INVITATION FOR BID

IFB C4DNCS19 Data Networks and Communications Services

CATEGORY 20 – MPLS DATA NETWORK

NWN Corporation

Statement of Work

TECHNICAL REQUIREMENTS

March 5, 2020

BAFO

Issued by:

STATE OF CALIFORNIA

California Department of Technology Statewide Procurement

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Disclaimer: The original PDF version and any subsequent addendums of the IFB released by the Procurement Official of this Bid remain the official version. In the event of any inconsistency between the Bidder's versions, articles, attachments, specifications or provisions which constitute the Contract, the official State version of the IFB in its entirety shall take precedence.

AMENDMENT LOG

Amendment #	Date	Amendment Description
3	11/01/2020	Addendum Changed to Amendment, Deleted items 2 - BAFO; and added Item 2, Am 3 Changes. Updated Table of Contents in its entirety. Table 20.2.10; Updated entire table.
6	4/9/2021	Updated Table 20.2.10 – Unsolicited MPLS Service and Features
10	1/22/2022	Updated Table 20.2.10 – Unsolicited MPLS Service and Features Table.
26	7/01/2025	Updated Table 20.2.9.3.b – Unsolicited MPLS Port, Access and Layer 3 Routing Device Bundled Transport Speeds. Updated Table of Contents for page numbering.

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TECHNICAL REQUIREMENTS Category 20 – MPLS DATA NETWORK

20.1 OVERVIEW

This Category 20 IFB C4DNCS19 (IFB) provides the State's solicitation for best value solutions for MPLS Data Network 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 Part 1, Bid Evaluation. The CALNET Data Network and Communication 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).

20.1.1 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 this requirement and shall meet or exceed it? Yes"

Or.

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

Bidder understands this requirement and shall meet or exceed it? Yes Bidder's 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	Bidder's Product Identifier	Bidder Meets or Exceeds? Yes or No.
1					Yes

20.1.2 Designation of Requirements

All Technical Requirements specified in this IFB are Mandatory and must be responded to as identified in IFB 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 Category Cost Worksheets. Items not listed in the Category Cost Worksheets will not be billable by the Contractor. If additional unsolicited items include the features described in this IFB and are not included as billable in the Category Cost Worksheets, the cost associated with the features shall not be included in the unsolicited price.

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

20.1.3 Pacific Time Zone

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

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

20.2 MULTI-PROTOCOL LABEL SWITCHING (MPLS) SERVICES

Bidders shall confirm that the Contractor's Multi-Protocol Label Switching (MPLS) Wide Area Network (WAN) Virtual Private Network (VPN) service will meet all of the requirements described below.

20.2.1 MPLS Service Functionality

1. Contractors shall provide a private MPLS WAN VPN service for the networking of all voice, video and data applications.

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

 The MPLS WAN VPN service shall support voice, video and data applications over a single access connection with individual Class of Service (CoS) to allow each set of applications to be transported within its service specifications.

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

3. The MPLS WAN VPN service shall support the ability to assign specific application priority over other applications.

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

4. The MPLS WAN VPN service shall provide any-to-any connectivity.

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

5. The MPLS WAN VPN service shall not use the public Internet for transport. Remote access to this solution may use the public Internet.

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

6. The MPLS WAN VPN service shall be a fully Managed Service that includes the Customer edge layer 3 routing device.

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

20.2.2 MPLS WAN VPN Configurations

The Bidder's MPLS WAN VPN service shall support the following configurations:

1. Port only configuration;

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

2. Bundled port and access configuration; and,

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

3. Bundled port, access and Customer edge layer 3 routing device configuration.

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

20.2.3 MPLS Industry Security Standards

 Upon request by the CALNET CMO, Contractor will provide for viewing at Contractor's facility the security controls in force for the MPLS WAN infrastructure as well as independent audit results of those controls for authorized State personnel (under NDA). This will include the full scope of controls NIST SP 800-53, ISO/IEC 27001, or equivalent. Where NDAs are not sufficient to allow access to Contractor's facility, the Contractor shall provide independent audit results to the State Information Security Officer.

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

2. If Contractor determines that a breach of data has occurred within the Contractor's MPLS WAN that may involve CALNET Customer data, the nature and scope of the breach (as it affects Customer data) must be

reported to both the Customer and the CALNET CMO within 24 hours of that determination.

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

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

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

4. Contractor shall apply available patches and/or updates which remediate published vulnerabilities in accordance CVSS v3.0 Base Score.

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

5. Contractor shall provide to the CALNET CMO a report upon request detailing all (if any) actual violations of security protections, policies, practices, and/or procedures involving Contractor managed Customer edge devices and what remediation was implemented.

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

20.2.3.1 MPLS Physical Security

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

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

20.2.3.2 Protection against Unauthorized Access

Contractor shall provide access controls for all equipment through which data traverses Contractor's MPLS WAN complying with the physical security controls of NIST SP 800-53, ISO/IEC 27001, or equivalent standards.

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

20.2.3.3 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 this requirement and shall meet or exceed it? Yes

20.2.4 MPLS WAN VPN Standards

Bidders shall confirm that the Contractor's CALNET MPLS WAN VPN services meet all International Engineering Task Force (IETF) Standards and Request for Comments (RFC's).

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

20.2.5 MPLS Performance Metrics

Bidders shall confirm that the Contractor's solution will meet all of the requirements described below.

1. Service availability shall be 99.9% measured port to port.

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

2. MPLS shall have a packet loss of <0.2% measured port to port.

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

3. MPLS shall have jitter < 10ms measured port to port.

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

20.2.6 MPLS Geographic Service Areas

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.

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.

Table 20.2.6 – Bidder's MPLS Service Locations

Line Item	Service Location – City or ZIP Code	Line Item	Service Location – City or ZIP Code	Line Item	Service Location — City or ZIP Code	Line Item	Service Location – City or ZIP Code	Line Item	Service Location – City or ZIP Code
1	Los Angeles	141	Chula Vista	281	Fountain Valley	421	Millbrae	561	Winton
2	West Hollywood	142	Imperial Beach	282	Tustin	422	Mountain View	562	Santa Rosa
3	Playa Vista	143	Jamul	283	Anaheim	423	Pacifica	563	Cazadero

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4	Bell Gardens	144	La Mesa	284	Brea	424	Redwood City	564	Clearlake
5	Beverly Hills	145	Lemon Grove	285	Fullerton	425	San Bruno	565	Cloverdale
6	Compton	146	National City	286	Garden Grove	426	San Carlos	566	Forestville
7	Culver City	147	Spring Valley	287	Norco	427	South San Francisco	567	Fort Bragg
8	Downey	148	Tecate	288	Orange	428	Sunnyvale	568	Geyserville
9	El Segundo	149	Bonsall	289	Placentia	429	San Francisco	569	Glen Ellen
10	Gardena	150	Cardiff By The Sea	290	Corona	430	Palo Alto	570	Gualala
11	Hawthorne	151	Carlsbad	291	Yorba Linda	431	Stanford	571	Guerneville
12	Hermosa Beach	152	Del Mar	292	Ventura	432	San Mateo	572	Healdsburg
13	Huntington Park	153	El Cajon	293	Camarillo	433	Alameda	573	Kelseyville
14	Lawndale	154	Encinitas	294	Carpinteria	434	American Canyon	574	Kenwood
15	Lynwood	155	Escondido	295	Fillmore	435	Danville	575	Lakeport
16	Malibu	156	Fallbrook	296	Moorpark	436	Alamo	576	Lower Lake
17	Manhattan Beach	157	Julian	297	Oak View	437	Angwin	577	Middletown
18	Maywood	158	La Jolla	298	Ojai	438	Antioch	578	Monte Rio
19	Pacific Palisades	159	Lakeside	299	Oxnard	439	Benicia	579	Occidental
20	Palos Verdes	160	Occaraida	200	Dim	440	Drantusad	F00	Dhile
20	Peninsula Rancho Palos	160	Oceanside	300	Piru	440	Brentwood	580	Philo Hidden Valley
21	Verdes	161	Camp Pendleton	301	Port Hueneme	441	Byron	581	Lake
22	Redondo Beach	162	Pala	302	Santa Paula	442	Calistoga	582	Redwood Valley
23	South Gate	163	Pauma Valley	303	Simi Valley	443	Concord	583	Sebastopol
24	Topanga	164	Poway	304	Brandeis	444	Pleasant Hill	584	Sonoma
25	Venice	165	Ramona	305	Somis	445	Crockett	585	Ukiah
26	Marina Del Rey	166	Rancho Santa Fe	306	Santa Barbara	446	El Cerrito	586	Upper Lake
27	Playa Del Rey	167	San Marcos	307	Goleta	447	Fairfield	587	Willits
28	Inglewood	168	Santa Ysabel	308	Armona	448	Fremont	588	Windsor
29	Santa Monica	169	Santee	309	Arvin	449	Hayward	589	Eureka
30	Torrance	170	Solana Beach	310	Avenal	450	Castro Valley	590	Mckinleyville
31	Whittier	171	Vista	311	Coalinga	451	Hercules	591	Arcata
32	Buena Park	172	Valley Center	312	Corcoran	452	Lafayette	592	Crescent City
33	La Palma	173	San Diego	313	Delano	453	Livermore	593	Fortuna
34	Cypress	174	Coronado	314	Ducor	454	Martinez	594	Garberville
35	La Habra	175	San Ysidro	315	Earlimart	455	Moraga	595	Loleta
36	La Mirada	176	Indio	316	Exeter	456	Napa	596	Redway
37	Montebello	177	Indian Wells	317	Pine Mountain Club	457	Newark	597	Scotia
38	Norwalk	178	Palm Desert	318	Farmersville	458	Oakley	598	Smith River
39	Pico Rivera	179	Banning	319	Frazier Park	459	Orinda	599	Trinidad
40	Santa Fe Springs	180	Beaumont	320	Hanford	460	Pinole	600	Auburn
41	Stanton	181	Blythe	321	Kettleman City	461	Pittsburg	601	West Sacramento
42	Artesia	182	Brawley	322	Lake Isabella	462	Pleasanton	602	Brooks

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43	Cerritos	183	Cabazon	323	Lamont	463	Dublin	603	Carmichael
44	Avalon	184	Calexico	324	Lebec	464	Rio Vista	604	Citrus Heights
45	Bellflower	185	Calipatria	325	Lemoore	465	Rodeo	605	Clarksburg
46	Harbor City	186	Cathedral City	326	Lindsay	466	Rutherford	606	Coloma
47	Lakewood	187	Coachella	327	Mc Farland	467	Saint Helena	607	Davis
48	Hawaiian Gardens	188	Desert Hot Springs	328	Porterville	468	Deer Park	608	Diamond Springs
49	Lomita	189	El Centro	329	Richgrove	469	San Leandro	609	Dixon
50	Los Alamitos	190	Heber	330	Shafter	470	San Lorenzo	610	Elk Grove
51	Paramount	191	Holtville	331	Stratford	471	San Ramon	611	Fair Oaks
52	San Pedro	192	Imperial	332	Strathmore	472	Suisun City	612	Folsom
53	Seal Beach	193	Joshua Tree	333	Taft	473	Sunol	613	Galt
54	Sunset Beach	194	La Quinta	334	Three Rivers	474	Union City	614	Garden Valley
55	Wilmington	195	Mecca	335	Tulare	475	Vallejo	615	Georgetown
56	Carson	196	Niland	336	Visalia	476	Walnut Creek	616	Herald
57	Signal Hill	197	North Palm Springs	337	Wasco	477	Yountville	617	lone
58	Long Beach	198	Palm Springs	338	Woodlake	478	Oakland	618	Jackson
59	Altadena	199	Rancho Mirage	339	Bakersfield	479	Emeryville	619	Lincoln
60	Arcadia	200	Thermal	340	San Luis Obispo	480	Berkeley	620	Loomis
61	Duarte	201	Salton City	341	Los Osos	481	Albany	621	Mcclellan
62	La Canada Flintridge	202	Thousand Palms	342	Arroyo Grande	482	Richmond	622	Madison
63	Monrovia	203	Twentynine Palms	343	Atascadero	483	El Sobrante	623	Mather
64	Montrose	204	Whitewater	344	Buellton	484	San Pablo	624	Newcastle
65	Sierra Madre	205	Winterhaven	345	Cambria	485	San Rafael	625	North Highlands
66	South Pasadena	206	Yucca Valley	346	Cayucos	486	Greenbrae	626	Roseville
- 55	30utii i usuuciiu		rucca vancy		cayacos		Belvedere		Rosevine
67	Sunland	207	Adelanto	347	Grover Beach	487	Tiburon	627	Orangevale
68	Tujunga	208	Apple Valley	348	Guadalupe	488	Corte Madera	628	Placerville
69	Pasadena	209	Baker	349	Lompoc	489	Rohnert Park	629	Pleasant Grove
70	San Marino	210	Barstow	350	Los Alamos	490	Dillon Beach	630	Rancho Cordova
71	Glendale	211	Grand Terrace	351	Los Olivos	491	Cotati	631	Rescue
72	La Crescenta	212	Big Bear Lake	352	Morro Bay	492	Larkspur	632	Rio Linda
73	Agoura Hills	213	Bloomington	353	Nipomo	493	Marshall	633	Rocklin
74	Calabasas	214	Blue Jay	354	Paso Robles	494	Mill Valley	634	Shingle Springs
75	Canoga Park	215	Calimesa	355	Pismo Beach	495	Novato	635	Sloughhouse
76	Winnetka	216	Cedar Glen	356	San Ardo	496	Nicasio	636	Vacaville
77	West Hills	217	Cedarpines Park	357	Santa Margarita	497	Petaluma	637	Wheatland
78	Chatsworth	218	Colton	358	Santa Maria	498	Point Reyes Station	638	Winters
79	Encino	219	Crestline	359	Santa Ynez	499	Ross	639	Woodland
80	Newbury Park	220	Daggett	360	Shandon	500	San Anselmo	640	Camino
81	Newhall	221	Essex	361	Solvang	501	Sausalito	641	Colfax

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82	Northridge	222	Fontana	362	Templeton	502	Woodacre	642	Pollock Pines
83	Porter Ranch	223	Hesperia	363	Mojave	503	Alviso	643	Granite Bay
84	Pacoima	224	Highland	364	California City	504	Aptos	644	El Dorado Hills
85	Reseda	225	Lake Arrowhead	365	Acton	505	Boulder Creek	645	Sacramento
86	San Fernando	226	Loma Linda	366	Bishop	506	Campbell	646	Antelope
87	Sylmar	227	Lucerne Valley	367	Boron	507	Capitola	647	Marysville
88	North Hills	228	Lytle Creek	368	Bridgeport	508	Castroville	648	Beale Afb
89	Granada Hills	229	Mentone	369	Edwards	509	Cupertino	649	Alleghany
90	Mission Hills	230	Needles	370	Independence	510	Felton	650	Arbuckle
91	Santa Clarita	231	Nipton	371	Keene	511	Freedom	651	Chico
92	Canyon Country	232	Oro Grande	372	Lancaster	512	Gilroy	652	Colusa
93	Sun Valley	233	Phelan	373	Littlerock	513	Hollister	653	Dunnigan
94	Valencia	234	Redlands	374	Llano	514	Los Gatos	654	Durham
95	Tarzana	235	Rialto	375	Lone Pine	515	Milpitas	655	Grass Valley
96	Thousand Oaks	236	Skyforest	376	Mammoth Lakes	516	Morgan Hill	656	Penn Valley
97	Westlake Village	237	Victorville	377	Palmdale	517	San Juan Bautista	657	Gridley
98	Woodland Hills	238	Yermo	378	Ridgecrest	518	San Martin	658	Live Oak
99	Stevenson Ranch	239	Yucaipa	379	Rosamond	519	Santa Clara	659	Magalia
100	Castaic	240	San Bernardino	380	Tehachapi	520	Santa Cruz	660	Nevada City
101	Van Nuys	241	Riverside	381	Chowchilla	521	Scotts Valley	661	Olivehurst
102	Panorama City	242	March Air Reserve Base	382	Clovis	522	Saratoga	662	Orland
103	Sherman Oaks	243	Lake Elsinore	383	Cutler	523	Soquel	663	Oroville
104	Burbank	244	Aguanga	384	Dinuba	524	Watsonville	664	Paradise
105	North Hollywood	245	Anza	385	Dos Palos	525	San Jose	665	Princeton
106	Studio City	246	Hemet	386	Firebaugh	526	Stockton	666	Quincy
107	Valley Village	247	Moreno Valley	387	Five Points	527	Acampo	667	Sutter
108	Universal City	248	Murrieta	388	Fowler	528	Angels Camp	668	Williams
109	Rancho Cucamonga	249	Nuevo	389	Friant	529	French Camp	669	Willows
110	Azusa	250	Perris	390	Kerman	530	Linden	670	Yuba City
111	Baldwin Park	251	San Jacinto	391	Kingsburg	531	Lodi	671	Redding
112	Chino	252	Menifee	392	Los Banos	532	San Andreas	672	Anderson
113	Chino Hills	253	Sun City	393	Madera	533	Atwater	673	Burney
114	Claremont	254	Temecula	394	Orange Cove	534	Tracy	674	Canby
115	Covina	255	Wildomar	395	Parlier	535	Ceres	675	Corning
116	El Monte	256	Irvine	396	Fresno	536	Crows Landing	676	Fall River Mills
117	South El Monte	257	Foothill Ranch	397	Reedley	537	Delhi	677	Fort Jones
117	Glendora	258	Capistrano Beach	398	Riverdale	538	Escalon	678	Mcarthur
119	La Puente	259	Corona Del Mar	398		539	Groveland	679	Mount Shasta
120				400	Salma	540		680	Red Bluff
	Hacienda Heights	260	Costa Mesa		Selma		Gustine		
121	Rowland Heights	261	Dana Point	401	Salinas	541	Hilmar	681	Weaverville

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122	La Verne	262	Lake Forest	402	Big Sur	542	Hughson	682	Weed
123	Mira Loma	263	Laguna Woods	403	Carmel	543	Jamestown	683	Yreka
124	Monterey Park	264	Huntington Beach	404	Gonzales	544	Lathrop	684	Alturas
125	Ontario	265	Laguna Beach	405	Greenfield	545	Le Grand	685	Cedarville
126	Montclair	266	Laguna Hills	406	King City	546	Livingston	686	Markleeville
127	Diamond Bar	267	Midway City	407	Marina	547	Manteca	687	Susanville
128	Pomona	268	Aliso Viejo	408	Monterey	548	Mariposa	688	Tahoma
129	Rosemead	269	Newport Coast	409	Pacific Grove	549	Merced	689	Kings Beach
130	San Dimas	270	Newport Beach	410	Pebble Beach	550	Modesto	690	Tahoe City
131	San Gabriel	271	San Clemente	411	Seaside	551	Newman	691	South Lake Tahoe
132	Temple City	272	San Juan Capistrano	412	Soledad	552	Oakdale	692	Truckee
133	Upland	273	Silverado	413	Belmont	553	Patterson		
134	Walnut	274	Laguna Niguel	414	Brisbane	554	Ripon		
135	West Covina	275	Trabuco Canyon	415	Burlingame	555	Riverbank		
136	Alhambra	276	Westminster	416	Daly City	556	Salida		
137	Alpine	277	Rancho Santa Margarita	417	Los Altos	557	Sonora		
138	Bonita	278	Mission Viejo	418	Menlo Park	558	Tuolumne		
139	Boulevard	279	Ladera Ranch	419	Atherton	559	Turlock		
140	Campo	280	Santa Ana	420	Portola Valley	560	Waterford		

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

20.2.7 MPLS Network Designs and Diagrams

Bidders shall provide network designs and diagrams for the network and MPLS services.

Bidders shall provide one electronic copy with their proposal. Electronic drawings shall be in .dwg, .dfx, .vsd, .pdf or any mutually agreed format. Drawings must identify how the Contractor's network(s) deployed for each service type will address the following:

- Redundancy Having one or more circuits/systems deployed in case of failure of the main circuits/systems; and
- 2. **Diversity** Backbone network paths and infrastructure offered in such a way as to minimize the chance of a single point of failure.

The Contractor shall provide soft and hard copy revisions upon CALNET CMO request.

