable for Port Only SKU's
6	Bundled Internet Access - 20Mbps MRC	ATS-MSR-INT-MPLS20M	Not Applicable for Port Only SKU's
7	Bundled Internet Access - 50Mbps NRC	ATS-MSN-INT-MPLS50M	Not Applicable for Port Only SKU's
8	Bundled Internet Access - 50Mbps MRC	ATS-MSR-INT-MPLS50M	Not Applicable for Port Only SKU's
9	Bundled Internet Access - 100Mbps NRC	ATS-MSN-INT-MPLS100M	Not Applicable for Port Only SKU's
10	Bundled Internet Access - 100Mbps MRC	ATS-MSR-INT-MPLS100M	Not Applicable for Port Only SKU's
11	Bundled Internet Access - 200Mbps NRC	ATS-MSN-INT-MPLS200M	Not Applicable for Port Only SKU's
12	Bundled Internet Access - 200Mbps MRC	ATS-MSR-INT-MPLS200M	Not Applicable for Port Only SKU's
13	Bundled Internet Access - 500Mbps NRC	ATS-MSN-INT-MPLS500M	Not Applicable for Port Only SKU's
14	Bundled Internet Access - 500Mbps MRC	ATS-MSR-INT-MPLS500M	Not Applicable for Port Only SKU's
15	Bundled Internet Access - 1Gbps NRC	ATS-MSN-INT-MPLS1G	Not Applicable for Port Only SKU's

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
16	Bundled Internet Access - 1Gbps MRC	ATS-MSR-INT-MPLS1G	Not Applicable for Port Only SKU's
17	Bundled Internet Access - 2Gbps NRC	ATS-MSN-INT-MPLS2G	Not Applicable for Port Only SKU's
18	Bundled Internet Access - 2Gbps MRC	ATS-MSR-INT-MPLS2G	Not Applicable for Port Only SKU's
19	Bundled Internet Access - 5Gbps NRC	ATS-MSN-INT-MPLS5G	Not Applicable for Port Only SKU's
20	Bundled Internet Access - 5Gbps MRC	ATS-MSR-INT-MPLS5G	Not Applicable for Port Only SKU's
21	Bundled Internet Access - 10Gbps NRC	ATS-MSN-INT-MPLS10G	Not Applicable for Port Only SKU's
22	Bundled Internet Access - 10Gbps MRC	ATS-MSR-INT-MPLS10G	Not Applicable for Port Only SKU's
23	NWN Provided Provisioning Services	ATS-PRO-CIR-DIA	Add-On Service to activate port/access gateway for Internet Access within Coretro Ethernet Infrastructure. Not available as a standalone dedicated internet access service.
24	Port Change Request for Circuit	ATS-MSN-CIR-PCR	
25	Port Expedite Request	ATS-MSN-CIR-PEXP	
26	One Static IP address	ATS-AAS-IPA-1S	NWN Support Services
27	Five Static IP addresses	ATS-AAS-IPA-5S	NWN Support Services
28	Twenty-nine Static IP addresses	ATS-AAS-IPA-29S	NWN Support Services
29	Mobile Connection 10M	ATS-AAS-MC-10M	NWN Support Services

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
30	Mobile Connection 20M	ATS-AAS-MC-20M	NWN Support Services
31	Mobile Connection 50M	ATS-AAS-MC-50M	NWN Support Services
32	Mobile Connection 100M	ATS-AAS-MC-100M	NWN Support Services
33	Mobile Connection 250M	ATS-AAS-MC-250M	NWN Support Services
34	Mobile Connection 500M	ATS-AAS-MC-500M	NWN Support Services
35	Setup for Mobile Connection	ATS-PRO-MC	
36	Security Information and Event Management (SIEM)		Correlated Log Management Services (CLMS))/Advanced Threat and Log Analysis Service (ATLAS) utilizes NWN's expertise in security analysis and operations within the NWN Security Operations Center (SOC) to correlate information from multiple devices and device types, both on premises and network based in the NWN network. It Provides NWN an overview of your network by correlating alerts from multiple devices and device types across the entire enterprise. NWN prioritizes security events based on threat and risk management methodologies generated from NWN standards and customer defined standards. NWN provides rapid notification to the customer when security events are detected and are identified as critical by NWN SOC. Includes customer access to weekly and monthly security summary analysis reports. The

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
			Correlated Log Management/Advanced Threat and Log Analysis service includes standard reports, threat analysis reports, log storage, Implementation assistance and initial device policy tuning. NWN collects the security relevant log and event information from firewalls, intrusion prevention sensors and other network devices using agent-less Parser/Aggregator technology deployed in your network. Event collection is provided for a wide variety of security and network devices which may be located within the NWN network or on your premises. A diverse set of "feeds" from security devices and services is recommended in order to get a better view of identified threats to your systems and take full advantage of the CLMS system's correlation capabilities. The intelligence produced is used by NWN's security analysis team to make security recommendations to you. Security recommendations, in the form of an email or a phone call, may vary in detail depending on type of incident, granularity of visibility within the network and breadth of the view. The response will be both verbal (phone call) and written (e-mailed) for severe and high incidents, and written only (e-mailed) for others as appropriate.

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
			Additional conditions may apply and will be outlined in the Scope of Work.
37	SIEM, 1 – 15 Devices	SEC-3PR-CN-CLMS1	SIEM service as described above. 1 – 15 Devices
38	SIEM, 1 – 15 Devices	SEC-3PN-CN-CLMS1	One-Time Charge for SIEM service as described above. 1 – 15 Devices
39	Each additional device	SEC-3PR-CN-CLMS1A	Each additional device above 15.
40	Each additional device	SEC-3PN-CN-CLMS1A	One-Time Charge for Each additional device above 15.
41	SIEM, 16 - 40 Devices	SEC-3PR-CN-CLMS2	SIEM service as described above. 16 - 40 Devices
42	SIEM, 16 - 40 Devices	SEC-3PN-CN-CLMS2	One-Time Charge for SIEM service as described above. 16 - 40 Devices
43	Each additional device	SEC-3PR-CN-CLMS2A	Each additional device above 40.
44	Each additional device	SEC-3PN-CN-CLMS2A	One-Time Charge for Each additional device above 40.
45	SIEM, 41 - 100 Devices	SEC-3PR-CN-CLMS3	SIEM service as described above. 41 - 100 Devices
46	SIEM, 41 - 100 Devices	SEC-3PN-CN-CLMS3	One-Time Charge for SIEM service as described above. 41 - 100 Devices
47	Each additional device	SEC-3PR-CN-CLMS3A	Each additional device above 100.
48	Each additional device	SEC-3PN-CN-CLMS3A	One-Time Charge for Each additional device above 100.
49	SIEM, 101 – 250 Devices	SEC-3PR-CN-CLMS4	SIEM service as described above. 101 – 250 Devices
50	SIEM, 101 – 250 Devices	SEC-3PN-CN-CLMS4	One-Time Charge for SIEM service as described above. 101 – 250 Devices
51	Each additional device	SEC-3PR-CN-CLMS4A	Each additional device above 250.
52	Each additional device	SEC-3PN-CN-CLMS4A	One-Time Charge for Each additional device above 250.

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
53	SIEM, 251 - 1000 Devices	SEC-3PR-CN-CLMS5	SIEM service as described above. 251 - 1000 Devices
54	SIEM, 251 - 1000 Devices	SEC-3PN-CN-CLMS5	One-Time Charge for SIEM service as described above. 251 - 1000 Devices
55	Each additional device	SEC-3PR-CN-CLMS5A	Each additional device above 1000.
56	Each additional device	SEC-3PN-CN-CLMS5A	One-Time Charge for Each additional device above 1000.
57	SIEM, 1001 - 2500 Devices	SEC-3PR-CN-CLMS6	SIEM service as described above. 1001 - 2500 Devices
58	SIEM, 1001 - 2500 Devices	SEC-3PN-CN-CLMS6	One-Time Charge for SIEM service as described above. 1001 - 2500 Devices
59	Each additional device	SEC-3PR-CN-CLMS6A	Each additional device above 2500.
60	Each additional device	SEC-3PN-CN-CLMS6A	One-Time Charge for Each additional device above 2500.
61	SIEM, 2501- 5000 Devices	SEC-3PR-CN-CLMS7	SIEM service as described above. 2501-5000 Devices
62	SIEM, 2501- 5000 Devices	SEC-3PN-CN-CLMS7	One-Time Charge for SIEM service as described above. 2501-5000 Devices
63	Each additional device	SEC-3PR-CN-CLMS7A	Each additional device above 5,000.
64	Each additional device	SEC-3PN-CN-CLMS7A	One-Time Charge for Each additional device above 5,000.
65	CLMS/ATLAS Tier 1 Storage	SEC-3PR-CN-CLMY1	Correlated Log Management Service (CLMS)/Advanced Threat and Log Analysis Service (ATLAS) – Tier 1 Per Incremental Year of Storage used with CLMS1. If customer desires longer than 1 year of archived storage, this fee applies Monthly Recurring for each additional year desired. Additional year storage for Tier 1 utilizes first in, first out log retention.

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
66	CLMS/ATLAS Tier 2 Storage	SEC-3PR-CN-CLMY2	Correlated Log Management Service (CLMS)/Advanced Threat and Log Analysis Service (ATLAS) – Tier 2 Per Incremental Year of Storage used with CLMS2. If customer desires longer than 1 year of archived storage, this fee applies Monthly Recurring for each additional year desired. Additional year storage for Tier 1 utilizes first in, first out log retention.
67	CLMS/ATLAS Tier 3 Storage	SEC-3PR-CN-CLMY3	Correlated Log Management Service (CLMS)/Advanced Threat and Log Analysis Service (ATLAS) – Tier 3 Per Incremental Year of Storage used with CLMS3. If customer desires longer than 1 year of archived storage, this fee applies Monthly Recurring for each additional year desired. Additional year storage for Tier 1 utilizes first in, first out log retention.
68	CLMS/ATLAS Tier 4 Storage	SEC-3PR-CN-CLMY4	Correlated Log Management Service (CLMS)/Advanced Threat and Log Analysis Service (ATLAS) – Tier 4 Per Incremental Year of Storage used with CLMS4. If customer desires longer than 1 year of archived storage, this fee applies Monthly Recurring for each additional year desired. Additional year storage for Tier 1 utilizes first in, first out log retention.
69	CLMS/ATLAS Tier 5 Storage	SEC-3PR-CN-CLMY5	Correlated Log Management Service (CLMS)/Advanced Threat and Log Analysis Service (ATLAS) – Tier 5 Per Incremental Year of

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
			Storage used with CLMS5. If customer desires longer than 1 year of archived storage, this fee applies Monthly Recurring for each additional year desired. Additional year storage for Tier 1 utilizes first in, first out log retention.
70	CLMS/ATLAS Tier 6 Storage	SEC-3PR-CN-CLMY6	Correlated Log Management Service (CLMS)/Advanced Threat and Log Analysis Service (ATLAS) – Tier 6 Per Incremental Year of Storage used with CLMS6. If customer desires longer than 1 year of archived storage, this fee applies Monthly Recurring for each additional year desired. Additional year storage for Tier 1 utilizes first in, first out log retention.
71	CLMS/ATLAS Tier 7 Storage	SEC-3PR-CN-CLMY7	Correlated Log Management Service (CLMS) Advanced Threat and Log Analysis Service (ATLAS) – Tier 7 Per Incremental Year of Storage used with CLMS7. If customer desires longer than 1 year of archived storage, this fee applies Monthly Recurring for each additional year desired. Additional year storage for Tier 1 utilizes first in, first out log retention.
72	CLMS/ATLAS Device Interface	SEC-3PN-CN-CLMCDI	One-Time Charge for Correlated Log Management Service (CLMS)/Advanced Threat and Log Analysis Service (ATLAS) – Custom (Non- standard) Device Interface Devices not included in the Supported Devices List incur a One-Time charge per each

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
			unique device (or group of devices). If a customer has multiple devices of the same type with the same operating environment, one fee will be levied. Development time may vary, and will be identified at time of request. Check with your NWN Account Team to determine if your device is supported.
73	CLMS/ATLAS Report	SEC-3PN-CN-CLMRPT	One-Time Charge for Correlated Log Management Service (CLMS)/Advanced Threat and Log Analysis Service (ATLAS) – Custom (Non- standard) Report Customers requiring special reports not listed in the SETA REPORTS List will incur a One-Time charge per each report. Development time may vary.
74	Custom Log Sources – Level 1	SEC-3PR-CN-CLMC1	Custom Log Sources – Application logs and custom log sources (priced per each custom log source). Level 1 is a threshold of 15 devices. Custom Level is based on the number of custom sources.
75	Custom Log Sources – Level 1	SEC-3PN-CN-CLMC1	One-Time Charge for Custom Log Sources – Application logs and custom log sources (priced per each custom log source). Level 1 is a threshold of 15 devices. Custom Level is based on the number of custom sources.
76	Custom Log Sources – Level 2	SEC-3PR-CN-CLMC2	Custom Log Sources – Application logs and custom log sources (priced per each custom log source). Level 2 is a threshold of 40 devices. Custom Level is based on the number of custom sources.

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
77	Custom Log Sources – Level 2	SEC-3PN-CN-CLMC2	One-Time Charge for Custom Log Sources – Application logs and custom log sources (priced per each custom log source). Level 2 is a threshold of 40 devices. Custom Level is based on the number of custom sources.
78	Custom Log Sources – Level 3	SEC-3PR-CN-CLMC3	Custom Log Sources – Application logs and custom log sources (priced per each custom log source). Level 3 is a threshold of 100 devices. Custom Level is based on the number of custom sources.
79	Custom Log Sources – Level 3	SEC-3PN-CN-CLMC3	One-Time Charge for Custom Log Sources – Application logs and custom log sources (priced per each custom log source). Level 3 is a threshold of 100 devices. Custom Level is based on the number of custom sources.
80	Custom Log Sources – Level 4	SEC-3PR-CN-CLMC4	Custom Log Sources – Application logs and custom log sources (priced per each custom log source). Level 4 is a threshold of 250 devices. Custom Level is based on the number of custom sources.
81	Custom Log Sources – Level 4	SEC-3PN-CN-CLMC4	One-Time Charge for Custom Log Sources – Application logs and custom log sources (priced per each custom log source). Level 4 is a threshold of 250 devices. Custom Level is based on the number of custom sources.
82	Custom Log Sources – Level 5	SEC-3PR-CN-CLMC5	Custom Log Sources – Application logs and custom log sources (priced per each custom log source). Level 5 is a threshold of 1000 devices. Custom Level is

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
			based on the number of custom sources.
83	Custom Log Sources – Level 5	SEC-3PN-CN-CLMC5	One-Time Charge for Custom Log Sources – Application logs and custom log sources (priced per each custom log source). Level 5 is a threshold of 1000 devices. Custom Level is based on the number of custom sources.
84	Custom Log Sources – Level 6	SEC-3PR-CN-CLMC6	Custom Log Sources – Application logs and custom log sources (priced per each custom log source). Level 6 is a threshold of 2500 devices. Custom Level is based on the number of custom sources.
85	Custom Log Sources – Level 6	SEC-3PN-CN-CLMC6	One-Time Charge for Custom Log Sources – Application logs and custom log sources (priced per each custom log source). Level 6 is a threshold of 2500 devices. Custom Level is based on the number of custom sources.
86	Custom Log Sources – Level 7	SEC-3PR-CN-CLMC7	Custom Log Sources – Application logs and custom log sources (priced per each custom log source). Level 7 is a threshold of 5000+ devices. Custom Level is based on the number of custom sources.
87	Custom Log Sources – Level 7	SEC-3PN-CN-CLMC7	One-Time Charge for Custom Log Sources – Application logs and custom log sources (priced per each custom log source). Level 7 is a threshold of 5000+ devices. Custom Level is based on the number of custom sources.
88	Advanced Correlation – Tier 1	SEC-3PR-CN-CLMA1	Advanced Correlation – Correlation with external data sources - DNS, DHCP, name

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
			databases, etc. (priced per correlation source for all devices within the tier). Tier 1 is a threshold of 15 devices.
89	Advanced Correlation – Tier 1	SEC-3PN-CN-CLMA1	One-Time Charge for Advanced Correlation – Correlation with external data sources - DNS, DHCP, name databases, etc. (priced per correlation source for all devices within the tier). Tier 1 is a threshold of 15 devices.
90	Advanced Correlation – Tier 2	SEC-3PR-CN-CLMA2	Advanced Correlation – Correlation with external data sources - DNS, DHCP, name databases, etc. (priced per correlation source for all devices within the tier). Tier 2 is a threshold of 40 devices.
91	Advanced Correlation – Tier 2	SEC-3PN-CN-CLMA2	One-Time Charge for Advanced Correlation – Correlation with external data sources - DNS, DHCP, name databases, etc. (priced per correlation source for all devices within the tier). Tier 2 is a threshold of 40 devices.
92	Advanced Correlation – Tier 3	SEC-3PR-CN-CLMA3	Advanced Correlation – Correlation with external data sources - DNS, DHCP, name databases, etc. (priced per correlation source for all devices within the tier). Tier 3 is a threshold of 100 devices.
93	Advanced Correlation – Tier 3	SEC-3PN-CN-CLMA3	One-Time Charge for Advanced Correlation – Correlation with external data sources - DNS, DHCP, name databases, etc. (priced per correlation source for all devices within the tier). Tier 3 is a threshold of 100 devices.

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
94	Advanced Correlation – Tier 4	SEC-3PR-CN-CLMA4	Advanced Correlation – Correlation with external data sources - DNS, DHCP, name databases, etc. (priced per correlation source for all devices within the tier). Tier 4 is a threshold of 250 devices.
95	Advanced Correlation – Tier 4	SEC-3PN-CN-CLMA4	One-Time Charge for Advanced Correlation – Correlation with external data sources - DNS, DHCP, name databases, etc. (priced per correlation source for all devices within the tier). Tier 4 is a threshold of 250 devices.
96	Advanced Correlation – Tier 5	SEC-3PR-CN-CLMA5	Advanced Correlation – Correlation with external data sources - DNS, DHCP, name databases, etc. (priced per correlation source for all devices within the tier). Tier 5 is a threshold of 1000 devices.
97	Advanced Correlation – Tier 5	SEC-3PN-CN-CLMA5	One-Time Charge for Advanced Correlation – Correlation with external data sources - DNS, DHCP, name databases, etc. (priced per correlation source for all devices within the tier). Tier 5 is a threshold of 1000 devices.
98	Advanced Correlation – Tier 6	SEC-3PR-CN-CLMA6	Advanced Correlation – Correlation with external data sources - DNS, DHCP, name databases, etc. (priced per correlation source for all devices within the tier). Tier 6 is a threshold of 2500 devices.
99	Advanced Correlation – Tier 6	SEC-3PN-CN-CLMA6	One-Time Charge for Advanced Correlation – Correlation with external data sources - DNS, DHCP, name databases, etc. (priced per correlation source for

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
			all devices within the tier). Tier 6 is a threshold of 2500 devices.
100	Advanced Correlation – Tier 7	SEC-3PR-CN-CLMA7	Advanced Correlation – Correlation with external data sources - DNS, DHCP, name databases, etc. (priced per correlation source for all devices within the tier). Tier 7 is a threshold of 5000 devices.
101	Advanced Correlation – Tier 7	SEC-3PN-CN-CLMA7	One-Time Charge for Advanced Correlation – Correlation with external data sources - DNS, DHCP, name databases, etc. (priced per correlation source for all devices within the tier). Tier 7 is a threshold of 5000 devices.
102	NWN VSS-PRO (Vulnerability Scanning Service)		The VSS-Pro service is used to conduct host discovery and/or vulnerability scans on external and/or internal IP-based systems and networks. A variety of scanning techniques are employed to survey the security posture of the target IP-based systems and networks. These scans proactively test for known vulnerabilities and the existence of mainstream industry practice security configurations. External scanning addresses all Internet-facing assets such as routers, firewalls, web servers, and e-mail servers for potential security weaknesses, checking for the "open doors" that could allow a hacker to gain unauthorized access to the network and exploit critical assets. Internal scanning addresses all internal assets such as workstations, intranet servers,

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
			and printers for Trojans, improper configurations, peer-to-peer (PTP) file sharing programs such as Morpheus, Kazaa, etc., and more. The VSS-Pro service also provides workflow management, host-based risk assignments, and remediation progress reporting. In addition, VSS-Pro includes assistance in setting up and maintaining scan profiles and scheduling, project management of the customer's remediation efforts (regardless of whether they are handled by the customer's IT staff or 3rd party provider), and provides access to NWN's staff of security analysts for additional information and guidance regarding more complex technical issues. In addition to the portal view, critical vulnerabilities that are identified are forwarded on a regular basis to the CLMS/ATLAS systems for correlation with other events within the network. Understand the vulnerabilities that exist, and the threats against these assets can be another critical element in the detection and prevention of a successful attack from either external or internal resources or devices.
103	VSS–PRO Reconnaissance Network Appliance (RNA) Set UP - Desktop	SEC-3PN-CN-VSSDRN	One-Time Charge for Desktop RNA Installation and Set Up

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
104	VSS–PRO Reconnaissance Network Appliance (RNA) Set UP - Rackmount	SEC-3PN-CN-VSSRRN	One-Time Charge for Rackmount RNA Installation and Set Up
105	VSS-PRO – Quarterly Scanning 130	SEC-3PR-CN-VSSQ130	Up to 130 devices
106	VSS-PRO – Quarterly Scanning 250	SEC-3PR-CN-VSSQ250	Up to 250 devices
107	VSS-PRO – Quarterly Scanning 500	SEC-3PR-CN-VSSQ500	Up to 500 devices
108	VSS-PRO – Quarterly Scanning 1000	SEC-3PR-CN-VSSQ1K	Up to 1000 devices
109	VSS-PRO – Quarterly Scanning 2000	SEC-3PR-CN-VSSQ2K	Up to 2000 devices
110	VSS-PRO – Quarterly Scanning 3000	SEC-3PR-CN-VSSQ3K	Up to 3000 devices
111	VSS-PRO – Quarterly Scanning 3000+ per 1K incremental	SEC-3PR-CN-VSSQ3KP	Each added 1K above 3K
112	VSS-PRO – Monthly Scanning 130	SEC-3PR-CN-VSSM130	Up to 130 devices
113	VSS-PRO – Monthly Scanning 250	SEC-3PR-CN-VSSM250	Up to 250 devices
114	VSS-PRO – Monthly Scanning 500	SEC-3PR-CN-VSSM500	Up to 500 devices
115	VSS-PRO – Monthly Scanning 1000	SEC-3PR-CN-VSSM1K	Up to 1000 devices
116	VSS-PRO – Monthly Scanning 2000	SEC-3PR-CN-VSSM2K	Up to 2000 devices
117	VSS-PRO – Monthly Scanning 3000	SEC-3PR-CN-VSSM3K	Up to 3000 devices
118	VSS-PRO – Monthly Scanning 3000+ per 1K incremental	SEC-3PR-CN-VSSM3KP	Each added 1K above 3K
119	VSS-PRO – On Demand Scanning 130	SEC-3PR-CN-VSSD130	Up to 130 devices

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
120	VSS-PRO – On Demand Scanning 250	SEC-3PR-CN-VSSD250	Up to 250 devices
121	VSS-PRO – On Demand Scanning 500	SEC-3PR-CN-VSSD500	Up to 500 devices
122	VSS-PRO – On Demand Scanning 1000	SEC-3PR-CN-VSSD1K	Up to 1000 devices
123	VSS-PRO – On Demand Scanning 2000	SEC-3PR-CN-VSSD2K	Up to 2000 devices
124	VSS-PRO – On Demand Scanning 3000	SEC-3PR-CN-VSSD3K	Up to 3000 devices
125	VSS-PRO – On Demand Scanning 3000+	SEC-3PR-CN-VSSD3KP	Each added 1K above 3K
126	Premises Based Firewall Service (PBFW) – (NWN Owned and Managed Firewalls) Complete Service		The NWN owned and managed Premises-Based Firewall Service – Complete Service provides a highly functional layer of security to your networks. The service is a fully managed bundled solution, which includes all hardware and software components, configuration, installation, day to day management and maintenance, as well as expert customer support and proactive network monitoring. The PBFW service can forward log information to the CLMS/ATLAS for advanced correlation within the network. With the ability to understand the communications as well as the ability to actively modify rules with customer approval based on attack information gathered from the

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
			CLMS/ATLAS system, NWN can provide that additional level of protection and ability to not only report, but act on actionable events. Additional conditions may apply and will be outlined in the Scope of Work.
127	Cisco Configurations – Managed PBFW		Cisco Configurations - Managed PBFW
128	Cisco Single Firewall for Large Office	SEC-3PR-CN-PFSLC	Cisco Single Firewall for Large Office NWN Owned and Managed Cisco Single firewall for large office – 650 Mbps Firewall Throughput
129	Cisco Single Firewall for Medium Office	SEC-3PR-CN-PFSMC	Cisco Single Firewall for Medium Office NWN Owned and Managed Cisco Single firewall for Medium office – 450 Mbps Firewall Throughput
130	Cisco Single Firewall for Small Office	SEC-3PR-CN-PFSSC	Cisco Single Firewall for Small Office NWN Owned and Managed Cisco Single firewall for small office – 300 Mbps Firewall Throughput
131	Cisco High Availability Firewall for Extra Large Office	SEC-3PR-CN-PFELHAC	Cisco High Availability Firewall for Extra Large Office NWN Owned and Managed Cisco High Availability Firewall for Extra Large Office - 1.2 Gbps Firewall Throughput
132	Cisco High Availability Firewall for Large Office	SEC-3PR-CN-PFLHAC	Cisco High Availability Firewall for Large Office NWN Owned and Managed Cisco High Availability Firewall for Large Office – 650 Mbps Firewall Throughput
133	Cisco High Availability Firewall for Medium Office	SEC-3PR-CN-PFMHAC	Cisco High Availability Firewall for Medium Office NWN Owned and Managed Cisco High Availability

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
			Firewall for Medium Office – 450 Mbps Firewall Throughput
134	Fortigate Configurations – Managed PBFW		Fortigate Configurations - Managed PBFW
135	Enterprise Office for Fortigate Single Firewall	SEC-3PR-CN-PFEOS	Fortigate Single Firewall for Enterprise Office Managed firewall service monthly recurring fee including single Fortigate CPE, all required licensing and full NWN management – 10 Gbps Firewall Throughput.
136	Fortigate Single Firewall for Extra Large Office	SEC-3PR-CN-PFSELF	Fortigate Single Firewall for Extra Large Office Managed firewall service monthly recurring fee including single Fortigate CPE, all required licensing and full NWN management – 5 Gbps Firewall Throughput
137	Fortigate Single Firewall for Large Office	SEC-3PR-CN-PFSLF	Fortigate Single Firewall for Large Office Managed firewall service monthly recurring fee including single Fortigate CPE, all required licensing and full NWN management – 500 Mbps Firewall Throughput.
138	Fortigate Single Firewall for Medium Office	SEC-3PR-CN-PFSMF	Fortigate Single Firewall for Medium Office Managed firewall service monthly recurring fee including single Fortigate CPE, all required licensing and full NWN management – 100 Mbps Firewall Throughput.
139	Fortigate Single Firewall Small Office	SEC-3PR-CN-PFSSF	Fortigate Single Firewall for Small Office Managed firewall service monthly recurring fee including single Fortigate CPE, all required licensing and full NWN management – 10 Mbps Firewall Throughput.