Drawings shall include both topology and logical representations of all critical network backbone elements to include but not be limited to the following:

- 1. Geographic location of equipment;
- 2. Type and capacity of equipment at each location including any backup systems;
- 3. Service type;
- 4. Unique identifier for each element;
- 5. Circuit type; and,
- 6. General circuit route

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

20.2.8 MPLS Technical Requirements

Bidder shall confirm that its MPLS solution to be deployed for CALNET DNCS will include the technical features and functionality described below.

 Contractor shall be able to scale the number of VPNs supported by the network.

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

2. Contractor shall support multiple VPNs per access.

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

3. Contractor shall support multiple VPNs across the MPLS network.

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

4. Contractor shall provide the rapid service restoration practices for all MPLS deployments in accordance with the SLAs in the Technical Service Level Agreements Section.

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

5. Contractor shall provide redundant network circuits in the backbone network.

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

6. Contractor shall provide network diversity to eliminate single points of failure in the backbone network.

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

7. Contractor shall provide a remote access service that allows an out of band access to any Customer site contained within the same VPN. The solution may utilize the public Internet.

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

8. The remote access service shall be secured.

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

9. The MPLS WAN VPN service shall support controlled and monitored connections between the MPLS network and the public Internet via a hardened trusted managed firewall.

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

10. The MPLS WAN VPN service shall be resilient.

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

11. Contractor shall provide support for multiple Layer 2 access protocols.

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

12. Contractor shall provide segregation of Customer traffic in a VPN environment.

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

13. The MPLS WAN VPN service shall support IPv4/v6 capability.

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

14. The Contractor shall provide MPLS port diversity capability within the same MPLS PoP.

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

15. The Contractor shall provide MPLS PoP diversity capability.

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

16. The Contractor shall provide out-of-band backup capability to support routing of traffic outside of the MPLS network in case of MPLS network failure.

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

17. The MPLS WAN VPN service shall support IP Multicasting.

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

18. The MPLS WAN VPN service shall provide Multiple CoS to support the prioritization of Customer applications and traffic flows.

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

19. The MPLS WAN VPN service shall support the division of an MPLS port into multiple logical channels such that each logical channel can be used to support a VPN.

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

20. The MPLS WAN VPN service shall support multiple Layer 2 protocols.

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

21. The MPLS WAN VPN service shall support wireless Customer access capability to the MPLS network.

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

22. The Contractor shall provide out-of-band emergency access capability for emergency access to the managed Layer 3 routing device. The solution shall include any data communications equipment as required.

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

- 23. Bidder shall confirm that its MPLS solution to be deployed for CALNET DNCS will provide fully managed Layer 3 routing device service bundles that include the following:
- 24. Layer 3 Routing Device Maintenance. Proactively detect, isolate and resolve hardware, software and firmware faults associated with the managed Layer 3 routing device and modem used for access to the managed Layer 3 routing device. The Contractor shall also respond to Customer reported faults. Layer 3 routing device maintenance shall be provided 24x7. If dispatch is required, a Field Service Repair Technician shall arrive within four hours of isolating the fault to the managed Layer 3 routing device. Customer shall be notified of Layer 3 routing device faults and be provided trouble status at one hour intervals.

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

25. Layer 3 Routing Device Monitoring. Proactively detect, isolate and resolve logical faults associated with the managed Layer 3 routing device. Layer 3 routing device monitoring shall be provided 24x7.

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

26. Layer 3 Routing Device Configuration Management. This includes passwords, access lists and configuration changes due to moves, adds, changes and deletes.

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

27. The Contractor shall provide full read only access to the managed Layer 3 routing device.

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

28. Network Monitoring. Proactively detect, isolate and resolve network faults. Network monitoring shall be provided 24x7. Customer shall be notified of network faults and be provided trouble status at one hour intervals.

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

20.2.8.1 Network Operations Center

The Contractor shall maintain a Network Operations Center (NOC) that is staffed 24x7 that coordinates and manages all data traffic.

The Contractor shall be responsible for the following:

1. Fault management (trouble identification, isolation and notification); and,

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

2. Monitoring of Contractor's network performance in near real-time to identify capacity blockages and implement controls to optimize network health and performance immediately.

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

20.2.8.2 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 this requirement and shall meet or exceed it? Yes

20.2.9 MPLS Transport Speeds

Bidder's CALNET MPLS solution shall include transport options to one endpoint for each of the speeds detailed in Tables 20.2.9.1 through 20.2.9.5. The Bidder shall

identify the delivery method in the Bidder's Product Description (e.g., Ethernet, T1, etc.) Pricing for each of these speeds shall be provided by the Bidder in the response to the Category Cost Worksheets. Alternative delivery methods that differ from those the Bidder has identified in Tables 20.2.9.1.a, 20.2.9.2.a, and 20.2.9.3.a may be proposed in the corresponding unsolicited tables.

20.2.9.1 MPLS Port Transport Speeds

Table 20.2.9.1.a - MPLS Port Transport Speeds

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	MPLS Port Service at 1 Mbps	MPLS Port service at minimum line rate of 1 Mbps		ATS-MSR- MPLS-P1M	Yes
2	MPLS Port service at 3 Mbps	MPLS Port service at minimum line rate of 3 Mbps		ATS-MSR- MPLS-P3M	Yes
3	MPLS Port service at 4 Mbps	MPLS Port service at minimum line rate of 4 Mbps		ATS-MSR- MPLS-P4M	Yes
4	MPLS Port service at 5 Mbps	MPLS Port service at minimum line rate of 5 Mbps		ATS-MSR- MPLS-P5M	Yes
5	MPLS Port service at 7 Mbps	MPLS Port service at minimum line rate of 7 Mbps		ATS-MSR- MPLS-P7M	Yes
6	MPLS Port service at 9 Mbps	MPLS Port service at minimum line rate of 9 Mbps		ATS-MSR- MPLS-P9M	Yes
7	MPLS Port service at 10 Mbps	MPLS Port service at minimum line rate of 10 Mbps		ATS-MSR- MPLS- P10M	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.
8	MPLS Port service at 12 Mbps	MPLS Port service at minimum line rate of 12 Mbps		ATS-MSR- MPLS- P12M	Yes
9	MPLS Port service at 15 Mbps	MPLS Port service at minimum line rate of 15 Mbps		ATS-MSR- MPLS- P15M	Yes
10	MPLS Port service at 20 Mbps	MPLS Port service at minimum line rate of 20 Mbps		ATS-MSR- MPLS- P20M	Yes
11	MPLS Port service at 30 Mbps	MPLS Port service at minimum line rate of 30 Mbps		ATS-MSR- MPLS- P30M	Yes
12	MPLS Port service at 40 Mbps	MPLS Port service at minimum line rate of 40 Mbps		ATS-MSR- MPLS- P40M	Yes
13	MPLS Port service at 50 Mbps	MPLS Port service at minimum line rate of 50 Mbps		ATS-MSR- MPLS- P50M	Yes
14	MPLS Port service at 60 Mbps	MPLS Port service at minimum line rate of 60 Mbps		ATS-MSR- MPLS- P60M	Yes
15	MPLS Port service at 70 Mbps	MPLS Port service at minimum line rate of 70 Mbps		ATS-MSR- MPLS- P70M	Yes
16	MPLS Port service at 80 Mbps	MPLS Port service at minimum line rate of 80 Mbps		ATS-MSR- MPLS- P80M	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.
17	MPLS Port service at 90 Mbps	MPLS Port service at minimum line rate of 90 Mbps		ATS-MSR- MPLS- P90M	Yes
18	MPLS Port service at 100 Mbps	MPLS Port service at minimum line rate of 100 Mbps		ATS-MSR- MPLS- P100M	Yes
19	MPLS Port service at 150 Mbps	MPLS Port service at minimum line rate of 150 Mbps		ATS-MSR- MPLS- P150M	Yes
20	MPLS Port service at 200 Mbps	MPLS Port service at minimum line rate of 200 Mbps		ATS-MSR- MPLS- P200M	Yes
21	MPLS Port service at 250 Mbps	MPLS Port service at minimum line rate of 250 Mbps		ATS-MSR- MPLS- P250M	Yes
22	MPLS Port service at 300 Mbps	MPLS Port service at minimum line rate of 300 Mbps		ATS-MSR- MPLS- P300M	Yes
23	MPLS Port service at 400 Mbps	MPLS Port service at minimum line rate of 400 Mbps		ATS-MSR- MPLS- P400M	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.
24	MPLS Port service at 500 Mbps	MPLS Port service at minimum line rate of 500 Mbps		ATS-MSR- MPLS- P500M	Yes
25	MPLS Port service at 600 Mbps	MPLS Port service at minimum line rate of 600 Mbps		ATS-MSR- MPLS- P600M	Yes
26	MPLS Port service at 700 Mbps	MPLS Port service at minimum line rate of 700 Mbps		ATS-MSR- MPLS- P700M	Yes
27	MPLS Port service at 1 Gbps	MPLS Port service at minimum line rate of 1 Gbps		ATS-MSR- MPLS-P1G	Yes
28	MPLS Port service at 2 Gbps	MPLS Port service at minimum line rate of 2 Gbps		ATS-MSR- MPLS-P2G	Yes
29	MPLS Port service at 3 Gbps	MPLS Port service at minimum line rate of 3 Gbps		ATS-MSR- MPLS-P3G	Yes
30	MPLS Port service at 4 Gbps	MPLS Port service at minimum line rate of 4 Gbps		ATS-MSR- MPLS-P4G	Yes
31	MPLS Port service at 5 Gbps	MPLS Port service at minimum line rate of 5 Gbps		ATS-MSR- MPLS-P5G	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.
32	MPLS Port service at 6 Gbps	MPLS Port service at minimum line rate of 6 Gbps		ATS-MSR- MPLS-P6G	Yes
33	MPLS Port service at 7 Gbps	MPLS Port service at minimum line rate of 7 Gbps		ATS-MSR- MPLS-P7G	Yes
34	MPLS Port service at 8 Gbps	MPLS Port service at minimum line rate of 8 Gbps		ATS-MSR- MPLS-P8G	Yes
35	MPLS Port service at 9 Gbps	MPLS Port service at minimum line rate of 9 Gbps		ATS-MSR- MPLS-P9G	Yes
36	MPLS Port service at 10 Gbps	MPLS Port service at minimum line rate of 10 Gbps		ATS-MSR- MPLS- P10G	Yes

The Contractor may offer additional unsolicited MPLS Port Transport Speeds in Table 20.2.9.1.b.

Table 20.2.9.1.b – Unsolicited MPLS Port Transport Speeds

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
1			
2			

20.2.9.2 MPLS Port and Access Bundled Transport Speeds

Table 20.2.9.2.a – MPLS Port and Access Bundled Transport Speeds

			Bidder's Product Description,	Bidder's	Bidder Meets
Line	Feature	Feature	Restrictions and	Product	or Exceeds?
Item	Name	Description	Limitations	Identifier	Yes or No
1	MPLS Port	MPLS Port			
	and	and			
	Access	Access		ATS-MSR-	
	service at	service at		MPLS-	Yes
	1 Mbps	minimum		PA1M	
		line rate of			
		1 Mbps			
2	MPLS Port	MPLS Port			
	and	and Access		ATS-MSR-	
	Access	service at		MPLS-	Yes
	service at	minimum		PA3M	
	3 Mbps	line rate of			
		3 Mbps			
3	MPLS Port	MPLS Port			
	and	and		A TC A 4CD	
	Access	Access		ATS-MSR-	Vaa
	service at	service at minimum		MPLS- PA4M	Yes
	4 Mbps	line rate of		FA4M	
		4 Mbps			
4	MPLS Port	MPLS Port			
4	and	and			
	Access	Access		ATS-MSR-	
	service at	service at		MPLS-	Yes
	5 Mbps	minimum		PA5M	103
		line rate of		.,	
		5 Mbps			
5	MPLS Port	MPLS Port			
	and	and			
	Access	Access		ATS-MSR-	
	service at	service at		MPLS-	Yes
	7 Mbps	minimum		PA7M	
		line rate of			
		7 Mbps			

Line Item	Feature Name	Feature Description	Bidder's Product Description, Restrictions and Limitations	Bidder's Product Identifier	Bidder Meets or Exceeds? Yes or No
6	MPLS Port and Access service at 9 Mbps	MPLS Port and Access service at minimum line rate of 9 Mbps		ATS-MSR- MPLS- PA9M	Yes
7	MPLS Port and Access service at 10 Mbps	MPLS Port and Access service at minimum line rate of 10 Mbps		ATS-MSR- MPLS- PA10M	Yes
8	MPLS Port and Access service at 12 Mbps	MPLS Port and Access service at minimum line rate of 12 Mbps		ATS-MSR- MPLS- PA12M	Yes
9	MPLS Port and Access service at 15 Mbps	MPLS Port and Access service at minimum line rate of 15 Mbps		ATS-MSR- MPLS- PA15M	Yes
10	MPLS Port and Access service at 20 Mbps	MPLS Port and Access service at minimum line rate of 20 Mbps		ATS-MSR- MPLS- PA20M	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
11	MPLS Port and Access service at 30 Mbps	MPLS Port and Access service at minimum line rate of 30 Mbps		ATS-MSR- MPLS- PA30M	Yes
12	MPLS Port and Access service at 40 Mbps	MPLS Port and Access service at minimum line rate of 40 Mbps		ATS-MSR- MPLS- PA40M	Yes
13	MPLS Port and Access service at 50 Mbps	MPLS Port and Access service at minimum line rate of 50 Mbps		ATS-MSR- MPLS- PA50M	Yes
14	MPLS Port and Access service at 60 Mbps	MPLS Port and Access service at minimum line rate of 60 Mbps		ATS-MSR- MPLS- PA60M	Yes
15	MPLS Port and Access service at 70 Mbps	MPLS Port and Access service at minimum line rate of 70 Mbps		ATS-MSR- MPLS- PA70M	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
16	MPLS Port and Access service at 80 Mbps	MPLS Port and Access service at minimum line rate of 80 Mbps		ATS-MSR- MPLS- PA80M	Yes
17	MPLS Port and Access service at 90 Mbps	MPLS Port and Access service at minimum line rate of 90 Mbps		ATS-MSR- MPLS- PA90M	Yes
18	MPLS Port and Access service at 100 Mbps	MPLS Port and Access service at minimum line rate of 100 Mbps		ATS-MSR- MPLS- PA100M	Yes
19	MPLS Port and Access service at 150 Mbps	MPLS Port and Access service at minimum line rate of 150 Mbps		ATS-MSR- MPLS- PA150M	Yes
20	MPLS Port and Access service at 200 Mbps	MPLS Port and Access service at minimum line rate of 200 Mbps		ATS-MSR- MPLS- PA200M	Yes

lina	Ea arbura	Eo arburo	Bidder's Product Description,	Bidder's	Bidder Meets
Line Item	Feature Name	Feature Description	Restrictions and Limitations	Product Identifier	or Exceeds? Yes or No
21	MPLS Port and Access service at 250 Mbps	MPLS Port and Access service at minimum line rate of		ATS-MSR- MPLS- PA250M	Yes
22	MPLS Port and Access service at 300 Mbps	250 Mbps MPLS Port and Access service at minimum line rate of 300 Mbps		ATS-MSR- MPLS- PA300M	Yes
23	MPLS Port and Access service at 400 Mbps	MPLS Port and Access service at minimum line rate of 400 Mbps		ATS-MSR- MPLS- PA400M	Yes
24	MPLS Port and Access service at 500 Mbps	MPLS Port and Access service at minimum line rate of 500 Mbps		ATS-MSR- MPLS- PA500M	Yes
25	MPLS Port and Access service at 600 Mbps	MPLS Port and Access service at minimum line rate of 600 Mbps		ATS-MSR- MPLS- PA600M	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
26	MPLS Port and Access service at 700 Mbps	MPLS Port and Access service at minimum line rate of 700 Mbps		ATS-MSR- MPLS- PA700M	Yes
27	MPLS Port and Access service at 1 Gbps	MPLS Port and Access service at minimum line rate of 1 Gbps		ATS-MSR- MPLS- PA1G	Yes
28	MPLS Port and Access service at 2 Gbps	MPLS Port and Access service at minimum line rate of 2 Gbps		ATS-MSR- MPLS- PA2G	Yes
29	MPLS Port and Access service at 3 Gbps	MPLS Port and Access service at minimum line rate of 3 Gbps		ATS-MSR- MPLS- PA3G	Yes
30	MPLS Port and Access service at 4 Gbps	MPLS Port and Access service at minimum line rate of 4 Gbps		ATS-MSR- MPLS- PA4G	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
31	MPLS Port and Access service at 5 Gbps	MPLS Port and Access service at minimum line rate of 5 Gbps		ATS-MSR- MPLS- PA5G	Yes
32	MPLS Port and Access service at 6 Gbps	MPLS Port and Access service at minimum line rate of 6 Gbps		ATS-MSR- MPLS- PA6G	Yes
33	MPLS Port and Access service at 7 Gbps	MPLS Port and Access service at minimum line rate of 7 Gbps		ATS-MSR- MPLS- PA7G	Yes
34	MPLS Port and Access service at 8 Gbps	MPLS Port and Access service at minimum line rate of 8 Gbps		ATS-MSR- MPLS- PA8G	Yes
35	MPLS Port and Access service at 9 Gbps	MPLS Port and Access service at minimum line rate of 9 Gbps		ATS-MSR- MPLS- PA9G	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
36	MPLS Port and Access service at 10 Gbps	MPLS Port and Access service at minimum line rate of 10 Gbps		ATS-MSR- MPLS- PA10G	Yes

The Contractor may offer additional unsolicited MPLS Port and Access Transport Speeds in Table 20.2.9.2.b.