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
140	Fortigate Single Firewall for SOHO Office	SEC-3PR-CN-PFSSHF	Fortigate Single Firewall for SOHO Office Managed firewall service monthly recurring fee including single Fortigate CPE, all required licensing and full NWN management – 5 Mbps Firewall Throughput.
141	Enterprise Office for Fortigate High Availability Firewall	SEC-3PR-CN-PFEOHAF	Fortigate High Availability Firewall for Enterprise Office Managed firewall service monthly recurring fee including HA Fortigate CPE, all required licensing and full NWN management – 10 Gbps Firewall Throughput.
142	Fortigate High Availability Firewall for Extra Large Office	SEC-3PR-CN-PFELHAF	Fortigate High Availability Firewall for Extra Large Office Managed firewall service monthly recurring fee including HA Fortigate CPE, all required licensing and full NWN management – 5 Gbps Firewall Throughput.
143	Fortigate High Availability Firewall for Large Office	SEC-3PR-CN-PFLHAF	Fortigate High Availability Firewall for Large Office Managed firewall service monthly recurring fee including HA Fortigate CPE, all required licensing and full NWN management – 500 Mbps Firewall Throughput.
144	Fortigate High Availability Firewall for Medium Office	SEC-3PR-CN-PFMOHAF	Fortigate High Availability Firewall for Medium Office Managed firewall service monthly recurring fee including HA Fortigate CPE, all required licensing and full NWN management – 100 Mbps Firewall Throughput.
145	Firewall Optional Add- On Features		
146	IPS Add-On – MIDS 3	SEC-3PR-CN-OPTIPSF	IPS Add-On provides the customer with intrusion protection capability to the firewall. Includes

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
			the following: • 7x24 monitoring • CPE Managed Option (customized to equipment • Signature updates • Vendor updates (3-5 business days) • Emergency updates (24 hours) • Incident Notification (Email for medium alerts within; High includes a telephone call) • Sensor Configuration: o Custom Tuning o Continuous Sensor Tuning o Custom Signatures (20) • Sensor Location: o Alarm Analysis o Event Correlation & Analysis with additional real time analyst support o Root cause analysis for high level alerts o Investigation support o Customer notification based on SLO o Attack signature recognition o Problem ticketing/Reporting o Initial configuration support o Configuration maintenance
147	URL Filtering Add-On	SEC-3PR-CN-OPTURLF	URL Filtering Add-On provides the customer with basic URL filtering capability. Enables enterprises to build their own Web access policies by selectively blocking access to sites. Enables the customer to allow domain name control within the firewall to block specific sites.
148	Anti-virus Add- On	SEC-3PR-CN-OPTAVF	Anti-virus Add-On additional feature which will look for known

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
			malicious software and protect against threats.
149	IPSEC (VPN) Add-On	SEC-3PR-CN-OPTVPN	IPSEC (VPN) Add-On allows remote VPN user access to applications behind the firewall.
150	Additional Port Add-On (DMZ) (2+, First Port is included)	SEC-3PR-CN-OPTPORT	Additional Port Add-On (DMZ) (2+, First Port is included) to allow additional DMZ to segment the local area network into additional segments.
151	Premises Based Firewall Service (PBFW) Customer Owned and NWN Managed – Complete Service		The customer owned and NWN managed Premises-Based Firewall Service – Complete Service provides a highly functional layer of security to your networks. The service is a fully managed solution, which includes day to day management and maintenance, as well as expert customer support and proactive network monitoring. The PBFW service can forward log information to the CLMS/ATLAS for advanced correlation within the network. With the ability to understand the communications as well as the ability to actively modify rules with customer approval based on attack information gathered from the CLMS/ATLAS system, NWN can provide that additional level of protection and ability to not only report, but act on actionable events.
152	Installation for Firewall Administration	SEC-3PN-CN-PFCINST	One-Time Charge for Installation for Firewall Administration

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
153	Firewall Administration 1 to 4 firewalls	SEC-3PR-CN-PFCA4	Firewall Administration 1 to 4 firewalls Management Kit required.
154	Firewall Administration 5 to 9 firewalls	SEC-3PR-CN-PFCA9	Firewall Administration 5 to 9 firewalls Management Kit required.
155	Firewall Administration 10 to 19 firewalls	SEC-3PR-CN-PFCA19	Firewall Administration 10 to 19 firewalls Management Kit required.
156	Firewall Administration 20 to 29 firewalls	SEC-3PR-CN-PFCA29	Firewall Administration 20 to 29 firewalls Management Kit required.
157	Firewall Administration 30 to 44 firewalls	SEC-3PR-CN-PFCA44	Firewall Administration 30 to 44 firewalls Management Kit required.
158	Firewall Administration 45 or greater firewalls	SEC-3PR-CN-PFCA45	Firewall Administration 45 or greater firewalls Management Kit required.
159	Management Kit	SEC-3PN-CN-PFCMK	One-Time Charge for Management Kit supports 4 Port out of band management including power and console connections for previse based managed solutions. Requires customer provided Measured Business Line or equivalent.
160	Managed Intrusion Detection Service - MIDS 3 (Customer owned and NWN managed equipment		NWN Managed Intrusion Detection Service provides security monitoring capabilities to include security audit, monitoring, attack recognition, control over employee Internet access, virus scanning, and incident response for customer owned equipment. NWN Certified IPS Sensors is provided based on the number of zones monitored. The qualifications for multi-sensor/zone discounts: • Counts are based on a per-

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
			department/organization order • Minimum of two monitored zones per location with Internet access point • Additional monitored IDS zones on same network count towards volume discount • Must include an NWN management kit at the Internet access location. • Configuration may require separate security management demilitarized zone (DMZ) off the customer firewall. The NWN MIDS solution integrates into the CLMS/ATLAS to provide enhanced visibility into network segments protected by IPS/IDS capabilities. Alarms/alerts and log information from these IPS/IDS devices are correlated into the advanced analytics within CLMS/ATLAS to allow these factors discovered by the MIDS systems to aid in the detection of hacker activity within a network.
161	Setup for IPS	SEC-3PN-CN-MICINST	One-Time Charge for Setup for IPS Installation charge for IPS Service. MIDS Level 3 sensor placement must be behind a screening device (i.e., Firewall, screening router, etc.).
162	IPS 1 to 59 zones	SEC-3PR-CN-MIC59	IPS 1 to 59 zones Management Kit required.
163	IPS 60 to 89 zones	SEC-3PR-CN-MIC89	IPS 60 to 89 zones Management Kit required.
164	IPS – 90 to 134 zones	SEC-3PR-CN-MIC134	IPS – 90 to 134 zones Management Kit required.

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
165	IPS - 135 to 179 zones	SEC-3PR-CN-MIC179	IPS - 135 to 179 zones Management Kit required.
166	IPS 180 or greater zones	SEC-3PR-CN-MIC180	IPS 180 or greater zones Management Kit required.
167	Managed Network Access Control Service (NAC)		Managed Network Access Control Service (NAC) utilizes NWN's expertise in endpoint security to analyze information about how endpoints impact the security posture of the network. Base service includes Hardware Other capabilities include: •Rogue Device Detection – Detects and alerts when unknown devices attempt to connect to a network (wired or wireless) •Advanced Asset Visibility – Identifies & classifies all devices with an IP address connecting to the network, by device & location on the network. Supports wired, wireless and VPN networks •Endpoint Compliance Identification – Remote inspection of Windows, Mac and Linux operating systems for compliance. Identify missing patches, out of date AV, required services not running, etc. Infractions can be reported on •Unauthorized Application Notification – Remote inspection of the endpoint will inventory the applications installed and notify on unauthorized applications •Misconfigured Asset Detection – Assets that have been misconfigured can be identified. •IoT Device Detection – identify IoT devices on the network and

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
			ensure they are properly segmented to prevent the threat of botnets attacking the internal network or being used as a threat to other organizations •System Patching & Security Updates – Support, management, maintenance of management server and sensors •System Health monitoring for all NAC solution components •Technical Support – phone & remote-based support 24x7 •Real-time monitoring and alerting of NAC events 24x7 with response and notification to customer actionable events •Correlation NAC events in association with customer log event sources if provided by customer for analysis (Note: Requires ATLAS coverage for other supported log sources) •Customer Web Portal – for reports, support tickets, log analyzer, log charts, security dashboard & web portal with alert data, event drill downs, graphs, etc. NAC Reporting – On R additional use cases the customer purchases. The Customer is required to provide the following: •Internet Connection •Network documentation & flow diagrams, including topology, d device assignment categories •Inbound & Outbound remote

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
			access via SSH to at least one sensor at each location •3 network ports on the core network switch for NAC sensors •A compatible managed switch and available ports •Internal management IP address for each sensor •Internal IP address for each network segment (or VLAN) •Customer is responsible for the configuration of a FQDN on the network domain for name resolution of the IP address assigned to the sensor for captive portal redirection •Physical installation and cabling of the sensor and other equipment included in service •Active participation as requested for review of network devices. May include confirmation and/or guidance regarding device categories of both known and unknown devices •If available, an OOB (Out of Band) method such as a IP KVM or Serial connection be connected to any sensor installed •Compatible managed switch, including switch documentation •Customer Project Manager/Coordinator and a Technical Resource to provide coordination of schedules and resources required for installation and configuration.
168	Managed Network Access Control	SEC-3PR-CN-NACSV1	Managed Network Access Control Service (NAC) – Tier 1

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
	Service (NAC) – Tier 1		(Small) -Advanced Visibility of Assets -Identify Compliancy of Endpoints -Unauthorized/Authorized Applications Notification -Misconfigured Asset Detection -IoT Device Detection NAC is broken into various Service Levels depending upon the number of devices identified upon initial installation and enablement of service. Customer may increase their service level at any time per incremental costs. Tier 1 is an initial enablement of up to 500 devices and/or 150 users per site. If customer users and devices fall into two tier levels, the higher tier will apply. May require agent or WMI connectivity for some features.
169	Managed Network Access Control Service (NAC) – Tier 1	SEC-3PN-CN-NACSV1	One-Time Charge for Managed Network Access Control Service (NAC) – Tier 1 (Small) -Advanced Visibility of Assets -Identify Compliancy of Endpoints -Unauthorized/Authorized Applications Notification -Misconfigured Asset Detection -IoT Device Detection NAC is broken into various Service Levels depending upon the number of devices identified upon initial installation and enablement of service. Customer may increase their service level at any time per incremental costs. Tier 1 is an initial enablement of up to 500

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
			devices and/or 150 users per site. If customer users and devices fall into two tier levels, the higher tier will apply. May require agent or WMI connectivity for some features.
170	Managed Network Access Control Service (NAC) – Tier 2	SEC-3PR-CN-NACSV2	Managed Network Access Control Service (NAC) – Tier 2 (Medium) -Advanced Visibility of Assets -Identify Compliancy of Endpoints -Unauthorized/Authorized Applications Notification -Misconfigured Asset Detection -IoT Device Detection NAC is broken into various Service Levels depending upon the number of devices identified upon initial installation and enablement of service. Customer may increase their service level at any time per incremental costs. Tier 2 is an initial enablement of 501 to 1,000 devices and/or 151-350 users per site. If customer users and devices fall into two tier levels, the higher tier will apply. May require agent or WMI connectivity for some features.
171	Managed Network Access Control Service (NAC) – Tier 2	SEC-3PN-CN-NACSV2	One-Time Charge for Managed Network Access Control Service (NAC) – Tier 2 (Medium) -Advanced Visibility of Assets -Identify Compliancy of Endpoints -Unauthorized/Authorized Applications Notification -Misconfigured Asset Detection -IoT Device Detection NAC is broken into various Service Levels

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
			depending upon the number of devices identified upon initial installation and enablement of service. Customer may increase their service level at any time per incremental costs. Tier 2 is an initial enablement of 501 to 1,000 devices and/or 151-350 users per site. If customer users and devices fall into two tier levels, the higher tier will apply. May require agent or WMI connectivity for some features.
172	Managed Network Access Control Service (NAC) – Tier 3	SEC-3PR-CN-NACSV3	Managed Network Access Control Service (NAC) – Tier 3 (Large) -Advanced Visibility of Assets -Identify Compliancy of Endpoints -Unauthorized/Authorized Applications Notification -Misconfigured Asset Detection -IoT Device Detection NAC is broken into various Service Levels depending upon the number of devices identified upon initial installation and enablement of service. Customer may increase their service level at any time per incremental costs. Tier 3 is an initial enablement of 1,001 to 2,500 devices and/or 351-850 users per site. If customer users and devices fall into two tier levels, the higher tier will apply. May require agent or WMI connectivity for some features
173	Managed Network Access Control	SEC-3PN-CN-NACSV3	One-Time Charge for Managed Network Access Control Service

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
	Service (NAC) – Tier 3		(NAC) – Tier 3 (Large) -Advanced Visibility of Assets -Identify Compliancy of Endpoints -Unauthorized/Authorized Applications Notification -Misconfigured Asset Detection -IoT Device Detection NAC is broken into various Service Levels depending upon the number of devices identified upon initial installation and enablement of service. Customer may increase their service level at any time per incremental costs. Tier 3 is an initial enablement of 1,001 to 2,500 devices and/or 351-850 users per site. If customer users and devices fall into two tier levels, the higher tier will apply. May require agent or WMI connectivity for some features
174	Managed Network Access Control Service (NAC) – Tier 4	SEC-3PR-CN-NACSV4	Managed Network Access Control Service (NAC) – Tier 4 (Extra Large) -Advanced Visibility of Assets -Identify Compliancy of Endpoints -Unauthorized/Authorized Applications Notification -Misconfigured Asset Detection -IoT Device Detection NAC is broken into various Service Levels depending upon the number of devices identified upon initial installation and enablement of service. Customer may increase their service level at any time per incremental costs. Tier 4 is an initial enablement of 2,501 to

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
			4,000 devices and/or 851-1,500 users per site. If customer users and devices fall into two tier levels, the higher tier will apply. May require agent or WMI connectivity for some features, May require agent or WMI connectivity for some features
175	Managed Network Access Control Service (NAC) – Tier 4	SEC-3PN-CN-NACSV4	One-Time Charge for Managed Network Access Control Service (NAC) – Tier 4 (Extra Large) -Advanced Visibility of Assets -Identify Compliancy of Endpoints -Unauthorized/Authorized Applications Notification -Misconfigured Asset Detection -IoT Device Detection NAC is broken into various Service Levels depending upon the number of devices identified upon initial installation and enablement of service. Customer may increase their service level at any time per incremental costs. Tier 4 is an initial enablement of 2,501 to 4,000 devices and/or 851-1,500 users per site. If customer users and devices fall into two tier levels, the higher tier will apply. May require agent or WMI connectivity for some features, May require agent or WMI connectivity for some features
176	Managed Network Access Control Service (NAC) – Tier 5	SEC-3PR-CN-NACSV5	Managed Network Access Control Service (NAC) – Tier 5 (Enterprise) -Advanced Visibility of Assets -Identify Compliancy of Endpoints -Unauthorized/Authorized

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
			Applications Notification -Misconfigured Asset Detection -IoT Device Detection NAC is broken into various Service Levels depending upon the number of devices identified upon initial installation and enablement of service. Customer may increase their service level at any time per incremental costs. Tier 5 is an initial enablement of 4,001- 10,000 devices and/or 1,501- 3,500 users per site. If customer users and devices fall into two tier levels, the higher tier will apply. May require agent or WMI connectivity for some features
177	Managed Network Access Control Service (NAC) – Tier 5	SEC-3PN-CN-NACSV5	One-Time Charge for Managed Network Access Control Service (NAC) – Tier 5 (Enterprise) -Advanced Visibility of Assets -Identify Compliancy of Endpoints -Unauthorized/Authorized Applications Notification -Misconfigured Asset Detection -IoT Device Detection NAC is broken into various Service Levels depending upon the number of devices identified upon initial installation and enablement of service. Customer may increase their service level at any time per incremental costs. Tier 5 is an initial enablement of 4,001- 10,000 devices and/or 1,501- 3,500 users per site. If customer users and devices fall into two tier levels, the higher tier will apply. May require

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
			agent or WMI connectivity for some features
178	Managed Network Access Control Service (NAC) – Additional Features		Managed Network Access Control Service (NAC) – Additional Features
179	Managed Network Access Control Service (NAC) – Tier 1 Advanced NAC Use Case	SEC-3PR-CN-NSV1AUC	Managed Network Access Control Service (NAC) – Tier 1 Advanced NAC Use Case - Flexible Access Control by User, Device or Policy - Remediation of Out of Compliance Endpoints - Unauthorized Application Prevention - Rogue Device Prevention Tier 1 Advanced NAC Use Case – Customer-requested use cases are defined as specific functionality requirements defined for NAC Service. These use cases are ranked into one of two categories: Basic and Advanced. A list of advanced use cases can be provided.Some features may require: CLI access to layer 2 or 3 switch so ACL's can be applied. Enforcement to be enabled, AD integration, and WMI integration or agent. Agent or WMI connectivity
180	Managed Network Access Control Service (NAC) – Tier 1 Advanced NAC Use Case	SEC-3PN-CN-NSV1AUC	One-Time Charge for Managed Network Access Control Service (NAC) – Tier 1 Advanced NAC Use Case - Flexible Access Control by User, Device or Policy - Remediation of Out of Compliance Endpoints

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
			- Unauthorized Application Prevention - Rogue Device Prevention Tier 1 Advanced NAC Use Case – Customer-requested use cases are defined as specific functionality requirements defined for NAC Service. These use cases are ranked into one of two categories: Basic and Advanced. A list of advanced use cases can be provided.Some features may require: CLI access to layer 2 or 3 switch so ACL's can be applied. Enforcement to be enabled, AD integration, and WMI integration or agent. Agent or WMI connectivity
181	Managed Network Access Control Service (NAC) – Tier 2 Advanced NAC Use Case	SEC-3PR-CN-NSV2AUC	Managed Network Access Control Service (NAC) – Tier 2 Advanced NAC Use Case - Flexible Access Control by User, Device or Policy - Remediation of Out of Compliance Endpoints - Unauthorized Application Prevention - Rogue Device Prevention Tier 2 Advanced NAC Use Case – Customer-requested use cases are defined as specific functionality requirements defined for NAC Service. These use cases are ranked into one of two categories: Basic and Advanced. A list of advanced use cases can be provided. Some features may require: CLI access to layer 2 or 3 switch so

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
			ACL's can be applied. Enforcement to be enabled, AD integration, and WMI integration or agent. Agent or WMI connectivity
182	Managed Network Access Control Service (NAC) – Tier 2 Advanced NAC Use Case	SEC-3PN-CN-NSV2AUC	One-Time Charge for Managed Network Access Control Service (NAC) – Tier 2 Advanced NAC Use Case - Flexible Access Control by User, Device or Policy - Remediation of Out of Compliance Endpoints - Unauthorized Application Prevention - Rogue Device Prevention Tier 2 Advanced NAC Use Case – Customer-requested use cases are defined as specific functionality requirements defined for NAC Service. These use cases are ranked into one of two categories: Basic and Advanced. A list of advanced use cases can be provided. Some features may require: CLI access to layer 2 or 3 switch so ACL's can be applied. Enforcement to be enabled, AD integration, and WMI integration or agent. Agent or WMI connectivity
183	Managed Network Access Control Service (NAC) – Tier 3 Advanced NAC Use Case	SEC-3PR-CN-NSV3AUC	Managed Network Access Control Service (NAC) – Tier 3 Advanced NAC Use Case - Flexible Access Control by User, Device or Policy - Remediation of Out of Compliance Endpoints - Unauthorized Application

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
			Prevention - Rogue Device Prevention Tier 3 Advanced NAC Use Case – Customer-requested use cases are defined as specific functionality requirements defined for NAC Service. These use cases are ranked into one of two categories: Basic and Advanced. A list of advanced use cases can be provided. Some features may require: CLI access to layer 2 or 3 switch so ACL's can be applied. Enforcement to be enabled, AD integration, and WMI integration or agent. Agent or WMI connectivity
184	Managed Network Access Control Service (NAC) – Tier 3 Advanced NAC Use Case	SEC-3PN-CN-NSV3AUC	One-Time Charge for Managed Network Access Control Service (NAC) – Tier 3 Advanced NAC Use Case - Flexible Access Control by User, Device or Policy - Remediation of Out of Compliance Endpoints - Unauthorized Application Prevention - Rogue Device Prevention Tier 3 Advanced NAC Use Case – Customer-requested use cases are defined as specific functionality requirements defined for NAC Service. These use cases are ranked into one of two categories: Basic and Advanced. A list of advanced use cases can be provided. Some features may require: CLI access to layer 2 or 3 switch so

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
			ACL's can be applied. Enforcement to be enabled, AD integration, and WMI integration or agent. Agent or WMI connectivity
185	Managed Network Access Control Service (NAC) – Tier 4 Advanced NAC Use Case	SEC-3PR-CN-NSV4AUC	Managed Network Access Control Service (NAC) – Tier 4 Advanced NAC Use Case - Flexible Access Control by User, Device or Policy - Remediation of Out of Compliance Endpoints - Unauthorized Application Prevention - Rogue Device Prevention Tier 4 Advanced NAC Use Case – Customer-requested use cases are defined as specific functionality requirements defined for NAC Service. These use cases are ranked into one of two categories: Basic and Advanced. A list of advanced use cases can be provided. Some features may require: CLI access to layer 2 or 3 switch so ACL's can be applied. Enforcement to be enabled, AD integration, and WMI integration or agent. Agent or WMI connectivity
186	Managed Network Access Control Service (NAC) – Tier 4 Advanced NAC Use Case	SEC-3PN-CN-NSV4AUC	One-Time Charge for Managed Network Access Control Service (NAC) – Tier 4 Advanced NAC Use Case - Flexible Access Control by User, Device or Policy - Remediation of Out of Compliance Endpoints - Unauthorized Application

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
			Prevention - Rogue Device Prevention Tier 4 Advanced NAC Use Case – Customer-requested use cases are defined as specific functionality requirements defined for NAC Service. These use cases are ranked into one of two categories: Basic and Advanced. A list of advanced use cases can be provided. Some features may require: CLI access to layer 2 or 3 switch so ACL's can be applied. Enforcement to be enabled, AD integration, and WMI integration or agent. Agent or WMI connectivity
187	Managed Network Access Control Service (NAC) – Tier 5 Advanced NAC Use Case	SEC-3PR-CN-NSV5AUC	Managed Network Access Control Service (NAC) – Tier 5 Advanced NAC Use Case - Flexible Access Control by User, Device or Policy - Remediation of Out of Compliance Endpoints - Unauthorized Application Prevention - Rogue Device Prevention Tier 5 Advanced NAC Use Case – Customer-requested use cases are defined as specific functionality requirements defined for NAC Service. These use cases are ranked into one of two categories: Basic and Advanced. A list of advanced use cases can be provided. Some features may require: CLI access to layer 2 or 3 switch so ACL's can be applied.