Table 20.2.9.2.b – Unsolicited MPLS Port and Access Bundled Transport Speeds

Line		Bidder's Product	Bidder's Product Description,
ltem	Feature Name	Identifier	Restrictions and Limitations
1			
2			
3			

20.2.9.3 MPLS Port, Access and Layer 3 Routing Device Bundled Transport Speeds

Table 20.2.9.3.a – MPLS Port, Access and Layer 3 Routing Device Bundled Transport Speeds

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	MPLS port,	MPLS port,		ATS-BUN-	
	access and	access and		MPLS-R1M	
	Layer 3	Layer 3 routing			
	routing	device			Yes
	device	bundled			163
	bundled	service at			
	service at 1	minimum line			
	Mbps	rate of 1 Mbps			

Line Item	Feature Name	Feature Description	Bidder's Product Description, Restrictions and Limitations	Bidder's Product Identifier	Bidder Meets or Exceeds? Yes or No
2	MPLS port, access and Layer 3 routing device bundled service at 3 Mbps	MPLS port, access and Layer 3 routing device bundled service at minimum line rate of 3 Mbps		ATS-BUN- MPLS-R3M	Yes
3	MPLS port, access and Layer 3 routing device bundled service at 4 Mbps	MPLS port, access and Layer 3 routing device bundled service at minimum line rate of 4 Mbps		ATS-BUN- MPLS-R4M	Yes
4	MPLS port, access and Layer 3 routing device bundled service at 5 Mbps	MPLS port, access and Layer 3 routing device bundled service at minimum line rate of 5 Mbps		ATS-BUN- MPLS-R5M	Yes
5	MPLS port, access and Layer 3 routing device bundled service at 7 Mbps	MPLS port, access and Layer 3 routing device bundled service at minimum line rate of 7 Mbps		ATS-BUN- MPLS-R7M	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
6	MPLS port, access and Layer 3 routing device bundled service at 9 Mbps	MPLS port, access and Layer 3 routing device bundled service at minimum line rate of 9 Mbps		ATS-BUN- MPLS-R9M	Yes
7	MPLS port, access and Layer 3 routing device bundled service at 10 Mbps	MPLS port, access and Layer 3 routing device bundled service at minimum line rate of 10 Mbps		ATS-BUN- MPLS- R10M	Yes
8	MPLS port, access and Layer 3 routing device bundled service at 12 Mbps	MPLS port, access and Layer 3 routing device bundled service at minimum line rate of 12 Mbps		ATS-BUN- MPLS- R12M	Yes
9	MPLS port, access and Layer 3 routing device bundled service at 15 Mbps	MPLS port, access and Layer 3 routing device bundled service at minimum line rate of 15 Mbps		ATS-BUN- MPLS- R15M	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
10	MPLS port, access and Layer 3 routing device bundled service at 20 Mbps	MPLS port, access and Layer 3 routing device bundled service at minimum line rate of 20 Mbps		ATS-BUN- MPLS- R20M	Yes
11	MPLS port, access and Layer 3 routing device bundled service at 30 Mbps	MPLS port, access and Layer 3 routing device bundled service at minimum line rate of 30 Mbps		ATS-BUN- MPLS- R30M	Yes
12	MPLS port, access and Layer 3 routing device bundled service at 40 Mbps	MPLS port, access and Layer 3 routing device bundled service at minimum line rate of 40 Mbps		ATS-BUN- MPLS- R40M	Yes
13	MPLS port, access and Layer 3 routing device bundled service at 50 Mbps	MPLS port, access and Layer 3 routing device bundled service at minimum line rate of 50 Mbps		ATS-BUN- MPLS- R50M	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
14	MPLS port, access and Layer 3 routing device bundled service at 60 Mbps	MPLS port, access and Layer 3 routing device bundled service at minimum line rate of 60 Mbps		ATS-BUN- MPLS- R60M	Yes
15	MPLS port, access and Layer 3 routing device bundled service at 70 Mbps	MPLS port, access and Layer 3 routing device bundled service at minimum line rate of 70 Mbps		ATS-BUN- MPLS- R70M	Yes
16	MPLS port, access and Layer 3 routing device bundled service at 80 Mbps	MPLS port, access and Layer 3 routing device bundled service at minimum line rate of 80 Mbps		ATS-BUN- MPLS- R80M	Yes
17	MPLS port, access and Layer 3 routing device bundled service at 90 Mbps	MPLS port, access and Layer 3 routing device bundled service at minimum line rate of 90 Mbps		ATS-BUN- MPLS- R90M	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
18	MPLS port, access and Layer 3 routing device bundled service at 100 Mbps	MPLS port, access and Layer 3 routing device bundled service at minimum line rate of 100 Mbps		ATS-BUN- MPLS- R100M	Yes
19	MPLS port, access and Layer 3 routing device bundled service at 150 Mbps	MPLS port, access and Layer 3 routing device bundled service at minimum line rate of 150 Mbps		ATS-BUN- MPLS- R150M	Yes
20	MPLS port, access and Layer 3 routing device bundled service at 200 Mbps	MPLS port, access and Layer 3 routing device bundled service at minimum line rate of 200 Mbps		ATS-BUN- MPLS- R200M	Yes
21	MPLS port, access and Layer 3 routing device bundled service at 250 Mbps	MPLS port, access and Layer 3 routing device bundled service at minimum line rate of 250 Mbps		ATS-BUN- MPLS- R250M	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
22	MPLS port, access and Layer 3 routing device bundled service at 300 Mbps	MPLS port, access and Layer 3 routing device bundled service at minimum line rate of 300 Mbps		ATS-BUN- MPLS- R300M	Yes
23	MPLS port, access and Layer 3 routing device bundled service at 400 Mbps	MPLS port, access and Layer 3 routing device bundled service at minimum line rate of 400 Mbps		ATS-BUN- MPLS- R400M	Yes
24	MPLS port, access and Layer 3 routing device bundled service at 500 Mbps	MPLS port, access and Layer 3 routing device bundled service at minimum line rate of 500 Mbps		ATS-BUN- MPLS- R500M	Yes
25	MPLS port, access and Layer 3 routing device bundled service at 600 Mbps	MPLS port, access and Layer 3 routing device bundled service at minimum line rate of 600 Mbps		ATS-BUN- MPLS- R600M	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
26	MPLS port, access and Layer 3 routing device bundled service at 700 Mbps	MPLS port, access and Layer 3 routing device bundled service at minimum line rate of 700 Mbps		ATS-BUN- MPLS- R700M	Yes
27	MPLS port, access and Layer 3 routing device bundled service at 1 Gbps	MPLS port, access and Layer 3 routing device bundled service at minimum line rate of 1 Gbps		ATS-BUN- MPLS-R1G	Yes
28	MPLS port, access and Layer 3 routing device bundled service at 2 Gbps	MPLS port, access and Layer 3 routing device bundled service at minimum line rate of 2 Gbps		ATS-BUN- MPLS-R2G	Yes
29	MPLS port, access and Layer 3 routing device bundled service at 3 Gbps	MPLS port, access and Layer 3 routing device bundled service at minimum line rate of 3 Gbps		ATS-BUN- MPLS-R3G	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
30	MPLS port, access and Layer 3 routing device bundled service at 4 Gbps	MPLS port, access and Layer 3 routing device bundled service at minimum line rate of 4 Gbps		ATS-BUN- MPLS-R4G	Yes
31	MPLS port, access and Layer 3 routing device bundled service at 5 Gbps	MPLS port, access and Layer 3 routing device bundled service at minimum line rate of 5 Gbps		ATS-BUN- MPLS-R5G	Yes
32	MPLS port, access and Layer 3 routing device bundled service at 6 Gbps	MPLS port, access and Layer 3 routing device bundled service at a minimum line rate of 6 Gbps		ATS-BUN- MPLS-R6G	Yes
33	MPLS port, access and Layer 3 routing device bundled service at 7 Gbps	MPLS port, access and Layer 3 routing device bundled service at minimum line rate of 7 Gbps		ATS-BUN- MPLS-R7G	Yes

device bundled service at service at 8 minimum line Gbps rate of 8 Gbps 35 MPLS port, access and Layer 3 routing device bundled service at 9 minimum line device at service at 9 minimum line Gbps rate of 9 Gbps 36 MPLS port, MPLS port, access and Layer 3 routing device bundled service at minimum line Gbps rate of 9 Gbps 36 MPLS port, MPLS port,	Yes or No Yes
access and Layer 3 routing device bundled service at 8 minimum line Gbps rate of 8 Gbps 35 MPLS port, access and Layer 3 routing device bundled service at more factorial bundled service at minimum line routing device bundled service at minimum line gevice at minimum line device bundled service at minimum line geps rate of 9 Gbps 36 MPLS port, MPLS port,	Yes
Layer 3 Layer 3 routing routing device bundled service at 8 minimum line Gbps rate of 8 Gbps 35 MPLS port, access and Layer 3 routing device bundled service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at service at serv	Yes
routing device bundled bundled service at service at 8 minimum line Gbps rate of 8 Gbps 35 MPLS port, access and Layer 3 Layer 3 routing routing device device bundled service at 9 minimum line service at 9 minimum line Gbps rate of 9 Gbps 36 MPLS port, MPLS port, MPLS-R8G ATS-BUN-MPLS-R9G ATS-BUN-MPLS-R9G ATS-BUN-MPLS-R9G ATS-BUN-MPLS-R9G ATS-BUN-MPLS-R9G	Yes
device bundled service at service at 8 minimum line rate of 8 Gbps 35 MPLS port, access and Layer 3 Layer 3 routing routing device device bundled service at 9 minimum line service at 9 minimum line rate of 9 Gbps 36 MPLS port, MPLS port,	Yes
bundled service at service at 8 minimum line rate of 8 Gbps 35 MPLS port, access and Layer 3 routing routing device bundled service at 9 minimum line service at 9 Gbps 36 MPLS port, MPLS port, access and Layer 3 routing device bundled service at 9 minimum line rate of 9 Gbps 36 MPLS port, MPLS port,	
service at 8 minimum line Gbps rate of 8 Gbps 35 MPLS port, access and Layer 3 couting routing device device bundled bundled service at service at 9 Gbps rate of 9 Gbps 36 MPLS port, MPLS port, MPLS port, ATS-BUN- MPLS-R9G	
Gbps rate of 8 Gbps 35 MPLS port, MPLS port, access and Layer 3 Layer 3 routing routing device bundled bundled service at service at 9 Gbps rate of 9 Gbps 36 MPLS port, MPLS port, MPLS port, MPLS port,	
35 MPLS port, access and Layer 3 routing routing device bundled service at service at 9 Gbps rate of 9 Gbps MPLS port, MPLS port, access and Layer 3 routing device ATS-BUN-MPLS-R9G ATS-BUN-MPLS-R9G ATS-BUN-MPLS-R9G ATS-BUN-MPLS-R9G	
access and Layer 3 routing routing device device bundled service at service at 9 Gbps rate of 9 Gbps access and Layer 3 routing device ATS-BUN-MPLS-R9G ATS-BUN-MPLS-R9G ATS-BUN-MPLS-R9G ATS-BUN-MPLS-R9G ATS-BUN-MPLS-R9G ATS-BUN-MPLS-R9G	
Layer 3 Layer 3 routing device ATS-BUN-MPLS-R9G bundled service at service at 9 Gbps rate of 9 Gbps Layer 3 Layer 3 routing ATS-BUN-MPLS-R9G MPLS-R9G ATS-BUN-MPLS-R9G ATS-BUN-MPLS-R9G ATS-BUN-MPLS-R9G ATS-BUN-MPLS-R9G	
routing device bundled bundled service at service at 9 Gbps rate of 9 Gbps ATS-BUN-MPLS-R9G ATS-BUN-MPLS-R9G MPLS-R9G ATS-BUN-MPLS-R9G MPLS-R9G ATS-BUN-MPLS-R9G	
device bundled service at service at 9 minimum line Gbps rate of 9 Gbps 36 MPLS port, MPLS port,	V.
service at 9 minimum line Gbps rate of 9 Gbps 36 MPLS port, MPLS port,	Yes
Gbps rate of 9 Gbps 36 MPLS port, MPLS port,	
36 MPLS port, MPLS port,	
access and access and	
Layer 3 Layer 3 routing	
routing device ATS-BUN-	
	Yes
bundled service at R10G	
service at minimum line	
10 Gbps rate of 10	
Gbps	
37 Out-of- Out-of-band	
band emergency	
the capability for ATS-BUN-	
	Yes
layer 3 access to the ROBA	162
routing managed	
device layer 3 routing	
device layer 3 tooling device.	

The Contractor may offer additional unsolicited MPLS Port, Access and Layer 3 Routing Device Bundled Transport Speeds in Table 20.2.9.3.b.

Table 20.2.9.3.b – Unsolicited MPLS Port, Access and Layer 3 Routing Device Bundled Transport Speeds

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
1	MNFS Standard		NWN's Managed Network Function Services (MNFS) is a managed service that allows Customers to deploy and use one or more Virtual Network Functions in conjunction with associated NWN Equipment which may be included in the Customer's solution. Virtual Network Functions are networking capabilities, such as routing, that have traditionally been implemented in single-purpose hardware appliances and can now run as virtualized software instances at the customer site. The Service consists of NWN owned and managed Host (CPE) with Virtual Network Functions (VNF). Other VNFs, such as SDWAN, firewall and WAN acceleration, NWN or customer managed, can be added to the host (subject to limitations). A customer managed router VNF is available.
2	MNFS Standard uCPE NWN U210	ATS-CNR- MNFS001	NWN Branded, Owned and Managed uCPE. May require phone line provided separately for maintenance.
3	MNFS Standard uCPE NWN U410	ATS-CNR- MNFS002	NWN Branded, Owned and Managed uCPE. May require phone line provided separately for maintenance.
4	MNFS Standard uCPE NWN U412	ATS-CNR- MNFS003	NWN Branded, Owned and Managed uCPE. May require phone line provided separately for maintenance.
5	MNFS Standard uCPE NWN U210-T	ATS-CNR- MNFS004	NWN Branded, Owned and Managed uCPE. May require phone line provided separately for maintenance.
6	MNFS Standard uCPE NWN U410-T	ATS-CNR- MNFS005	NWN Branded, Owned and Managed uCPE. May require phone line provided separately for maintenance.

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
7	MNFS Standard uCPE NWN U412-T	ATS-CNR- MNFS006	NWN Branded, Owned and Managed uCPE. May require phone line provided separately for maintenance.
8	MNFS Standard uCPE NWN V150	ATS-CNR- MNFS007	NWN Branded, Owned and Managed uCPE. May require phone line provided separately for maintenance.
9	MNFS Standard uCPE NWN V250	ATS-CNR- MNFS008	NWN Branded, Owned and Managed uCPE. May require phone line provided separately for maintenance.
10	MNFS Standard uCPE NWN V450	ATS-CNR- MNFS009	NWN Branded, Owned and Managed uCPE. May require phone line provided separately for maintenance.
11	MNFS Standard uCPE NWN V150-T	ATS-CNR- MNFS010	NWN Branded, Owned and Managed uCPE. May require phone line provided separately for maintenance.
12	MNFS Standard uCPE NWN V250-T	ATS-CNR- MNFS011	NWN Branded, Owned and Managed uCPE. May require phone line provided separately for maintenance.
13	MNFS Standard uCPE NWN V450-T	ATS-CNR- MNFS012	NWN Branded, Owned and Managed uCPE. May require phone line provided separately for maintenance.
14	Managed VNF Juniper vSRX 100M	ATS-CNR- MNFS013	MNFS Standard VNF's must be configured on MNFS Standard uCPE devices with adequate capacity or compatible vendor-specific hardware.
15	Managed VNF Juniper vSRX 300M	ATS-CNR- MNFS014	MNFS Standard VNF's must be configured on MNFS Standard uCPE devices with adequate capacity or compatible vendor-specific hardware.
16	Managed VNF Juniper vSRX 1G	ATS-CNR- MNFS015	MNFS Standard VNF's must be configured on MNFS Standard uCPE devices with adequate capacity or compatible vendor-specific hardware.
17	Managed VNF Cisco CSR 10M	ATS-CNR- MNFS016	MNFS Standard VNF's must be configured on MNFS Standard uCPE devices with adequate capacity or compatible vendor-specific hardware.

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
18	Managed VNF Cisco CSR 50M	ATS-CNR- MNFS017	MNFS Standard VNF's must be configured on MNFS Standard uCPE devices with adequate capacity or compatible vendor-specific hardware.
19	Managed VNF Cisco CSR 100M	ATS-CNR- MNFS018	MNFS Standard VNF's must be configured on MNFS Standard uCPE devices with adequate capacity or compatible vendor-specific hardware.
20	Managed VNF Cisco CSR 250M	ATS-CNR- MNFS019	MNFS Standard VNF's must be configured on MNFS Standard uCPE devices with adequate capacity or compatible vendor-specific hardware.
21	Managed VNF Cisco CSR 500M	ATS-CNR- MNFS020	MNFS Standard VNF's must be configured on MNFS Standard uCPE devices with adequate capacity or compatible vendor-specific hardware.
22	Managed VNF Cisco CSR 1G	ATS-CNR- MNFS021	MNFS Standard VNF's must be configured on MNFS Standard uCPE devices with adequate capacity or compatible vendor-specific hardware.
23	Managed VNF Cisco CSR 2.5G	ATS-CNR- MNFS022	MNFS Standard VNF's must be configured on MNFS Standard uCPE devices with adequate capacity or compatible vendor-specific hardware.
24	Managed VNF Cisco CSR AX 10M	ATS-CNR- MNFS023	MNFS Standard VNF's must be configured on MNFS Standard uCPE devices with adequate capacity or compatible vendor-specific hardware.
25	Managed VNF Cisco CSR AX 50M	ATS-CNR- MNFS024	MNFS Standard VNF's must be configured on MNFS Standard uCPE devices with adequate capacity or compatible vendor-specific hardware.
26	Managed VNF Cisco CSR AX 100M	ATS-CNR- MNFS025	MNFS Standard VNF's must be configured on MNFS Standard uCPE devices with adequate capacity or compatible vendor-specific hardware.

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
27	Managed VNF Cisco CSR AX 250M	ATS-CNR- MNFS026	MNFS Standard VNF's must be configured on MNFS Standard uCPE devices with adequate capacity or compatible vendor-specific hardware.
28	Managed VNF Cisco CSR AX 500M	ATS-CNR- MNFS027	MNFS Standard VNF's must be configured on MNFS Standard uCPE devices with adequate capacity or compatible vendor-specific hardware.
29	Managed VNF Cisco CSR AX 1G	ATS-CNR- MNFS028	MNFS Standard VNF's must be configured on MNFS Standard uCPE devices with adequate capacity or compatible vendor-specific hardware.
30	Managed VNF Cisco CSR AX 2.5G	ATS-CNR- MNFS029	MNFS Standard VNF's must be configured on MNFS Standard uCPE devices with adequate capacity or compatible vendor-specific hardware.
31	Managed VNF Fortinet FortiGate - VM00 Essential	ATS-CNR- MNFS030	MNFS Standard VNF's must be configured on MNFS Standard uCPE devices with adequate capacity or compatible vendor-specific hardware.
32	Managed VNF Fortinet FortiGate - VM01 Essential	ATS-CNR- MNFS031	MNFS Standard VNF's must be configured on MNFS Standard uCPE devices with adequate capacity or compatible vendor-specific hardware.
33	Managed VNF Fortinet FortiGate - VM02 Essential	ATS-CNR- MNFS032	MNFS Standard VNF's must be configured on MNFS Standard uCPE devices with adequate capacity or compatible vendor-specific hardware.
34	Managed VNF Fortinet FortiGate - VM04 Essential	ATS-CNR- MNFS033	MNFS Standard VNF's must be configured on MNFS Standard uCPE devices with adequate capacity or compatible vendor-specific hardware.
35	Managed VNF Fortinet FortiGate - VM08 Essential	ATS-CNR- MNFS034	MNFS Standard VNF's must be configured on MNFS Standard uCPE devices with adequate capacity or compatible vendor-specific hardware.

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
36	Managed VNF Palo Alto VM50 - Essential	ATS-CNR- MNFS035	MNFS Standard VNF's must be configured on MNFS Standard uCPE devices with adequate capacity or compatible vendor-specific hardware.
37	Managed VNF Palo Alto VM100 - Essential	ATS-CNR- MNFS036	MNFS Standard VNF's must be configured on MNFS Standard uCPE devices with adequate capacity or compatible vendor-specific hardware.
38	Managed VNF Palo Alto VM300 - Essential	ATS-CNR- MNFS037	MNFS Standard VNF's must be configured on MNFS Standard uCPE devices with adequate capacity or compatible vendor-specific hardware.
39	Managed VNF Fortinet FortiGate - VM00 Enhanced	ATS-CNR- MNFS038	MNFS Standard VNF's must be configured on MNFS Standard uCPE devices with adequate capacity or compatible vendor-specific hardware.
40	Managed VNF Fortinet FortiGate - VM01 Enhanced	ATS-CNR- MNFS039	MNFS Standard VNF's must be configured on MNFS Standard uCPE devices with adequate capacity or compatible vendor-specific hardware.
41	Managed VNF Fortinet FortiGate - VM02 Enhanced	ATS-CNR- MNFS040	MNFS Standard VNF's must be configured on MNFS Standard uCPE devices with adequate capacity or compatible vendor-specific hardware.
42	Managed VNF Fortinet FortiGate - VM04 Enhanced	ATS-CNR- MNFS041	MNFS Standard VNF's must be configured on MNFS Standard uCPE devices with adequate capacity or compatible vendor-specific hardware.
43	Managed VNF Fortinet FortiGate - VM08 Enhanced	ATS-CNR- MNFS042	MNFS Standard VNF's must be configured on MNFS Standard uCPE devices with adequate capacity or compatible vendor-specific hardware.
44	Managed VNF Palo Alto VM50 Enhanced	ATS-CNR- MNFS043	MNFS Standard VNF's must be configured on MNFS Standard uCPE devices with adequate capacity or compatible vendor-specific hardware.