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
			Enforcement to be enabled, AD integration, and WMI integration or agent. Agent or WMI connectivity
188	Managed Network Access Control Service (NAC) – Tier 5 Advanced NAC Use Case	SEC-3PN-CN-NSV5AUC	One-Time Charge for Managed Network Access Control Service (NAC) – Tier 5 Advanced NAC Use Case - Flexible Access Control by User, Device or Policy - Remediation of Out of Compliance Endpoints - Unauthorized Application Prevention - Rogue Device Prevention Tier 5 Advanced NAC Use Case – Customer-requested use cases are defined as specific functionality requirements defined for NAC Service. These use cases are ranked into one of two categories: Basic and Advanced. A list of advanced use cases can be provided. Some features may require: CLI access to layer 2 or 3 switch so ACL's can be applied. Enforcement to be enabled, AD integration, and WMI integration or agent. Agent or WMI connectivity
189	Managed Network Access Control Service (NAC) – Tier 1 Dedicated Management Server	SEC-3PR-CN-NSV1DMS	Managed Network Access Control Service (NAC) – Tier 1 Dedicated Management Server (DMS) Allows for management of multiple NAC devices in a Customer's environment. Required for configurations with more than 2 sensors. Pricing includes service, and hardware. A

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
			Tier 1 DMS can support up to 5 appliances/sensors.
190	Managed Network Access Control Service (NAC) – Tier 2 Dedicated Management Server	SEC-3PR-CN-NSV2DMS	Managed Network Access Control Service (NAC) – Tier 2 Dedicated Management Server (DMS) Allows for management of multiple NAC devices in a Customer's environment. Required for configurations with more than 5 sensors. Pricing includes service, and hardware. A Tier 2 DMS can support 6-10 appliances/sensors.
191	Managed Network Access Control Service (NAC) – Tier 3 Dedicated Management Server	SEC-3PR-CN-NSV3DMS	Managed Network Access Control Service (NAC) – Tier 3 Dedicated Management Server (DMS) Allows for management of multiple NAC devices in a Customer's environment. Required for configurations with more than 10 sensors. Pricing includes service, and hardware. A Tier 3 DMS can support 11-25 appliances/sensors.
192	Managed Network Access Control Service (NAC) – Tier 4 Dedicated Management Server	SEC-3PR-CN-NSV4DMS	Managed Network Access Control Service (NAC) – Tier 4 Dedicated Management Server (DMS) Allows for management of multiple NAC devices in a Customer's environment. Required for configurations with more than 25 sensors. Pricing includes service, and hardware. A Tier 4 DMS can support 26-50 appliances/sensors.
193	Managed Network Access Control Service (NAC) – Tier 5 Dedicated	SEC-3PR-CN-NSV5DMS	Managed Network Access Control Service (NAC) – Tier 5 Dedicated Management Server (DMS) Allows for management of multiple NAC devices in a

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
	Management Server		Customer's environment. Required for configurations with more than 50 sensors. Pricing includes service, and hardware. A Tier 5 DMS can support 51-100 appliances/sensors.
194	Managed Network Access Control Service (NAC) – Tier 1 Co- Management	SEC-3PR-CN-NSV1CM	Managed Network Access Control Service (NAC) – Tier 1 Co-Management End-user NAC console access for end point MAC/IP management by designated IT staff (Note: requires training & dedicated management server). Required.
195	Managed Network Access Control Service (NAC) – Tier 2 Co- Management	SEC-3PR-CN-NSV2CM	Managed Network Access Control Service (NAC) – Tier 2 Co-Management End-user NAC console access for end point MAC/IP management by designated IT staff (Note: requires training & dedicated management server). Required.
196	Managed Network Access Control Service (NAC) – Tier 3 Co- Management	SEC-3PR-CN-NSV3CM	Managed Network Access Control Service (NAC) – Tier 3 Co-Management End-user NAC console access for end point MAC/IP management by designated IT staff (Note: requires training & dedicated management server). Required.
197	Managed Network Access Control Service (NAC) – Tier 4 Co- Management	SEC-3PR-CN-NSV4CM	Managed Network Access Control Service (NAC) – Tier 4 Co-Management End-user NAC console access for end point MAC/IP management by designated IT staff (Note: requires training & dedicated management server). Required.
198	Managed Network Access Control	SEC-3PR-CN-NSV5CM	Managed Network Access Control Service (NAC) – Tier 5 Co-

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
	Service (NAC) – Tier 5 Co- Management		Management End-user NAC console access for end point MAC/IP management by designated IT staff (Note: requires training & dedicated management server). Required.
199	Managed Network Access Control Service (NAC) – Collector	SEC-3PR-CN-NACSVC	Managed Network Access Control Service (NAC) – Collector Log Collector placed at the Customer Site which collects and aggregates the log data from the Customer's device logs generated by its network and systems.
200	NWN Security Network Device Management – Riverbed		NWN managed security for devices is provided effectively across multiple product categories and create a process/methodology to include valuable flow and security analytics in the CLMS platform for enhanced correlation and analysis. Customers receive application performance analysis, capacity audits, issue root-cause determinations, and receive recommendations for increasing network and application performance. This is for customer owned devices. This service includes: Initial basic set-up and policy development 24x7x365 Monitoring of applications Monthly analysis of mission- critical application performance Quarterly tuning of policy and performance settings

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
			Hardware support for both custom and off-the-shelf applications Forwarding of critical alerts to CLMS platform for security correlation and analysis Post Implementation Network Management - Network monitoring service with carrier and vendor coordination for CPE supporting WAN access NWN Network Management is a set of support solutions that provides you a single-point-of- contact to outsource or back- up some or all of the State's network support functions. You can use NWN Network Management Services as a supplementary and disaster-recovery organization. We can assist the State to manage, monitor, and assume responsibility for your network on an as-needed basis. This will ensure that your network is reliable, available, efficient, and successfully performs your critical operations. NWN provides a one-stop shop. We are able to manage most pieces of your network, including SNMP-MIB II-compliant devices. This means we can manage routers, CSU/DSUs, LAN switches, LAN hubs, etc. You do not have to work only with equipment we supply. If you have equipment supplied by other vendors, we can coordinate with them to make sure that your NWN Network Management solution

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
			supports their CPE. NWN Network Management is also flexible. We can mold your solution to fit the State environment from very hands- on, requiring detailed reporting to hands-off where the State only engages NWN on an as- needed basis. We can monitor your CPE (e.g., routers, hubs, switches, CSU/DSUs, call managers) remotely from our NWN Data Services Customer Care. You can choose from three levels of service to ensure the right fit with your staff and budget needs: Basic, Essential, and Complete. We will monitor supported devices over a customer-provided permanent virtual circuit ("PVC") or virtual private network ("VPN"). A customer premise router (e.g., Cisco 1800 with VPN) may also be required for NWN to deliver this service. The Customer is required to provide the following: -Internet Connection -MIB-II compliant hardware required -Inbound & Outbound remote access via SSH to at least one device at each location -Internal management IP address for each device
201	Basic level Category A	SEC-3PR-CN-DMRBBA	Basic level Category A With our Basic level service, you receive network monitoring, event detection, and subsequent

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
			notification and correlation with the CLMS/ATLAS team. You may use your internal staff for event and fault management and remediation support. NWN's Network Management support team will alert you about the detected faults and it is your responsibility to contact your vendor directly for maintenance. Basic Service is suited for you if your need is to supplement your existing network monitoring capabilities or off-hours support (or both). Basic service is available on any NWN Approved SNMP MIB II-compliant device. Category A Devices Router Switch Centralized WLAN - Management/Sec. Switch Firewall (BASIC only)
202	Basic level Category A	SEC-3PN-CN-DMRBBA	One-Time Charge for Basic level Category A With our Basic level service, you receive network monitoring, event detection, and subsequent notification and correlation with the CLMS/ATLAS team. You may use your internal staff for event and fault management and remediation support. NWN's Network Management support team will alert you about the detected faults and it is your responsibility to contact your vendor directly for maintenance. Basic Service is suited for you if your need is to supplement your

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
			existing network monitoring capabilities or off-hours support (or both). Basic service is available on any NWN Approved SNMP MIB II-compliant device. Category A Devices Router Switch Centralized WLAN - Management/Sec. Switch Firewall (BASIC only)
203	Basic level Category B	SEC-3PR-CN-DMRBBB	Basic level Category B With our Basic level service, you receive network monitoring, event detection, and subsequent notification and correlation with the CLMS/ATLAS team. You may use your internal staff for event and fault management and remediation support. NWN's Network Management support team will alert you about the detected faults and it is your responsibility to contact your vendor directly for maintenance. Basic Service is suited for you if your need is to supplement your existing network monitoring capabilities or off-hours support (or both). Basic service is available on any NWN Approved SNMP MIB II-compliant device. Category B Devices Centralized WLAN: "Thin" Access Points
204	Basic level Category B	SEC-3PN-CN-DMRBBB	One-Time Charge for Basic level Category B With our Basic level service, you receive network monitoring,

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
			event detection, and subsequent notification and correlation with the CLMS/ATLAS team. You may use your internal staff for event and fault management and remediation support. NWN's Network Management support team will alert you about the detected faults and it is your responsibility to contact your vendor directly for maintenance. Basic Service is suited for you if your need is to supplement your existing network monitoring capabilities or off-hours support (or both). Basic service is available on any NWN Approved SNMP MIB II-compliant device. Category B Devices Centralized WLAN: "Thin" Access Points
205	Essential Level Category A	SEC-3PR-CN-DMRBEA	Essential Level Category A Our Essential Service provides you with comprehensive, end- to-end fault management. In addition to fault management, the service includes network monitoring, technical assistance (with carrier and vendor coordination), configuration support, software support, and the ability to open or view web-based trouble tickets as well as correlation with the CLMS/ATLAS team on events. If you elect Essential Service, NWN becomes your single-point-of-contact for network problems. When we diagnose a problem with your

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
			equipment, our Network Management Service support team manages the vendor to coordinate your dispatch. Work with the vendor may include opening trouble tickets and escalating to resolve the problem quickly. Throughout this process, our engineer takes total responsibility for ensuring that the problem is resolved. The NWN NOC will update you as appropriate and will not close the trouble ticket until the problem is resolved to your satisfaction. Carrier and Vendor coordination requires that a valid Letter of Agency (LOA) be on file with NWN Network Device Management support team. Available on any NWN Approved SNMP MIB II- compliant device. Category A Devices Router Switch Centralized WLAN: management/security switch
206	Essential Level Category A	SEC-3PN-CN-DMRBEA	One-Time Charge for Essential Level Category A Our Essential Service provides you with comprehensive, end- to-end fault management. In addition to fault management, the service includes network monitoring, technical assistance (with carrier and vendor coordination), configuration support, software support, and the ability to open or view web-based trouble tickets as well as correlation with the CLMS/ATLAS

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
			team on events. If you elect Essential Service, NWN becomes your single-point-of-contact for network problems. When we diagnose a problem with your equipment, our Network Management Service support team manages the vendor to coordinate your dispatch. Work with the vendor may include opening trouble tickets and escalating to resolve the problem quickly. Throughout this process, our engineer takes total responsibility for ensuring that the problem is resolved. The NWN NOC will update you as appropriate and will not close the trouble ticket until the problem is resolved to your satisfaction. Carrier and Vendor coordination requires that a valid Letter of Agency (LOA) be on file with NWN Network Device Management support team. Available on any NWN Approved SNMP MIB II- compliant device. Category A Devices Router Switch Centralized WLAN: management/security switch
207	Essential Level Category B	SEC-3PR-CN-DMRBEB	Essential Level Category B Our Essential Service provides you with comprehensive, end- to-end fault management. In addition to fault management, the service includes network monitoring, technical assistance (with carrier and vendor coordination), configuration

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
			support, software support, and the ability to open or view web-based trouble tickets as well as correlation with the CLMS/ATLAS team on events. If you elect Essential Service, NWN becomes your single-point-of-contact for network problems. When we diagnose a problem with your equipment, our Network Management Service support team manages the vendor to coordinate your dispatch. Work with the vendor may include opening trouble tickets and escalating to resolve the problem quickly. Throughout this process, our engineer takes total responsibility for ensuring that the problem is resolved. The NWN NOC will update you as appropriate and will not close the trouble ticket until the problem is resolved to your satisfaction. Carrier and Vendor coordination requires that a valid Letter of Agency (LOA) be on file with NWN Network Device Management support team. Available on any NWN Approved SNMP MIB II- compliant device. Category B Devices Centralized WLAN: "Thin" Access Points CSU/DSU (w/ Router)
208	Essential Level Category B	SEC-3PN-CN-DMRBEB	One-Time Charge for Essential Level Category B Our Essential Service provides you with comprehensive, end- to-end fault management. In addition to fault management, the service

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
			includes network monitoring, technical assistance (with carrier and vendor coordination), configuration support, software support, and the ability to open or view web- based trouble tickets as well as correlation with the CLMS/ATLAS team on events. If you elect Essential Service, NWN becomes your single-point-of-contact for network problems. When we diagnose a problem with your equipment, our Network Management Service support team manages the vendor to coordinate your dispatch. Work with the vendor may include opening trouble tickets and escalating to resolve the problem quickly. Throughout this process, our engineer takes total responsibility for ensuring that the problem is resolved. The NWN NOC will update you as appropriate and will not close the trouble ticket until the problem is resolved to your satisfaction. Carrier and Vendor coordination requires that a valid Letter of Agency (LOA) be on file with NWN Network Device Management support team. Available on any NWN Approved SNMP MIB II- compliant device. Category B Devices Centralized WLAN: "Thin" Access Points CSU/DSU (w/ Router)
209	Complete Level Category A	SEC-3PR-CN-DMRBCA	Complete Level Category A The Complete option provides performance management

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
			support in addition to all the services you receive with our Essential service offering. Through performance management, we can measure and report on your network performance to keep internetworking performance at an optimal level. Our Complete Network Management offering includes web-based performance reporting on network elements and supported CPE and monthly performance reviews through an assigned engineer. Available on any NWN Approved SNMP MIB II-compliant device. Category A Devices Router Switch Centralized WLAN: management/security switch
210	Complete Level Category A	SEC-3PN-CN-DMRBCA	One-Time Charge for Complete Level Category A The Complete option provides performance management support in addition to all the services you receive with our Essential service offering. Through performance management, we can measure and report on your network performance to keep internetworking performance at an optimal level. Our Complete Network Management offering includes web-based performance reporting on network elements and supported CPE and monthly performance reviews through an assigned engineer. Available on any NWN Approved SNMP MIB II-

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
			compliant device. Category A Devices Router Switch Centralized WLAN: management/security switch
211	Equinix Interconnection Services	Multiple (See feature IDs below)	Equinix Interconnection Services are a suite of products that enable both physical and virtual connections to a wide range of telecom services and cloud service providers.
212	Interconnection - Cross Connect Fiber (SM/MM)	ATS-3CR-EQ-INTC-CCFIB	Cross Connects are dedicated, physical cabling links between two parties within an Equinix IBX data center. Single mode fiber is the only supported media type.
213	Interconnection - Cross Connect UTP/Coax	ATS-3CR-EQ-INTC-CCUTP	Cross Connects are dedicated, physical cabling links between two parties within an Equinix IBX data center. This service is not available for new orders; it is used only for legacy UTP/Coax cross-connections.
214	Interconnection - Extended Cross Connects (SMF/MMF) LA1	ATS-3CR-EQ-LA1-INTC-ECC	Extended Cross Connects provide connectivity between an Equinix IBX and a third-party Building Meet-Me Room (BMMR). Fiber transceivers are not included.
215	Interconnection - Metro Connect (Protected) 1G	ATS-3CR-EQ-INTC-MCP1G	Metro Connects provide point-to-point connectivity between Equinix IBXs within a metro area. Protected uses dual paths but does not offer node redundancy.
216	Interconnection - Metro Connect (Protected) 10G	ATS-3CR-EQ-INTC-MCP10G	Metro Connects provide point-to-point connectivity between Equinix IBXs within a metro area. Protected uses dual paths but does not offer node redundancy.

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
217	Interconnection - Metro Connect (Unprotected) 10G	ATS-3CR-EQ-INTC-MCU10G	Metro Connects provide point-to-point connectivity between Equinix IBXs within a metro area. Unprotected uses a single path without node redundancy.
218	Interconnection - Metro Connect (Unprotected) 100G	ATS-3CR-EQ-INTC-MCU100G	Metro Connects provide point-to-point connectivity between Equinix IBXs within a metro area. Unprotected uses a single path without node redundancy.
219	Interconnection - Metro Connect (Dual Diverse) 10G	ATS-3CR-EQ-INTC-MCDD10G	Metro Connects provide point-to-point connectivity between Equinix IBXs within a metro area. Dual Diverse offers both path and node redundancy, with two physical connections on each side.
220	Interconnection - Metro Connect (Dual Diverse) 100G	ATS-3CR-EQ-INTC-MCDD100G	Metro Connects provide point-to-point connectivity between Equinix IBXs within a metro area. Dual Diverse offers both path and node redundancy, with two physical connections on each side.
221	Interconnection - Equinix Fabric Port (Standard and Metro) 1G	ATS-3CR-EQ-INTC-EFPS1G	Fabric Ports are the network interface to the Equinix Fabric - enabling multiple low-latency connections to many cloud service providers. A cross-connect is included with the Fabric Port. Standard ports offer a direct and secure connection point within your own dedicated space at an Equinix IBX data center. Each Virtual Connection (VC) on a Fabric Port incurs an additional monthly cost based on the bandwidth allocated to the VC.

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
222	Interconnection - Equinix Fabric Port (Standard and Metro) 10G	ATS-3CR-EQ-INTC-EFPS10G	Fabric Ports are the network interface to the Equinix Fabric - enabling multiple low-latency connections to many cloud service providers. A cross-connect is included with the Fabric Port. Standard ports offer a direct and secure connection point within your own dedicated space at an Equinix IBX data center. Each Virtual Connection (VC) on a Fabric Port incurs an additional monthly cost based on the bandwidth allocated to the VC.
223	Interconnection - Equinix Fabric Port (Standard and Metro) 100G	ATS-3CR-EQ-INTC-EFPS100G	Fabric Ports are the network interface to the Equinix Fabric - enabling multiple low-latency connections to many cloud service providers. A cross-connect is included with the Fabric Port. Standard ports offer a direct and secure connection point within your own dedicated space at an Equinix IBX data center. Each Virtual Connection (VC) on a Fabric Port incurs an additional monthly cost based on the bandwidth allocated to the VC.

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
224	Interconnection - Equinix Fabric Port (Remote/ Metro Remote) 1G	ATS-3CR-EQ-INTC-EFPR1G	Fabric Ports are the network interface to the Equinix Fabric - enabling multiple low-latency connections to many cloud service providers. A cross-connect is included with the Fabric Port. Remote ports give you the flexibility to connect to Equinix Fabric even when your infrastructure isn't directly housed within an Equinix IBX. Each Virtual Connection (VC) on a Fabric Port incurs an additional monthly cost based on the bandwidth allocated to the VC.
225	Interconnection - Equinix Fabric Port (Remote/ Metro Remote) 10G	ATS-3CR-EQ-INTC-EFPR10G	Fabric Ports are the network interface to the Equinix Fabric - enabling multiple low-latency connections to many cloud service providers. A cross-connect is included with the Fabric Port. Remote ports give you the flexibility to connect to Equinix Fabric even when your infrastructure isn't directly housed within an Equinix IBX. Each Virtual Connection (VC) on a Fabric Port incurs an additional monthly cost based on the bandwidth allocated to the VC.

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
226	Interconnection - Equinix Fabric Port (Remote/ Metro Remote) 100G	ATS-3CR-EQ-INTC-EFPR100G	Fabric Ports are the network interface to the Equinix Fabric - enabling multiple low-latency connections to many cloud service providers. A cross-connect is included with the Fabric Port. Remote ports give you the flexibility to connect to Equinix Fabric even when your infrastructure isn't directly housed within an Equinix IBX. Each Virtual Connection (VC) on a Fabric Port incurs an additional monthly cost based on the bandwidth allocated to the VC.
227	Interconnection - Equinix Fabric Port (Extended/ Metro Extended) 1G	ATS-3CR-EQ-INTC-EFPE1G	Fabric Ports are the network interface to the Equinix Fabric - enabling multiple low-latency connections to many cloud service providers. A cross-connect is included with the Fabric Port. Extended ports also give you the flexibility to connect to Equinix Fabric even when your infrastructure isn't directly housed within an Equinix IBX. Instead, the connection is established through a Building Meet-Me Room (BMMR). Each Virtual Connection (VC) on a Fabric Port incurs an additional monthly cost based on the bandwidth allocated to the VC.

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
228	Interconnection - Equinix Fabric Port (Extended/ Metro Extended) 10G	ATS-3CR-EQ-INTC-EFPE10G	Fabric Ports are the network interface to the Equinix Fabric - enabling multiple low-latency connections to many cloud service providers. A cross-connect is included with the Fabric Port. Extended ports also give you the flexibility to connect to Equinix Fabric even when your infrastructure isn't directly housed within an Equinix IBX. Instead, the connection is established through a Building Meet-Me Room (BMMR). Each Virtual Connection (VC) on a Fabric Port incurs an additional monthly cost based on the bandwidth allocated to the VC.
229	Interconnection - Equinix Fabric Port (Extended/ Metro Extended) 100G	ATS-3CR-EQ-INTC-EFPE100G	Fabric Ports are the network interface to the Equinix Fabric - enabling multiple low-latency connections to many cloud service providers. A cross-connect is included with the Fabric Port. Extended ports also give you the flexibility to connect to Equinix Fabric even when your infrastructure isn't directly housed within an Equinix IBX. Instead, the connection is established through a Building Meet-Me Room (BMMR). Each Virtual Connection (VC) on a Fabric Port incurs an additional monthly cost based on the bandwidth allocated to the VC.

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
230	Interconnection - Equinix Fabric Port - Unlimited Local Connections Package (Standard and Metro) 1G	ATS-3CR-EQ-INTC-EFPUS1G	Fabric Ports are the network interface to the Equinix Fabric - enabling multiple low-latency connections to many cloud service providers. A cross-connect is included with the Fabric Port. Standard ports offer a direct and secure connection point within your own dedicated space at an Equinix IBX data center. The Unlimited Local Connections Package allows customers to provision unlimited local Virtual Connections (VC) without incurring additional monthly costs, up to the total bandwidth of the Port.
231	Interconnection - Equinix Fabric Port - Unlimited Local Connections Package (Standard and Metro) 10G	ATS-3CR-EQ-INTC-EFPUS10G	Fabric Ports are the network interface to the Equinix Fabric - enabling multiple low-latency connections to many cloud service providers. A cross-connect is included with the Fabric Port. Standard ports offer a direct and secure connection point within your own dedicated space at an Equinix IBX data center. The Unlimited Local Connections Package allows customers to provision unlimited local Virtual Connections (VC) without incurring additional monthly costs, up to the total bandwidth of the Port.

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
232	Interconnection - Equinix Fabric Port - Unlimited Local Connections Package (Standard and Metro) 100G	ATS-3CR-EQ-INTC-EFPUS100G	Fabric Ports are the network interface to the Equinix Fabric - enabling multiple low-latency connections to many cloud service providers. A cross-connect is included with the Fabric Port. Standard ports offer a direct and secure connection point within your own dedicated space at an Equinix IBX data center. The Unlimited Local Connections Package allows customers to provision unlimited local Virtual Connections (VC) without incurring additional monthly costs, up to the total bandwidth of the Port.
233	Interconnection - Equinix Fabric Port - Unlimited Port Plus Remote Connections Package (Remote/ Metro Remote) 1G	ATS-3CR-EQ-INTC-EFPUR1G	Fabric Ports are the network interface to the Equinix Fabric - enabling multiple low-latency connections to many cloud service providers. A cross-connect is included with the Fabric Port. Standard ports offer a direct and secure connection point within your own dedicated space at an Equinix IBX data center. The Unlimited Port Plus Remote Connections Package allows customers to provision unlimited local and/or remote Virtual Connections (VC) without incurring additional monthly costs, up to the total bandwidth of the Port.

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
234	Interconnection - Equinix Fabric Port - Unlimited Port Plus Remote Connections Package (Remote/ Metro Remote) 10G	ATS-3CR-EQ-INTC-EFPUR10G	Fabric Ports are the network interface to the Equinix Fabric - enabling multiple low-latency connections to many cloud service providers. A cross-connect is included with the Fabric Port. Standard ports offer a direct and secure connection point within your own dedicated space at an Equinix IBX data center. The Unlimited Port Plus Remote Connections Package allows customers to provision unlimited local and/or remote Virtual Connections (VC) without incurring additional monthly costs, up to the total bandwidth of the Port.
235	Interconnection - Equinix Fabric Port - Unlimited Port Plus Remote Connections Package (Remote/ Metro Remote) 100G	ATS-3CR-EQ-INTC-EFPUR100G	Fabric Ports are the network interface to the Equinix Fabric - enabling multiple low-latency connections to many cloud service providers. A cross-connect is included with the Fabric Port. Standard ports offer a direct and secure connection point within your own dedicated space at an Equinix IBX data center. The Unlimited Port Plus Remote Connections Package allows customers to provision unlimited local and/or remote Virtual Connections (VC) without incurring additional monthly costs, up to the total bandwidth of the Port.
236	Interconnection - Cross Connect Fiber (SM/MM) On-Boarding	ATS-3CN-EQ-INTC-CCFIB	Cross Connects are dedicated, physical cabling links between two parties within an Equinix IBX data center. Single mode fiber is the only supported media type.