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
45	Managed VNF Palo Alto VM100 Enhanced	ATS-CNR- MNFS044	MNFS Standard VNF's must be configured on MNFS Standard uCPE devices with adequate capacity or compatible vendor-specific hardware.
46	Managed VNF Palo Alto VM300 Enhanced	ATS-CNR- MNFS045	MNFS Standard VNF's must be configured on MNFS Standard uCPE devices with adequate capacity or compatible vendor-specific hardware.
47	Managed VNF Juniper vSRX 100M Enhanced	ATS-CNR- MNFS046	MNFS Standard VNF's must be configured on MNFS Standard uCPE devices with adequate capacity or compatible vendor-specific hardware.
48	Managed VNF Juniper vSRX 1G Enhanced	ATS-CNR- MNFS047	MNFS Standard VNF's must be configured on MNFS Standard uCPE devices with adequate capacity or compatible vendor-specific hardware.
49	Managed VNF Riverbed Steelhead VCX- 10	ATS-CNR- MNFS048	MNFS Standard VNF's must be configured on MNFS Standard uCPE devices with adequate capacity or compatible vendor-specific hardware.
50	Managed VNF Riverbed Steelhead VCX- 20	ATS-CNR- MNFS049	MNFS Standard VNF's must be configured on MNFS Standard uCPE devices with adequate capacity or compatible vendor-specific hardware.
51	Managed VNF Riverbed Steelhead VCX- 30	ATS-CNR- MNFS050	MNFS Standard VNF's must be configured on MNFS Standard uCPE devices with adequate capacity or compatible vendor-specific hardware.
52	Managed VNF Riverbed Steelhead VCX- 40	ATS-CNR- MNFS051	MNFS Standard VNF's must be configured on MNFS Standard uCPE devices with adequate capacity or compatible vendor-specific hardware.
53	Managed VNF Riverbed Steelhead VCX- 50	ATS-CNR- MNFS052	MNFS Standard VNF's must be configured on MNFS Standard uCPE devices with adequate capacity or compatible vendor-specific hardware.

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
54	Managed VNF Riverbed Steelhead VCX- 60	ATS-CNR- MNFS053	MNFS Standard VNF's must be configured on MNFS Standard uCPE devices with adequate capacity or compatible vendor-specific hardware.
55	VNF Self Managed Juniper vSRX 100M	ATS-CNR- MNFS054	MNFS Standard VNF's must be configured on MNFS Standard uCPE devices with adequate capacity or compatible vendor-specific hardware.
56	VNF Self Managed Juniper vSRX 300M	ATS-CNR- MNFS055	MNFS Standard VNF's must be configured on MNFS Standard uCPE devices with adequate capacity or compatible vendor-specific hardware.
57	VNF Self Managed Juniper vSRX 1G	ATS-CNR- MNFS056	MNFS Standard VNF's must be configured on MNFS Standard uCPE devices with adequate capacity or compatible vendor-specific hardware.
58	VNF Self Managed VeloCloud vEdge ENT 10M	ATS-CNR- MNFS057	MNFS Standard VNF's must be configured on MNFS Standard uCPE devices with adequate capacity or compatible vendor-specific hardware.
59	VNF Self Managed VeloCloud vEdge ENT 30M	ATS-CNR- MNFS058	MNFS Standard VNF's must be configured on MNFS Standard uCPE devices with adequate capacity or compatible vendor-specific hardware.
60	VNF Self Managed VeloCloud vEdge ENT 50M	ATS-CNR- MNFS059	MNFS Standard VNF's must be configured on MNFS Standard uCPE devices with adequate capacity or compatible vendor-specific hardware.
61	VNF Self Managed VeloCloud vEdge ENT 100M	ATS-CNR- MNFS060	MNFS Standard VNF's must be configured on MNFS Standard uCPE devices with adequate capacity or compatible vendor-specific hardware.
62	VNF Self Managed VeloCloud vEdge ENT 200M	ATS-CNR- MNFS061	MNFS Standard VNF's must be configured on MNFS Standard uCPE devices with adequate capacity or compatible vendor-specific hardware.

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
63	VNF Self Managed VeloCloud vEdge ENT 300M	ATS-CNR- MNFS062	MNFS Standard VNF's must be configured on MNFS Standard uCPE devices with adequate capacity or compatible vendor-specific hardware.
64	VNF Self Managed VeloCloud vEdge ENT 400M	ATS-CNR- MNFS063	MNFS Standard VNF's must be configured on MNFS Standard uCPE devices with adequate capacity or compatible vendor-specific hardware.
65	VNF Self Managed VeloCloud vEdge ENT 1G	ATS-CNR- MNFS064	MNFS Standard VNF's must be configured on MNFS Standard uCPE devices with adequate capacity or compatible vendor-specific hardware.
66	VNF Self Managed VeloCloud vEdge PRE 10M	ATS-CNR- MNFS065	MNFS Standard VNF's must be configured on MNFS Standard uCPE devices with adequate capacity or compatible vendor-specific hardware.
67	VNF Self Managed VeloCloud vEdge PRE 30M	ATS-CNR- MNFS066	MNFS Standard VNF's must be configured on MNFS Standard uCPE devices with adequate capacity or compatible vendor-specific hardware.
68	VNF Self Managed VeloCloud vEdge PRE 50M	ATS-CNR- MNFS067	MNFS Standard VNF's must be configured on MNFS Standard uCPE devices with adequate capacity or compatible vendor-specific hardware.
69	VNF Self Managed VeloCloud vEdge PRE 100M	ATS-CNR- MNFS068	MNFS Standard VNF's must be configured on MNFS Standard uCPE devices with adequate capacity or compatible vendor-specific hardware.
70	VNF Self Managed VeloCloud vEdge PRE 200M	ATS-CNR- MNFS069	MNFS Standard VNF's must be configured on MNFS Standard uCPE devices with adequate capacity or compatible vendor-specific hardware.
71	VNF Self Managed VeloCloud vEdge PRE 300M	ATS-CNR- MNFS070	MNFS Standard VNF's must be configured on MNFS Standard uCPE devices with adequate capacity or compatible vendor-specific hardware.

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
72	VNF Self Managed VeloCloud vEdge PRE 400M	ATS-CNR- MNFS071	MNFS Standard VNF's must be configured on MNFS Standard uCPE devices with adequate capacity or compatible vendor-specific hardware.
73	VNF Self Managed VeloCloud vEdge PRE 1G	ATS-CNR- MNFS072	MNFS Standard VNF's must be configured on MNFS Standard uCPE devices with adequate capacity or compatible vendor-specific hardware.
74	VNF Self Managed Fortinet FortiGate - VM00 Essential	ATS-CNR- MNFS073	MNFS Standard VNF's must be configured on MNFS Standard uCPE devices with adequate capacity or compatible vendor-specific hardware.
75	VNF Self Managed Fortinet FortiGate - VM01 Essential	ATS-CNR- MNFS074	MNFS Standard VNF's must be configured on MNFS Standard uCPE devices with adequate capacity or compatible vendor-specific hardware.
76	VNF Self Managed Fortinet FortiGate - VM02 Essential	ATS-CNR- MNFS075	MNFS Standard VNF's must be configured on MNFS Standard uCPE devices with adequate capacity or compatible vendor-specific hardware.
77	VNF Self Managed Fortinet FortiGate - VM04 Essential	ATS-CNR- MNFS076	MNFS Standard VNF's must be configured on MNFS Standard uCPE devices with adequate capacity or compatible vendor-specific hardware.
78	VNF Self Managed Fortinet FortiGate - VM08 Essential	ATS-CNR- MNFS077	MNFS Standard VNF's must be configured on MNFS Standard uCPE devices with adequate capacity or compatible vendor-specific hardware.
79	VNF Self Managed Palo Alto VM50 - Essential	ATS-CNR- MNFS078	MNFS Standard VNF's must be configured on MNFS Standard uCPE devices with adequate capacity or compatible vendor-specific hardware.
80	VNF Self Managed Palo Alto VM100 - Essential	ATS-CNR- MNFS079	MNFS Standard VNF's must be configured on MNFS Standard uCPE devices with adequate capacity or compatible vendor-specific hardware.

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
81	VNF Self Managed Palo Alto VM300 - Essential	ATS-CNR- MNFS080	MNFS Standard VNF's must be configured on MNFS Standard uCPE devices with adequate capacity or compatible vendor-specific hardware.
82	VNF Self Managed Checkpoint VE10 - Essential	ATS-CNR- MNFS081	MNFS Standard VNF's must be configured on MNFS Standard uCPE devices with adequate capacity or compatible vendor-specific hardware.
83	VNF Self Managed Checkpoint VE50 - Essential	ATS-CNR- MNFS082	MNFS Standard VNF's must be configured on MNFS Standard uCPE devices with adequate capacity or compatible vendor-specific hardware.
84	VNF Self Managed Checkpoint VE250 - Essential	ATS-CNR- MNFS083	MNFS Standard VNF's must be configured on MNFS Standard uCPE devices with adequate capacity or compatible vendor-specific hardware.
85	VNF Self Managed Checkpoint VE500 - Essential	ATS-CNR- MNFS084	MNFS Standard VNF's must be configured on MNFS Standard uCPE devices with adequate capacity or compatible vendor-specific hardware.
86	VNF Self Managed Checkpoint VE1000 - Essential	ATS-CNR- MNFS085	MNFS Standard VNF's must be configured on MNFS Standard uCPE devices with adequate capacity or compatible vendor-specific hardware.
87	VNF Self Managed Fortinet FortiGate - VM00 Enhanced	ATS-CNR- MNFS086	MNFS Standard VNF's must be configured on MNFS Standard uCPE devices with adequate capacity or compatible vendor-specific hardware.
88	VNF Self Managed Fortinet FortiGate - VM01 Enhanced	ATS-CNR- MNFS087	MNFS Standard VNF's must be configured on MNFS Standard uCPE devices with adequate capacity or compatible vendor-specific hardware.
89	VNF Self Managed Fortinet FortiGate - VM02 Enhanced	ATS-CNR- MNFS088	MNFS Standard VNF's must be configured on MNFS Standard uCPE devices with adequate capacity or compatible vendor-specific hardware.

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
90	VNF Self Managed Fortinet FortiGate - VM04 Enhanced	ATS-CNR- MNFS089	MNFS Standard VNF's must be configured on MNFS Standard uCPE devices with adequate capacity or compatible vendor-specific hardware.
91	VNF Self Managed Fortinet FortiGate - VM08 Enhanced	ATS-CNR- MNFS090	MNFS Standard VNF's must be configured on MNFS Standard uCPE devices with adequate capacity or compatible vendor-specific hardware.
92	VNF Self Managed Juniper vSRX 10M Enhanced	ATS-CNR- MNFS091	MNFS Standard VNF's must be configured on MNFS Standard uCPE devices with adequate capacity or compatible vendor-specific hardware.
93	VNF Self Managed Juniper vSRX 100M Enhanced	ATS-CNR- MNFS092	MNFS Standard VNF's must be configured on MNFS Standard uCPE devices with adequate capacity or compatible vendor-specific hardware.
94	VNF Self Managed Juniper vSRX 1G Enhanced	ATS-CNR- MNFS093	MNFS Standard VNF's must be configured on MNFS Standard uCPE devices with adequate capacity or compatible vendor-specific hardware.
95	VNF Self Managed Palo Alto VM50 Enhanced	ATS-CNR- MNFS094	MNFS Standard VNF's must be configured on MNFS Standard uCPE devices with adequate capacity or compatible vendor-specific hardware.
96	VNF Self Managed Palo Alto VM100 Enhanced	ATS-CNR- MNFS095	MNFS Standard VNF's must be configured on MNFS Standard uCPE devices with adequate capacity or compatible vendor-specific hardware.
97	VNF Self Managed Palo Alto VM300 Enhanced	ATS-CNR- MNFS096	MNFS Standard VNF's must be configured on MNFS Standard uCPE devices with adequate capacity or compatible vendor-specific hardware.
98	VNF Self Managed Checkpoint VE10 Enhanced	ATS-CNR- MNFS097	MNFS Standard VNF's must be configured on MNFS Standard uCPE devices with adequate capacity or compatible vendor-specific hardware.

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
99	VNF Self Managed Checkpoint VE50 Enhanced	ATS-CNR- MNFS098	MNFS Standard VNF's must be configured on MNFS Standard uCPE devices with adequate capacity or compatible vendor-specific hardware.
100	VNF Self Managed Checkpoint VE250 Enhanced	ATS-CNR- MNFS099	MNFS Standard VNF's must be configured on MNFS Standard uCPE devices with adequate capacity or compatible vendor-specific hardware.
101	VNF Self Managed Checkpoint VE500 Enhanced	ATS-CNR- MNFS100	MNFS Standard VNF's must be configured on MNFS Standard uCPE devices with adequate capacity or compatible vendor-specific hardware.
102	VNF Self Managed Checkpoint VE1000 Enhanced	ATS-CNR- MNFS101	MNFS Standard VNF's must be configured on MNFS Standard uCPE devices with adequate capacity or compatible vendor-specific hardware.
103	VNF Self Managed Riverbed Steelhead VCX- 10	ATS-CNR- MNFS102	MNFS Standard VNF's must be configured on MNFS Standard uCPE devices with adequate capacity or compatible vendor-specific hardware.
104	VNF Self Managed Riverbed Steelhead VCX- 20	ATS-CNR- MNFS103	MNFS Standard VNF's must be configured on MNFS Standard uCPE devices with adequate capacity or compatible vendor-specific hardware.
105	VNF Self Managed Riverbed Steelhead VCX- 30	ATS-CNR- MNFS104	MNFS Standard VNF's must be configured on MNFS Standard uCPE devices with adequate capacity or compatible vendor-specific hardware.
106	VNF Self Managed Riverbed Steelhead VCX- 40	ATS-CNR- MNFS105	MNFS Standard VNF's must be configured on MNFS Standard uCPE devices with adequate capacity or compatible vendor-specific hardware.

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
107	VNF Self Managed Riverbed Steelhead VCX- 50	ATS-CNR- MNFS106	MNFS Standard VNF's must be configured on MNFS Standard uCPE devices with adequate capacity or compatible vendor-specific hardware.
108	VNF Self Managed Riverbed Steelhead VCX- 60	ATS-CNR- MNFS107	MNFS Standard VNF's must be configured on MNFS Standard uCPE devices with adequate capacity or compatible vendor-specific hardware.
109	VNF Self Managed Visibility with Salsa Orchestrator	ATS-CNR- MNFS108	MNFS Standard VNF's must be configured on MNFS Standard uCPE devices with adequate capacity or compatible vendor-specific hardware.
110	VNF Self Managed QoE Control with Salsa Orchestrator 10M	ATS-CNR- MNFS109	MNFS Standard VNF's must be configured on MNFS Standard uCPE devices with adequate capacity or compatible vendor-specific hardware.
111	VNF Self Managed QoE Control with Salsa Orchestrator 50M	ATS-CNR- MNFS110	MNFS Standard VNF's must be configured on MNFS Standard uCPE devices with adequate capacity or compatible vendor-specific hardware.
112	VNF Self Managed WAN Opt + QoE Control with Salsa Orchestrator 10M	ATS-CNR- MNFS111	MNFS Standard VNF's must be configured on MNFS Standard uCPE devices with adequate capacity or compatible vendor-specific hardware.
113	VNF Self Managed WAN Opt + QoE Control with Salsa Orchestrator 50M	ATS-CNR- MNFS112	MNFS Standard VNF's must be configured on MNFS Standard uCPE devices with adequate capacity or compatible vendor-specific hardware.
114	Installation - MNFS Host	ATS-CNR- MNFS113	Installation - MNFS Standard Host
115	MNFS Hardware Installation Per Unit	ATS-CNR- MNFS114	MNFS Standard Hardware Installation Per Unit

Line	Feature Name	Bidder's	Bidder's Product Description, Restrictions
Item		Product	and Limitations
		Identifier	
116	MNFS Premium		NWN's Managed Network Function Services (MNFS) is a managed service that allows Customers to deploy and use one or more Virtual Network Functions in conjunction with associated NWN Equipment which may be included in the Customer's solution. Virtual Network Functions are networking capabilities, such as routing, that have traditionally been implemented in single-purpose hardware appliances and can now run as virtualized software instances at the customer site. The Service consists of NWN owned and managed Host (CPE) with Virtual Network Functions (VNF). Other VNFs, such as SDWAN, firewall and WAN acceleration, NWN or customer managed, can be added to the host (subject to limitations). A customer managed router VNF is available.
117	uCPE NWN MNFS Premium White Label Small Device - Non- Recurring Charge	ATS-CNN- MNFP00	NWN MNFS Premium uCPE device built on open hardware standard utilizes a common virtualization engine DNFVi. Orchestration, Virtual Network Functions (VNF) service chaining and up to 10 Gbps network connection speeds.
118	uCPE NWN MNFS Premium White Label Small Device - Monthly Recurring Charge	ATS-CNR- MNFP00	NWN MNFS Premium uCPE device built on open hardware standard utilizes a common virtualization engine DNFVi. Orchestration, Virtual Network Functions (VNF) service chaining and up to 10 Gbps network connection speeds.
119	uCPE NWN MNFS Premium White Label Medium Device - Non- Recurring Charge	ATS-CNN- MNFP01	NWN MNFS Premium uCPE device built on open hardware standard utilizes a common virtualization engine DNFVi. Orchestration, Virtual Network Functions (VNF) service chaining and up to 10 Gbps network connection speeds.

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
120	uCPE NWN MNFS Premium White Label Medium Device - Monthly Recurring Charge	ATS-CNR- MNFP01	NWN MNFS Premium uCPE device built on open hardware standard utilizes a common virtualization engine DNFVi. Orchestration, Virtual Network Functions (VNF) service chaining and up to 10 Gbps network connection speeds.
121	uCPE NWN MNFS Premium White Label Large Device - Non- Recurring Charge	ATS-CNN- MNFP02	NWN MNFS Premium uCPE device built on open hardware standard utilizes a common virtualization engine DNFVi. Orchestration, Virtual Network Functions (VNF) service chaining and up to 10 Gbps network connection speeds.
122	uCPE NWN MNFS Premium White Label Large Device - Monthly Recurring Charge	ATS-CNR- MNFP02	NWN MNFS Premium uCPE device built on open hardware standard utilizes a common virtualization engine DNFVi. Orchestration, Virtual Network Functions (VNF) service chaining and up to 10 Gbps network connection speeds.
123	uCPE NWN MNFS Premium Unmanaged 3906 Large+Super FRU - Non-Recurring Charge	ATS-CNN- MNFP03	NWN MNFS Premium uCPE device built on open hardware standard utilizes a common virtualization engine DNFVi. Orchestration, Virtual Network Functions (VNF) service chaining and up to 10 Gbps network connection speeds.
124	uCPE NWN MNFS Premium Unmanaged 3906 Large+Super FRU - Monthly Recurring Charge	ATS-CNR- MNFP03	NWN MNFS Premium uCPE device built on open hardware standard utilizes a common virtualization engine DNFVi. Orchestration, Virtual Network Functions (VNF) service chaining and up to 10 Gbps network connection speeds.
125	uCPE NWN MNFS Premium Managed 3906 Large+Super FRU - Non-Recurring Charge	ATS-CNN- MNFP04	NWN MNFS Premium uCPE device built on open hardware standard utilizes a common virtualization engine DNFVi. Orchestration, Virtual Network Functions (VNF) service chaining and up to 10 Gbps network connection speeds.

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
126	uCPE NWN MNFS Premium Managed 3906 Large+Super FRU - Monthly Recurring Charge	ATS-CNR- MNFP04	NWN MNFS Premium uCPE device built on open hardware standard utilizes a common virtualization engine DNFVi. Orchestration, Virtual Network Functions (VNF) service chaining and up to 10 Gbps network connection speeds.
127	uCPE NWN MNFS Premium Unmanaged 3926 Large+Super FRU - Non-Recurring Charge	ATS-CNN- MNFP05	NWN MNFS Premium uCPE device built on open hardware standard utilizes a common virtualization engine DNFVi. Orchestration, Virtual Network Functions (VNF) service chaining and up to 10 Gbps network connection speeds.
128	uCPE NWN MNFS Premium Unmanaged 3926 Large+Super FRU - Monthly Recurring Charge	ATS-CNR- MNFP05	NWN MNFS Premium uCPE device built on open hardware standard utilizes a common virtualization engine DNFVi. Orchestration, Virtual Network Functions (VNF) service chaining and up to 10 Gbps network connection speeds.
129	uCPE NWN MNFS Premium Managed 3926 Large+Super FRU - Non-Recurring Charge	ATS-CNN- MNFP06	NWN MNFS Premium uCPE device built on open hardware standard utilizes a common virtualization engine DNFVi. Orchestration, Virtual Network Functions (VNF) service chaining and up to 10 Gbps network connection speeds.
130	uCPE NWN MNFS Premium Managed 3926 Large+Super FRU - Monthly Recurring Charge	ATS-CNR- MNFP06	NWN MNFS Premium uCPE device built on open hardware standard utilizes a common virtualization engine DNFVi. Orchestration, Virtual Network Functions (VNF) service chaining and up to 10 Gbps network connection speeds.
131	uCPE NWN MNFS Premium Unmanaged 3906 Medium - Non- Recurring Charge	ATS-CNN- MNFP07	NWN MNFS Premium uCPE device built on open hardware standard utilizes a common virtualization engine DNFVi. Orchestration, Virtual Network Functions (VNF) service chaining and up to 10 Gbps network connection speeds.