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
237	Interconnection - Cross Connect UTP/Coax On-Boarding	ATS-3CN-EQ-INTC-CCUTP	Cross Connects are dedicated, physical cabling links between two parties within an Equinix IBX data center. This service is not available for new orders; it is used only for legacy UTP/Coax cross-connections.
238	Interconnection - Cross Connect De-install fee (all media types) On-Boarding	ATS-3CN-EQ-INTC-CCDIN	One-time charge for decommissioning a Cross Connect
239	Interconnection - Extended Cross Connects (SMF/MMF) LA1 On-Boarding	ATS-3CN-EQ-LA1-INTC-ECC	One-time charge for provisioning an Extended Cross Connect service
240	Interconnection - Metro Connect (Protected) 1G On-Boarding	ATS-3CN-EQ-INTC-MCP1G	One-time charge for provisioning a 1G Metro Connect (Protected) service
241	Interconnection - Metro Connect (Protected) 10G On-Boarding	ATS-3CN-EQ-INTC-MCP10G	One-time charge for provisioning a 10G Metro Connect (Protected) service
242	Interconnection - Metro Connect (Unprotected) 10G On-Boarding	ATS-3CN-EQ-INTC-MCU10G	One-time charge for provisioning a 10G Metro Connect (Unprotected) service
243	Interconnection - Metro Connect (Unprotected) 100G On-Boarding	ATS-3CN-EQ-INTC-MCU100G	One-time charge for provisioning a 100G Metro Connect (Unprotected) service
244	Interconnection - Metro Connect (Dual Diverse) 10G On-Boarding	ATS-3CN-EQ-INTC-MCDD10G	One-time charge for provisioning a 10G Metro Connect (Dual Diverse) service
245	Interconnection - Metro Connect (Dual Diverse) 100G On-Boarding	ATS-3CN-EQ-INTC-MCDD100G	One-time charge for provisioning a 100G Metro Connect (Dual Diverse) service
246	Interconnection - Equinix Fabric Port (Standard and Metro) 1G On-Boarding	ATS-3CN-EQ-INTC-EFPS1G	One-time charge for provisioning a 1G Fabric Port

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
247	Demarcation Point	ATS-3CR-EQ-DEMARC	Defined demarc for an Equinix-provided cabinet or cage
248	Patch Panel	ATS-3CR-EQ-PATCHP	Patch Panel for an Equinix-provided cabinet or cage
249	Network Cable Connection - Single-Mode Fiber - Campus - Z-side	ATS-3CR-EQ-NCC-CAMPUS	Connection charge for 3rd party-initiated connections into customer environment
250	Network Cable Connection - Single-Mode Fiber - Z-side	ATS-3CR-EQ-NCC-SMF	Connection charge for 3rd party-initiated connections into customer environment
251	Network Cable Connection - POTS - Campus - Z-side	ATS-3CR-EQ-NCC-POTS-CAMP	Connection charge for 3rd party-initiated connections into customer environment
252	Equinix Fabric Local Virtual Connection - 10 Mbps	ATS-3CR-EQ-LVC-10M	Charge for local VC provisioned on a Fabric Port without an unlimited plan
253	Equinix Fabric Local Virtual Connection - 50 Mbps	ATS-3CR-EQ-LVC-50M	Charge for local VC provisioned on a Fabric Port without an unlimited plan
254	Equinix Fabric Local Virtual Connection - 200 Mbps	ATS-3CR-EQ-LVC-200M	Charge for local VC provisioned on a Fabric Port without an unlimited plan
255	Equinix Fabric Local Virtual Connection - 500 Mbps	ATS-3CR-EQ-LVC-500M	Charge for local VC provisioned on a Fabric Port without an unlimited plan
256	Equinix Fabric Local Virtual Connection - 1 Gbps	ATS-3CR-EQ-LVC-1G	Charge for local VC provisioned on a Fabric Port without an unlimited plan
257	Equinix Fabric Local Virtual Connection - 2 Gbps	ATS-3CR-EQ-LVC-2G	Charge for local VC provisioned on a Fabric Port without an unlimited plan
258	Equinix Fabric Local Virtual Connection - 5 Gbps	ATS-3CR-EQ-LVC-5G	Charge for local VC provisioned on a Fabric Port without an unlimited plan
259	Equinix Fabric Local Virtual Connection - 10 Gbps	ATS-3CR-EQ-LVC-10G	Charge for local VC provisioned on a Fabric Port without an unlimited plan
260	Equinix Fabric Local Virtual Connection - 25 Gbps	ATS-3CR-EQ-LVC-25G	Charge for local VC provisioned on a Fabric Port without an unlimited plan
261	Equinix Fabric Local Virtual Connection - 50 Gbps	ATS-3CR-EQ-LVC-50G	Charge for local VC provisioned on a Fabric Port without an unlimited plan

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
262	Equinix Fabric Local Virtual Connection - All Speeds with any Unlimited Connections Package (Local or Remote)	ATS-3CR-EQ-LVC-UL	Charge for local VC provisioned on a Fabric Port with an Unlimited Local or Unlimited Port Plus package
263	Equinix Fabric Remote Virtual Connection - 10 Mbps	ATS-3CR-EQ-RVC-10M	Charge for remote VC provisioned on a Fabric Port without an unlimited plan
264	Equinix Fabric Remote Virtual Connection - 50 Mbps	ATS-3CR-EQ-RVC-50M	Charge for remote VC provisioned on a Fabric Port without an unlimited plan
265	Equinix Fabric Remote Virtual Connection - 200 Mbps	ATS-3CR-EQ-RVC-200M	Charge for remote VC provisioned on a Fabric Port without an unlimited plan
266	Equinix Fabric Remote Virtual Connection - 500 Mbps	ATS-3CR-EQ-RVC-500M	Charge for remote VC provisioned on a Fabric Port without an unlimited plan
267	Equinix Fabric Remote Virtual Connection - 1 Gbps	ATS-3CR-EQ-RVC-1G	Charge for remote VC provisioned on a Fabric Port without an unlimited plan
268	Equinix Fabric Remote Virtual Connection - 2 Gbps	ATS-3CR-EQ-RVC-2G	Charge for remote VC provisioned on a Fabric Port without an unlimited plan
269	Equinix Fabric Remote Virtual Connection - 5 Gbps	ATS-3CR-EQ-RVC-5G	Charge for remote VC provisioned on a Fabric Port without an unlimited plan
270	Equinix Fabric Remote Virtual Connection - 10 Gbps	ATS-3CR-EQ-RVC-10G	Charge for remote VC provisioned on a Fabric Port without an unlimited plan
271	Equinix Fabric Remote Virtual Connection - 25 Gbps	ATS-3CR-EQ-RVC-25G	Charge for remote VC provisioned on a Fabric Port without an unlimited plan
272	Equinix Fabric Remote Virtual Connection - 50 Gbps	ATS-3CR-EQ-RVC-50G	Charge for remote VC provisioned on a Fabric Port without an unlimited plan
273	Equinix Fabric Remote Virtual Connection - 10 Mbps with Unlimited Local Connections Package	ATS-3CR-EQ-RVC-10M-UL	Charge for remote VC provisioned on a Fabric Port with an Unlimited Local Connections package

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
274	Equinix Fabric Remote Virtual Connection - 50 Mbps with Unlimited Local Connections Package	ATS-3CR-EQ-RVC-50M-UL	Charge for remote VC provisioned on a Fabric Port with an Unlimited Local Connections package
275	Equinix Fabric Remote Virtual Connection - 200 Mbps with Unlimited Local Connections Package	ATS-3CR-EQ-RVC-200M-UL	Charge for remote VC provisioned on a Fabric Port with an Unlimited Local Connections package
276	Equinix Fabric Remote Virtual Connection - 500 Mbps with Unlimited Local Connections Package	ATS-3CR-EQ-RVC-500M-UL	Charge for remote VC provisioned on a Fabric Port with an Unlimited Local Connections package
277	Equinix Fabric Remote Virtual Connection - 1 Gbps with Unlimited Local Connections Package	ATS-3CR-EQ-RVC-1G-UL	Charge for remote VC provisioned on a Fabric Port with an Unlimited Local Connections package
278	Equinix Fabric Remote Virtual Connection - 2 Gbps with Unlimited Local Connections Package	ATS-3CR-EQ-RVC-2G-UL	Charge for remote VC provisioned on a Fabric Port with an Unlimited Local Connections package
279	Equinix Fabric Remote Virtual Connection - 5 Gbps with Unlimited Local Connections Package	ATS-3CR-EQ-RVC-5G-UL	Charge for remote VC provisioned on a Fabric Port with an Unlimited Local Connections package
280	Equinix Fabric Remote Virtual Connection - 10 Gbps with Unlimited Local Connections Package	ATS-3CR-EQ-RVC-10G-UL	Charge for remote VC provisioned on a Fabric Port with an Unlimited Local Connections package
281	Equinix Fabric Remote Virtual Connection - 25 Gbps with Unlimited Local	ATS-3CR-EQ-RVC-25G-UL	Charge for remote VC provisioned on a Fabric Port with an Unlimited Local Connections package

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
	Connections Package		
282	Equinix Fabric Remote Virtual Connection - 50 Gbps with Unlimited Local Connections Package	ATS-3CR-EQ-RVC-50G-UL	Charge for remote VC provisioned on a Fabric Port with an Unlimited Local Connections package
283	Equinix Fabric Remote Virtual Connection - All Speeds with Unlimited Port Plus Remote Connections Package	ATS-3CR-EQ-RVC-UR	Charge for remote VC provisioned on a Fabric Port with an Unlimited Port Plus package
284	Smart Hands Support	ATS-3CN-EQ-SH	Access Equinix Smart Hands support for on-site services. Billed monthly in arrears based on usage.

23.2.1.7 MAE Service Geographic Service Areas

Bidder shall identify the locations where their EPL and EVPL MAE Services are available in Table 23.2.1.7.a. The Contractor shall provide the service where commercially available through Contractor owned facilities, third-party agreements, and as allowed by State or Federal regulations. Commitment to provide service is subject to facility availability as determined by the Bidder at time of bid submission and may be reassessed by Contractor at time of service order.

Bidder understands the requirements and shall meet or exceed them? Yes

Special construction charges that may be required to provide this service are not included in this offering or contained within the CALNET contracts and must be acquired by the customer directly through other procurement means.

Bidder understands the requirements and shall meet or exceed them? Yes

Table 23.2.1.7.a – Bidder's MAE Services Service Locations

Line Item	Service Location – City or ZIP Code	EPL MAE Service 10/100 Mbps	EPL MAE Service 1 Gbps	EPL MAE Service 10 Gbps	EVPL MAE Service 10/100 Mbps	EVPL MAE Service 1 Gbps	EVPL MAE Service 10 Gbps
1 - 692	Please see 23.2.1.7.a. Bidder's MAE Services Service Locations List Line Item 1 - 692	Yes	Yes	Yes	Yes	Yes	Yes

23.2.1.7.a. Bidder's MAE Services Service Locations List Line Item 1 - 692:

1. Los Angeles
2. West Hollywood
3. Playa Vista
4. Bell Gardens
5. Beverly Hills
6. Compton
7. Culver City
8. Downey
9. El Segundo
10. Gardena
11. Hawthorne
12. Hermosa Beach
13. Huntington Park
14. Lawndale
15. Lynwood
16. Malibu
17. Manhattan Beach
18. Maywood
19. Pacific Palisades
20. Palos Verdes Peninsula
21. Rancho Palos Verdes
22. Redondo Beach
23. South Gate
24. Topanga
25. Venice
26. Marina Del Rey
27. Playa Del Rey
28. Inglewood
29. Santa Monica
30. Torrance
31. Whittier
32. Buena Park
33. La Palma
34. Cypress
35. La Habra
36. La Mirada
37. Montebello
38. Norwalk
39. Pico Rivera
40. Santa Fe Springs
41. Stanton
42. Artesia
43. Cerritos
44. Avalon
45. Bellflower
46. Harbor City
47. Lakewood
48. Hawaiian Gardens
49. Lomita
50. Los Alamitos
51. Paramount
52. San Pedro
53. Seal Beach
54. Sunset Beach
55. Wilmington
56. Carson
57. Signal Hill
58. Long Beach
59. Altadena
60. Arcadia
61. Duarte
62. La Canada Flintridge
63. Monrovia
64. Montrose
65. Sierra Madre
66. South Pasadena
67. Sunland
68. Tujunga
69. Pasadena
70. San Marino
71. Glendale
72. La Crescenta
73. Agoura Hills
74. Calabasas
75. Canoga Park
76. Winnetka

77. West Hills
78. Chatsworth
79. Encino
80. Newbury Park
81. Newhall
82. Northridge
83. Porter Ranch
84. Pacoima
85. Reseda
86. San Fernando
87. Sylmar
88. North Hills
89. Granada Hills
90. Mission Hills
91. Santa Clarita
92. Canyon Country
93. Sun Valley
94. Valencia
95. Tarzana
96. Thousand Oaks
97. Westlake Village
98. Woodland Hills
99. Stevenson Ranch
100. Castaic
101. Van Nuys
102. Panorama City
103. Sherman Oaks
104. Burbank
105. North Hollywood
106. Studio City
107. Valley Village
108. Universal City
109. Rancho Cucamonga
110. Azusa
111. Baldwin Park
112. Chino
113. Chino Hills
114. Claremont
115. Covina
116. El Monte
117. South El Monte
118. Glendora
119. La Puente
120. Hacienda Heights
121. Rowland Heights
122. La Verne
123. Mira Loma
124. Monterey Park
125. Ontario
126. Montclair
127. Diamond Bar
128. Pomona
129. Rosemead
130. San Dimas
131. San Gabriel
132. Temple City
133. Upland
134. Walnut
135. West Covina
136. Alhambra
137. Alpine
138. Bonita
139. Boulevard
140. Campo
141. Chula Vista
142. Imperial Beach
143. Jamul
144. La Mesa
145. Lemon Grove
146. National City
147. Spring Valley
148. Tecate
149. Bonsall
150. Cardiff By The Sea
151. Carlsbad
152. Del Mar
153. El Cajon
154. Encinitas
155. Escondido
156. Fallbrook
157. Julian
158. La Jolla
159. Lakeside
160. Oceanside
161. Camp Pendleton
162. Pala
163. Pauma Valley
164. Poway
165. Ramona
166. Rancho Santa Fe
167. San Marcos
168. Santa Ysabel
169. Santee
170. Solana Beach
171. Vista
172. Valley Center
173. San Diego
174. Coronado
175. San Ysidro
176. Indio
177. Indian Wells
178. Palm Desert
179. Banning
180. Beaumont
181. Blythe
182. Brawley
183. Cabazon
184. Calexico
185. Calipatria
186. Cathedral City
187. Coachella
188. Desert Hot Springs
189. El Centro
190. Heber
191. Holtville
192. Imperial
193. Joshua Tree
194. La Quinta

195. Mecca
196. Niland
197. North Palm Springs
198. Palm Springs
199. Rancho Mirage
200. Thermal
201. Salton City
202. Thousand Palms
203. Twentynine Palms
204. Whitewater
205. Winterhaven
206. Yucca Valley
207. Adelanto
208. Apple Valley
209. Baker
210. Barstow
211. Grand Terrace
212. Big Bear Lake
213. Bloomington
214. Blue Jay
215. Calimesa
216. Cedar Glen
217. Cedarpines Park
218. Colton
219. Crestline
220. Daggett
221. Essex
222. Fontana
223. Hesperia
224. Highland
225. Lake Arrowhead
226. Loma Linda
227. Lucerne Valley
228. Lytle Creek
229. Mentone
230. Needles
231. Nipton
232. Oro Grande
233. Phelan
234. Redlands
235. Rialto
236. Skyforest
237. Victorville
238. Yermo
239. Yucaipa
240. San Bernardino
241. Riverside
242. March Air Reserve Base
243. Lake Elsinore
244. Aguanga
245. Anza
246. Hemet
247. Moreno Valley
248. Murrieta
249. Nuevo
250. Perris
251. San Jacinto
252. Menifee
253. Sun City
254. Temecula
255. Wildomar
256. Irvine
257. Foothill Ranch
258. Capistrano Beach
259. Corona Del Mar
260. Costa Mesa
261. Dana Point
262. Lake Forest
263. Laguna Woods
264. Huntington Beach
265. Laguna Beach
266. Laguna Hills
267. Midway City
268. Aliso Viejo
269. Newport Coast
270. Newport Beach
271. San Clemente
272. San Juan Capistrano
273. Silverado
274. Laguna Niguel
275. Trabuco Canyon
276. Westminster
277. Rancho Santa Margarita
278. Mission Viejo
279. Ladera Ranch
280. Santa Ana
281. Fountain Valley
282. Tustin
283. Anaheim
284. Brea
285. Fullerton
286. Garden Grove
287. Norco
288. Orange
289. Placentia
290. Corona
291. Yorba Linda
292. Ventura
293. Camarillo
294. Carpinteria
295. Fillmore
296. Moorpark
297. Oak View
298. Ojai
299. Oxnard
300. Piru
301. Port Hueneme
302. Santa Paula
303. Simi Valley
304. Brandeis
305. Somis
306. Santa Barbara
307. Goleta
308. Armona

309. Arvin
310. Avenal
311. Coalinga
312. Corcoran
313. Delano
314. Ducor
315. Earlimart
316. Exeter
317. Pine Mountain Club
318. Farmersville
319. Frazier Park
320. Hanford
321. Kettleman City
322. Lake Isabella
323. Lamont
324. Lebec
325. Lemoore
326. Lindsay
327. Mc Farland
328. Porterville
329. Richgrove
330. Shafter
331. Stratford
332. Strathmore
333. Taft
334. Three Rivers
335. Tulare
336. Visalia
337. Wasco
338. Woodlake
339. Bakersfield
340. San Luis Obispo
341. Los Osos
342. Arroyo Grande
343. Atascadero
344. Buellton
345. Cambria
346. Cayucos
347. Grover Beach
348. Guadalupe
349. Lompoc
350. Los Alamos
351. Los Olivos
352. Morro Bay
353. Nipomo
354. Paso Robles
355. Pismo Beach
356. San Ardo
357. Santa Margarita
358. Santa Maria
359. Santa Ynez
360. Shandon
361. Solvang
362. Templeton
363. Mojave
364. California City
365. Acton
366. Bishop
367. Boron
368. Bridgeport
369. Edwards
370. Independence
371. Keene
372. Lancaster
373. Littlerock
374. Llano
375. Lone Pine
376. Mammoth Lakes
377. Palmdale
378. Ridgecrest
379. Rosamond
380. Tehachapi
381. Chowchilla
382. Clovis
383. Cutler
384. Dinuba
385. Dos Palos
386. Firebaugh
387. Five Points
388. Fowler
389. Friant
390. Kerman
391. Kingsburg
392. Los Banos
393. Madera
394. Orange Cove
395. Parlier
396. Fresno
397. Reedley
398. Riverdale
399. Sanger
400. Selma
401. Salinas
402. Big Sur
403. Carmel
404. Gonzales
405. Greenfield
406. King City
407. Marina
408. Monterey
409. Pacific Grove
410. Pebble Beach
411. Seaside
412. Soledad
413. Belmont
414. Brisbane
415. Burlingame
416. Daly City
417. Los Altos
418. Menlo Park
419. Atherton
420. Portola Valley
421. Millbrae
422. Mountain View
423. Pacifica
424. Redwood City
425. San Bruno
426. San Carlos

427. South San Francisco
428. Sunnyvale
429. San Francisco
430. Palo Alto
431. Stanford
432. San Mateo
433. Alameda
434. American Canyon
435. Danville
436. Alamo
437. Angwin
438. Antioch
439. Benicia
440. Brentwood
441. Byron
442. Calistoga
443. Concord
444. Pleasant Hill
445. Crockett
446. El Cerrito
447. Fairfield
448. Fremont
449. Hayward
450. Castro Valley
451. Hercules
452. Lafayette
453. Livermore
454. Martinez
455. Moraga
456. Napa
457. Newark
458. Oakley
459. Orinda
460. Pinole
461. Pittsburg
462. Pleasanton
463. Dublin
464. Rio Vista
465. Rodeo
466. Rutherford
467. Saint Helena
468. Deer Park
469. San Leandro
470. San Lorenzo
471. San Ramon
472. Suisun City
473. Sunol
474. Union City
475. Vallejo
476. Walnut Creek
477. Yountville
478. Oakland
479. Emeryville
480. Berkeley
481. Albany
482. Richmond
483. El Sobrante
484. San Pablo
485. San Rafael
486. Greenbrae
487. Belvedere Tiburon
488. Corte Madera
489. Rohnert Park
490. Dillon Beach
491. Cotati
492. Larkspur
493. Marshall
494. Mill Valley
495. Novato
496. Nicasio
497. Petaluma
498. Point Reyes Station
499. Ross
500. San Anselmo
501. Sausalito
502. Woodacre
503. Alviso
504. Aptos
505. Boulder Creek
506. Campbell
507. Capitola
508. Castroville
509. Cupertino
510. Felton
511. Freedom
512. Gilroy
513. Hollister
514. Los Gatos
515. Milpitas
516. Morgan Hill
517. San Juan Bautista
518. San Martin
519. Santa Clara
520. Santa Cruz
521. Scotts Valley
522. Saratoga
523. Soquel
524. Watsonville
525. San Jose
526. Stockton
527. Acampo
528. Angels Camp
529. French Camp
530. Linden
531. Lodi
532. San Andreas
533. Atwater
534. Tracy
535. Ceres
536. Crows Landing
537. Delhi
538. Escalon
539. Groveland
540. Gustine
541. Hilmar
542. Hughson
543. Jamestown

544. Lathrop
545. Le Grand
546. Livingston
547. Manteca
548. Mariposa
549. Merced
550. Modesto
551. Newman
552. Oakdale
553. Patterson
554. Ripon
555. Riverbank
556. Salida
557. Sonora
558. Tuolumne
559. Turlock
560. Waterford
561. Winton
562. Santa Rosa
563. Cazadero
564. Clearlake
565. Cloverdale
566. Forestville
567. Fort Bragg
568. Geyserville
569. Glen Ellen
570. Gualala
571. Guerneville
572. Healdsburg
573. Kelseyville
574. Kenwood
575. Lakeport
576. Lower Lake
577. Middletown
578. Monte Rio
579. Occidental
580. Philo
581. Hidden Valley Lake
582. Redwood Valley
583. Sebastopol
584. Sonoma
585. Ukiah
586. Upper Lake
587. Willits
588. Windsor
589. Eureka
590. Mckinleyville
591. Arcata
592. Crescent City
593. Fortuna
594. Garberville
595. Loleta
596. Redway
597. Scotia
598. Smith River
599. Trinidad
600. Auburn
601. West Sacramento
602. Brooks
603. Carmichael
604. Citrus Heights
605. Clarksburg
606. Coloma
607. Davis
608. Diamond Springs
609. Dixon
610. Elk Grove
611. Fair Oaks
612. Folsom
613. Galt
614. Garden Valley
615. Georgetown
616. Herald
617. Ione
618. Jackson
619. Lincoln
620. Loomis
621. Mcclellan
622. Madison
623. Mather
624. Newcastle
625. North Highlands
626. Roseville
627. Orangevale
628. Placerville
629. Pleasant Grove
630. Rancho Cordova
631. Rescue
632. Rio Linda
633. Rocklin
634. Shingle Springs
635. Sloughhouse
636. Vacaville
637. Wheatland
638. Winters
639. Woodland
640. Camino
641. Colfax
642. Pollock Pines
643. Granite Bay
644. El Dorado Hills
645. Sacramento
646. Antelope
647. Marysville
648. Beale Afb
649. Alleghany
650. Arbuckle
651. Chico
652. Colusa
653. Dunnigan
654. Durham
655. Grass Valley
656. Penn Valley
657. Gridley
658. Live Oak
659. Magalia
660. Nevada City
661. Olivehurst
662. Orland

663. Oroville
664. Paradise
665. Princeton
666. Quincy
667. Sutter
668. Williams
669. Willows
670. Yuba City
671. Redding
672. Anderson
673. Burney
674. Canby
675. Corning
676. Fall River Mills
677. Fort Jones
678. Mcarthur
679. Mount Shasta
680. Red Bluff
681. Weaverville
682. Weed
683. Yreka
684. Alturas
685. Cedarville
686. Markleeville
687. Susanville
688. Tahoma
689. Kings Beach
690. Tahoe City
691. South Lake Tahoe
692. Truckee

23.3 NETWORK DISASTER/OPERATIONAL RECOVERY

23.3.1 Telecommunications Service Priority (TSP) Program

When applicable, 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 requirements and shall meet or exceed them? Yes

23.4 OTHER SERVICES

23.4.1 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.

When coordinated scheduling for projects between the State and the Contractor occurs, the State and the Contractor may mutually agree that hours worked between 5:00PM and 7:59AM, Monday through Friday and all day Saturday and any hours worked on Sunday or State of California holidays can be classified as Regular Hours in accordance with the State of California Department of Industrial Relations.

Bidder understands this Requirement and shall meet or exceed it? Yes

23.4.2 Services Related Infrastructure (SRI)

The Contractor shall offer infrastructure service as defined below.

23.4.2.1 Extended Demarcation Wiring Services

The Contractor shall provide Extended Demarcation (Extended Demarc) wiring to support the services covered by this IFB C4DNCS19 Category for all of the Customer occupied buildings where services under this Contract are being offered. Extended Demarc wiring includes wire/cable related activities required to extend the demarcation point to the Customer defined termination location or cross-connect point from the Contractor's Minimum Point of Entry (MPOE).

Bidder understands this Requirement and shall meet or exceed it? Yes

Extended Demarc wiring shall include the necessary wire/cable, connectors, jumpers, panel, and jack. Extended Demarc wiring shall also include associated trouble shooting, testing and labeling. 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; and,
4. Installation intervals shall be in accordance with the timeframes identified for the services that this cabling will support, and shall be subject to the SLAs associated with that service.

Bidder understands this Requirement and shall meet or exceed it? Yes

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 without significant effort or damage to the Customer site;
2. The wire/cable pathway is in an asbestos 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. Upon written release provided by either the Customer or by the CALNET Program.

The 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 Demarc extension as described herein. The Bidder shall provide one price for each media identified.

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

Bidder understands this Requirement and shall meet or exceed it? Yes

Bidder shall provide the Extended Demarcation Wiring Services described in Table 23.4.2.1.

Table 23.4.2.1 – Extended Demarcation Wiring Services

Line Item	Feature Name	Feature Description	Bidder's Product Description, Restrictions and Limitations	Bidder's Product Identifier	Bidder Meets or Exceeds? Yes or No
1	Extended Demarcation -Copper – 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. Includes 300 feet of four-pair cable and an RJ48 or equivalent jack.		ATS-3PN-DMCCOP	Yes
2	Extended Demarcation -Copper –	Wiring services to extend Facilities from the		ATS-3PN-DMCCOP-AH	Yes

Line Item	Feature Name	Feature Description	Bidder's Product Description, Restrictions and Limitations	Bidder's Product Identifier	Bidder Meets or Exceeds? Yes or No
	Overtime Hours	Customer's MPOE to the Customer's point of utilization from a copper trunk or trunking equipment. Includes 300 feet of four-pair cable and an RJ48 or equivalent jack.			
3	Extended Demarcation -Copper – 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. Includes 300 feet of four-pair cable and an RJ48 or equivalent jack.		ATS-3PN-DMCCOP-AHW	Yes
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.		ATS-3PN-DMCCOP25	Yes

Line Item	Feature Name	Feature Description	Bidder's Product Description, Restrictions and Limitations	Bidder's Product Identifier	Bidder Meets or Exceeds? Yes or No
		Includes 300 feet or less of Category 5 25-pair CMP cable, one patch panel and mounting hardware. Ten Category 5e, three meter jumpers; one 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.			
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. Includes 300 feet or less of Category 5 25-pair CMP cable,		ATS-3PN-DMCCOP25-AH	Yes

Line Item	Feature Name	Feature Description	Bidder's Product Description, Restrictions and Limitations	Bidder's Product Identifier	Bidder Meets or Exceeds? Yes or No
		one patch panel and mounting hardware. Ten Category 5e, three meter jumpers; one 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.			
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. Includes 300 feet or less of Category 5 25-pair CMP cable, one patch panel and mounting hardware. Ten Category 5e,		ATS-3PN-DMCCOP25-AHW	Yes

Line Item	Feature Name	Feature Description	Bidder's Product Description, Restrictions and Limitations	Bidder's Product Identifier	Bidder Meets or Exceeds? Yes or No
		three meter jumpers; one 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.			
7	Extended Demarcation - Optical Fiber Link – Regular Hours	Wiring services to extend Facilities from the Customer's MPOE to the Customer's point of utilization from a fiber trunk or trunking equipment, Strand count required to provision one/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,		ATS-3PN-DMCFIB	Yes

Line Item	Feature Name	Feature Description	Bidder's Product Description, Restrictions and Limitations	Bidder's Product Identifier	Bidder Meets or Exceeds? Yes or No
		enclosures, connectors, and two SC-SC duplex patch cords for each single circuit extension. Includes associated troubleshooting, testing and labeling.			
8	Extended Demarcation - Optical Fiber Link – Overtime Hours	Wiring services to extend Facilities from the Customer's MPOE to the Customer's point of utilization from a fiber trunk or trunking equipment, Strand count required to provision one/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 SC-SC		ATS-3PN-DMCFIB-AH	Yes

Line Item	Feature Name	Feature Description	Bidder's Product Description, Restrictions and Limitations	Bidder's Product Identifier	Bidder Meets or Exceeds? Yes or No
		duplex patch cords for each single circuit extension. Includes associated troubleshooting, testing and labeling.			
9	Extended Demarcation - Optical Fiber Link – Sunday and Holiday Hours	Wiring services to extend Facilities from the Customer's MPOE to the Customer's point of utilization from a fiber trunk or trunking equipment, Strand count required to provision one/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 SC-SC duplex patch cords for each single circuit		ATS-3PN-DMCFIB-AHW	Yes

Line Item	Feature Name	Feature Description	Bidder's Product Description, Restrictions and Limitations	Bidder's Product Identifier	Bidder Meets or Exceeds? Yes or No
		extension. Includes associated troubleshooting, testing and labeling.			

23.4.2.2 Unsolicited Services Related Infrastructure

Bidder may offer additional unsolicited Services Related Infrastructure in Table 23.4.2.2.

Table 23.4.2.2 – Unsolicited Services Related Infrastructure

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
1	Install Customer Provided UPS	NWN0092	Install Customer Provided Rack Mount UPS Labor Only
2	48-Port Switch (Patch Cords)	NWN0093	Provide and Install 48- Patch Cords from switch to patch panel); Leviton or Equivalent
3	7' 2-Post Rack	NWN0094	Provide and Install 7' 2 post rack; CPI or Equivalent
4	7' 4-post seismic rack	NWN0095	Provide and Install 7' 4- Post seismic Rack; CPI or Equivalent
5	Install Customer Provided Rack	NWN0096	Install Customer Provided Rack; Labor Only
6	2RU Horizontal Wire Manager	NWN0097	Provide and Install 2RU Horizontal Wire Manager; Leviton or Equivalent
7	Double Sided Vertical Wire Manager for 7' Rack	NWN0098	Provide and Install Double Sided Vertical Wire Manager for 7' rack; CPI or Equivalent
8	Install Customer Provided Vertical Wire Manager for 7'	NWN0307	Install Customer Provided 7' vertical wire manager; Labor Only

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
	Rack		
9	Install Customer Provided 2RU Horizontal Wire Manager	NWN0099	Install Customer Provided 2RU Horizontal Wire Manager; Labor Only
10	Shelf (Single sided 3U)	NWN0100	Provide and Install Single-sided 3U Shelf; CPI or Equivalent
11	Install Customer Provided Single Sided 3U Shelf	NWN0101	Install Customer Provided Single Sided 3U Shelf; Labor Only
12	Install 4' x 4' x 3/4" Painted Plywood Backboard	NWN0103	Provide and Install Fire Treated 4' x 4' x 3/4" Painted Plywood Backboard
13	Power Strip (4 outlets)	NWN0104	Provide and Install Power Strip - Up to 4 Outlets; CPI or Equivalent
14	Install up to 10' x 12" Ladder Rack With 9" Rungs	NWN0105	Provide and Install Ladder Rack – Up to 10'x12" with 9" rungs (includes Support Hardware; CPI or Equivalent
15	Communication Pole 10 feet	NWN0106	Provide and Install Communication Pole – Up to 10 feet; Wiremold or Equivalent
16	6-Strand MM ISP Fiber	NWN0107	Provide and Install 6-Strand MM 50/125um ISP Fiber; Corning or Equivalent
17	6-Strand SM ISP Fiber	NWN0108	Provide and Install 6-Strand SM ISP Fiber; Corning or Equivalent
18	2-Strand MM ISP Fiber	NWN0109	Provide and Install 2-Strand MM 50/125 ISP Fiber; Corning or Equivalent
19	2-Strand SM ISP Fiber	NWN0110	Provide and Install 2-Strand SM ISP Fiber; Corning or Equivalent
20	6-Strand MM 50/125um OSP Underground Fiber	NWN0111	Provide and Install 6-Strand MM 50/125um OSP Underground Fiber; Corning or Equivalent
21	6-Strand SM OSP Underground Fiber	NWN0112	Provide and Install 6-Strand SM OSP Underground Fiber; Corning or Equivalent
22	12-Strand MM 50/125um OSP Underground Fiber	NWN0113	Provide and Install 12-Strand MM 50/125um OSP Underground Fiber; Corning or Equivalent

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
23	12-strand SM OSP Underground Fiber	NWN0114	Provide and Install 12-strand SM OSP Underground Fiber; Corning or Equivalent
24	24-Strand MM 50/125um OSP Underground Fiber	NWN0115	Provide and Install 24-Strand MM 50/125um OSP Underground Fiber; Corning or Equivalent
25	48-strand MM 50/125um OSP underground fiber	NWN0116	Provide and install 48-strand SM OSP underground fiber; Corning or Equivalent
26	24-Strand SM OSP Underground Fiber	NWN0116B	Provide and install 24-strand SM OSP Underground fiber; Corning or Equivalent
27	48-Strand SM OSP Underground Fiber	NWN0117	Provide and Install 48- Strand SM OSP Underground Fiber; Corning or Equivalent
28	1" Corrugated innerduct in Existing 2" to 4" Duct	NWN0118	Provide and Install 1" corrugated innerduct Underground in Existing 2" to 4" Duct - All 1" Innerduct; Carlon or Equivalent
29	1 1/4" Corrugated Innerduct in Existing 4" Duct	NWN0119	Provide and Install1-1/4" Corrugated innerduct Underground in Existing 4" Duct - All 1 1/4" Innerduct; Carlon or Equivalent
30	CAT5 25-Pair Copper ISP	NWN0120	Provide and Install CAT5 25-Pair Copper ISP; Superior Essex or Equivalent
31	CAT5 25-Pair Copper Underground OSP	NWN0121	Provide and Install CAT5 25-Pair Copper Underground OSP; Superior Essex or Equivalent
32	CAT3 50-Pair Copper ISP	NWN0122	Provide and Install CAT3 50-Pair Copper ISP; Superior Essex or Equivalent
33	CAT3 50-Pair Copper Underground OSP	NWN0123	Provide and Install CAT3 50-Pair Copper Underground OSP; Superior Essex or Equivalent
34	CAT3 100-Pair Copper ISP	NWN0124	Provide and Install CAT3 100-Pair Copper ISP; Superior Essex or Equivalent

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
35	CAT3 100-Pair Copper Underground OSP	NWN0125	Provide and Install CAT3 100-Pair Copper Underground OSP; Superior Essex or Equivalent
36	Cat 6 4-PairCopper ISP Circuit Extension	NWN0126	Provide and Install Cat 6 4-Pair Copper ISP Circuit Extension - Up to 300'; BerkTek or Equivalent
37	Cat 6 4-Pair Copper OSP Circuit Extension	NWN0127	Provide and Install Cat 6 4-Pair Copper OSP Circuit Extension - Up to 300'; BerkTek or Equivalent
38	CAT5 25-pair Copper ISP Circuit Extension	NWN0128	Provide and Install CAT5 25-pair Copper ISP Circuit Extension - Up to 300'; BerkTek or Equivalent
39	CAT5 25-pair Copper OSP Circuit Extension	NWN0129	Provide and Install CAT5 25-pair Copper OSP Circuit Extension - Up to 300'; BerkTek or Equivalent
40	RG58 COAX ISP	NWN0130	Provide and Install RG58 COAX ISP - Up to 300'; Commscope or Equivalent
41	RG62 COAX ISP	NWN0131	Provide and Install RG62 COAX ISP - Up to 300'; Commscope or Equivalent
42	RG6 COAX ISP	NWN0132	Provide and Install RG6 COAX ISP - Up to 300'; Commscope or Equivalent
43	25-Pair Protector	NWN0133	Provide and Install 25- Pair Protector; Commscope or Equivalent
44	50-Pair Protector	NWN0134	Provide and Install 50- Pair Protector; Circa or Equivalent
45	100-Pair Protector	NWN0135	Provide and Install 100- Pair Protector; Circa or Equivalent
46	4-Pair Protector	NWN0136	Provide and Install 4-Pair Protector; Circa or Equivalent
47	Protector Modules	NWN0137	Provide and Install Surge Protector Modules; Circa or Equivalent
48	BIX Mount 250-pair	NWN0138	Provide and Install BIX Mount 250- pair
49	BIX Connector	NWN0139	Provide and Install BIX Connector
50	BIX Ring	NWN0140	Provide and Install BIX Ring
51	66-Type Block 50 Pair	NWN0141	Provide and Install 66- Type Block 50 Pair with standoff bracket; Leviton or Equivalent

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
52	110-Style Block 100 Pair Kit	NWN0142	Provide and Install 110- Style Block 100 Pair Kit; Leviton or Equivalent
53	Rack Mount Fiber Cabinet, 2 Panel Capacity, 24 Fiber	NWN0143	Provide and Install Rack Mount Fiber Cabinet, 2 Panel Capacity, 24 Fiber; Corning or Equivalent
54	Rack Mount Fiber Cabinet, 4 Panel Capacity, 48 Fiber	NWN0144	Provide and Install Rack Mount Fiber Cabinet, 4 Panel Capacity, 48 Fiber; Corning or Equivalent
55	Wall Mount Fiber Cabinet, 2 Panel Capacity, 24 Fiber	NWN0145	Provide and Install Wall Mount Fiber Cabinet, 2 Panel Capacity, 24 Fiber; Corning or Equivalent
56	Wall Mount Fiber Cabinet, 4 Panel Capacity, 48 Fiber	NWN0146	Provide and Install Wall Mount Fiber Cabinet, 4 Panel Capacity, 48 Fiber; Corning or Equivalent
57	6-Strand Connector Panel MM 50/125 SC	NWN0147	Provide and Install 6- Strand Connector Panel MM 50/125 SC; Corning or Equivalent
58	6-Strand Connector Panel MM 50/125 LC	NWN0148	Provide and Install 6- Strand Connector Panel MM 50/125 LC; Corning or Equivalent
59	6-Strand Connector Panel MM 62.5/125 SC	NWN0149	Provide and Install 6- Strand Connector Panel MM 62.5/125 SC; Corning or Equivalent
60	6-Strand Connector Panel MM 62.5/125 LC	NWN0150	Provide and Install 6- Strand Connector Panel MM 62.5/125 LC; Corning or Equivalent
61	12-Strand Connector Panel MM 50/125 SC	NWN0151	Provide and Install 12- Strand Connector Panel MM 50/125 SC; Corning or Equivalent
62	12-Strand Connector Panel MM 50/125 LC	NWN0152	Provide and Install 12- Strand Connector Panel MM 50/125 LC; Corning or Equivalent
63	12-Strand Connector Panel MM 62.5/125 SC	NWN0153	Provide and Install 12- Strand Connector Panel MM 62.5/125 SC; Corning or Equivalent
64	12-Strand Connector Panel MM 62.5/125 LC	NWN0154	Provide and Install 12- Strand Connector Panel MM 62.5/125 LC; Corning or Equivalent
65	6-Strand Connector Panel SM SC	NWN0155	Provide and Install 6- Strand Connector Panel SM SC; Corning or Equivalent

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
66	6-Strand Connector Panel SM LC	NWN0156	Provide and Install 6- Strand Connector Panel SM LC; Corning or Equivalent
67	12-Strand Connector Panel SM SC	NWN0157	Provide and Install 12- Strand Connector Panel SM SC; Corning or Equivalent
68	12-Strand Connector Panel SM LC	NWN0158	Provide and Install 12- Strand Connector Panel SM LC; Corning or Equivalent
69	SC MM 50µm Connector	NWN0159	Provide SC MM 50µm Connector; Material Only – Must be Ordered in Conjunction with material Component in this Section
70	SC MM 62.5µm Connector	NWN0160	Provide SC MM 62.5µm Connector; Material Only – Must be Ordered in Conjunction with material Component in this Section
71	SC SM 9/125 connector	NWN0161	Provide SC SM 9/125um Mode Connector; Material Only – Must be Ordered in Conjunction with material Component in this Section
72	LC MM 50µm Connector	NWN0162	Provide LC MM 50µm Connector; Material Only – Must be Ordered in Conjunction with material Component in this Section
73	LC MM 62.5µm Connector	NWN0163	Provide LC MM 62.5µm Connector; Material Only – Must be Ordered in Conjunction with material Component in this Section
74	LC SM 9/125um Connector	NWN0164	Provide LC Mode SM 9/125um Connector; Material Only – Must be Ordered in Conjunction with material Component in this Section

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
75	Multimode 62.5/125 SC To SC 1 Meter Patch Cable	NWN0165	Provide and Install Multimode 62.5/125 SC To SC 1 Meter Patch Cable
76	Multimode 62.5/125 SC To SC 3 Meter Patch Cable	NWN0166	Provide and Install Multimode 62.5/125 SC To SC 3 Meter Patch Cable
77	Multimode 62.5/125 SC To LC 1 Meter Patch Cable	NWN0167	Provide and Install Multimode 62.5/125 SC To LC 1 Meter Patch Cable
78	Multimode 62.5/125 SC To LC 3 Meter Patch Cable	NWN0168	Provide and Install Multimode 62.5/125 SC To LC 3 Meter Patch Cable
79	Multimode 62.5/125 LC To LC 1 Meter Patch Cable	NWN0169	Provide and Install Multimode 62.5/125 LC To LC 1 Meter Patch Cable
80	Multimode 62.5/125 LC To LC 3 Meter Patch Cable	NWN0170	Provide and Install Multimode 62.5/125 LC To LC 3 Meter Patch Cable
81	Multimode 50/125 SC To SC 1 Meter Patch Cable	NWN0171	Provide and Install Multimode 50/125 SC To SC 1 Meter Patch Cable
82	Multimode 50/125 SC To SC 3 Meter Patch Cable	NWN0172	Provide and Install Multimode 50/125 SC To SC 3 Meter Patch Cable
83	Multimode 50/125 SC To LC 1 Meter Patch Cable	NWN0173	Provide and Install Multimode 50/125 SC To LC 1 Meter Patch Cable
84	Multimode 50/125 SC To LC 3 Meter Patch Cable	NWN0174	Provide and Install Multimode 50/125 SC To LC 3 Meter Patch Cable
85	Multimode 50/125 LC To LC 1 Meter Patch Cable	NWN0175	Provide and Install Multimode 50/125 LC To LC 1 Meter Patch Cable
86	Multimode 50/125 LC To LC 3 Meter Patch Cable	NWN0176	Provide and Install Multimode 50/125 LC To LC 3 Meter Patch Cable
87	Single Mode 9/125 SC To SC 1 Meter Patch Cable	NWN0177	Provide and Install Single Mode 9/125 SC To SC 1 Meter Patch Cable

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
88	Single Mode 9/125 SC To SC 3 Meter Patch Cable	NWN0178	Provide and Install Single Mode 9/125 SC To SC 3 Meter Patch Cable
89	Single Mode 9/125 SC To LC 1 Meter Patch Cable	NWN0179	Provide and Install Single Mode 9/125 SC To LC 1 Meter Patch Cable
90	Single Mode 9/125 SC To LC 3 Meter Patch Cable	NWN0180	Provide and Install Single Mode 9/125 SC To LC 3 Meter Patch Cable
91	Single Mode 9/125 LC To LC 1 Meter Patch Cable	NWN0181	Provide and Install Single Mode 9/125 LC To LC 1 Meter Patch Cable
92	Single Mode 9/125 LC To LC 3 Meter Patch Cable	NWN0182	Provide and Install Single Mode 9/125 LC To LC 3 Meter Patch Cable
93	Copper Cable Termination per Pair	NWN0183	Terminate one pair on 110 or 66 block, Copper Cable 25 Pair and Larger; Does not include cable preparation time or grounding
94	Copper Cable Splicing per Pair	NWN0184	Splice one pair of Copper Cable 25 Pair and Larger; Does not include cable preparation time or grounding
95	Copper cable Testing per Pair	NWN0185	Test one pair of Copper cable 25 Pair and Larger
96	Fiber Termination per Strand	NWN0186	Terminate one strand of fiber, 6 strands and larger
97	Fiber Splicing per Pair	NWN0187	Splice one strand of fiber, 6 strands and larger
98	Fiber Testing per Strand	NWN0188	Test one strand of fiber with OTDR or& power meter must provide test print out to customer
99	4-Pair CAT5e Termination and Testing	NWN0189	Terminate CAT5e 4- Pair with 8P8C 568B outlet, test with level II tester, submit printed test result to customer
100	4-Pair Cat 6 Termination and Testing	NWN0190	Terminate CAT6 4-Pair with 8P8C 568B CAT6 outlet, test with level II tester, submit printed test result to customer
101	4-Pair Cat 6 Jacking	NWN0191	Terminate CAT6 cable with CAT6 8P8C 568B outlet, test with LEVEL II tester. Submit printed test result to customer

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
102	4-Pair Cat 6 Termination	NWN0192	Terminate 4- Pair Cat 6 cable
103	4-Pair Cat 6 Testing	NWN0193	Test 4-Pair Cat 6 cable with Level II tester. Submit printed copy to customer
104	4-Pair Cat 6A Termination and Testing	NWN0194	Terminate CAT6A 4- Pair cable with CAT6A 8P8C 568B outlet
105	4-Pair Cat 6A Jacking	NWN0195	Terminate CAT6A cable with CAT6A 8P8C 568B outlet
106	4-Pair Cat 6A Termination	NWN0196	Terminate 4- Pair CAT6A cable on block
107	4-Pair Cat 6A Testing	NWN0197	Test 4-Pair Cat 6A cable with Level II tester. Submit printed copy to customer
108	Single 4-Pair Cat 6 PVC Cable	NWN0198	Provide and Install Single 4-pair Cat 6 PVC Cable; BerkTek or Equivalent
109	Single 4-Pair Cat 6 Plenum Cable	NWN0199	Provide and Install Single 4-Pair Cat 6 Plenum Cable; BerkTek or Equivalent
110	Single 4-Pair Cat 6 OSP Cable	NWN0200	Provide and Install Single 4-Pair Cat 6 OSP Cable; BerkTek or Equivalent
111	Single 4-Pair Cat 6A PVC Cable	NWN0201	Provide and Install Single 4-Pair Cat 6A PVC Cable; BerkTek or Equivalent
112	Single 4-Pair Cat 6A Plenum Cable	NWN0202	Provide and Install Single 4-Pair Cat 6A Plenum Cable; BerkTek or Equivalent
113	Single 4-Pair Cat 6A OSP Cable	NWN0203	Provide and Install Single 4-Pair Cat 6A OSP Cable; BerkTek or Equivalent
114	24-Port Unloaded Cat 6A Patch Panel	NWN0204	Provide and Install 24- Port Unloaded Cat 6A Patch Panel; Leviton or Equivalent
115	48-Port Unloaded Cat 6A Patch Panel	NWN0205	Provide and Install 48- Port Unloaded Cat 6A Patch Panel; Leviton or Equivalent
116	New 24-Port Cat 6 Patch Panel	NWN0206	Provide and Install New 24-Port Cat 6 Patch Panel; Leviton or Equivalent
117	New 48-Port Cat 6 Patch Panel	NWN0207	Provide and Install New 48-Port Cat 6 Patch Panel; Leviton or Equivalent
118	New 12-Port Cat 6 Patch Panel	NWN0210	Provide and Install New 12-Port Cat 6 Patch Panel; Leviton or Equivalent

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
119	Face Plate Plastic	NWN0211	Provide and Install Face Plate Plastic; Leviton or Equivalent
120	Modular Furniture Device Plate	NWN0212	Provide and Install Modular Furniture Device Plate; Leviton or Equivalent
121	4-Port Stainless Steel Faceplate	NWN0213	Provide and Install 4-Port Stainless Steel Faceplate; Leviton or Equivalent
122	6-port Stainless Steel Faceplate	NWN0214	Provide and Install 6-port Stainless Steel Faceplate; Leviton or Equivalent
123	Cat 6 Jack Insert	NWN0215	Provide and Install Cat 6 Jack Insert; Leviton or Equivalent
124	Cat 6A Jack Insert	NWN0216	Provide and Install Cat 6A Jack Insert; Leviton or Equivalent
125	3' Cat 5e Patch Cord	NWN0217	Provide and Install 3' Cat 5e Patch Cord; Leviton or Equivalent
126	10' Cat 5e Patch Cord	NWN0218	Provide and Install 10' Cat 5e Patch Cord; Leviton or Equivalent
127	3' Cat 6 Patch Cord	NWN0219	Provide and Install 3' Cat 6 Patch Cord; Leviton or Equivalent
128	10' Cat 6 Patch Cord	NWN0220	Provide and Install 10' Cat 6 Patch Cord; Leviton or Equivalent
129	Velcro Ties	NWN0221	Provide and Install Velcro Ties - 25 Yard Roll; Panduit or Equivalent
130	6.5" Coyote Fiber Splice Closure	NWN0222	Provide and Install Fiber Splice Closure; Preformed or Equivalent
131	Fiber Splice Tray	NWN0223	Provide and Install Fiber Splice Tray; Preformed or Equivalent
132	Copper Splice Case 4.0x25	NWN0224	Provide and Install Copper Splice Case 4.0x25; Preformed or Equivalent
133	Copper Splice Case 6.5x28	NWN0225	Provide and Install Copper Splice Case 6.5x28; Preformed or Equivalent
134	Rod & rope conduit	NWN0227	Rod & rope conduit and leave 3/8" rope in conduit to pull; Pull String & Rope provided by NWN. Rope to be approximately sized to conduit size
135	Stick (10') of 1" EMT	NWN0228	Provide and Install Stick (10') of 1" EMT
136	Stick (10') of 1 1/4" EMT	NWN0229	Provide and Install Stick (10') of 1 1/4" EMT
137	Stick (10') of 2" EMT	NWN0230	Provide and Install Stick (10') of 2" EMT

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
138	Stick (10') of 1" Rigid	NWN0231	Provide and Install Stick (10') of 1" Rigid
139	Stick (10') of 1 1/4" Rigid	NWN0232	Provide and Install Stick (10') of 1 1/4" Rigid
140	Stick (10') of 2" Rigid	NWN0233	Provide and Install Stick (10') of 2" Rigid
141	1" EMT Stub	NWN0234	Provide and Install 1" EMT Stub - From Device Box to Ceiling - Includes Straps, Connector and Bushing
142	6"x6"x4" NEMA1 indoor Surface Mount Box	NWN0235	Provide and Install 6'x6"x4" NEMA1 Surface Mount Box
143	1" 2-Hole Strap, EMT	NWN0236	Provide and Install 1" 2- Hole Strap, EMT
144	1" Bushing, EMT	NWN0237	Provide and Install 1" Bushing, EMT
145	1" Compression Connector, EMT	NWN0238	Provide and Install 1" Compression Connector, EMT
146	1" Compression Coupler, EMT	NWN0239	Provide and Install 1" Compression Coupler, EMT
147	1" Unistrut Clamp, EMT	NWN0240	Provide and Install 1" Unistrut Clamp, EMT
148	2" 2-Hole Strap, EMT	NWN0241	Provide and Install 2" 2- Hole Strap, EMT
149	2" Bushing, EMT	NWN0242	Provide and Install 2" Bushing, EMT
150	2" Compression Connector, EMT	NWN0243	Provide and Install 2" Compression Connector, EMT
151	2" Compression Coupler, EMT	NWN0244	Provide and Install 2" Compression Coupler, EMT
152	2" Unistrut Clamp, EMT	NWN0245	Provide and Install 2" Unistrut Clamp, EMT
153	3" 2-Hole Strap, EMT	NWN0246	Provide and Install 3" 2- Hole Strap, EMT
154	3" Bushing, EMT	NWN0247	Provide and Install 3" Bushing, EMT
155	3" Compression Connector, EMT	NWN0248	Provide and Install 3" Compression Connector, EMT
156	3" Compression Coupler, EMT	NWN0249	Provide and Install 3" Compression Coupler, EMT
157	3" Unistrut Clamp, EMT	NWN0250	Provide and Install 3" Unistrut Clamp, EMT
158	4" 2-Hole Strap, EMT	NWN0251	Provide and Install 4" 2- Hole Strap, EMT