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
132	uCPE NWN MNFS Premium Unmanaged 3906 Medium - Monthly Recurring Charge	ATS-CNR- MNFP07	NWN MNFS Premium uCPE device built on open hardware standard utilizes a common virtualization engine DNFVi. Orchestration, Virtual Network Functions (VNF) service chaining and up to 10 Gbps network connection speeds.
133	uCPE NWN MNFS Premium Managed 3906 Medium - Non- Recurring Charge	ATS-CNN- MNFP08	NWN MNFS Premium uCPE device built on open hardware standard utilizes a common virtualization engine DNFVi. Orchestration, Virtual Network Functions (VNF) service chaining and up to 10 Gbps network connection speeds.
134	uCPE NWN MNFS Premium Managed 3906 Medium - Monthly Recurring Charge	ATS-CNR- MNFP08	NWN MNFS Premium uCPE device built on open hardware standard utilizes a common virtualization engine DNFVi. Orchestration, Virtual Network Functions (VNF) service chaining and up to 10 Gbps network connection speeds.
135	uCPE NWN MNFS Premium Unmanaged 3906 Large - Non- Recurring Charge	ATS-CNN- MNFP09	NWN MNFS Premium uCPE device built on open hardware standard utilizes a common virtualization engine DNFVi. Orchestration, Virtual Network Functions (VNF) service chaining and up to 10 Gbps network connection speeds.
136	uCPE NWN MNFS Premium Unmanaged 3906 Large - Monthly Recurring Charge	ATS-CNR- MNFP09	NWN MNFS Premium uCPE device built on open hardware standard utilizes a common virtualization engine DNFVi. Orchestration, Virtual Network Functions (VNF) service chaining and up to 10 Gbps network connection speeds.
137	uCPE NWN MNFS Premium Managed 3906 Large - Non- Recurring Charge	ATS-CNN- MNFP10	NWN MNFS Premium uCPE device built on open hardware standard utilizes a common virtualization engine DNFVi. Orchestration, Virtual Network Functions (VNF) service chaining and up to 10 Gbps network connection speeds.

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
138	uCPE NWN MNFS Premium Managed 3906 Large - Monthly Recurring Charge	ATS-CNR- MNFP10	NWN MNFS Premium uCPE device built on open hardware standard utilizes a common virtualization engine DNFVi. Orchestration, Virtual Network Functions (VNF) service chaining and up to 10 Gbps network connection speeds.
139	uCPE NWN MNFS Premium Unmanaged 3926 Large - Non- Recurring Charge	ATS-CNN- MNFP11	NWN MNFS Premium uCPE device built on open hardware standard utilizes a common virtualization engine DNFVi. Orchestration, Virtual Network Functions (VNF) service chaining and up to 10 Gbps network connection speeds.
140	uCPE NWN MNFS Premium Unmanaged 3926 Large - Monthly Recurring Charge	ATS-CNR- MNFP11	NWN MNFS Premium uCPE device built on open hardware standard utilizes a common virtualization engine DNFVi. Orchestration, Virtual Network Functions (VNF) service chaining and up to 10 Gbps network connection speeds.
141	uCPE NWN MNFS Premium Managed 3926 Large - Non- Recurring Charge	ATS-CNN- MNFP12	NWN MNFS Premium uCPE device built on open hardware standard utilizes a common virtualization engine DNFVi. Orchestration, Virtual Network Functions (VNF) service chaining and up to 10 Gbps network connection speeds.
142	uCPE NWN MNFS Premium Managed 3926 Large - Monthly Recurring Charge	ATS-CNR- MNFP12	NWN MNFS Premium uCPE device built on open hardware standard utilizes a common virtualization engine DNFVi. Orchestration, Virtual Network Functions (VNF) service chaining and up to 10 Gbps network connection speeds.
143	NWN MNFS Premium Virtual Network Function Unmanaged- SteelHead VCX- 10 (Note1)	ATS-CNR- MNFP13	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
144	NWN MNFS Premium Virtual Network Function Managed - SteelHead VCX- 10 (Note1)	ATS-CNR- MNFP14	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
145	NWN MNFS Premium Virtual Network Function Unmanaged- SteelHead VCX- 20 (Note1)	ATS-CNR- MNFP15	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
146	NWN MNFS Premium Virtual Network Function Managed - SteelHead VCX- 20 (Note1)	ATS-CNR- MNFP16	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
147	NWN MNFS Premium Virtual Network Function Unmanaged- SteelHead VCX- 30	ATS-CNR- MNFP17	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
148	NWN MNFS Premium Virtual Network Function Managed- SteelHead VCX- 30	ATS-CNR- MNFP18	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
149	NWN MNFS Premium Virtual Network Function Unmanaged- SteelHead VCX- 40	ATS-CNR- MNFP19	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
150	NWN MNFS Premium Virtual Network Function Managed- SteelHead VCX- 40	ATS-CNR- MNFP20	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
151	NWN MNFS Premium Virtual Network Function Unmanaged- SteelHead VCX- 50	ATS-CNR- MNFP21	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
152	NWN MNFS Premium Virtual Network Function Managed- SteelHead VCX- 50	ATS-CNR- MNFP22	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
153	NWN MNFS Premium Virtual Network Function Unmanaged- SteelHead VCX- 60	ATS-CNR- MNFP23	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
154	NWN MNFS Premium Virtual Network Function Managed- SteelHead VCX- 60	ATS-CNR- MNFP24	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
155	NWN MNFS Premium Virtual Network Function Unmanaged- SteelHead VCX- 70	ATS-CNR- MNFP25	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
156	NWN MNFS Premium Virtual Network Function Managed- SteelHead VCX- 70	ATS-CNR- MNFP26	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
157	NWN MNFS Premium Virtual Network Function Unmanaged- SteelHead VCX- 80	ATS-CNR- MNFP27	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
158	NWN MNFS Premium Virtual Network Function Managed- SteelHead VCX- 80	ATS-CNR- MNFP28	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
159	NWN MNFS Premium Virtual Network Function Unmanaged- Fortigate VM00	ATS-CNR- MNFP29	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
160	NWN MNFS Premium Virtual Network Function Managed- Fortigate VM00	ATS-CNR- MNFP30	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
161	NWN MNFS Premium Virtual Network Function Unmanaged- Fortigate VM01	ATS-CNR- MNFP31	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
162	NWN MNFS Premium Virtual Network Function Managed- Fortigate VM01	ATS-CNR- MNFP32	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
163	NWN MNFS Premium Virtual Network Function Unmanaged- Fortigate VM02	ATS-CNR- MNFP33	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
164	NWN MNFS Premium Virtual Network Function Managed- Fortigate VM02	ATS-CNR- MNFP34	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
165	NWN MNFS Premium Virtual Network Function Unmanaged- Fortigate VM04	ATS-CNR- MNFP35	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
166	NWN MNFS Premium Virtual Network Function Managed- Fortigate VM04	ATS-CNR- MNFP36	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
167	NWN MNFS Premium Virtual Network Function Unmanaged- Fortigate VM08	ATS-CNR- MNFP37	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
168	NWN MNFS Premium Virtual Network Function Managed- Fortigate VM08	ATS-CNR- MNFP38	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
169	NWN MNFS Premium Virtual Network Function Unmanaged- Palo Alto VM- 50	ATS-CNR- MNFP39	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
170	NWN MNFS Premium Virtual Network Function Managed- Palo Alto VM- 50	ATS-CNR- MNFP40	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
171	NWN MNFS Premium Virtual Network Function Unmanaged- Palo Alto VM- 100	ATS-CNR- MNFP41	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
172	NWN MNFS Premium Virtual Network Function Managed- Palo Alto VM- 100	ATS-CNR- MNFP42	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
173	NWN MNFS Premium Virtual Network Function Unmanaged- Palo Alto VM- 300	ATS-CNR- MNFP43	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
174	NWN MNFS Premium Virtual Network Function Managed- Palo Alto VM- 300	ATS-CNR- MNFP44	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
175	NWN MNFS Premium Virtual Network Function Unmanaged- Palo Alto VM- 500	ATS-CNR- MNFP45	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
176	NWN MNFS Premium Virtual Network Function Managed- Palo Alto VM- 500	ATS-CNR- MNFP46	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
177	NWN MNFS Premium Virtual Network Function Unmanaged- Mediant VE SBC KVM Small 250	ATS-CNR- MNFP47	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
178	NWN MNFS Premium Virtual Network Function Managed- Mediant VE SBC KVM Small 250	ATS-CNR- MNFP48	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
179	NWN MNFS Premium Virtual Network Function Unmanaged- Mediant VE SBC KVM Medium 1400	ATS-CNR- MNFP49	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
180	NWN MNFS Premium Virtual Network Function Managed- Mediant VE SBC KVM Medium 1400	ATS-CNR- MNFP50	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
181	NWN MNFS Premium Virtual Network Function Unmanaged- Mediant VE SBC KVM Large 2700	ATS-CNR- MNFP51	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
182	NWN MNFS Premium Virtual Network Function Managed- Mediant VE SBC KVM Large 2700	ATS-CNR- MNFP52	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
183	NWN MNFS Premium Virtual Network Function Unmanaged- Mediant VE SBC KVM Extra Large 10000	ATS-CNR- MNFP53	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
184	NWN MNFS Premium Virtual Network Function Managed- Mediant VE SBC KVM Extra Large 10000	ATS-CNR- MNFP54	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
185	NWN MNFS Premium Virtual Network Function Unmanaged- Vyatta v5600 - 250M	ATS-CNR- MNFP55	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
186	NWN MNFS Premium Virtual Network Function Managed- Vyatta v5600 - 250M	ATS-CNR- MNFP56	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
187	NWN MNFS Premium Virtual Network Function Unmanaged- Vyatta v5600 - 500M	ATS-CNR- MNFP57	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
188	NWN MNFS Premium Virtual Network Function Managed- Vyatta v5600 - 500M	ATS-CNR- MNFP58	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
189	NWN MNFS Premium Virtual Network Function Unmanaged- Vyatta v5600 - 5G	ATS-CNR- MNFP59	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
190	NWN MNFS Premium Virtual Network Function Managed- Vyatta v5600 - 5G	ATS-CNR- MNFP60	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
191	NWN MNFS Premium Virtual Network Function Unmanaged- Vyatta v5600 - 10G	ATS-CNR- MNFP61	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
192	NWN MNFS Premium Virtual Network Function Managed- Vyatta v5600 - 10G	ATS-CNR- MNFP62	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
193	NWN MNFS Premium Virtual Network Function Unmanaged- VeloCloud VC- 00010-ENT- VEDG- XX	ATS-CNR- MNFP63	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
194	NWN MNFS Premium Virtual Network Function Managed- VeloCloud VC- 00010-ENT- VEDG- XX	ATS-CNR- MNFP64	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
195	NWN MNFS Premium Virtual Network Function Unmanaged- VeloCloud VC- 00030-ENT- VEDG- XX	ATS-CNR- MNFP65	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
196	NWN MNFS Premium Virtual Network Function Managed- VeloCloud VC- 00030-ENT- VEDG- XX	ATS-CNR- MNFP66	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
197	NWN MNFS Premium Virtual Network Function Unmanaged- VeloCloud VC- 00050-ENT- VEDG- XX	ATS-CNR- MNFP67	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
198	NWN MNFS Premium Virtual Network Function Managed- VeloCloud VC- 00050-ENT- VEDG- XX	ATS-CNR- MNFP68	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
199	NWN MNFS Premium Virtual Network Function Unmanaged- VeloCloud VC- 00100-ENT- VEDG- XX	ATS-CNR- MNFP69	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
200	NWN MNFS Premium Virtual Network Function Managed- VeloCloud VC- 00100-ENT- VEDG- XX	ATS-CNR- MNFP70	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
201	NWN MNFS Premium Virtual Network Function Unmanaged- VeloCloud VC- 00200-ENT- VEDG- XX	ATS-CNR- MNFP71	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
202	NWN MNFS Premium Virtual Network Function Managed- VeloCloud VC- 00200-ENT- VEDG- XX	ATS-CNR- MNFP72	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
203	NWN MNFS Premium Virtual Network Function Unmanaged- VeloCloud VC- 00400-ENT- VEDG- XX	ATS-CNR- MNFP73	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
204	NWN MNFS Premium Virtual Network Function Managed- VeloCloud VC- 00400-ENT- VEDG- XX	ATS-CNR- MNFP74	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
205	NWN MNFS Premium Virtual Network Function Unmanaged- VeloCloud VC- 01000-ENT- VEDG- XX	ATS-CNR- MNFP75	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
206	NWN MNFS Premium Virtual Network Function Managed- VeloCloud VC- 01000-ENT- VEDG- XX	ATS-CNR- MNFP76	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
207	NWN MNFS Premium Virtual Network Function Unmanaged- VeloCloud VC- 00010-PRE- VEDG- XX	ATS-CNR- MNFP77	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
208	NWN MNFS Premium Virtual Network Function Managed- VeloCloud VC- 00010-PRE- VEDG- XX	ATS-CNR- MNFP78	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
209	NWN MNFS Premium Virtual Network Function Unmanaged- VeloCloud VC- 00030-PRE- VEDG- XX	ATS-CNR- MNFP79	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
210	NWN MNFS Premium Virtual Network Function Managed- VeloCloud VC- 00030-PRE- VEDG- XX	ATS-CNR- MNFP80	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
211	NWN MNFS Premium Virtual Network Function Unmanaged- VeloCloud VC- 00050-PRE- VEDG- XX	ATS-CNR- MNFP81	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
212	NWN MNFS Premium Virtual Network Function Managed- VeloCloud VC- 00050-PRE- VEDG- XX	ATS-CNR- MNFP82	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
213	NWN MNFS Premium Virtual Network Function Unmanaged- VeloCloud VC- 00100-PRE- VEDG- XX	ATS-CNR- MNFP83	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
214	NWN MNFS Premium Virtual Network Function Managed- VeloCloud VC- 00100-PRE- VEDG- XX	ATS-CNR- MNFP84	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware

Line Item	Feature Name	Bidder's Product	Bidder's Product Description, Restrictions and Limitations
215	NWN MNFS Premium Virtual Network Function Unmanaged- VeloCloud VC- 00200-PRE- VEDG- XX	ATS-CNR- MNFP85	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
216	NWN MNFS Premium Virtual Network Function Managed- VeloCloud VC- 00200-PRE- VEDG- XX	ATS-CNR- MNFP86	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
217	NWN MNFS Premium Virtual Network Function Unmanaged- VeloCloud VC- 00400-PRE- VEDG- XX	ATS-CNR- MNFP87	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
218	NWN MNFS Premium Virtual Network Function Managed- VeloCloud VC- 00400-PRE- VEDG- XX	ATS-CNR- MNFP88	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
219	NWN MNFS Premium Virtual Network Function Unmanaged- R80 20 FW - 10M	ATS-CNR- MNFP89	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
220	NWN MNFS Premium Virtual Network Function Managed-R80 20 FW - 10M	ATS-CNR- MNFP90	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
221	NWN MNFS Premium Virtual Network Function Unmanaged- R80 20 FW - 50M	ATS-CNR- MNFP91	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
222	NWN MNFS Premium Virtual Network Function Managed-R80 20 FW - 50M	ATS-CNR- MNFP92	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
223	NWN MNFS Premium Virtual Network Function Unmanaged- R80 20 FW - 250M	ATS-CNR- MNFP93	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
224	NWN MNFS Premium Virtual Network Function Managed-R80 20 FW - 250M	ATS-CNR- MNFP94	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
225	NWN MNFS Premium Virtual Network Function Unmanaged- R80 20 FW - 500M	ATS-CNR- MNFP95	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
226	NWN MNFS Premium Virtual Network Function Managed-R80 20 FW - 500M	ATS-CNR- MNFP96	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
227	NWN MNFS Premium Virtual Network Function Unmanaged- R80 20 FW - 1000M	ATS-CNR- MNFP97	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
228	NWN MNFS Premium Virtual Network Function Managed-R80 20 FW - 1000M	ATS-CNR- MNFP98	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
229	NWN MNFS Premium Virtual Network Function Unmanaged- R80 20 FW - 2000M	ATS-CNR- MNFP99	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
230	NWN MNFS Premium Virtual Network Function Managed-R80 20 FW - 2000M	ATS-CNR- MNFPA0	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
231	NWN MNFS Premium Virtual Network Function Unmanaged- R80 20 FW - 5000M	ATS-CNR- MNFPA1	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
232	NWN MNFS Premium Virtual Network Function Managed-R80 20 FW - 5000M	ATS-CNR- MNFPA2	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
233	NWN MNFS Premium Virtual Network Function Unmanaged- R80 20 NGTX - 10M	ATS-CNR- MNFPA3	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
234	NWN MNFS Premium Virtual Network Function Managed-R80 20 NGTX - 10M	ATS-CNR- MNFPA4	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
235	NWN MNFS Premium Virtual Network Function Unmanaged- R80 20 NGTX - 50M	ATS-CNR- MNFPA5	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
236	NWN MNFS Premium Virtual Network Function Managed-R80 20 NGTX - 50M	ATS-CNR- MNFPA6	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
237	NWN MNFS Premium Virtual Network Function Unmanaged- BYO VNF Small	ATS-CNR- MNFPA7	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
238	NWN MNFS Premium Virtual Network Function Unmanaged- BYOVNF Medium	ATS-CNR- MNFPA8	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
239	NWN MNFS Premium Virtual Network Function Unmanaged- BYOVNF Large	ATS-CNR- MNFPA9	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
240	NWN MNFS Premium Virtual Network Function Unmanaged- BYOVNF - XLarge	ATS-CNR- MNFPB0	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
241	NWN MNFS Premium Virtual Network Function Unmanaged- Boost (10Mb) Primary	ATS-CNR- MNFPB1	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
242	NWN MNFS Premium Virtual Network Function Managed- Boost (10Mb) Primary	ATS-CNR- MNFPB2	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
243	NWN MNFS Premium Virtual Network Function Unmanaged- Boost (20Mb) Primary	ATS-CNR- MNFPB3	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
244	NWN MNFS Premium Virtual Network Function Managed-Boost (20Mb) Primary	ATS-CNR- MNFPB4	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
245	NWN MNFS Premium Virtual Network Function Unmanaged- Boost (50Mb) Primary	ATS-CNR- MNFPB5	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
246	NWN MNFS Premium Virtual Network Function Managed- Boost (50Mb) Primary	ATS-CNR- MNFPB6	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
247	NWN MNFS Premium Virtual Network Function Unmanaged- Boost (100Mb) Primary	ATS-CNR- MNFPB7	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
248	NWN MNFS Premium Virtual Network Function Managed- Boost (100Mb) Primary	ATS-CNR- MNFPB8	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
249	NWN MNFS Premium Virtual Network Function Unmanaged- Boost (200Mb) Primary	ATS-CNR- MNFPB9	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
250	NWN MNFS Premium Virtual Network Function Managed- Boost (200Mb) Primary	ATS-CNR- MNFPC0	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
251	NWN MNFS Premium Virtual Network Function Unmanaged- Boost (500Mb) Primary	ATS-CNR- MNFPC1	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
252	NWN MNFS Premium Virtual Network Function Managed- Boost (500Mb) Primary	ATS-CNR- MNFPC2	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
253	NWN MNFS Premium Virtual Network Function Unmanaged- Boost (1000Mb) Primary	ATS-CNR- MNFPC3	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
254	NWN MNFS Premium Virtual Network Function Managed- Boost (1000Mb) Primary	ATS-CNR- MNFPC4	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
255	NWN MNFS Premium Virtual Network Function Unmanaged- Boost (10Mb) Back-up	ATS-CNR- MNFPC5	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
256	NWN MNFS Premium Virtual Network Function Managed- Boost (10Mb) Back-up	ATS-CNR- MNFPC6	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
257	NWN MNFS Premium Virtual Network Function Unmanaged- Boost (20Mb) Back-up	ATS-CNR- MNFPC7	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
258	NWN MNFS Premium Virtual Network Function Managed- Boost (20Mb) Back-up	ATS-CNR- MNFPC8	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
259	NWN MNFS Premium Virtual Network Function Unmanaged- Boost (50Mb) Back-up	ATS-CNR- MNFPC9	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
260	NWN MNFS Premium Virtual Network Function Managed- Boost (50Mb) Back-up	ATS-CNR- MNFPD0	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
261	NWN MNFS Premium Virtual Network Function Unmanaged- Boost (100Mb) Back-up	ATS-CNR- MNFPD1	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
262	NWN MNFS Premium Virtual Network Function Managed- Boost (100Mb) Back-up	ATS-CNR- MNFPD2	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
263	NWN MNFS Premium Virtual Network Function Unmanaged- Boost (200Mb) Back-up	ATS-CNR- MNFPD3	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
264	NWN MNFS Premium Virtual Network Function Managed- Boost (200Mb) Back-up	ATS-CNR- MNFPD4	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
265	NWN MNFS Premium Virtual Network Function Unmanaged- Boost (500Mb) Back-up	ATS-CNR- MNFPD5	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
266	NWN MNFS Premium Virtual Network Function Managed- Boost (500Mb) Back-up	ATS-CNR- MNFPD6	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
267	NWN MNFS Premium Virtual Network Function Unmanaged- Boost (1000Mb) Back-up	ATS-CNR- MNFPD7	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
268	NWN MNFS Premium Virtual Network Function Managed- Boost (1000Mb) Back- up	ATS-CNR- MNFPD8	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
269	NWN MNFS Premium Virtual Network Function Unmanaged- Cisco CSR1000v AX - 50mbps	ATS-CNR- MNFPD9	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
270	NWN MNFS Premium Virtual Network Function Managed- Cisco CSR1000v AX - 50mbps	ATS-CNR- MNFPE0	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
271	NWN MNFS Premium Virtual Network Function Unmanaged- Cisco CSR1000v AX - 100mbps	ATS-CNR- MNFPE1	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
272	NWN MNFS Premium Virtual Network Function Managed- Cisco CSR1000v AX - 100mbps	ATS-CNR- MNFPE2	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
273	NWN MNFS Premium Virtual Network Function Unmanaged- Cisco CSR1000v AX - 250mbps	ATS-CNR- MNFPE3	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
274	NWN MNFS Premium Virtual Network Function Managed- Cisco CSR1000v AX - 250mbps	ATS-CNR- MNFPE4	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
275	NWN MNFS Premium Virtual Network Function Unmanaged- Cisco CSR1000v AX - 500mbps	ATS-CNR- MNFPE5	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
276	NWN MNFS Premium Virtual Network Function Managed- Cisco CSR1000v AX - 500mbps	ATS-CNR- MNFPE6	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
277	NWN MNFS Premium Virtual Network Function Unmanaged- Cisco CSR1000v AX - 1000mbps	ATS-CNR- MNFPE7	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
278	NWN MNFS Premium Virtual Network Function Managed- Cisco CSR1000v AX - 1000mbps	ATS-CNR- MNFPE8	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
279	NWN MNFS Premium Virtual Network Function Unmanaged- Cisco CSR1000v AX - 5000mbps	ATS-CNR- MNFPE9	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
280	NWN MNFS Premium Virtual Network Function Managed- Cisco CSR1000v AX - 5000mbps	ATS-CNR- MNFPF0	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
281	NWN MNFS Premium Virtual Network Function Unmanaged- Aruba MC-VA- 10	ATS-CNR- MNFPF1	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
282	NWN MNFS Premium Virtual Network Function Managed- Aruba MC-VA- 10	ATS-CNR- MNFPF2	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
283	NWN MNFS Premium Virtual Network Function Unmanaged- Aruba MC-VA- 50	ATS-CNR- MNFPF3	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
284	NWN MNFS Premium Virtual Network Function Managed- Aruba MC-VA- 50	ATS-CNR- MNFPF4	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
285	NWN MNFS Premium Virtual Network Function Unmanaged- Aruba MC-VA- 250	ATS-CNR- MNFPF5	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
286	NWN MNFS Premium Virtual Network Function Managed- Aruba MC-VA- 250	ATS-CNR- MNFPF6	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
287	NWN MNFS Premium Virtual Network Function Unmanaged- Aruba MC-VA- 1k	ATS-CNR- MNFPF7	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware