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
159	4" Bushing, EMT	NWN0252	Provide and Install 4" Bushing, EMT
160	4" Compression Connector, EMT	NWN0253	Provide and Install 4" Compression Connector, EMT
161	4" Compression Coupler, EMT	NWN0254	Provide and Install 4" Compression Coupler, EMT
162	4" Unistrut Clamp, EMT	NWN0255	Provide and Install 4" Unistrut Clamp, EMT
163	1" 2-Hole Strap, Rigid	NWN0256	Provide and Install 1" 2- Hole Strap, Rigid
164	1" Bushing, Rigid	NWN0257	Provide and Install 1" Bushing, Rigid
165	1" Compression Connector, Rigid	NWN0258	Provide and Install Connector - 1" Compression Connector, Rigid
166	1" Compression Coupler, Rigid	NWN0259	Provide and Install Coupler - 1" Compression Coupler, Rigid
167	1" Unistrut Clamp, Rigid	NWN0260	Provide and Install 1" Unistrut Clamp, Rigid
168	2" 2-Hole Strap, Rigid	NWN0261	Provide and Install 2" 2- Hole Strap, Rigid
169	2" Bushing, Rigid	NWN0262	Provide and Install 2" Bushing, Rigid
170	2" Compression Connector, Rigid	NWN0263	Provide and Install Connector - 2" Compression Connector, Rigid
171	2" Compression Coupler, Rigid	NWN0264	Provide and Install Coupler - 2" Compression Coupler, Rigid
172	2" Unistrut Clamp, Rigid	NWN0265	Provide and Install 2" Unistrut Clamp, Rigid
173	2" J-Hook w/ Multi-Purpose Clip	NWN0266	Provide and Install 2" J- Hook w/ Multi-Purpose Clip
174	2 Gang weatherproof Bell Box	NWN0267	Provide and Install 2 Gang Bell Box or Equivalent
175	NEMA1 8"x8"x6" Pull Box	NWN0268	Provide and Install 8"x8"x6" NEMA1 Pull Box or Equivalent
176	12"x12"x8" NEMA 1 Junction Box	NWN0269	Provide and Install 12"x12"x8" NEMA 1 J-Box or Equivalent
177	12"x12"x8" NEMA 3 Junction Box	NWN0270	Provide and Install 12"x12"x8" NEMA 3 J-Box1 or Equivalent

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
178	Install Customer Provided WAP (Wireless Access Point)	NWN0271	Install Customer Provided WAP (Wireless Access Point); Labor Only Does not include Configuration
179	WAP (Wireless Access Point) Enclosure	NWN0272	Provide and Install WAP (Wireless Access Point) Enclosure; Oberon or Equivalent
180	Install Customer Provided Camera	NWN0273	Install Customer Provided Camera; Labor Only
181	Install Customer Provided Paging Speaker	NWN0274	Install Customer Provided Paging Speaker; Labor Only
182	Unistrut slotted 7/8"	NWN0275	Provide and Install Unistrut slotted 7/8"
183	1" unistrut straps EMT	NWN0276	Provide and Install 1" unistrut straps EMT
184	2" unistrut straps EMT	NWN0277	Provide and Install 2" unistrut straps EMT
185	1"x12" EMT Sleeve	NWN0278	Provide and Install 1" EMT Sleeve; Core or Penetration not Included
186	2"x12" EMT Sleeve	NWN0279	Provide and Install 2" EMT Sleeve; Core or Penetration not Included
187	3"x12" EMT Sleeve	NWN0280	Provide and Install 3" EMT Sleeve; Core or Penetration not Included
188	4"x12" EMT Sleeve	NWN0281	Provide and Install 4" EMT Sleeve; Core or Penetration not Included
189	8"x8"x6" Pull Box NEMA3R	NWN0282	Provide and Install 8"x8"x6" Pull Box NEMA 3R
190	Raceway: 5-Foot Base Ivory and Cover Plastic (2 1/4" x 11/16")	NWN0283	Provide and Install 5- Foot Base Ivory and Cover Plastic (2 1/4" x 11/16"); Wiremold or Equivalent
191	Raceway: Cover Clip	NWN0284	Provide and Install Cover Clip; Wiremold or Equivalent
192	Raceway: Internal Elbow	NWN0285	Provide and Install Internal Elbow; Wiremold or Equivalent
193	Raceway: External Bend	NWN0286	Provide and Install External Bend; Wiremold or Equivalent

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
194	Raceway: Flat Elbow	NWN0287	Provide and Install Flat Elbow; Wiremold or Equivalent
195	Raceway: Wire Clip Ivory	NWN0288	Provide and Install Wire Clip Ivory; Wiremold or Equivalent
196	Raceway: Blank End Fitting	NWN0289	Provide and Install Blank End Fitting; Wiremold or Equivalent
197	Raceway: Entrance Fitting	NWN0290	Provide and Install Entrance Fitting; Wiremold or Equivalent
198	Raceway: Tee	NWN0291	Tee; Wiremold or Equivalent
199	Raceway: Core Drilling, 1" Hole	NWN0292	Core Drilling, 1" Hole; Labor Only
200	Raceway: Core Drilling, 2" hole	NWN0293	Core Drilling, 2" hole; Labor Only
201	Raceway: Core Drilling, 3" hole	NWN0294	Core Drilling, 3" hole; Labor Only
202	Raceway: Core Drilling, 4" hole	NWN0295	Core Drilling, 4" hole; Labor Only
203	Raceway: 1"x8" EMT sleeve for Drywall - Wall Penetration	NWN0296	Provide and Install 1"x8" sleeve for Wall Penetration - Drywall
204	Raceway: Scissor Lift Rental (20')	NWN0297	Provide Scissor Lift Rental (20') - Includes Daily Rate, Pickup and Delivery Fees.; For NWN use in support of SRI.
205	Raceway: Fire Seal Penetration, 1" Hole	NWN0298	Provide and Install Fire Seal Penetration, 1" Hole
206	Raceway: Fire Seal Penetration, 2" Hole	NWN0299	Provide and Install Fire Seal Penetration, 2" Hole
207	Raceway: Fire Seal Penetration, 3" Hole	NWN0300	Provide and Install Fire Seal Penetration, 3" Hole
208	Raceway: Fire Seal Penetration, 4" Hole	NWN0301	Provide and Install Fire Seal Penetration, 4" Hole

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
209	Installation of Equipment Ground – Rods and Wire	NWN0302	Provide and Install Equipment Ground 1 - 8' x 5/8" Ground Rod and # 6 Ground Wire; Includes All Material, Termination s and Labor
210	Installation of Equipment Ground – Wire Only	NWN0303	Provide and Install Equipment Ground, # 6 Ground Wire; Includes All Material, Termination s and Labor
211	Relocate Existing Telephone Handset	NWN0304	Relocate Existing Telephone Handset - same HC/TC on Existing Cabling; Includes Cross- Connect, Testing, and Documentation
212	Install New Cross-Connect	NWN0305	Provide Installation New Cross-Connect
213	Locate and Identify Circuit	NWN0306	Locate and Identify Circuit - Includes Tone, Tag and Document; Labor Only
214	Install Customer Provided UPS	NWN0092- OT	Install Customer Provided Rack Mount UPS; Labor Only
215	48-Port Switch (Patch Cords)	NWN0093- OT	Provide and Install 48- Patch Cords from switch to patch panel); Leviton or Equivalent
216	7' 2-Post Rack	NWN0094- OT	Provide and Install 7' 2 post rack; CPI or Equivalent
217	7' 4-post seismic rack	NWN0095- OT	Provide and Install 7' 4- Post seismic Rack; CPI or Equivalent
218	Install Customer Provided Rack	NWN0096- OT	Provide and Install Customer Provided Rack; Labor Only
219	Double Sided Vertical Wire Manager for 7' Rack	NWN0098- OT	Provide and Install Double Sided Vertical Wire Manager for 7' rack; CPI or Equivalent
220	Install Customer Provided Vertical Wire Manager for 7' Rack	NWN0307- OT	Customer Provided 7' vertical wire manager; Labor Only
221	Install Customer Provided 2RU Horizontal Wire Manager	NWN0099- OT	Installation of Customer Provided 2RU Horizontal Wire Manager; Labor Only

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
222	Shelf (Single sided 3U)	NWN0100- OT	Provide and Install Single-sided 3U Shelf; CPI or Equivalent
223	Install Customer Provided Single Sided 3U Shelf	NWN0101- OT	Install Customer Provided Single Sided 3U Shelf; Labor Only
224	Hinged Wall Bracket	NWN0102- OT	Provide and Install Hinged Wall Bracket; Allen Tel
225	Install 4' x 4' x 3/4" Painted Plywood Backboard	NWN0103- OT	Provide and Install Fire Treated 4' x 4' x 3/4" Painted Plywood Backboard
226	Power Strip (4 outlets)	NWN0104- OT	Provide and Install Power Strip - Up to 4 Outlets; CPI or Equivalent
227	Install up to 10' x 12" Ladder Rack With 9" Rungs	NWN0105- OT	Provide and Install Ladder Rack – Up to 10'x12" with 9" rungs (includes Support Hardware); CPI or Equivalent
228	Communication Pole 10 feet	NWN0106- OT	Provide and Install Communication Pole – Up to 10 feet; Wiremold or Equivalent
229	6-Strand MM ISP Fiber	NWN0107- OT	Provide and Install 6- Strand MM 50/125um ISP Fiber; Corning or Equivalent
230	6-Strand SM ISP Fiber	NWN0108- OT	Provide and install 6-Strand SM ISP Fiber; Corning or Equivalent
231	2-Strand MM ISP Fiber	NWN0109- OT	Provide and install 2-Strand MM 50/125 ISP Fiber; Corning or Equivalent
232	2-Strand SM ISP Fiber	NWN0110- OT	Provide and install 2-Strand SM ISP Fiber; Corning or Equivalent
233	6-Strand MM 50/125um OSP Underground Fiber	NWN0111- OT	Provide and install 6-Strand MM 50/125um OSP Underground Fiber; Corning or Equivalent
234	6-Strand SM OSP Underground Fiber	NWN0112- OT	Provide and install 6-Strand SM OSP Underground Fiber; Corning or Equivalent
235	12-Strand MM 50/125um OSP Underground Fiber	NWN0113- OT	Provide and install 12-Strand MM 50/125um OSP Underground Fiber; Corning or Equivalent

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
236	12-strand SM OSP Underground Fiber	NWN0114- OT	Provide and install 12-strand SM OSP Underground Fiber; Corning or Equivalent
237	24-Strand MM 50/125um OSP Undergroud Fiber	NWN0115- OT	Provide and install 24-Strand MM 50/125um OSP Underground Fiber; Corning or Equivalent
238	48-strand MM 50/125um OSP underground fiber	NWN0116- OT	Provide and install 48-strand SM OSP Underground Fiber; Corning or Equivalent
239	24-Strand SM OSP Underground Fiber	NWN0116B- OT	Provide and Install 24- Strand SM OSP Underground Fiber; Corning or Equivalent
240	48-Strand SM OSP Underground Fiber	NWN0117- OT	Provide and Install 48- Strand SM OSP Underground Fiber; Corning or Equivalent
241	1" Corrugated innerduct in Existing 2" to 4" Duct	NWN0118- OT	Provide and Install 1" corrugated innerduct Underground in Existing 2" to 4" Duct - All 1" Innerduct; Carlon or Equivalent
242	1 1/4" Corrugated Innerduct in Existing 4" Duct	NWN0119- OT	Provide and Install1-1/4" Corrugated innerduct Underground in Existing 4" Duct - All 1 1/4" Innerduct; Carlon or Equivalent
243	CAT5 25-Pair Copper ISP	NWN0120- OT	Provide and Install CAT5 25-Pair Copper ISP; Superior Essex or Equivalent
244	CAT5 25-Pair Copper Underground OSP	NWN0121- OT	Provide and Install CAT5 25-Pair Copper Underground OSP; Superior Essex or Equivalent
245	CAT3 50-Pair Copper ISP	NWN0122- OT	Provide and Install CAT3 50-Pair Copper ISP; Superior Essex or Equivalent
246	CAT3 50-Pair Copper Underground OSP	NWN0123- OT	Provide and Install CAT3 50-Pair Copper Underground OSP; Superior Essex or Equivalent
247	CAT3 100-Pair Copper ISP	NWN0124- OT	Provide and Install CAT3 100-Pair Copper ISP; Superior Essex or Equivalent

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
248	CAT3 100-Pair Copper Underground OSP	NWN0125- OT	Provide and Install CAT3 100-Pair Copper Underground OSP; Superior Essex or Equivalent
249	Cat 6 4-PairCopper ISP Circuit Extension	NWN0126- OT	Provide and Install Cat 6 4-Pair Copper ISP Circuit Extension - Up to 300'; BerkTek or Equivalent
250	Cat 6 4-Pair Copper OSP Circuit Extension	NWN0127- OT	Provide and Install Cat 6 4-Pair Copper OSP Circuit Extension - Up to 300'; BerkTek or Equivalent
251	CAT5 25-pair Copper ISP Circuit Extension	NWN0128- OT	Provide and Install CAT5 25-pair Copper ISP Circuit Extension - Up to 300'; BerkTek or Equivalent
252	CAT5 25-pair Copper OSP Circuit Extension	NWN0129- OT	Provide and Install CAT5 25-pair Copper OSP Circuit Extension - Up to 300'; BerkTek or Equivalent
253	RG58 COAX ISP	NWN0130- OT	Provide and Install RG58 COAX ISP - Up to 300'; Commscope or Equivalent
254	RG62 COAX ISP	NWN0131- OT	Provide and Install RG62 COAX ISP - Up to 300'; Commscope or Equivalent
255	RG6 COAX ISP	NWN0132- OT	Provide and Install RG6 COAX ISP - Up to 300'; Commscope or Equivalent
256	25-Pair Protector	NWN0133- OT	Provide and Install 25- Pair Protector; Circa or Equivalent
257	50-Pair Protector	NWN0134- OT	Provide and Install 50- Pair Protector; Circa or Equivalent
258	100-Pair Protector	NWN0135- OT	Provide and Install 100- Pair Protector; Circa or Equivalent
259	4-Pair Protector	NWN0136- OT	Provide and Install 4-Pair Protector; Circa or Equivalent
260	Protector Modules	NWN0137- OT	Provide and Install Surge Protector Modules; Circa or Equivalent
261	BIX Mount 250-pair	NWN0138- OT	Provide and Install BIX Mount 250- pair
262	BIX Connector	NWN0139- OT	Provide and Install BIX Connector

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
263	BIX Ring	NWN0140- OT	Provide and Install BIX Ring
264	66-Type Block 50 Pair	NWN0141- OT	Provide and Install 66- Type Block 50 Pair with stand off bracket; Leviton or Equivalent
265	110-Style Block 100 Pair Kit	NWN0142- OT	Provide and Install 110- Style Block 100 Pair Kit; Leviton or Equivalent
266	Rack Mount Fiber Cabinet, 2 Panel Capacity, 24 Fiber	NWN0143- OT	Provide and Install Rack Mount Fiber Cabinet, 2 Panel Capacity, 24 Fiber; Corning or Equivalent
267	Rack Mount Fiber Cabinet, 4 Panel Capacity, 48 Fiber	NWN0144- OT	Provide and Install Rack Mount Fiber Cabinet, 4 Panel Capacity, 48 Fiber; Corning or Equivalent
268	Wall Mount Fiber Cabinet, 2 Panel Capacity, 24 Fiber	NWN0145- OT	Provide and Install Wall Mount Fiber Cabinet, 2 Panel Capacity, 24 Fiber; Corning or Equivalent
269	Wall Mount Fiber Cabinet, 4 Panel Capacity, 48 Fiber	NWN0146- OT	Provide and Install Wall Mount Fiber Cabinet, 4 Panel Capacity, 48 Fiber; Corning or Equivalent
270	6-Strand Connector Panel MM 50/125 SC	NWN0147- OT	Provide and Install 6- Strand Connector Panel MM 50/125 SC; Corning or Equivalent
271	6-Strand Connector Panel MM 50/125 LC	NWN0148- OT	Provide and Install 6- Strand Connector Panel MM 50/125 LC; Corning or Equivalent
272	6-Strand Connector Panel MM 62.5/125 SC	NWN0149- OT	Provide and Install 6- Strand Connector Panel MM 62.5/125 SC; Corning or Equivalent
273	6-Strand Connector Panel MM 62.5/125 LC	NWN0150- OT	Provide and Install 6- Strand Connector Panel MM 62.5/125 LC; Corning or Equivalent
274	12-Strand Connector Panel MM 50/125 SC	NWN0151- OT	Provide and Install 12- Strand Connector Panel MM 50/125 SC; Corning or Equivalent
275	12-Strand Connector Panel MM 50/125 LC	NWN0152- OT	Provide and Install 12- Strand Connector Panel MM 50/125 LC; Corning or Equivalent

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
276	12-Strand Connector Panel MM 62.5/125 SC	NWN0153- OT	Provide and Install 12- Strand Connector Panel MM 62.5/125 SC; Corning or Equivalent
277	12-Strand Connector Panel MM 62.5/125 LC	NWN0154- OT	Provide and Install 12- Strand Connector Panel MM 62.5/125 LC; Corning or Equivalent
278	6-Strand Connector Panel SM SC	NWN0155- OT	Provide and Install 6- Strand Connector Panel SM SC; Corning or Equivalent
279	6-Strand Connector Panel SM LC	NWN0156- OT	Provide and Install 6- Strand Connector Panel SM LC; Corning or Equivalent
280	12-Strand Connector Panel SM SC	NWN0157- OT	Provide and Install 12- Strand Connector Panel SM SC; Corning or Equivalent
281	Multimode 62.5/125 SC To SC 1 Meter Patch Cable	NWN0165- OT	Provide and Install Multimode 62.5/125 SC To SC 1 Meter Patch Cable
282	Multimode 62.5/125 SC To SC 3 Meter Patch Cable	NWN0166- OT	Provide and Install Multimode 62.5/125 SC To SC 3 Meter Patch Cable
283	Multimode 62.5/125 SC To LC 1 Meter Patch Cable	NWN0167- OT	Provide and Install Multimode 62.5/125 SC To LC 1 Meter Patch Cable
284	Multimode 62.5/125 SC To LC 3 Meter Patch Cable	NWN0168- OT	Provide and Install Multimode 62.5/125 SC To LC 3 Meter Patch Cable
285	Multimode 62.5/125 LC To LC 1 Meter Patch Cable	NWN0169- OT	Provide and Install Multimode 62.5/125 LC To LC 1 Meter Patch Cable
286	Multimode 62.5/125 LC To LC 3 Meter Patch Cable	NWN0170- OT	Provide and Install Multimode 62.5/125 LC To LC 3 Meter Patch Cable
287	Multimode 62.5/125 SC To SC 1 Meter Patch Cable	NWN0171- OT	Provide and Install Multimode 62.5/125 SC To SC 1 Meter Patch Cable
288	Multimode 62.5/125 SC To SC 3 Meter Patch Cable	NWN0172- OT	Provide and Install Multimode 62.5/125 SC To SC 3 Meter Patch Cable

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
289	Multimode 62.5/125 SC To LC 1 Meter Patch Cable	NWN0173- OT	Provide and Install Multimode 62.5/125 SC To LC 1 Meter Patch Cable
290	Multimode 62.5/125 SC To LC 3 Meter Patch Cable	NWN0174- OT	Provide and Install Multimode 62.5/125 SC To LC 3 Meter Patch Cable
291	Multimode 62.5/125 LC To LC 1 Meter Patch Cable	NWN0175- OT	Provide and Install Multimode 62.5/125 LC To LC 1 Meter Patch Cable
292	Multimode 62.5/125 LC To LC 3 Meter Patch Cable	NWN0176- OT	Provide and Install Multimode 62.5/125 LC To LC 3 Meter Patch Cable
293	Multimode 50/125 SC To SC 1 Meter Patch Cable	NWN0177- OT	Provide and Install Multimode 50/125 SC To SC 1 Meter Patch Cable
294	Multimode 50/125 SC To SC 3 Meter Patch Cable	NWN0178- OT	Provide and Install Multimode 50/125 SC To SC 3 Meter Patch Cable
295	Multimode 50/125 SC To LC 1 Meter Patch Cable	NWN0179- OT	Provide and Install Multimode 50/125 SC To LC 1 Meter Patch Cable
296	Multimode 50/125 SC To LC 3 Meter Patch Cable	NWN0180- OT	Provide and Install Multimode 50/125 SC To LC 3 Meter Patch Cable
297	Multimode 50/125 LC To LC 1 Meter Patch Cable	NWN0181- OT	Provide and Install Multimode 50/125 LC To LC 1 Meter Patch Cable
298	Multimode 50/125 LC To LC 3 Meter Patch Cable	NWN0182- OT	Provide and Install Multimode 50/125 LC To LC 3 Meter Patch Cable
299	Copper Cable Termination per Pair	NWN0183- OT	Copper cable termination per pair (25 pair and larger); Does not include cable preparation time or grounding
300	Copper Cable Splicing per Pair	NWN0184- OT	Copper cable splicing per pair (25 pair and larger); Does not include cable preparation time or grounding
301	Copper cable Testing per Pair	NWN0185- OT	Copper cable testing per pair (25 pair and larger)

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
302	Fiber Termination per Strand	NWN0186- OT	Fiber termination per strand
303	Fiber Splicing per Pair	NWN0187- OT	Fiber splicing per pair
304	Fiber Testing per Strand	NWN0188- OT	Fiber testing per strand
305	4-Pair CAT5e Termination and Testing	NWN0189- OT	4-pair CAT5e termination and testing
306	4-Pair Cat 6 Termination and Testing	NWN0190- OT	4-pair Cat 6 termination and testing
307	4-Pair Cat 6 Jacking	NWN0191- OT	4-pair Cat 6 jacking
308	4-Pair Cat 6 Termination	NWN0192- OT	4-pair Cat 6 termination
309	4-Pair Cat 6 Testing	NWN0193- OT	4-pair Cat 6 testing
310	4-Pair Cat 6A Termination and Testing	NWN0194- OT	4-pair Cat 6A termination and testing
311	4-Pair Cat 6A Jacking	NWN0195- OT	4-pair Cat 6A jacking
312	4-Pair Cat 6A Termination	NWN0196- OT	4-pair Cat 6A termination
313	4-Pair Cat 6A Testing	NWN0197- OT	4-pair Cat 6A testing
314	Single 4-Pair Cat 6 PVC Cable	NWN0198- OT	BerkTek or Equivalent
315	Single 4-Pair Cat 6 Plenum Cable	NWN0199- OT	BerkTek or Equivalent
316	Single 4-Pair Cat 6 OSP Cable	NWN0200- OT	BerkTek or Equivalent
317	Single 4-Pair Cat 6A PVC Cable	NWN0201- OT	BerkTek or Equivalent

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
318	Single 4-Pair Cat 6A Plenum Cable	NWN0202- OT	BerkTek or Equivalent
319	Single 4-Pair Cat 6A OSP Cable	NWN0203- OT	BerkTek or Equivalent
320	24-Port Unloaded Cat 6A Patch Panel	NWN0204- OT	Provide and Install 24- Port Unloaded Cat 6A Patch Panel; Leviton or Equivalent
321	48-Port Unloaded Cat 6A Patch Panel	NWN0205- OT	Provide and Install 48- Port Unloaded Cat 6A Patch Panel; Leviton or Equivalent
322	New 24-Port Cat 6 Patch Panel	NWN0206- OT	Provide and Install New 24-Port Cat 6 Patch Panel; Leviton or Equivalent
323	New 48-Port Cat 6 Patch Panel	NWN0207- OT	Provide and Install New 48-Port Cat 6 Patch Panel; Leviton or Equivalent
324	New 12-Port Cat 6 Patch Panel	NWN0210- OT	Provide and Install New 12-Port Cat 6 Patch Panel; Leviton or Equivalent
325	Face Plate Plastic	NWN0211- OT	Provide and Install Face Plate Plastic; Leviton or Equivalent
326	Modular Furniture Device Plate	NWN0212- OT	Provide and Install Modular Furniture Device Plate; Leviton or Equivalent
327	4-Port Stainless Steel Faceplate	NWN0213- OT	Provide and Install 4-Port Stainless Steel Faceplate; Leviton or Equivalent
328	6-port Stainless Steel Faceplate	NWN0214- OT	Provide and Install 6-port Stainless Steel Faceplate; Leviton or Equivalent
329	Cat 6 Jack Insert	NWN0215- OT	Provide and Install Cat 6 Jack Insert; Leviton or Equivalent
330	Cat 6A Jack Insert	NWN0216- OT	Provide and Install Cat 6A Jack Insert; Leviton or Equivalent
331	3' Cat 5e Patch Cord	NWN0217- OT	Provide and Install 3' Cat 5e Patch Cord; Leviton or Equivalent
332	10' Cat 5e Patch Cord	NWN0218- OT	Provide and Install 10' Cat 5e Patch Cord; Leviton or Equivalent
333	3' Cat 6 Patch Cord	NWN0219- OT	Provide and Install 3' Cat 6 Patch Cord; Leviton or Equivalent

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
334	10' Cat 6 Patch Cord	NWN0220- OT	Provide and Install 10' Cat 6 Patch Cord; Leviton or Equivalent
335	Velcro Ties	NWN0221- OT	Provide and Install Velcro Ties - 25 Yard Roll; Panduit or Equivalent
336	6.5" Coyote Fiber Splice Closure	NWN0222- OT	Provide and Install Fiber Splice Closure; Preformed or Equivalent
337	Fiber Splice Tray	NWN0223- OT	Provide and Install Fiber Splice Tray; Preformed or Equivalent
338	Copper Splice Case 4.0x25	NWN0224- OT	Provide and Install Copper Splice Case 4.0x25; Preformed or Equivalent
339	Copper Splice Case 6.5x28	NWN0225- OT	Provide and Install Copper Splice Case 6.5x28; Preformed or Equivalent
340	Rod & rope conduit	NWN0227- OT	Rod & rope conduit and leave 3/8" rope in conduit to pull; Pull String & Rope provided by NWN. Rope to be approximate ly sized to conduit size
341	Stick (10') of 1" EMT	NWN0228- OT	Provide and Install Stick (10') of 1" EMT
342	Stick (10') of 1 1/4" EMT	NWN0229- OT	Provide and Install Stick (10') of 1 1/4" EMT
343	Stick (10') of 2" EMT	NWN0230- OT	Provide and Install Stick (10') of 2" EMT
344	Stick (10') of 1" Rigid	NWN0231- OT	Provide and Install Stick (10') of 1" Rigid
345	Stick (10') of 1 1/4" Rigid	NWN0232- OT	Provide and Install Stick (10') of 1 1/4" Rigid
346	Stick (10') of 2" Rigid	NWN0233- OT	Provide and Install Stick (10') of 2" Rigid
347	1" EMT Stub	NWN0234- OT	Provide and Install 1" EMT Stub - From Device Box to Ceiling - Includes Straps, Connector and Bushing
348	6"x6"x4" NEMA1 indoor Surface Mount Box	NWN0235- OT	Provide and Install 6'x6"x4" NEMA1 Surface Mount Box

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
349	1" 2-Hole Strap, EMT	NWN0236- OT	Provide and Install 1" 2- Hole Strap, EMT
350	1" Bushing, EMT	NWN0237- OT	Provide and Install 1" Bushing, EMT
351	1" Compression Connector, EMT	NWN0238- OT	Provide and Install 1" Compression Connector, EMT
352	1" Compression Coupler, EMT	NWN0239- OT	Provide and Install 1" Compression Coupler, EMT
353	1" Unistrut Clamp, EMT	NWN0240- OT	Provide and Install 1" Unistrut Clamp, EMT
354	2" 2-Hole Strap, EMT	NWN0241- OT	Provide and Install 2" 2- Hole Strap, EMT
355	2" Bushing	NWN0242- OT	Provide and Install 2" Bushing, EMT
356	2" Compression Connector, EMT	NWN0243- OT	Provide and Install 2" Compression Connector, EMT
357	2" Compression Coupler, EMT	NWN0244- OT	Provide and Install 2" Compression Coupler, EMT
358	2" Unistrut Clamp, EMT	NWN0245- OT	Provide and Install 2" Unistrut Clamp, EMT
359	3" 2-Hole Strap, EMT	NWN0246- OT	Provide and Install 3" 2- Hole Strap, EMT
360	3" Bushing	NWN0247- OT	Provide and Install 3" Bushing, EMT
361	3" Compression Connector, EMT	NWN0248- OT	Provide and Install 3" Compression Connector, EMT
362	3" Compression Coupler, EMT	NWN0249- OT	Provide and Install 3" Compression Coupler, EMT
363	3" Unistrut Clamp, EMT	NWN0250- OT	Provide and Install 3" Unistrut Clamp, EMT
364	4" 2-Hole Strap, EMT	NWN0251- OT	Provide and Install 4" 2- Hole Strap, EMT
365	4" Bushing	NWN0252- OT	Provide and Install 4" Bushing, EMT

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
366	4" Compression Connector, EMT	NWN0253- OT	Provide and Install 4" Compression Connector, EMT
367	4" Compression Coupler, EMT	NWN0254- OT	Provide and Install 4" Compression Coupler, EMT
368	4" Unistrut Clamp, EMT	NWN0255- OT	Provide and Install 4" Unistrut Clamp, EMT
369	1" 2-Hole Strap, Rigid	NWN0256- OT	Provide and Install 1" 2- Hole Strap, Rigid
370	1" Bushing	NWN0257- OT	Provide and Install 1" Bushing, Rigid
371	1" Compression Connector, Rigid	NWN0258- OT	Provide and Install Connector - 1" Compression Connector, Rigid
372	1" Compression Coupler, Rigid	NWN0259- OT	Provide and Install Coupler - 1" Compression Coupler, Rigid
373	1" Unistrut Clamp, Rigid	NWN0260- OT	Provide and Install 1" Unistrut Clamp, Rigid
374	2" 2-Hole Strap, Rigid	NWN0261- OT	Provide and Install 2" 2- Hole Strap, Rigid
375	2" Bushing	NWN0262- OT	Provide and Install 2" Bushing, Rigid
376	2" Compression Connector, Rigid	NWN0263- OT	Provide and Install Connector - 2" Compression Connector, Rigid
377	2" Compression Coupler, Rigid	NWN0264- OT	Provide and Install Coupler - 2" Compression Coupler, Rigid
378	2" Unistrut Clamp, Rigid	NWN0265- OT	Provide and Install 2" Unistrut Clamp, Rigid
379	2" J-Hook w/ Multi-Purpose Clip	NWN0266- OT	Provide and Install 2" J- Hook w/ Multi-Purpose Clip
380	2 Gang weatherproof Bell Box	NWN0267- OT	Provide and Install 2 Gang Bell Box
381	NEMA1 8"x8"x6" Pull Box	NWN0268- OT	Provide and Install 8"x8"x6" NEMA1 Pull Box

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
382	12"x12"x8" NEMA 1 Junction Box	NWN0269- OT	Provide and Install 12"x12"x8" NEMA 1 Junction Box
383	12"x12"x8" NEMA 3 Junction Box	NWN0270- OT	Provide and Install 12"x12"x8" NEMA 1 J-Box
384	Install Customer Provided WAP (Wireless Access Point)	NWN0271- OT	Install Customer Provided 12"x12"x8" NEMA 3 J- Box; Labor Only Does not include Configuration
385	WAP (Wireless Access Point)Enclosure	NWN0272- OT	Install Customer Provided WAP (Wireless Access Point); Labor Only
386	Install Customer Provided Camera	NWN0273- OT	Install Customer Provided Camera; Does not include Configuration
387	Install Customer Provided Paging Speaker	NWN0274- OT	Install Customer Provided WAP (Wireless Access Point) Enclosure; Oberon or Equivalent
388	Unistrut slotted 7/8"	NWN0275- OT	Provide and Install Customer Provided Camera;
389	1" unistrut straps EMT	NWN0276- OT	Provide and Install Paging Speaker - Drop Tile Ceiling;
390	2" unistrut straps EMT	NWN0277- OT	Provide and Install Unistrut slotted 7/8"
391	1"x12" EMT Sleeve	NWN0278- OT	Provide and Install 1" unistrut straps EMT
392	2"x12" EMT Sleeve	NWN0279- OT	Provide and Install 2" unistrut straps EMT
393	3"x12" EMT Sleeve	NWN0280- OT	Provide and Install 1" EMT Sleeve; Core or Penetration not Included
394	4"x12" EMT Sleeve	NWN0281- OT	Provide and Install 2" EMT Sleeve; Core or Penetration not Included
395	8"x8"x6" Pull Box NEMA3R	NWN0282- OT	Provide and Install 3" EMT Sleeve; Core or Penetration not Included
396	Raceway: Core Drilling, 1" Hole	NWN0292- OT	Install Core Drilling, 1" Hole; Labor Only

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
397	Raceway: Core Drilling, 2" hole	NWN0293- OT	Install Core Drilling, 2" hole; Labor Only
398	Raceway: Core Drilling, 3" hole	NWN0294- OT	Install Core Drilling, 3" hole; Labor Only
399	Raceway: Core Drilling, 4" hole	NWN0295- OT	Install Core Drilling, 4" hole; Labor Only
400	Raceway: 1"x8" EMT sleeve for Drywall - Wall Penetration	NWN0296- OT	Install 1"x8" sleeve for Wall Penetration - Drywall; Labor Only
401	Raceway: Scissor Lift Rental (20')	NWN0297- OT	Provide Scissor Lift Rental (20') - Includes Daily Rate, Pickup and Delivery Fees.; For NWN use in support of SRI.
402	Raceway: Fire Seal Penetration, 1" Hole	NWN0298- OT	Provide and Install Fire Seal Penetration, 1" Hole
403	Raceway: Fire Seal Penetration, 2" Hole	NWN0299- OT	Provide and Install Fire Seal Penetration, 2" Hole
404	Raceway: Fire Seal Penetration, 3" Hole	NWN0300- OT	Provide and Install Fire Seal Penetration, 3" Hole
405	Raceway: Fire Seal Penetration, 4" Hole	NWN0301- OT	Provide and Install Fire Seal Penetration, 4" Hole
406	Installation of Equipment Ground – Rods and Wire	NWN0302- OT	Provide and Install Equipment Ground 1 8' x 5/8" Ground Rod and # 6 Ground Wire; Includes All Material, Termination s and Labor
407	Installation of Equipment Ground – Wire Only	NWN0303- OT	Provide and Install Equipment Ground, # 6 Ground Wire; Includes All Material, Termination s and Labor
408	Relocate Existing Telephone Handset	NWN0304- OT	Relocate Existing Telephone Handset - same HC/TC on Existing Cabling; Includes Cross- Connect, Testing, and Documentation
409	Install New Cross-Connect	NWN0305- OT	Provide Installation New Cross-Connect
410	Locate and Identify Circuit	NWN0306- OT	Locate and Identify Circuit - Includes Tone, Tag and Document; Labor Only

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
411	Install Customer Provided UPS	NWN0092- SH	Install Customer Provided Rack Mount UPS; Labor Only
412	48-Port Switch (Patch Cords)	NWN0093- SH	Provide and Install 48- Patch Cords from switch to patch panel); Leviton or Equivalent
413	7' 2-Post Rack	NWN0094- SH	Provide and Install 7' 2 post rack; CPI or Equivalent
414	7' 4-post seismic rack	NWN0095- SH	Provide and Install 7' 4- Post seismic Rack; CPI or Equivalent
415	Install Customer Provided Rack	NWN0096- SH	Install Customer Provided Rack; Labor Only
416	2RU Horizontal Wire Manager	NWN0097- SH	Provide and Install 2RIU Horizontal Wire Manager; Leviton or Equivalent
417	Double Sided Vertical Wire Manager for 7' Rack	NWN0098- SH	Provide and Install Double Sided Vertical Wire Manager for 7' rack; CPI or Equivalent
418	Install Customer Provided Vertical Wire Manager for 7' Rack	NWN0307- SH	Install Customer Provided 7' vertical wire manager; Labor Only
419	Install Customer Provided 2RU Horizontal Wire Manager	NWN0099- SH	Install Installation of Customer Provided 2RU Horizontal Wire Manager; Labor Only
420	Shelf (Single sided 3U)	NWN0100- SH	Provide and Install Single-sided 3U Shelf; CPI or Equivalent
421	Install Customer Provided Single Sided 3U Shelf	NWN0101- SH	Install Customer Provided Single Sided 3U Shelf; Labor Only
422	Hinged Wall Bracket	NWN0102- SH	Provide and Install Hinged Wall Bracket; Allen Tel
423	Install 4' x 4' x 3/4" Painted Plywood Backboard	NWN0103- SH	Provide and Install Fire Treated 4' x 4' x 3/4" Painted Plywood Backboard
424	Power Strip (4 outlets)	NWN0104- SH	Provide and Install Power Strip - Up to 4 Outlets; CPI or Equivalent

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
425	Install up to 10' x 12" Ladder Rack With 9" Rungs	NWN0105- SH	Provide and Install Ladder Rack – Up to 10'x12" with 9" rungs (includes Support Hardware); CPI or Equivalent
426	Communication Pole 10 feet	NWN0106- SH	Provide and Install Communication Pole – Up to 10 feet; Wiremold or Equivalent
427	6-Strand MM ISP Fiber	NWN0107- SH	Provide and Install 6- Strand MM 50/125um ISP Fiber; Corning or Equivalent
428	6-Strand SM ISP Fiber	NWN0108- SH	Provide and Install 6- Strand SM ISP Fiber; Corning or Equivalent
429	2-Strand MM ISP Fiber	NWN0109- SH	Provide and Install 2- Strand MM 50/125 ISP Fiber; Corning or Equivalent
430	2-Strand SM ISP Fiber	NWN0110- SH	Provide and Install 2- Strand SM ISP Fiber; Corning or Equivalent
431	6-Strand MM 50/125um OSP Underground Fiber	NWN0111- SH	Provide and Install 6- Strand MM 50/125um OSP Underground Fiber; Corning or Equivalent
432	6-Strand SM OSP Underground Fiber	NWN0112- SH	Provide and Install 6- Strand SM OSP Underground Fiber; Corning or Equivalent
433	12-Strand MM 50/125um OSP Underground Fiber	NWN0113- SH	Provide and Install 12- Strand MM 50/125um OSP Underground Fiber; Corning or Equivalent
434	12-strand SM OSP Underground Fiber	NWN0114- SH	Provide and Install 12- strand SM OSP Underground Fiber; Corning or Equivalent
435	24-Strand MM 50/125um OSP Underground Fiber	NWN0115- SH	Provide and Install 24- Strand MM 50/125um OSP Underground Fiber; Corning or Equivalent
436	48-Strand SM OSP Underground Fiber	NWN0116- SH	Provide and Install 48- Strand SM OSP Underground Fiber
437	24-Strand SM OSP Underground Fiber	NWN0116B- SH	Provide and Install 24- Strand SM OSP Underground Fiber or Equivalent
438	48-Strand SM OSP Underground Fiber	NWN0117- SH	Provide and Install 48- Strand SM OSP Underground Fiber or Equivalent

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
439	1" innerduct Underground in Existing Duct	NWN0118- SH	Provide and Install Underground in Existing Duct - All 1" Innerduct
440	1 1/4" Innerduct Underground in Existing Duct	NWN0119- SH	Provide and Install Underground in Existing Duct - All 1 1/4" Innerduct
441	25-Pair Copper ISP	NWN0120- SH	Provide and Install 25- Pair Copper ISP
442	25-Pair Copper Underground OSP	NWN0121- SH	Provide and Install 25- Pair Copper Underground OSP
443	50-Pair Copper ISP	NWN0122- SH	Provide and Install 50- Pair Copper ISP
444	50-Pair Copper Underground OSP	NWN0123- SH	Provide and Install 50- Pair Copper Underground OSP
445	100-Pair Copper ISP	NWN0124- SH	Provide and Install 100- Pair Copper ISP
446	100-Pair Copper Underground OSP	NWN0125- SH	Provide and Install 100- Pair Copper Underground OSP
447	Cat 6 Copper ISP Circuit Extension	NWN0126- SH	Provide and Install Cat 6 Copper ISP Circuit Extension - Up to 300'
448	Cat 6 Copper OSP Circuit Extension	NWN0127- SH	Provide and Install Cat 6 Copper OSP Circuit Extension - Up to 300'
449	25-pair Copper ISP Circuit Extension	NWN0128- SH	Provide and Install 25- pair Copper ISP Circuit Extension - Up to 300'
450	25-pair Copper OSP Circuit Extension	NWN0129- SH	Provide and Install 25- pair Copper OSP Circuit Extension - Up to 300'
451	RG58 COAX ISP	NWN0130- SH	Provide and Install RG58 COAX ISP - Up to 300'
452	RG62 COAX ISP	NWN0131- SH	Provide and Install RG62 COAX ISP - Up to 300'
453	RG6 COAX ISP	NWN0132- SH	Provide and Install RG6 COAX ISP - Up to 300'
454	25-Pair Protector	NWN0133- SH	Provide and Install 25- Pair Protector

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
455	50-Pair Protector	NWN0134- SH	Provide and Install 50- Pair Protector
456	100-Pair Protector	NWN0135- SH	Provide and Install 100- Pair Protector
457	4-Pair Protector	NWN0136- SH	Provide and Install 4-Pair Protector
458	Protector Modules	NWN0137- SH	Provide and Install Protector Modules
459	BIX Mount 250-pair	NWN0138- SH	Provide and Install BIX Mount 250- pair
460	BIX Connector	NWN0139- SH	Provide and Install BIX Connector
461	BIX Ring	NWN0140- SH	Provide and Install BIX Ring
462	66-Type Block 50 Pair	NWN0141- SH	Provide and Install 66- Type Block 50 Pair
463	110-Style Block 100 Pair Kit	NWN0142- SH	Provide and Install 110- Style Block 100 Pair Kit
464	Rack Mount Fiber Cabinet, 2 Panel Capacity, 24 Fiber	NWN0143- SH	Provide and Install Rack Mount Fiber Cabinet, 2 Panel Capacity, 24 Fiber
465	Rack Mount Fiber Cabinet, 4 Panel Capacity, 48 Fiber	NWN0144- SH	Provide and Install Rack Mount Fiber Cabinet, 4 Panel Capacity, 48 Fiber
466	Wall Mount Fiber Cabinet, 2 Panel Capacity, 24 Fiber	NWN0145- SH	Provide and Install Wall Mount Fiber Cabinet, 2 Panel Capacity, 24 Fiber
467	Wall Mount Fiber Cabinet, 4 Panel Capacity, 48 Fiber	NWN0146- SH	Provide and Install Wall Mount Fiber Cabinet, 4 Panel Capacity, 48 Fiber
468	6-Strand Connector Panel MM 50/125 SC	NWN0147- SH	Provide and Install 6- Strand Connector Panel MM 50/125 SC
469	6-Strand Connector Panel MM 50/125 LC	NWN0148- SH	Provide and Install 6- Strand Connector Panel MM 50/125 LC

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
470	6-Strand Connector Panel MM 62.5/125 SC	NWN0149- SH	Provide and Install 6- Strand Connector Panel MM 62.5/125 SC
471	6-Strand Connector Panel MM 62.5/125 LC	NWN0150- SH	Provide and Install 6- Strand Connector Panel MM 62.5/125 LC
472	12-Strand Connector Panel MM 50/125 SC	NWN0151- SH	Provide and Install 12- Strand Connector Panel MM 50/125 SC
473	12-Strand Connector Panel MM 50/125 LC	NWN0152- SH	Provide and Install 12- Strand Connector Panel MM 50/125 LC
474	12-Strand Connector Panel MM 62.5/125 SC	NWN0153- SH	Provide and Install 12- Strand Connector Panel MM 62.5/125 SC
475	12-Strand Connector Panel MM 62.5/125 LC	NWN0154- SH	Provide and Install 12- Strand Connector Panel MM 62.5/125 LC
476	6-Strand Connector Panel SM SC	NWN0155- SH	Provide and Install 6- Strand Connector Panel SM SC
477	6-Strand Connector Panel SM LC	NWN0156- SH	Provide and Install 6- Strand Connector Panel SM LC
478	12-Strand Connector Panel SM SC	NWN0157- SH	Provide and Install 12- Strand Connector Panel SM SC
479	12-Strand Connector Panel SM LC	NWN0158- SH	Provide and Install 12- Strand Connector Panel SM LC
480	Multimode 62.5/125 SC To SC 1 Meter Patch Cable	NWN0165- SH	Provide and Install Multimode 62.5/125 SC To SC 1 Meter Patch Cable
481	Multimode 62.5/125 SC To SC 3 Meter Patch Cable	NWN0166- SH	Provide and Install Multimode 62.5/125 SC To SC 3 Meter Patch Cable
482	Multimode 62.5/125 SC To LC 1 Meter Patch Cable	NWN0167- SH	Provide and Install Multimode 62.5/125 SC To LC 1 Meter Patch Cable

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
483	Multimode 62.5/125 SC To LC 3 Meter Patch Cable	NWN0168- SH	Provide and Install Multimode 62.5/125 SC To LC 3 Meter Patch Cable
484	Multimode 62.5/125 LC To LC 1 Meter Patch Cable	NWN0169- SH	Provide and Install Multimode 62.5/125 LC To LC 1 Meter Patch Cable
485	Multimode 62.5/125 LC To LC 3 Meter Patch Cable	NWN0170- SH	Provide and Install Multimode 62.5/125 LC To LC 3 Meter Patch Cable
486	Multimode 50/125 SC To SC 1 Meter Patch Cable	NWN0171- SH	Provide and Install Multimode 50/125 SC To SC 1 Meter Patch Cable
487	Multimode 50/125 SC To SC 3 Meter Patch Cable	NWN0172- SH	Provide and Install Multimode 50/125 SC To SC 3 Meter Patch Cable
488	Multimode 50/125 SC To LC 1 Meter Patch Cable	NWN0173- SH	Provide and Install Multimode 50/125 SC To LC 1 Meter Patch Cable
489	Multimode 50/125 SC To LC 3 Meter Patch Cable	NWN0174- SH	Provide and Install Multimode 50/125 SC To LC 3 Meter Patch Cable
490	Multimode 50/125 LC To LC 1 Meter Patch Cable	NWN0175- SH	Provide and Install Multimode 50/125 LC To LC 1 Meter Patch Cable
491	Multimode 50/125 LC To LC 3 Meter Patch Cable	NWN0176- SH	Provide and Install Multimode 50/125 LC To LC 3 Meter Patch Cable
492	Single Mode 9/125 SC To SC 1 Meter Patch Cable	NWN0177- SH	Provide and Install Single Mode 9/125 SC To SC 1 Meter Patch Cable
493	Single Mode 9/125 SC To SC 3 Meter Patch Cable	NWN0178- SH	Provide and Install Single Mode 9/125 SC To SC 3 Meter Patch Cable
494	Single Mode 9/125 SC To LC 1 Meter Patch Cable	NWN0179- SH	Provide and Install Single Mode 9/125 SC To LC 1 Meter Patch Cable
495	Single Mode 9/125 SC To LC 3 Meter Patch Cable	NWN0180- SH	Provide and Install Single Mode 9/125 SC To LC 3 Meter Patch Cable

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
496	Single Mode 9/125 LC To LC 1 Meter Patch Cable	NWN0181- SH	Provide and Install Single Mode 9/125 LC To LC 1 Meter Patch Cable
497	Single Mode 9/125 LC To LC 3 Meter Patch Cable	NWN0182- SH	Provide and Install Single Mode 9/125 LC To LC 3 Meter Patch Cable
498	Copper Cable Termination per Pair	NWN0183- SH	Install Copper Cable Termination - 25 Pair and Larger
499	Copper Cable Splicing per Pair	NWN0184- SH	Install Copper Cable Splicing - 25 Pair and Larger
500	Copper cable Testing per Pair	NWN0185- SH	Install Copper cable Testing - 25 Pair and Larger
501	Fiber Termination per Strand	NWN0186- SH	Provide and Install Fiber Termination
502	Fiber Splicing per Pair	NWN0187- SH	Provide and Install Fiber Splicing
503	Fiber Testing per Strand	NWN0188- SH	Install Fiber Testing
504	4-Pair CAT5e Termination and Testing	NWN0189- SH	Install 4-Pair CAT5e Termination and Testing
505	4-Pair Cat 6 Termination and Testing	NWN0190- SH	Install 4-Pair Cat 6 Termination and Testing
506	4-Pair Cat 6 Jacking	NWN0191- SH	Install 4-Pair Cat 6 Jacking
507	4-Pair Cat 6 Termination	NWN0192- SH	Install 4-Pair Cat 6 Termination
508	4-Pair Cat 6 Testing	NWN0193- SH	Install 4-Pair Cat 6 Testing
509	4-Pair Cat 6A Termination and Testing	NWN0194- SH	Install 4-Pair Cat 6A Termination and Testing
510	4-Pair Cat 6A Jacking	NWN0195- SH	Install 4-Pair Cat 6A Jacking

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
511	4-Pair Cat 6A Termination	NWN0196- SH	Install 4-Pair Cat 6A Termination
512	4-Pair Cat 6A Testing	NWN0197- SH	Install 4-Pair Cat 6A Testing
513	Single 4-Pair Cat 6 PVC Cable	NWN0198- SH	Provide and Install Single 4-pair Cat 6 PVC Cable – or Equivalent
514	Single 4-Pair Cat 6 Plenum Cable	NWN0199- SH	Provide and Install Single 4-Pair Cat 6 Plenum Cable – or Equivalent
515	Single 4-Pair Cat 6 OSP Cable	NWN0200- SH	Provide and Install Single 4-Pair Cat 6 OSP Cable – or Equivalent
516	Single 4-Pair Cat 6A PVC Cable	NWN0201- SH	Provide and Install Single 4-Pair Cat 6A PVC Cable – or Equivalent
517	Single 4-Pair Cat 6A Plenum Cable	NWN0202- SH	Provide and Install Single 4-Pair Cat 6A Plenum Cable – or Equivalent
518	Single 4-Pair Cat 6A OSP Cable	NWN0203- SH	Provide and Install Single 4-Pair Cat 6A OSP Cable – or Equivalent
519	24-Port Unloaded Cat 6A Patch Panel	NWN0204- SH	Provide and Install 24- Port Unloaded Cat 6A Patch Panel
520	48-Port Unloaded Cat 6A Patch Panel	NWN0205- SH	Provide and Install 48- Port Unloaded Cat 6A Patch Panel
521	New 24-Port Cat 6 Patch Panel	NWN0206- SH	Provide and Install New 24-Port Cat 6 Patch Panel
522	New 48-Port Cat 6 Patch Panel	NWN0207- SH	Provide and Install New 48-Port Cat 6 Patch Panel
523	Rod & rope conduit	NWN0227- SH	Provide and Install Rod & rope conduit; Pull String & Rope provided by NWN. Rope to be approximate ly sized to conduit size
524	Stick (10') of 1" EMT	NWN0228- SH	Provide and Install Stick (10') of 1" EMT
525	Stick (10') of 1 1/4" EMT	NWN0229- SH	Provide and Install Stick (10') of 1 1/4" EMT
526	Stick (10') of 2" EMT	NWN0230- SH	Provide and Install Stick (10') of 2" EMT

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
527	Stick (10') of 1" Rigid	NWN0231- SH	Provide and Install Stick (10') of 1" Rigid
528	Stick (10') of 1 1/4" Rigid	NWN0232- SH	Provide and Install Stick (10') of 1 1/4" Rigid
529	Stick (10') of 2" Rigid	NWN0233- SH	Provide and Install Stick (10') of 2" Rigid
530	1" EMT Stub	NWN0234- SH	Provide and Install 1" EMT Stub - From Device Box to Ceiling - Includes Straps, Connector and Bushing
531	6"x6"x4" NEMA1 indoor Surface Mount Box	NWN0235- SH	Provide and Install 6'x6"x4" NEMA1 Surface Mount Box
532	1" 2-Hole Strap, EMT	NWN0236- SH	Provide and Install 1" 2- Hole Strap, EMT
533	1" Bushing, EMT	NWN0237- SH	Provide and Install 1" Bushing, EMT
534	1" Compression Connector, EMT	NWN0238- SH	Provide and Install 1" Compression Connector, EMT
535	1" Compression Coupler, EMT	NWN0239- SH	Provide and Install 1" Compression Coupler, EMT
536	1" Unistrut Clamp, EMT	NWN0240- SH	Provide and Install 1" Unistrut Clamp, EMT
537	2" 2-Hole Strap, EMT	NWN0241- SH	Provide and Install 2" 2- Hole Strap, EMT
538	2" Bushing, EMT	NWN0242- SH	Provide and Install 2" Bushing, EMT
539	2" Compression Connector, EMT	NWN0243- SH	Provide and Install 2" Compression Connector, EMT
540	2" Compression Coupler, EMT	NWN0244- SH	Provide and Install 2" Compression Coupler, EMT
541	2" Unistrut Clamp, EMT	NWN0245- SH	Provide and Install 2" Unistrut Clamp, EMT
542	3" 2-Hole Strap, EMT	NWN0246- SH	Provide and Install 3" 2- Hole Strap, EMT