Line Item	Feature Name	Bidder's Product	Bidder's Product Description, Restrictions and Limitations
		Identifier	
288	NWN MNFS Premium Virtual Network Function Managed- Aruba MC-VA- 1k	ATS-CNR- MNFPF8	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
289	NWN MNFS Premium Virtual Network Function Unmanaged- VeloCloud VC- 00010-ENT- VEDG- XX (HA Only)	ATS-CNR- MNFPF9	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
290	NWN MNFS Premium Virtual Network Function Managed- VeloCloud VC- 00010-ENT- VEDG- XX (HA Only)	ATS-CNR- MNFPG0	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
291	NWN MNFS Premium Virtual Network Function Unmanaged- VeloCloud VC- 00030-ENT- VEDG- XX (HA Only)	ATS-CNR- MNFPG1	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
292	NWN MNFS Premium Virtual Network Function Managed- VeloCloud VC- 00030-ENT- VEDG- XX (HA Only)	ATS-CNR- MNFPG2	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
293	NWN MNFS Premium Virtual Network Function Unmanaged- R80 20 NGTX - 250M	ATS-CNR- MNFPG3	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
294	NWN MNFS Premium Virtual Network Function Managed-R80 20 NGTX - 250M	ATS-CNR- MNFPG4	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
295	NWN MNFS Premium Virtual Network Function Unmanaged- R80 20 NGTX - 500M	ATS-CNR- MNFPG5	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
296	NWN MNFS Premium Virtual Network Function Managed-R80 20 NGTX - 500M	ATS-CNR- MNFPG6	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
297	NWN MNFS Premium Virtual Network Function Unmanaged- R80 20 NGTX - 1000M	ATS-CNR- MNFPG7	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
298	NWN MNFS Premium Virtual Network Function Managed-R80 20 NGTX - 1000M	ATS-CNR- MNFPG8	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
299	NWN MNFS Premium Virtual Network Function Unmanaged- R80 20 NGTX - 2000M	ATS-CNR- MNFPG9	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
300	NWN MNFS Premium Virtual Network Function Managed-R80 20 NGTX - 2000M	ATS-CNR- MNFPH0	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
301	NWN MNFS Premium Virtual Network Function Unmanaged- VeloCloud VC- 00050-ENT- VEDG- XX (HA Only)	ATS-CNR- MNFPH1	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
302	NWN MNFS Premium Virtual Network Function Managed- VeloCloud VC- 00050-ENT- VEDG- XX (HA Only)	ATS-CNR- MNFPH2	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
303	NWN MNFS Premium Virtual Network Function Unmanaged- VeloCloud VC- 00100-ENT- VEDG- XX (HA Only)	ATS-CNR- MNFPH3	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
304	NWN MNFS Premium Virtual Network Function Managed- VeloCloud VC- 00100-ENT- VEDG- XX (HA Only)	ATS-CNR- MNFPH4	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
305	NWN MNFS Premium Virtual Network Function Unmanaged- VeloCloud VC- 01000-PRE- VEDG- XX	ATS-CNR- MNFPH5	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
306	NWN MNFS Premium Virtual Network Function Managed- VeloCloud VC- 01000-PRE- VEDG- XX	ATS-CNR- MNFPH6	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
307	NWN MNFS Premium Virtual Network Function Unmanaged- Silver Peak EdgeConnect (EC-SP-20-MET)	ATS-CNR- MNFPH7	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
308	NWN MNFS Premium Virtual Network Function Managed- Silver Peak EdgeConnect (EC-SP-20-MET)	ATS-CNR- MNFPH8	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
309	NWN MNFS Premium Virtual Network Function Unmanaged- Silver Peak EdgeConnect (EC-SP-2000-MET)	ATS-CNR- MNFPH9	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
310	NWN MNFS Premium Virtual Network Function Managed- Silver Peak EdgeConnect (EC-SP-2000-MET)	ATS-CNR- MNFPI0	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
311	NWN MNFS Premium Virtual Network Function Unmanaged- Silver Peak EdgeConnect (EC-SP-50-MET)	ATS-CNR- MNFPI1	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
312	NWN MNFS Premium Virtual Network Function Managed- Silver Peak EdgeConnect (EC-SP-50-MET)	ATS-CNR- MNFPI2	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
313	NWN MNFS Premium Virtual Network Function Unmanaged- Silver Peak EdgeConnect (EC-SP-100- MET)	ATS-CNR- MNFPI3	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
314	NWN MNFS Premium Virtual Network Function Managed- Silver Peak EdgeConnect (EC-SP-100- MET)	ATS-CNR- MNFPI4	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
315	NWN MNFS Premium Virtual Network Function Unmanaged- Silver Peak EdgeConnect (EC-SP-200- MET)	ATS-CNR- MNFPI5	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
316	NWN MNFS Premium Virtual Network Function Managed- Silver Peak EdgeConnect (EC-SP-200- MET)	ATS-CNR- MNFPI6	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
317	NWN MNFS Premium Virtual Network Function Unmanaged- Silver Peak EdgeConnect (EC-SP-500- MET)	ATS-CNR- MNFPI7	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
318	NWN MNFS Premium Virtual Network Function Managed- Silver Peak EdgeConnect (EC-SP-500- MET)	ATS-CNR- MNFPI8	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
319	NWN MNFS Premium Virtual Network Function Unmanaged- Silver Peak EdgeConnect (EC-SP-1000- MET)	ATS-CNR- MNFPI9	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
320	NWN MNFS Premium Virtual Network Function Managed- Silver Peak EdgeConnect (EC-SP-1000- MET)	ATS-CNR- MNFPJ0	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
321	NWN MNFS Premium Virtual Network Function Unmanaged- Silver Peak EdgeConnect HA (EC-SP-20- MET)	ATS-CNR- MNFPJ1	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
322	NWN MNFS Premium Virtual Network Function Managed- Silver Peak EdgeConnect HA (EC-SP-20- MET)	ATS-CNR- MNFPJ2	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
323	NWN MNFS Premium Virtual Network Function Unmanaged- Silver Peak EdgeConnect HA (EC-SP-2000- MET)	ATS-CNR- MNFPJ3	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
324	NWN MNFS Premium Virtual Network Function Managed- Silver Peak EdgeConnect HA (EC-SP-2000- MET)	ATS-CNR- MNFPJ4	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
325	NWN MNFS Premium Virtual Network Function Unmanaged- Silver Peak EdgeConnect HA (EC-SP-50- MET)	ATS-CNR- MNFPJ5	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
326	NWN MNFS Premium Virtual Network Function Managed- Silver Peak EdgeConnect HA (EC-SP-50- MET)	ATS-CNR- MNFPJ6	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
327	NWN MNFS Premium Virtual Network Function Unmanaged- Silver Peak EdgeConnect HA (EC-SP-100- MET)	ATS-CNR- MNFPJ7	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
328	NWN MNFS Premium Virtual Network Function Managed- Silver Peak EdgeConnect HA (EC-SP-100- MET)	ATS-CNR- MNFPJ8	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
329	NWN MNFS Premium Virtual Network Function Unmanaged- Silver Peak EdgeConnect HA (EC-SP-200- MET)	ATS-CNR- MNFPJ9	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
330	NWN MNFS Premium Virtual Network Function Managed- Silver Peak EdgeConnect HA (EC-SP-200- MET)	ATS-CNR- MNFPK0	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
331	NWN MNFS Premium Virtual Network Function Unmanaged- Silver Peak EdgeConnect HA (EC-SP-500- MET)	ATS-CNR- MNFPK1	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
332	NWN MNFS Premium Virtual Network Function Managed- Silver Peak EdgeConnect HA (EC-SP-500- MET)	ATS-CNR- MNFPK2	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
333	NWN MNFS Premium Virtual Network Function Unmanaged- Silver Peak EdgeConnect HA (EC-SP- 1000-MET)	ATS-CNR- MNFPK3	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
334	NWN MNFS Premium Virtual Network Function Managed- Silver Peak EdgeConnect HA (EC-SP- 1000-MET)	ATS-CNR- MNFPK4	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
335	NWN MNFS Premium Virtual Network Function Unmanaged- VeloCloud VC- 00200-ENT- VEDG- XX (HA Only)	ATS-CNR- MNFPK5	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
336	NWN MNFS Premium Virtual Network Function Managed- VeloCloud VC- 00200-ENT- VEDG- XX (HA Only)	ATS-CNR- MNFPK6	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
337	NWN MNFS Premium Virtual Network Function Unmanaged- VeloCloud VC- 00400-ENT- VEDG- XX (HA Only)	ATS-CNR- MNFPK7	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
338	NWN MNFS Premium Virtual Network Function Managed- VeloCloud VC- 00400-ENT- VEDG- XX (HA Only)	ATS-CNR- MNFPK8	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
339	NWN MNFS Premium Virtual Network Function Unmanaged- VeloCloud VC- 01000-ENT- VEDG- XX (HA Only)	ATS-CNR- MNFPK9	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
340	NWN MNFS Premium Virtual Network Function Managed- VeloCloud VC- 01000-ENT- VEDG- XX (HA Only)	ATS-CNR- MNFPL0	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
341	NWN MNFS Premium Virtual Network Function Unmanaged- VeloCloud VC- 00010-PRE- VEDG- XX (HA Only)	ATS-CNR- MNFPL1	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
342	NWN MNFS Premium Virtual Network Function Managed- VeloCloud VC- 00010-PRE- VEDG- XX (HA Only)	ATS-CNR- MNFPL2	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
343	NWN MNFS Premium Virtual Network Function Unmanaged- VeloCloud VC- 00030-PRE- VEDG- XX (HA Only)	ATS-CNR- MNFPL3	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
344	NWN MNFS Premium Virtual Network Function Managed- VeloCloud VC- 00030-PRE- VEDG- XX (HA Only)	ATS-CNR- MNFPL4	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
345	NWN MNFS Premium Virtual Network Function Unmanaged- VeloCloud VC- 00050-PRE- VEDG- XX (HA Only)	ATS-CNR- MNFPL5	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
346	NWN MNFS Premium Virtual Network Function Managed- VeloCloud VC- 00050-PRE- VEDG- XX (HA Only)	ATS-CNR- MNFPL6	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
347	NWN MNFS Premium Virtual Network Function Unmanaged- VeloCloud VC- 00100-PRE- VEDG- XX (HA Only)	ATS-CNR- MNFPL7	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
348	NWN MNFS Premium Virtual Network Function Managed- VeloCloud VC- 00100-PRE- VEDG- XX (HA Only)	ATS-CNR- MNFPL8	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
349	NWN MNFS Premium Virtual Network Function Unmanaged- VeloCloud VC- 00200-PRE- VEDG- XX (HA Only)	ATS-CNR- MNFPL9	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
350	NWN MNFS Premium Virtual Network Function Managed- VeloCloud VC- 00200-PRE- VEDG- XX (HA Only)	ATS-CNR- MNFPM0	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
351	NWN MNFS Premium Virtual Network Function Unmanaged- VeloCloud VC- 00400-PRE- VEDG- XX (HA Only)	ATS-CNR- MNFPM1	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
352	NWN MNFS Premium Virtual Network Function Managed- VeloCloud VC- 00400-PRE- VEDG- XX (HA Only)	ATS-CNR- MNFPM2	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
353	NWN MNFS Premium Virtual Network Function Unmanaged- VeloCloud VC- 01000-PRE- VEDG- XX (HA Only)	ATS-CNR- MNFPM3	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
354	NWN MNFS Premium Virtual Network Function Managed- VeloCloud VC- 01000-PRE- VEDG- XX (HA Only)	ATS-CNR- MNFPM4	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
355	NWN MNFS Premium Virtual Network Function Unmanaged- FatPipe WANx + QoS VNF - 10Mbps	ATS-CNR- MNFPM5	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
356	NWN MNFS Premium Virtual Network Function Managed- FatPipe WANx + QoS VNF - 10Mbps	ATS-CNR- MNFPM6	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
357	NWN MNFS Premium Virtual Network Function Unmanaged- FatPipe WANx + QoS + Visibility VNF - 10Mbps	ATS-CNR- MNFPM7	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
358	NWN MNFS Premium Virtual Network Function Managed- FatPipe WANx + QoS + Visibility VNF - 10Mbps	ATS-CNR- MNFPM8	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
359	NWN MNFS Premium Virtual Network Function Unmanaged- FatPipe SD- WAN + QoS + Visibility VNF - 10Mbps	ATS-CNR- MNFPM9	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
360	NWN MNFS Premium Virtual Network Function Managed- FatPipe SD- WAN + QoS + Visibility VNF - 10Mbps	ATS-CNR- MNFPN0	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
361	NWN MNFS Premium Virtual Network Function Unmanaged- FatPipe SD- WAN Pro VNF - 10Mbps	ATS-CNR- MNFPN1	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
362	NWN MNFS Premium Virtual Network Function Managed- FatPipe SD- WAN Pro VNF - 10Mbps	ATS-CNR- MNFPN2	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
363	NWN MNFS Premium Virtual Network Function Unmanaged- FatPipe WANx + QoS VNF - 30Mbps	ATS-CNR- MNFPN3	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
364	NWN MNFS Premium Virtual Network Function Managed- FatPipe WANx + QoS VNF - 30Mbps	ATS-CNR- MNFPN4	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
365	NWN MNFS Premium Virtual Network Function Unmanaged- FatPipe WANx + QoS + Visibility VNF - 30Mbps	ATS-CNR- MNFPN5	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
366	NWN MNFS Premium Virtual Network Function Managed- FatPipe WANx + QoS + Visibility VNF - 30Mbps	ATS-CNR- MNFPN6	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
367	NWN MNFS Premium Virtual Network Function Unmanaged- FatPipe SD- WAN + QoS + Visibility VNF - 30Mbps	ATS-CNR- MNFPN7	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
368	NWN MNFS Premium Virtual Network Function Managed- FatPipe SD- WAN + QoS + Visibility VNF - 30Mbps	ATS-CNR- MNFPN8	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
369	NWN MNFS Premium Virtual Network Function Unmanaged- FatPipe SD- WAN Pro VNF - 30Mbps	ATS-CNR- MNFPN9	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
370	NWN MNFS Premium Virtual Network Function Managed- FatPipe SD- WAN Pro VNF - 30Mbps	ATS-CNR- MNFPO0	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
371	NWN MNFS Premium Virtual Network Function Unmanaged- FatPipe WANx + QoS VNF - 50Mbps	ATS-CNR- MNFPO1	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
372	NWN MNFS Premium Virtual Network Function Managed- FatPipe WANx + QoS VNF - 50Mbps	ATS-CNR- MNFPO2	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
373	NWN MNFS Premium Virtual Network Function Unmanaged- FatPipe WANx + QoS + Visibility VNF - 50Mbps	ATS-CNR- MNFPO3	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
374	NWN MNFS Premium Virtual Network Function Managed- FatPipe WANx + QoS + Visibility VNF - 50Mbps	ATS-CNR- MNFPO4	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
375	NWN MNFS Premium Virtual Network Function Unmanaged- FatPipe SD- WAN + QoS + Visibility VNF - 50Mbps	ATS-CNR- MNFPO5	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
376	NWN MNFS Premium Virtual Network Function Managed- FatPipe SD- WAN + QoS + Visibility VNF - 50Mbps	ATS-CNR- MNFPO6	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
377	NWN MNFS Premium Virtual Network Function Unmanaged- FatPipe SD- WAN Pro VNF - 50Mbps	ATS-CNR- MNFPO7	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
378	NWN MNFS Premium Virtual Network Function Managed- FatPipe SD- WAN Pro VNF - 50Mbps	ATS-CNR- MNFPO8	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
379	NWN MNFS Premium Virtual Network Function Unmanaged- FatPipe WANx + QoS VNF - 100Mbps	ATS-CNR- MNFPO9	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
380	NWN MNFS Premium Virtual Network Function Managed- FatPipe WANx + QoS VNF - 100Mbps	ATS-CNR- MNFPP0	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
381	NWN MNFS Premium Virtual Network Function Unmanaged- FatPipe WANx + QoS + Visibility VNF - 100Mbps	ATS-CNR- MNFPP1	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
382	NWN MNFS Premium Virtual Network Function Managed- FatPipe WANx + QoS + Visibility VNF - 100Mbps	ATS-CNR- MNFPP2	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
383	NWN MNFS Premium Virtual Network Function Unmanaged- FatPipe SD- WAN + QoS + Visibility VNF - 100Mbps	ATS-CNR- MNFPP3	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
384	NWN MNFS Premium Virtual Network Function Managed- FatPipe SD- WAN + QoS + Visibility VNF - 100Mbps	ATS-CNR- MNFPP4	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
385	NWN MNFS Premium Virtual Network Function Unmanaged- FatPipe SD- WAN Pro VNF - 100Mbps	ATS-CNR- MNFPP5	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
386	NWN MNFS Premium Virtual Network Function Managed- FatPipe SD- WAN Pro VNF - 100Mbps	ATS-CNR- MNFPP6	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
387	NWN MNFS Premium Virtual Network Function Unmanaged- FatPipe WANx + QoS VNF - 300Mbps	ATS-CNR- MNFPP7	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
388	NWN MNFS Premium Virtual Network Function Managed- FatPipe WANx + QoS VNF - 300Mbps	ATS-CNR- MNFPP8	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
389	NWN MNFS Premium Virtual Network Function Unmanaged- FatPipe WANx + QoS + Visibility VNF - 300Mbps	ATS-CNR- MNFPP9	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
390	NWN MNFS Premium Virtual Network Function Managed- FatPipe WANx + QoS + Visibility VNF - 300Mbps	ATS-CNR- MNFPQ0	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
391	NWN MNFS Premium Virtual Network Function Unmanaged- FatPipe SD- WAN + QoS + Visibility VNF - 300Mbps	ATS-CNR- MNFPQ1	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
392	NWN MNFS Premium Virtual Network Function Managed- FatPipe SD- WAN + QoS + Visibility VNF - 300Mbps	ATS-CNR- MNFPQ2	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
393	NWN MNFS Premium Virtual Network Function Unmanaged- FatPipe SD- WAN Pro VNF - 300Mbps	ATS-CNR- MNFPQ3	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
394	NWN MNFS Premium Virtual Network Function Managed- FatPipe SD- WAN Pro VNF - 300Mbps	ATS-CNR- MNFPQ4	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
395	NWN MNFS Premium Virtual Network Function Unmanaged- FatPipe WANx + QoS VNF - 500Mbps	ATS-CNR- MNFPQ5	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
396	NWN MNFS Premium Virtual Network Function Managed- FatPipe WANx + QoS VNF - 500Mbps	ATS-CNR- MNFPQ6	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
397	NWN MNFS Premium Virtual Network Function Unmanaged- FatPipe WANx + QoS + Visibility VNF - 500Mbps	ATS-CNR- MNFPQ7	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
398	NWN MNFS Premium Virtual Network Function Managed- FatPipe WANx + QoS + Visibility VNF - 500Mbps	ATS-CNR- MNFPQ8	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
399	NWN MNFS Premium Virtual Network Function Unmanaged- FatPipe SD- WAN + QoS + Visibility VNF - 500Mbps	ATS-CNR- MNFPQ9	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
400	NWN MNFS Premium Virtual Network Function Managed- FatPipe SD- WAN + QoS + Visibility VNF - 500Mbps	ATS-CNR- MNFPR0	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
401	NWN MNFS Premium Virtual Network Function Unmanaged- FatPipe SD- WAN Pro VNF - 500Mbps	ATS-CNR- MNFPR1	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
402	NWN MNFS Premium Virtual Network Function Managed- FatPipe SD- WAN Pro VNF - 500Mbps	ATS-CNR- MNFPR2	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
403	NWN MNFS Premium Virtual Network Function Unmanaged- FatPipe WANx + QoS VNF - 1 Gbps	ATS-CNR- MNFPR3	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
404	NWN MNFS Premium Virtual Network Function Managed- FatPipe WANx + QoS VNF - 1 Gbps	ATS-CNR- MNFPR4	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
405	NWN MNFS Premium Virtual Network Function Unmanaged- FatPipe WANx + QoS + Visibility VNF - 1Gbps	ATS-CNR- MNFPR5	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
406	NWN MNFS Premium Virtual Network Function Managed- FatPipe WANx + QoS + Visibility VNF - 1 Gbps	ATS-CNR- MNFPR6	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
407	NWN MNFS Premium Virtual Network Function Unmanaged- FatPipe SD- WAN + QoS + Visibility VNF - 1Gbps	ATS-CNR- MNFPR7	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
408	NWN MNFS Premium Virtual Network Function Managed- FatPipe SD- WAN + QoS + Visibility VNF - 1Gbps	ATS-CNR- MNFPR8	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
409	NWN MNFS Premium Virtual Network Function Unmanaged- FatPipe SD- WAN Pro VNF - 1Gbps	ATS-CNR- MNFPR9	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
410	NWN MNFS Premium Virtual Network Function Managed- FatPipe SD- WAN Pro VNF - 1Gbps	ATS-CNR- MNFPS0	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
411	NWN MNFS Premium Virtual Network Function Unmanaged- VSRX-100M- ASCS-1 + CSO A-1 (Security)	ATS-CNR- MNFPS1	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
412	NWN MNFS Premium Virtual Network Function Managed- VSRX- 100M- ASCS-1 + CSO A-1 (Security)	ATS-CNR- MNFPS2	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
413	NWN MNFS Premium Virtual Network Function Unmanaged- VSRX-100M- CS-B- 1 + CSO A- 1 (Security)	ATS-CNR- MNFPS3	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
414	NWN MNFS Premium Virtual Network Function Managed- VSRX- 100M- CS-B-1 + CSO A-1 (Security)	ATS-CNR- MNFPS4	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
415	NWN MNFS Premium Virtual Network Function Unmanaged- VSRX-1G- ASCS-1 + CSO B-1 (Security)	ATS-CNR- MNFPS5	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware