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
543	3" Bushing, EMT	NWN0247- SH	Provide and Install 3" Bushing, EMT
544	3" Compression Connector, EMT	NWN0248- SH	Provide and Install 3" Compression Connector, EMT
545	3" Compression Coupler, EMT	NWN0249- SH	Provide and Install 3" Compression Coupler, EMT
546	3" Unistrut Clamp, EMT	NWN0250- SH	Provide and Install 3" Unistrut Clamp, EMT
547	4" 2-Hole Strap, EMT	NWN0251- SH	Provide and Install 4" 2- Hole Strap, EMT
548	4" Bushing, EMT	NWN0252- SH	Provide and Install 4" Bushing, EMT
549	4" Compression Connector, EMT	NWN0253- SH	Provide and Install 4" Compression Connector, EMT
550	4" Compression Coupler, EMT	NWN0254- SH	Provide and Install 4" Compression Coupler, EMT
551	4" Unistrut Clamp, EMT	NWN0255- SH	Provide and Install 4" Unistrut Clamp, EMT
552	1" 2-Hole Strap, Rigid	NWN0256- SH	Provide and Install 1" 2- Hole Strap, Rigid
553	1" Bushing, Rigid	NWN0257- SH	Provide and Install 1" Bushing, Rigid
554	1" Compression Connector, Rigid	NWN0258- SH	Provide and Install Connector - 1" Compression Connector, Rigid
555	1" Compression Coupler, Rigid	NWN0259- SH	Provide and Install Coupler - 1" Compression Coupler, Rigid
556	1" Unistrut Clamp, Rigid	NWN0260- SH	Provide and Install 1" Unistrut Clamp, Rigid
557	2" 2-Hole Strap, Rigid	NWN0261- SH	Provide and Install 2" 2- Hole Strap, Rigid
558	2" Bushing, Rigid	NWN0262- SH	Provide and Install 2" Bushing, Rigid
559	2" Compression Connector, Rigid	NWN0263- SH	Provide and Install Connector - 2" Compression Connector, Rigid

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
560	2" Compression Coupler, Rigid	NWN0264- SH	Provide and Install Coupler - 2" Compression Coupler, Rigid
561	2" Unistrut Clamp, Rigid	NWN0265- SH	Provide and Install 2" Unistrut Clamp, Rigid
562	2" J-Hook w/ Multi-Purpose Clip	NWN0266- SH	Provide and Install 2" J- Hook w/ Multi-Purpose Clip
563	Bell Box	NWN0267- SH	Provide and Install Bell Box NEMA 1 or Equivalent
564	8"x8"x6" Pull Box	NWN0268- SH	Provide and Install 8"x8"x6" Pull Box NEMA 1 or Equivalent
565	12"x12"x8" NEMA 1 Junction Box NEMA 1	NWN0269- SH	Provide and Install 12"x12"x8" NEMA 1 or Equivalent Junction Box NEMA 1 or Equivalent
566	12"x12"x8" NEMA 1 Junction Box NEMA 3	NWN0270- SH	Provide and Install 12"x12"x8" NEMA 1 or Equivalent Junction Box NEMA 3 or Equivalent
567	Install Customer Provided WAP (Wireless Access Point)	NWN0271- SH	Provide Installation of Customer Provided WAP (Wireless Access Point); Labor Only Does not include Configuration
568	WAP (Wireless Access Point) Enclosure	NWN0272- SH	Provide and Install WAP (Wireless Access Point) Enclosure
569	Install Customer Provided Camera	NWN0273- SH	Provide Installation Customer Provided Camera; Labor Only
570	Install Customer Provided Paging Speaker	NWN0274- SH	Provide Installation Customer Provided Paging Speaker; Labor Only
571	Unistrut slotted 7/8"	NWN0275- SH	Provide and Install Unistrut slotted 7/8"
572	1" unistrut straps	NWN0276- SH	Provide and Install 1" unistrut straps
573	2" unistrut straps	NWN0277- SH	Provide and Install 2" unistrut straps
574	1" EMT Sleeve	NWN0278- SH	Provide and Install 1" EMT Sleeve; Core or Penetration not Included

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
575	2" EMT Sleeve	NWN0279- SH	Provide and Install 2" EMT Sleeve; Core or Penetration not Included
576	3" EMT Sleeve	NWN0280- SH	Provide and Install 3" EMT Sleeve; Core or Penetration not Included
577	4" EMT Sleeve	NWN0281- SH	Provide and Install 4" EMT Sleeve; Core or Penetration not Included
578	8"x8"x6" Pull Box	NWN0282- SH	Provide and Install 8"x8"x6" Pull Box NEMA R3 or Equivalent
579	Core Drilling, 1" Hole	NWN0292- SH	Install Core Drilling, 1" Hole; Labor Only
580	Core Drilling, 2" hole	NWN0293- SH	Install Core Drilling, 2" hole; Labor Only
581	Core Drilling, 3" hole	NWN0294- SH	Install Core Drilling, 3" hole; Labor Only
582	Core Drilling, 4" hole	NWN0295- SH	Install Core Drilling, 4" hole; Labor Only
583	Wall Penetration - Drywall	NWN0296- SH	Install Wall Penetration - Drywall; Labor Only
584	Scissor Lift Rental (20')	NWN0297- SH	Install Scissor Lift Rental (20') - Includes Daily Rate, Pickup and Delivery Fees.; For NWN use in support of SRI.
585	Fire Seal Penetration, 1" Hole	NWN0298- SH	Provide and Install Fire Seal Penetration, 1" Hole
586	Fire Seal Penetration, 2" Hole	NWN0299- SH	Provide and Install Fire Seal Penetration, 2" Hole
587	Fire Seal Penetration, 3" Hole	NWN0300- SH	Provide and Install Fire Seal Penetration, 3" Hole
588	Fire Seal Penetration, 4" Hole	NWN0301- SH	Provide and Install Fire Seal Penetration, 4" Hole
589	Installation of Equipment Ground – Rods and Wire	NWN0302- SH	Provide Installation of Equipment Ground of 2 - 8' x 5/8" Ground Rods and # 6 Ground Wire; Includes All Material, Termination s and Labor

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
590	Installation of Equipment Ground – Wire Only	NWN0303- SH	Provide Installation of Equipment Ground of # 6 Ground Wire; Includes All Material, Termination s and Labor
591	Relocate Existing Telephone Handset	NWN0304- SH	Provide Relocation of Existing Telephone Handset - same HC/TC on Existing Cabling; Includes Cross-Connect, Testing, and Documentation
592	Install New Cross-Connect	NWN0305- SH	Provide Installation New Cross-Connect
593	Locate and Identify Circuit	NWN0306- SH	Locate and Identify Circuit - Includes Tone, Tag and Document; Labor Only

23.4.3 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 23.4.3 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.

Bidder understands this Requirement and shall meet or exceed it? Yes

In Cost Worksheet 23.4.3, 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 hours per dispatch/occurrence.

Bidder understands this Requirement and shall meet or exceed it? Yes

The Contractor shall offer emergency restoration services as detailed in Table 23.4.3.3.

Table 23.4.3.3 – Services Related Hourly Support

Line Item	Feature Name	Feature Description	Bidder's Product Description, Restrictions and Limitations	Bidder's Product Identifier	Bidder Meets or Exceeds? Yes or No
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 DNCS service problem that turns out to be caused by factors outside the responsibility of the Contractor.		ATS-PRO-ASE-S	Yes
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 DNCS service problem that turns out to be caused by factors outside the		ATS-PRO-ASE-AH	Yes

Line Item	Feature Name	Feature Description	Bidder's Product Description, Restrictions and Limitations	Bidder's Product Identifier	Bidder Meets or Exceeds? Yes or No
		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 DNCS service problem that turns out to be caused by factors outside the responsibility of the Contractor.		ATS-PRO-ASE-AHW	Yes

23.5 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 Program 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.

23.5.1 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 should include source of data and define the points of measurement within the system, application, or network;
4. Service(s) - All applicable services will be listed in each SLA;
5. Objective(s) – Defines the SLA performance goal/parameters; and,
6. Rights and Remedies
7. Per Occurrence: Rights and remedies are paid on a per event basis during the bill cycle; and,
8. 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 a credit or refund when a 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 this Requirement and shall meet or exceed it? Yes

23.5.2 Technical Requirements versus SLA Objectives

Sections 23.2 (Ethernet Services), 23.3 (Network Disaster/Operational Recovery) and 23.4 (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 this Requirement and shall meet or exceed it? Yes

23.5.3 Methods of Outage Reporting: Customer or Contractor

There are two methods in which CALNET 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 (SOW Business Requirements Section G.10.4, Trouble Ticket Reporting Tool (TTRT)).

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 (SOW Business Requirements Section G.10.4) and monitor and report to Customer until service is restored.

Bidder understands this Requirement and shall meet or exceed it? Yes

23.5.4 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 specific objective level they are committing to for each service in space provided in the "Objective" section of each SLA description.

Bidder understands this Requirement and shall meet or exceed it? Yes

23.5.5 Contractor SLA Management Plan

Within 90 calendar days of Contract award, the Contractor shall provide CALNET 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 (SOW Business Requirements Section G.10.5). The Contractor shall include a sample report in accordance with SOW Business Requirements Section G.10.5, SLA Reports for the following: SLA Service Performance Report (SOW Business Requirements Section G.10.5.1), SLA Provisioning Report (SOW Business Requirements Section G.10.5.2), SLA Catastrophic Outage Reports (SOW Business Requirements Section G.10.5.3), and Trouble Ticket and Provisioning/SLA Credit Report (SOW Business Requirements Section G.10.5.4). The Contractor shall commit to a monthly due date. The reports shall be provided to the CALNET Program via the Private Oversight Website (SOW Business Requirements Section G.10.2);

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 Program; 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 Program.

Bidder understands this Requirement and shall meet or exceed it? Yes

23.5.6 Technical SLA General Requirements

The Contractor shall adhere to the following general requirements which apply to all CALNET Technical SLAs (Section 23.5.8):

1. With the exception of the Provisioning SLA (Section 23.5.8.9), the total SLA rights and remedies for any given month shall not exceed the sum of 100% 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 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 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; and,
5. TMRC rights and remedies shall include the service, option(s), and feature(s) charges.

Bidder understands this requirement and shall meet or exceed it? Yes

6. The Contractor shall proactively and continuously monitor and measure all Technical SLA objectives.

Bidder understands this requirement and shall meet or exceed it? Yes

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.

Bidder understands this requirement and shall meet or exceed it? Yes

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 Program for possible inclusion via amendments;
9. The Contractor shall apply CALNET DNCS 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 DNCS Customer;
10. The election by CALNET Program of any SLA remedy covered by this Contract shall not exclude or limit CALNET Program 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 and/or the CALNET CMO Escalation Process 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 24x7 for CALNET services;

Bidder understands this requirement and shall meet or exceed it? Yes

15. SLAs apply 24x7 unless SLA specifies an exception;
16. Contractor invoices shall clearly cross reference the SLA credit to the service Circuit ID in accordance with SOW Business Requirements Section G.6;

Bidder understands this requirement and shall meet or exceed it? Yes

17. The Contractor shall provide a CALNET DNCS SLA Manager responsible for CALNET DNCS SLA compliance. The SLA Manager shall attend regular

meetings and be available upon request to address CALNET Program SLA oversight, report issues, and problem resolution concerns. The CALNET DNCS SLA Manager shall also coordinate SLA support for Customer SLA inquiries and issue resolution;

18. The Contractor shall provide Customer and CALNET Program 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 DNCS Customer.

Bidder understands the requirements and shall meet or exceed them? Yes

23.5.7 Trouble Ticket Stop Clock Conditions

Only the following conditions shall be allowed to stop the duration of the Service Level Agreements. The Contractor shall document durations using the Stop Clock Condition (SCC) listed in Table 23.5.7, which must include start and stop time stamps in the Contractor's Trouble Ticket Reporting Tool (SOW Business Requirements Section G.10.4) or Customer provisioning Service Request for each application of an SCC.

Bidder understands the requirements and shall meet or exceed them? Yes

The Contractor shall not consider "cleared while testing" or "no trouble found" as a SCC.

Bidder understands the requirements and shall meet or exceed them? Yes

Contractor observation timeframes, not requested by End-User, after incident resolution shall not be included in Outage Duration reporting.

Bidder understands the requirements and shall meet or exceed them? Yes

Note: The Glossary (SOW Appendix A) defines term "End-User" as the "individual within an Entity that is receiving services and/or features provided under the Contract."

Table 23.5.7 Stop Clock Conditions

Line Item	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

Line Item	Stop Clock Condition (SCC)	SCC Definition
		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	CUSTOMER PROVISIONING DELAY	Delays to Provisioning caused by lack of Customer's building entrance Facilities, conduit structures that are the Customer's responsibilities or Extended demarcation wiring. If the Service Providing Contractor has been contracted by the Customer for extended demarcation, this SCC shall not apply to missed dates/times. The Customer Provisioning Delay SCC is restricted to Provisioning SLAs only.
7	ACCESS	Limited access or contact with End-User provided the Contractor documents in the trouble ticket

Line Item	Stop Clock Condition (SCC)	SCC Definition
		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

Line Item	Stop Clock Condition (SCC)	SCC Definition
		Contractor's technician for on-line close 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.
12	MAINTENANCE	An outage directly related to any properly performed scheduled maintenance or upgrade scheduled for CALNET DNCS 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 eVAQ General Provisions - Telecommunications, Section 28 (Force Majeure).
15	CUSTOMER ENVIRONMENTAL	An outage directly caused by customer premise environmental conditions, which are outside the control and responsibility of the Contractor. This includes a non-secured location, excessive heat or lack of cooling. If determined later that the environmental conditions were not the cause of the service outage, or a result of the Contractor modifying Contractor provided equipment without Customer's approval, the Customer Environmental SCC will not apply.

Bidder understands the requirements and shall meet or exceed them? Yes

The Contractor shall provide and manage the following Technical SLAs.

23.5.8 Technical Service Level Agreements (SLA)

23.5.8.1 Availability (M-S)

SLA Name: Availability

Definition:

The percentage of time a CALNET MAE 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 individual affected service (per Circuit ID or Service 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 based on 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 Services

Objectives:

The objective will be based on the access type identified in the table below:

Access Type	Basic (B)	Standard (S)	Premier (P)	Bidder's 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 1 Gbps	≥ 99.2%	≥ 99.5%	≥ 99.9%	P
EPL and EVPL MAE Service 10 Gbps	≥ 99.2%	≥ 99.5%	≥ 99.9%	P

Rights and Remedies:

1. Per Occurrence:

- End-User Escalation Process
- CALNET CMO Escalation Process

2. Monthly Aggregated Measurements:
    - First month to fail to meet the committed SLA objective shall result in a 15% credit or refund of the TMRC.
    - The second consecutive month to fail to meet the committed SLA objective shall result in a 30% credit or refund of TMRC.
    - Each additional consecutive month to fail to meet the committed SLA objective shall result in a 50% credit or refund of the TMRC.

Bidder understands the requirements and shall meet or exceed them? Yes

23.5.8.2 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 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 or Service ID) affected by the 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 or Service ID) is restored minus SCC. Any service reported by a Customer as not having been restored shall have the outage time adjusted to the actual restoration time.

Services:

MAE Service

Objectives:

The objective restoral time will be:

Access Type	Basic (B)	Standard (S)	Premier (P)	Bidder's Objective Commitment (B, S or P)
MAE Service	≤ 3 hours	≤ 2 hours	≤ 1 hour	P

Rights and Remedies:

1. Per Occurrence:
    - 100% credit or refund of the TMRC for each End-User service not meeting the committed objective for each CAT 1 fault.
2. Monthly Aggregated Measurements:
    - N/A

Bidder understands the requirements and shall meet or exceed them? Yes

23.5.8.3 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 the 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 the 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 or Service ID) basis from information recorded from the network equipment/system or a Customer reported trouble ticket. Each End-User service (Circuit ID or Service 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.

Services:

MAE Service

Objectives:

The objective restoral time will be:

Access Type	Basic (B)	Standard (S)	Premier (P)	Bidder's Objective Commitment (B, S or P)
MAE Service	≤ 1 Hour	≤ 30 Minutes	≤ 15 Minutes	P

Rights and Remedies:

1. Per Occurrence:
    - 100% credit or refund of the for each End-User service not meeting the committed objective per occurrence objective for a single CAT 2 fault.
2. Monthly Aggregated Measurements:
    - N/A

Bidder understands the requirements and shall meet or exceed them? Yes

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

SLA Name: Catastrophic Outage 3 (CAT 3)

Definition:

The total loss of more than one service type in central office, or the loss of any service type 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 the Contractor, whichever occurs first. Upon notification from the Customer or network alarm, the Contractor shall open a trouble ticket and compile a list for each End-User service (Circuit ID or Service ID) affected by the 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 or Service ID) basis from information recorded from the network equipment/system or trouble ticket. Each End-User service (Circuit ID or Service 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.

Services:

MAE Service

Objectives:

The objective restoral time will be:

Access Type	Basic (B)	Standard (S)	Premier (P)	Bidder's Objective Commitment (B or P)
MAE Service	≤ 30 Minutes	N/A	≤ 15 Minutes	P

Rights and Remedies:

1. Per Occurrence:
    - 100% credit or refund of the TMRC for each service (Circuit ID or Service ID) not meeting the committed objective for each Cat 3 fault.
2. Monthly Aggregated Measurements:
    - N/A

Bidder understands the requirements and shall meet or exceed them? Yes

23.5.8.5 Excessive Outage (M-S)

SLA Name: Excessive Outage

Definition:

Any failure that prevents full functionality of the service 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 not fully functional during the time the trouble ticket is reported as opened until restoration of the service, minus SCC. If the Customer reports a partial or

complete service that is not fully functional and remains unresolved after the closure of the trouble ticket by the Contractor, the Unavailable Time shall be adjusted to the actual restoration time.

Services:

MAE Service

Objectives:

The Unavailable Time objective shall not exceed:

Access Type	Basic (B)	Standard (S)	Premier (P)	Bidder's Objective Commitment (B, S or P)
MAE Service	≤ 16 Hours	≤ 12 Hours	≤ 8 Hours	P

Rights and Remedies:

1. Per Occurrence:
    - 100% credit or refund of the TMRC for each service (Circuit ID or Service ID) out of service for a period greater than the committed objective level.
    - Upon request from the Customer or the CALNET Program, the Contractor shall provide a briefing on the excessive outage restoration.
2. Monthly Aggregated Measurements:
    - N/A

Bidder understands the requirements and shall meet or exceed them? Yes

23.5.8.6 Notification

SLA Name: Notification

Definition:

The Contractor notification to the CALNET Program and designated stakeholders in the event of a CAT 2 or CAT 3 failure, terrorist activity, threat of natural disaster, or actual natural disaster which results in a significant loss of telecommunication services to CALNET DNCS End-Users or has the potential to

impact services in a general or statewide area. The State understands initial information requiring the nature of the outage may be limited.

Measurement Process:

The Contractor shall adhere to the Network Outage Response requirements (SOW Business Requirements Section G.3.3, Network Outage Response) and notify the CALNET Program 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 threat of natural disaster, the Contractor shall notify the CALNET Program and designated stakeholder when information is available for dissemination to the Customers.

Services:

All services

Objectives:

Within 60 minutes of the above mentioned failures' start time, the Contractor shall notify the CALNET Program and designated stakeholders using a method defined in SOW Business Requirements, Network Outage Response.

At 60-minute intervals, updates shall be given on the above-mentioned failures via the method defined in SOW Business Requirements, Network Outage Response.

This objective is the same for Basic, Standard and Premier Commitments.

Rights and Remedies:

1. Per Occurrence:
    - Senior Management Escalation
2. Monthly Aggregated Measurements:
    - N/A

Bidder understands the requirements and shall meet or exceed them? Yes

23.5.8.7 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.

Services:

MAE Service

Objectives:

The Unavailable Time objective shall not exceed:

Access Type	Basic (B)	Standard (S)	Premier (P)	Bidder's Objective Commitment (B, S or P)
MAE Service	≤ 75ms	≤ 50ms	≤ 25ms	P

Rights and Remedies:

1. Per Occurrence:
    - First month the service fails to meet the committed SLA objectives shall result in a 15% credit or refund of the TMRC for the reported service.
    - Next consecutive month to fail to meet the committed SLA objectives shall result in a 25% credit or refund of the TMRC.

- Each additional consecutive month to fail to meet the committed SLA objective shall result in a 35% credit or refund of the TMRC.

2. Monthly Aggregated Measurements:
    - N/A

Bidder understands the requirements and shall meet or exceed them? Yes

23.5.8.8 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.

Services:

MAE Service

Objectives:

The Unavailable Time objective shall not exceed:

Access Type	Basic (B)	Standard (S)	Premier (P)	Bidder's Objective Commitment (B, S or P)
MAE Service	≤ .7% Packet Loss	≤ .5% Packet Loss	≤ .2% Packet Loss	P

Rights and Remedies:

1. Per Occurrence:
    - First month the service fails to meet the committed SLA objectives shall result in a 15% credit or refund of the TMRC for the reported service.
    - Next consecutive month to fail to meet the committed SLA objectives shall result in a 25% credit or refund of the TMRC.
    - Each additional consecutive month to fail to meet the committed SLA objective shall result in a 35% credit or refund of the TMRC.
2. Monthly Aggregated Measurements:
    - N/A

Bidder understands the requirements and shall meet or exceed them? Yes

23.5.8.9 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 the Customer and the Contractor documented on the Contractor's order confirmation notification or Contracted Project Work SOW in accordance with SOW Business Requirements Section G.2.5.4, 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 Timeline per SOW Business Requirements Section G.8, Contracted Service Project Work.

Provisioning SLAs have two objectives:

Objective 1: Individual service installation; and,
Objective 2: Successful Install Monthly Percentage by service type.
Note: Provisioning timelines include extended demarcation wiring when appropriate.

Measurement Process:

Objective 1: Individual Service Installations: Install intervals are based on the committed installation intervals established in this SLA or due dates negotiated between the Customer and the Contractor. This objective requires the Contractor to meet the due date for each individual service installation. This includes individual circuit/service level installations for Coordinated and Managed Projects.

Objective 2: Successful Install Monthly Percentage per Service Type: The Contractor shall sum all individual installations per service, as listed below, meeting the objective in the measurement period and divide by the sum of all individual service installations due per service in the measurement period and multiply by 100 to equal the percentage of service installations completed on time. The Contractor must meet or exceed the objective below in order to avoid the rights and remedies.

Services:

Features must be installed in conjunction with the service except when listed below:

Service (Features must be installed with service except when listed below.	Committed Interval Days	Coordinated/Managed Project
MAE Service	30	Coordinated/Managed Project

Objectives:

Objective 1: Individual service installation: Service provisioned on or before the due date per installation Service Request.
Objective 2: Monthly Average percent by service type:

Access Type	Basic (B)	Standard (S)	Premier (P)	Bidder's Objective Commitment (B or P)
MAE Service	≥ 90%	N/A	≥ 95%	P

Rights and Remedies:

1. Per Occurrence:
    - Objective 1: Individual service installations: 50% of installation fee credited to the Customer for any missed committed objective.
2. Monthly Aggregated Measurements:
    - Objective 2: 100% of the installation fee credited to the Customer for all service installations (per service type) that did not complete within the committed objective during the month if the Successful Install Monthly Percentage is below the committed objective.

Bidder understands the requirements and shall meet or exceed them? Yes

23.5.8.10 Time to Repair (M-S)

SLA Name: Time to Repair

Definition:

Any failure that prevents full functionality of the service that remains unresolved for more than the committed objective level.

Measurement Process:

This SLA is based on trouble ticket Unavailable Time per service (Circuit ID or Service ID). The circuit or service is not fully functional during the time the trouble ticket is reported as opened until restoration of the service, minus SCC. If the Customer reports a service that is not fully functional and remains 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.

Services:

MAE Service

Objectives:

The Unavailable Time objective shall not exceed:

Access Type	Basic (B)	Standard (S)	Premier (P)	Bidder's Objective Commitment (B, S or P)
MAE Service	≤ 6 Hours	≤ 5 Hours	≤ 4 Hours	P

Rights and Remedies:

1. Per Occurrence:
    - 25% credit or refund of the TMRC for each service (Circuit ID or Service ID) out of service for a period greater than the committed objective level.
2. Monthly Aggregated Measurements:
    - N/A

Bidder understands the requirements and shall meet or exceed them? Yes

23.5.8.11 Managed Service Proactive Notification

SLA Name: Managed Service Proactive Notification

Definition:

The proactive outage notification SLA provides credits if the Contractor fails to open a trouble ticket and notify Customer of an Outage for a managed service. Notification to the Customer shall occur through means agreed to by Contractor and CALNET Program.

An Outage is defined as an unscheduled period in which the managed service 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 minutes (Notification Period) to open a trouble ticket and 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.

Services:

MAE Services with Managed Router or IP Enabled Routing Device

Objectives:

15 Minutes

Rights and Remedies:

1. Per Occurrence:
    - Customer will receive a credit or refund equal to 10% of the TMRC for each Contractor Managed Service (Circuit ID) that was impacted during an outage if the Customer was not proactively notified within the notification period
2. Monthly Aggregated Measurements:
    - N/A

Bidder understands the requirements and shall meet or exceed them? Yes

23.5.8.12 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 requirements and shall meet or exceed them? Yes

23.5.8.13 Proposed Unsolicited Offerings

The Contractor shall provide SLAs as defined in SLA Section 23.5.8 for each unsolicited offering determined by the CALNET Program 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 requirements and shall meet or exceed them? Yes

23.5.8.14 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 Section 23.5.8.

Bidder understands the requirements and shall meet or exceed them? Yes