Line Item	Feature Name	Bidder's Product	Bidder's Product Description, Restrictions and Limitations
416	NWN MNFS Premium Virtual Network Function Managed- VSRX- 1G- ASCS-1 + CSO B-1 (Security)	ATS-CNR- MNFPS6	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
417	NWN MNFS Premium Virtual Network Function Unmanaged- VSRX-1G-CS-B- 1 + CSO A- 1 (Security)	ATS-CNR- MNFPS7	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
418	NWN MNFS Premium Virtual Network Function Managed- VSRX- 1G-CS-B- 1 + CSO A- 1 (Security)	ATS-CNR- MNFPS8	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
419	NWN MNFS Premium Virtual Network Function Unmanaged- VSRX-100M- STD- ATT (Router)	ATS-CNR- MNFPS9	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
420	NWN MNFS Premium Virtual Network Function Managed- VSRX- 100M- STD-ATT (Router)	ATS-CNR- MNFPT0	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
421	NWN MNFS Premium Virtual Network Function Unmanaged- VSRX-1G-STD- ATT (Router)	ATS-CNR- MNFPT1	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware

Line Item	Feature Name	Bidder's Product	Bidder's Product Description, Restrictions and Limitations
		Identifier	
422	NWN MNFS Premium Virtual Network Function Managed- VSRX- 1G-STD- ATT (Router)	ATS-CNR- MNFPT2	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
423	NWN MNFS Premium Virtual Network Function - Non-Recurring Charge (except Cisco CSR)	ATS-CNN- MNFPNRC 1	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
424	NWN MNFS Premium Virtual Network Function - Non-Recurring Charge (Cisco CSR)	ATS-CNN- MNFPNRC 2	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
425	1G Copper SFP (XCVR- B00CRJ)	ATS-CNN- MNFPT3	1G Copper SFP (XCVR-B00CRJ)
426	1G Multimode Optics-Dual Fiber (XCVR- B00G85)	ATS-CNN- MNFPT4	1G Multimode Optics-Dual Fiber (XCVR-B00G85)
427	1G Single Mode Optics- Dual Fiber (XCVR- A10Y31)	ATS-CNN- MNFPT5	1G Single Mode Optics-Dual Fiber (XCVR-A10Y31)
428	Cisco RJ45F Serial Adapter (170- 0062-900)	ATS-CNN- MNFPT6	Cisco RJ45F Serial Adapter (170-0062-900)
429	10G single mode Fiber SFP (XCVR- S10V31)	ATS-CNN- MNFPT7	10G single mode Fiber SFP (XCVR-S10V31)
430	10G Multimode Fiber SFP (XCVR- S00Z85)	ATS-CNN- MNFPT8	10G Multimode Fiber SFP (XCVR- S00Z85)
431	US Power Cord	ATS-CNN- MNFPT9	US Power Cord

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
432	NWN MNFS Premium Virtual Network Function Unmanaged- Silver Peak EdgeConnect (EC-SP-UL- MET)	ATS-CNR- MNFPU1	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
433	NWN MNFS Premium Virtual Network Function Managed- Silver Peak EdgeConnect (EC-SP-UL- MET)	ATS-CNR- MNFPU2	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
434	NWN MNFS Premium Virtual Network Function Unmanaged- Silver Peak EdgeConnect HA (EC-SP-UL- MET)	ATS-CNR- MNFPU3	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
435	NWN MNFS Premium Virtual Network Function Managed- Silver Peak EdgeConnect HA (EC-SP-UL- MET)	ATS-CNR- MNFPU4	NWN Virtual Network Functions are managed or unmanaged but must be purchased with NWN uCPE MNFS Premium equipment or compatible vendor-specific hardware
436	PowerUP UPSaaS Basic	Multiple (See Below)	NWN PowerUP UPSaaS Basic Includes: UPS, Network Card, 2-Post & 4-Post Mounting Kits. Site Assessment, 5x8 Installation. 16kVA Modular/Scalable UPS installation also includes full electrical installation (materials & labor), and Remote Monitoring Service. Only to be procured with an NWN CALNET Service.
437	1500VA UPS with 5-15P Plug - Basic - NRC	ATS-CNN- PUB01	5-15R (15A, 120V, Non-locking) required outlet for UPS

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
438	1500VA UPS with 5-15P Plug - Basic - MRC	ATS-CNR- PUB01	5-15R (15A, 120V, Non-locking) required outlet for UPS
439	Battery Pack for 1500VA UPS - Basic - NRC	ATS-CNN- PUB02	
440	Battery Pack for 1500VA UPS - Basic - MRC	ATS-CNR- PUB02	
441	2000VA UPS with 5-20P Plug - Basic - NRC	ATS-CNN- PUB03	5-20R (20A, 120V, Non-locking) required outlet for UPS
442	2000VA UPS with 5-20P Plug - Basic - MRC	ATS-CNR- PUB03	5-20R (20A, 120V, Non-locking) required outlet for UPS
443	Battery Pack for 2000VA UPS - Basic - NRC	ATS-CNN- PUB04	
444	Battery Pack for 2000VA UPS - Basic - MRC	ATS-CNR- PUB04	
445	3000VA UPS with L5-30P Plug - Basic - NRC	ATS-CNN- PUB05	L5-30R (30A, 120V, locking) required outlet for UPS
446	3000VA UPS with L5-30P Plug - Basic - MRC	ATS-CNR- PUB05	L5-30R (30A, 120V, locking) required outlet for UPS
447	Battery Pack for 3000VA UPS - Basic - NRC	ATS-CNN- PUB06	
448	Battery Pack for 3000VA UPS - Basic - MRC	ATS-CNR- PUB06	
449	5000VA UPS with L6-30P Plug - Basic - NRC	ATS-CNN- PUB07	L6-30R (30A, 208V, Locking) required outlet for UPS
450	5000VA UPS with L6-30P Plug - Basic - MRC	ATS-CNR- PUB07	L6-30R (30A, 208V, Locking) required outlet for UPS

Line Item	Feature Name	Bidder's Product	Bidder's Product Description, Restrictions and Limitations
		Identifier	
451	Battery Pack for 5000VA UPS - Basic - NRC	ATS-CNN- PUB08	
452	Battery Pack for 5000VA UPS - Basic - MRC	ATS-CNR- PUB08	
453	16kVA Modular/Scalabl e UPS - Basic - NRC	ATS-CNN- PUB09	100A, 208V, 4 Wire Hardwire (2ph+N+G) required outlet for UPS
454	16kVA Modular/Scalabl e UPS - Basic - MRC	ATS-CNR- PUB09	100A, 208V, 4 Wire Hardwire (2ph+N+G) required outlet for UPS
455	Battery Frame for 16kVA UPS - Basic - NRC	ATS-CNN- PUB10	
456	Battery Frame for 16kVA UPS - Basic - MRC	ATS-CNR- PUB10	
457	Automatic Transfer Switch - Basic - NRC	ATS-CNN- PUB11	
458	Automatic Transfer Switch - Basic - MRC	ATS-CNR- PUB11	
459	PowerUP UPSaaS Deluxe	Multiple (See Below)	PowerUP UPSaaS Deluxe Includes: UPS, Network Card, 2-Post & 4-Post Mounting Kits. Site Assessment, 7x24 Installation. 16kVA Modular/Scalable UPS installation also includes full electrical installation (materials & labor), Remote Monitoring Service. Only to be procured with an NWN CALNET Service.
460	1500VA UPS with 5-15P Plug - Deluxe - NRC	ATS-CNN- PUD01	5-15R (15A, 120V, Non-locking) required outlet for UPS

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
461	1500VA UPS with 5-15P Plug - Deluxe - MRC	ATS-CNR- PUD01	5-15R (15A, 120V, Non-locking) required outlet for UPS
462	Battery Pack for 1500VA UPS - Deluxe - NRC	ATS-CNN- PUD02	
463	Battery Pack for 1500VA UPS - Deluxe - MRC	ATS-CNR- PUD02	
464	2000VA UPS with 5-20P Plug - Deluxe - NRC	ATS-CNN- PUD03	5-20R (20A, 120V, Non-locking) required outlet for UPS
465	2000VA UPS with 5-20P Plug - Deluxe - MRC	ATS-CNR- PUD03	5-20R (20A, 120V, Non-locking) required outlet for UPS
466	Battery Pack for 2000VA UPS - Deluxe - NRC	ATS-CNN- PUD04	
467	Battery Pack for 2000VA UPS - Deluxe - MRC	ATS-CNR- PUD04	
468	3000VA UPS with L5-30P Plug - Deluxe - NRC	ATS-CNN- PUD05	L5-30R (30A, 120V, locking) required outlet for UPS
469	3000VA UPS with L5-30P Plug - Deluxe - MRC	ATS-CNR- PUD05	L5-30R (30A, 120V, locking) required outlet for UPS
470	Battery Pack for 3000VA UPS - Deluxe - NRC	ATS-CNN- PUD06	
471	Battery Pack for 3000VA UPS - Deluxe - MRC	ATS-CNR- PUD06	
472	5000VA UPS with L6-30P Plug - Deluxe - NRC	ATS-CNN- PUD07	L6-30R (30A, 208V, Locking) required outlet for UPS
473	5000VA UPS with L6-30P Plug - Deluxe - MRC	ATS-CNR- PUD07	L6-30R (30A, 208V, Locking) required outlet for UPS

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
474	Battery Pack for 5000VA UPS - Deluxe - NRC	ATS-CNN- PUD08	
475	Battery Pack for 5000VA UPS - Deluxe - MRC	ATS-CNR- PUD08	
476	16kVA Modular/Scalabl e UPS - Deluxe - NRC	ATS-CNN- PUD09	100A, 208V, 4 Wire Hardwire (2ph+N+G) required outlet for UPS
477	16kVA Modular/Scalabl e UPS - Deluxe - MRC	ATS-CNR- PUD09	100A, 208V, 4 Wire Hardwire (2ph+N+G) required outlet for UPS
478	Battery Frame for 16kVA UPS - Deluxe - NRC	ATS-CNN- PUD10	
479	Battery Frame for 16kVA UPS - Deluxe - MRC	ATS-CNR- PUD10	
480	Automatic Transfer Switch - Deluxe - NRC	ATS-CNN- PUD11	
481	Automatic Transfer Switch - Deluxe - MRC	ATS-CNR- PUD11	
482	PowerUP UPSaaS Ultra	Multiple (See Below)	PowerUP UPSaaS Ultra Includes: UPS, Network Card, 2-Post or Wallmount Rack, 2-Post & 4-Post Mounting Kits, Rackmount PDU. Site Assessment, Existing UPS Removal, Rack & PDU Installation, 7x24 Installation. 16kVA Modular/Scalable UPS installation also includes full electrical installation (materials & labor), Remote Monitoring Service. Only to be procured with an NWN CALNET Service.
483	1500VA UPS with 5-15P Plug - Ultra - NRC	ATS-CNN- PUU01	5-15R (15A, 120V, Non-locking) required outlet for UPS

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
484	1500VA UPS with 5-15P Plug - Ultra - MRC	ATS-CNR- PUU01	5-15R (15A, 120V, Non-locking) required outlet for UPS
485	Battery Pack for 1500VA UPS - Ultra - NRC	ATS-CNN- PUU02	
486	Battery Pack for 1500VA UPS - Ultra - MRC	ATS-CNR- PUU02	
487	2000VA UPS with 5-20P Plug - Ultra - NRC	ATS-CNN- PUU03	5-20R (20A, 120V, Non-locking) required outlet for UPS
488	2000VA UPS with 5-20P Plug - Ultra - MRC	ATS-CNR- PUU03	5-20R (20A, 120V, Non-locking) required outlet for UPS
489	Battery Pack for 2000VA UPS - Ultra - NRC	ATS-CNN- PUU04	
490	Battery Pack for 2000VA UPS - Ultra - MRC	ATS-CNR- PUU04	
491	3000VA UPS with L5-30P Plug - Ultra - NRC	ATS-CNN- PUU05	L5-30R (30A, 120V, locking) required outlet for UPS
492	3000VA UPS with L5-30P Plug - Ultra - MRC	ATS-CNR- PUU05	L5-30R (30A, 120V, locking) required outlet for UPS
493	Battery Pack for 3000VA UPS - Ultra - NRC	ATS-CNN- PUU06	
494	Battery Pack for 3000VA UPS - Ultra - MRC	ATS-CNR- PUU06	
495	5000VA UPS with L6-30P Plug - Ultra - NRC	ATS-CNN- PUU07	L6-30R (30A, 208V, Locking) required outlet for UPS
496	5000VA UPS with L6-30P Plug - Ultra - MRC	ATS-CNR- PUU07	L6-30R (30A, 208V, Locking) required outlet for UPS

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
497	Battery Pack for 5000VA UPS - Ultra - NRC	ATS-CNN- PUU08	
498	Battery Pack for 5000VA UPS - Ultra - MRC	ATS-CNR- PUU08	
499	16kVA Modular/Scalabl e UPS - Ultra - NRC	ATS-CNN- PUU09	100A, 208V, 4 Wire Hardwire (2ph+N+G) required outlet for UPS
500	16kVA Modular/Scalabl e UPS - Ultra - MRC	ATS-CNR- PUU09	100A, 208V, 4 Wire Hardwire (2ph+N+G) required outlet for UPS
501	Battery Frame for 16kVA UPS - Ultra - NRC	ATS-CNN- PUU10	
502	Battery Frame for 16kVA UPS - Ultra - MRC	ATS-CNR- PUU10	
503	Automatic Transfer Switch - Ultra - NRC	ATS-CNN- PUU11	
504	Automatic Transfer Switch - Ultra - MRC	ATS-CNR- PUU11	
505	MAAS Host Probe Server Premise	ATS-CNR- MHPR0000	Onsite Deployment: Provides centralized onsite storage of all analyzed Performance Data with expert alert notification and Portal Access for all Monitoring, Diagnostics and Reporting.
506	MAAS Host Probe Server Cloud	ATS-CNR- MHPC0000	Cloud Deployment: Provides centralized cloud storage of all analyzed Performance Data with expert alert notification and Portal Access for all Monitoring, Diagnostics and Reporting.

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
507	MAAS Probe Remote - Small	ATS-CNR- MPRM0001	MAAS Virtual Small features include: Deep Packet visibility of remote sites to provide Performance Monitoring, Diagnostics and Reporting for up to 100Mbps of networked Voice, Video and Application services.
508	MAAS Probe Remote - Medium	ATS-CNR- MPRM0002	MAAS Virtual Medium features include: Deep Packet visibility of remote sites to provide Performance Monitoring, Diagnostics and Reporting for up to 500Mbps of networked Voice, Video and Application services.
509	MAAS Probe Remote - Large	ATS-CNR- MPRM0003	MAAS Virtual Large features include: Deep Packet visibility of remote sites to provide Performance Monitoring, Diagnostics and Reporting for up to 1Gbps of networked Voice, Video and Application services.
510	MAAS Probe Data Center - Small	ATS-CNR- MPDC0001	MAAS Small Probe Monitoring features include: Deep Packet visibility of Data Center sites to provide Performance Monitoring, Diagnostics and Reporting for up to 1Gbps of networked Voice, Video and Application services.
511	MAAS Probe Data Center - Medium	ATS-CNR- MPDC0002	MAAS Medium Probe Monitoring features include: Deep Packet visibility of Data Center sites to provide Performance Monitoring, Diagnostics and Reporting for up to 10Gbps of networked Voice, Video and Application services.
512	MAAS Probe Data Center - Large	ATS-CNR- MPDC0003	MAAS Large Probe Monitoring features include: Deep Packet visibility of Data Center sites to provide Performance Monitoring, Diagnostics and Reporting for greater than 10Gbps of networked Voice, Video and Application services.

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
513	MAAS≤100 Mbps	ATS-CNR- MAPA0001	Bidder's Product Description: Managed Application Assurance Service ≤ 100 Mbps - Provides NetFlow collection and active testing for sites with less than ≤ 100 Mbps WAN connectivity. This service includes the basic monitoring and troubleshooting dashboards, reports, and alert threshold notifications that are available with Application Assurance.
514	MAAS > 100Mbps	ATS-CNR- MAPA0002	Bidder's Product Description: Managed Application Assurance Service > 100 – Provides everything provided by Application Assurance Service > 100 for WAN connectivity.
515	MAAS Virtual Pulse - Simulate a End User	ATS-CNR- MVPS0000	MAAS Virtual Pulse features include: Active testing for service level validation of performance and reliability.
516	MAAS Hardware Pulse - Simulate a End User	ATS-CNR- MHPS0000	MAAS Hardware Pulse features include: Active testing for service level validation of performance and reliability.
517	MAAS Customer Care 25 Sites	ATS-CNR- MCCR002 5	MAAS Customer Care Small features include: Professional Monthly Review, Summarized Reporting and expert Troubleshooting Assistance for up to 25 sites.
518	MAAS Customer Care 50 Sites	ATS-CNR- MCCR005 0	MAAS Customer Care Medium features include: Professional Monthly Review, Summarized Reporting and expert Troubleshooting Assistance for up to 50 sites.
519	MAAS Customer Care 100 Sites	ATS-CNR- MCCR010 0	MAAS Customer Care Large features include: Professional Monthly Review, Summarized Reporting and expert Troubleshooting Assistance for up to 100 sites.

Line Item	Feature Name	Bidder's Product	Bidder's Product Description, Restrictions and Limitations
		Identifier	
520	MAAS Customer Care 100> Sites	ATS-CNR- MCST0100	MAAS Customer Care Extra Large features include: Professional Monthly Review, Summarized Reporting and expert Troubleshooting Assistance for greater than 100 sites.
521	MWAN Monitor and Notify - Small	ATS-CNR- MMNS0000	Managed WAN Monitor & Notify - Small provides the monitoring of Small managed device. The device is polled on a regular basis, and a repeated failure of the device to respond to polls will indicate a fault condition and will generate alarms. The fault will be isolated to access, transport, or CPE and a trouble ticket will be opened on the customer's behalf, and the customer will be proactively notified of the outage. NWN will own the resolution of the access and transport issues related to the fault. The customer retains responsibility for resolving all physical and logical CPE issues.
522	MWAN Monitor and Notify - Medium	ATS-CNR- MMNM000 0	Bidder's Product Description: Managed WAN Monitor & Notify - Medium provides everything provided by Managed WAN Monitor & Notify Small except for a Medium class device. MWAN Monitor and Notify – Medium features include: Device Availability and Health Monitoring, Fault Isolation, Trouble Ticket Generation, and Proactive Outage Notification.
523	MWAN Monitor and Notify - Large	ATS-CNR- MMNL0000	Bidder's Product Description: Managed WAN Monitor & Notify - Large provides everything provided by Managed WAN Monitor & Notify Small except for a Large class device. MWAN Monitor and Notify – Large features include: Device Availability and Health Monitoring, Fault Isolation, Trouble Ticket Generation, and Proactive Outage Notification

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
524	MWAN Physical - Small	ATS-CNR- MMPS0000	Bidder's Product Description: Managed WAN Physical - Small provides all of the monitoring features of Managed WAN Monitory & Notify Small as well as NWN owning the resolution of any physical CPE issues. The customer retains responsibility for resolving all logical Customer Premise Equipment (CPE) issues. MWAN Physical – Small features include: Device Availability and Health Monitoring, Fault Isolation, Trouble Ticket Generation, and Proactive Outage Notification.
525	MWAN Physical - Medium	ATS-CNR- MMPM000 0	Bidder's Product Description: Managed WAN Physical - Medium provides all of the monitoring features of Managed WAN Monitory & Notify Medium as well as NWN owning the resolution of any physical CPE issues. The customer retains responsibility for resolving all logical Customer Premise Equipment (CPE) issues. MWAN Physical - Medium features include: Device Availability and Health Monitoring, Fault Isolation, Trouble Ticket Generation, and Proactive Outage Notification.
526	MWAN Physical - Large	ATS-CNR- MMPL0000	Bidder's Product Description: Managed WAN Physical - Large provides all of the monitoring features of Managed WAN Monitory & Notify Large as well as NWN owning the resolution of any physical CPE issues. The customer retains responsibility for resolving all logical Customer Premise Equipment (CPE) issues. MWAN Physical - Large features include: Device Availability and Health Monitoring, Fault Isolation, Trouble Ticket Generation, and Proactive Outage Notification.

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
527	MWAN Full - Small	ATS-CNR- MFLS0000	Bidder's Product Description: Managed WAN Full - Small provides all of the monitoring features of Managed WAN Physical - Small as well as NWN owning the resolution of any logical Customer Premise Equipment (CPE) issues. MWAN Full - Small Full features include: Device Availability and Health Monitoring, Fault Isolation, Trouble Ticket Generation, and Proactive Outage Notification.
528	MWAN Full - Medium	ATS-CNR- MFLM0000	Bidder's Product Description: Managed WAN Full - Medium provides all of the monitoring features of Managed WAN Physical - Medium as well as NWN owning the resolution of any logical Customer Premise Equipment (CPE) issues. MWAN Full - Medium features include: Device Availability and Health Monitoring, Fault Isolation, Trouble Ticket Generation, and Proactive Outage Notification.
529	MWAN Full - Large	ATS-CNR- MFLG0000	Bidder's Product Description: MWAN Full - Large provides all of the monitoring features of Managed WAN Physical – Large as well as NWN owning the resolution of any logical Customer Premise Equipment (CPE) issues. MWAN Full - Large features include: Device Availability and Health Monitoring, Fault Isolation, Trouble Ticket Generation, and Proactive Outage Notification.
530	MWAN Device Installation	ATS-CNN- MDVI0000	Bidder's Product Description: Managed WAN Device Installation provides for the process of installing, implementing, and activating a new device under management

Line	Feature Name	Bidder's	Bidder's Product Description, Restrictions
Item		Product Identifier	and Limitations
531	MWAN Takeover of Existing Device	ATS-CNN- MTEV0000	Bidder's Product Description: Managed WAN Takeover of Existing Device provides for the takeover process of previously installed and working device for management.
532	MWAN Order Expedite	ATS-CNN- MOEX0000	Bidder's Product Description: MWAN Order Expedite provides for an expedited process for activating a WAN device in fifteen (15) days or less. This service is solely for the purposes of expediting the CPE installation process and does not affect circuit installation and activation.
533	MWAN Report - Threshold Proactive Performance Monitoring (PPM)	ATS-CNR- MWTH0000	Bidder's Product Description: MWAN Report - Threshold Proactive Performance Monitoring features include: Add-on service to Managed WAN for proactively monitoring specific predefined performance thresholds.
534	MWAN Reporting - ETM Reporting	ATS-CNR- MWRE0000	Bidder's Product Description: Managed WAN Analysis – ETM Reporting – This feature includes all of the benefits from the basic reporting included with the managed service. ETM reporting adds the ability to report on QoS, CE-CE path performance, and high-level application data. CE-CE path performance allows reports of information, such as latency, for up to ten (10) paths per managed device. CE network performance allows for monitoring and detailed reporting on traffic volumes for up to twenty (20) Customer defined and selected network protocols. QoS performance reports can be generated on the quality and performance of DSCP and CoS on managed devices. Customer may generate At-a-Glance, Top-N, and Trend reports with PE elements.

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
535	MWAN Reporting - ETM Select Reporting w/Netflow Reporting	ATS-CNR- MWRA000 0	Bidder's Product Description: MWAN Reporting Analysis ETM Select w/NetFlow features include Live Health reporting and collection and reporting from NetFlow

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536	MWAN Reporting - Network Analysis	ATS-CNR- MWRN000 0	Is an optional service that provides for a NWN Analysis Professional to review the Customer entitled reports and provides a monthly summarization of issues and provides recommendations to improve network performance. The analyst will analyze the network performance based on key variables such as, but not limited to, utilization, queue drops, and error conditions from the perspective of the NWN managed device. With a preliminary report established, the analyst has the capability to utilize other NWN tools and reporting systems, as required, to validate finds and further clarify the nature of the identified issue in finalizing the report. This service also includes a monthly review of the post monthly network performance report with Customer and NWN account team as well as notification to Customer and/or the appropriate NWN organization to isolate and resolve performance anomalies discovered outside of the reporting cycle. The monthly report will include up to thirty (30) performance affecting issues as well as volume statistics for the NWN managed network. The monthly report is based on the prior month's performance data, further investigation of any identified issues, incorporation of relevant and factual information, and recommendation to resolve identified issues. The target date of the first monthly report, upon initiation of the service, is between 60-90 days. A prearranged and schedule conference call will be held between the NWN Analyst, NWN Account Team, and Customer to review each month's report. The NWN Analyst is available between standard business hours Monday through Friday.

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
537	MWAN Network Engineering – Small Router	ATS-CNR- MNSR0000	Bidder's Product Description: Managed WAN Network Engineering – Small Router – Places a small sized router under NE support.
538	MWAN Network Engineering – Medium Router	ATS-CNR- MNMR000 0	Bidder's Product Description: Managed WAN Network Engineering – Medium Router – Places a medium sized router under NE support. MWAN Network Engineering – Medium Router features include: Design Planning, Support Services, and Change Management Support
539	MWAN Network Engineering – Large Router	ATS-CNR- MNLR0000	Bidder's Product Description: Managed WAN Network Engineering – Large Router – Places a large sized router under NE support.
540	MWAN – Opt Change Mgmt - DHCP IP Helper Configuration	ATS-CNN- MNOC000 0	Bidder's Product Description: Managed WAN Optional Change Management - DHCP IP Helper Configuration - This optional service provides configuration on an existing fully managed WAN device for adding, deleting, or modifying DHCP IP Helper information. This service is performed remotely.
541	MWAN – Opt Change Mgmt - IP NAT Configuration	ATS-CNN- MNIC0000	Bidder's Product Description: Managed WAN Optional Change Management IP Network Address Translation (NAT) Configuration - This optional service provides router configuration on an existing fully managed WAN device for adding, deleting, or modifying IP NAT configurations entries. This service is performed remotely. MWAN – Opt Change Mgmt - IP NAT Configuration – Add, modify, and/or delete IP NAT configuration

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
542	MWAN – Opt Change Mgmt Network Routed Protocol Configuration	ATS-CNN- MWNR000 0	Bidder's Product Description: Managed WAN Optional Change Management Network Routed Protocol Configuration - This optional service provides router configuration on an existing fully managed router for adding, deleting, or modifying routed protocol entries such as IPX, DLSW, RTP, SIP, HSRP, etc. This service is performed remotely.
543	MWAN – Opt Change Mgmt - MSO IP Address Chg	ATS-CNN- MWIA0000	Bidder's Product Description: Managed WAN Optional Change Management MSO IP Address Change – This optional service provides router configuration on an existing fully managed router for adding, deleting, or modifying IP Address and/or Mask per the Managed Services Operations (MSO) approved IP addressing plan. This service is performed remotely.
544	MWAN – Opt Change Mgmt - Virtual Circuit Chg	ATS-CNN- MWVC000 0	Bidder's Product Description: Managed WAN Optional Change Management Virtual Circuit Change – This optional service provides router configuration on an existing fully managed router for adding, deleting, or modifying virtual circuit configurations. This service is performed remotely.
545	MWAN – Opt Change Mgmt- Routing Protocol Chg	ATS-CNN- MWRP0000	Bidder's Product Description: Managed WAN Optional Change Management Routing Protocol Change – This optional service provides router configuration on an existing fully managed router for adding, deleting, or modifying routing protocol configuration and entries (static, EIGRP, OSPF, RIP, BGP, etc.). This service is performed remotely.

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
546	MWAN – Opt Change Mgmt - VPN Tunnel Change	ATS-CNN- MWVT0000	Bidder's Product Description: Managed WAN Optional Change Management VPN Tunnel Change – This optional service provides router configuration on an existing fully managed router for adding, deleting, or modifying Virtual Private Network (VPN) tunnel configuration. This service is performed remotely.
547	MWAN – Opt Change Mgmt- Bandwidth Change- Physical	ATS-CNN- MWBC000 0	Bidder's Product Description: Managed WAN Optional Change Management Bandwidth Change-Physical – This on-site service is for changing out a CSU/DSU or router module required to support a change in physical bandwidth on an existing router.
548	MWAN – Opt Change Mgmt - Hardware Module Upgrade	ATS-CNN- MWHM000 0	Bidder's Product Description: Managed WAN Optional Change Management Hardware Module Upgrade – This on-site service is for the addition of or swapping of a hardware module on an existing router.
549	MWAN – Opt Change Mgmt - Device Move	ATS-CNN- MWCM000 0	Bidder's Product Description: Managed WAN Optional Change Management Device Move – This on-site service provides for the relocation of an existing router between two different buildings up to thirty (30) miles apart. This includes dispatching a technician for on-site support and remote management and configuration support and assumes no design changes.
550	MWAN – Opt Change Mgmt - Memory Upgrade	ATS-CNN- MWMU000 0	Bidder's Product Description: Managed WAN Optional Change Management Memory Upgrade – This on-site service is for upgrading memory capacity on an existing router by adding or swapping flash or RAM modules.

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
551	MWAN – Opt Change Mgmt - Device Exchange	ATS-CNN- MOCD000 0	Bidder's Product Description: Managed WAN Optional Change Management Device Exchange – This on-site service provides for swapping out an existing router for another.
552	MWAN – Opt Change Mgmt - IOS Change Support New Features	ATS-CNN- MOIC0000	Bidder's Product Description: Managed WAN Optional Change Management IOS Change Support New Features – This service provides for the installation of a new version or feature set of router software in order to support a new feature.
553	MWAN – Opt Change Mgmt- Traffic Shaping & Queuing Config	ATS-CNN- MCTR0000	Bidder's Product Description: Managed WAN Optional Change Management Traffic Shaping & Queuing Configuration – This service provides for the addition, deletion, and/or modification of traffic shaping, policing and queuing policies on an existing router. All policies and classification maps will be built on customer provided specification.
554	MWAN – Opt Change Mgmt - Traffic Filter Design	ATS-CNN- MCTF0000	Bidder's Product Description: Managed WAN Optional Change Management Traffic Filter Design – This service provides for the addition, deletion, and/or modification of traffic filters on an existing router.
555	MWAN – Opt Change Mgmt - Traffic Filter Design	ATS-CNN- MTFD0000	Bidder's Product Description: Managed WAN Optional Change Management Traffic Filter Design – This service provides for the addition, deletion, and/or modification of traffic filters on an existing router.

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
556	MWAN – Field Services Dispatch Normal Hours	ATS-CNN- MWFN0000	Field Services Dispatch Normal - In lieu of the optional change management per occurrence services described with on premise activities for truck rolls, customers have the option to utilize the established hourly rate. Labor charges will commence upon arrival at customer site. Only the highest single Non-Recurring Charge (NRC) will be charged per device. This optional service provides for dispatch a technician to perform on-site managed services on a time basis at the level of a journeyman during normal business hours. Exclusive of NWN recognized holidays, Normal Business hours are defined as M-F 8:00 AM to 5:00 PM Pacific Time.
557	MWAN – Field Services Dispatch Off Hours	ATS-CNN- MWFO000 0	Field Services Dispatch Off Hours - In lieu of the optional change management per occurrence services described with on premise activities for truck rolls, customers have the option to utilize the established hourly rate. Labor charges will commence upon arrival at customer site. Only the highest single Non-Recurring Charge (NRC) will be charged per device. This optional service provides for dispatch a technician to perform on-site managed services on a time basis at the level of a journeyman outside of normal business hours. Exclusive of NWN recognized holidays, outside of Normal Business hours defined as M-F 8:00 AM to 5:00 PM Pacific Time.

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
558	Staging Customer Sw/Rtr/Sec Equip LO Regular Hours	ATS-CNN- MSLO0000	Labor Only (LO) Regular Hours staging for switch/router/security include unpackaging, power up device, and burn-in the equipment provided by the Customer. IOS will be upgraded to the agreed upon version and installation of customer provided configuration onto the device. Conduct appropriate pre- cutover testing. Inventory of device in Master Database by documenting device specific information (serial number, model and manufacturer), network specific information, such as IP address, subnet in spread sheet format and label each switch in accordance to customer labeling scheme. Create and place asset tags in accordance with customer Asset Tracking Inventory Process. Provide configuration documentation in electronic and hard copies. Remediate defective equipment and return to manufacturer based on customer purchased maintenance agreement as required. Must be ordered in conjunction with CALNET services. Does not include the network design related to the device or trouble shooting configurations not allowing device to work on customer network. Staging of Switch/Router/Security Appliance excludes Installation, Test and Turn-up and Configuration support of device activities. Hourly rates scope cannot conflict with scope identified on this feature code. Multiple occurrences may have Individual Price Reduction (IPR) based on volume.

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
559	Installation Customer Sw/Rtr/Sec Equip of Device LO Regular Hours	ATS-CNN-MNLO0000	Labor Only (LO) Regular Hours transport device (e.g. Device type can be, not limited to, the following: UPS, Switch, Wireless Access Point, Voice Gateways, Router, Security Appliance, Terminal Servers, etc) to correct location from within the building, unpackage, attach applicable plates / racking brackets, placement of device in rack per customer direction, power up device, and connect the device to the customer provided network patch cords. This would include removing existing equipment from rack, if applicable, and clean up directly related to work performed. Technician will be deployed after customer has confirmed devices are onsite and accessible to perform this work. Must be ordered in conjunction with CALNET services. Does not include the Staging activities, testing post installation at customer site, troubleshooting of the device in the customer network, or Configuration Support related to the device. Switch not to exceed 48 ports. Hourly rates scope cannot conflict with scope identified on this feature code. Multiple occurrences may have Individual Price Reduction (IPR) based on volume.

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
560	Customer Switch Basic On-Site Test and Turn-Up LO Regular Hours	ATS-CNN- MCOS0000	Labor Only (LO) Regular Hours review customer provided configuration, review customer provided test plan and follow test plan for switch functionality (e.g. Switch or UPS). Standard Layer 2 configuration with non- default security features. Remediate defective equipment and return to manufacturer based on customer purchased maintenance agreement as required. Must be ordered in conjunction with CALNET services. This does not include Staging, Installation and Configuration Support of device activities. Trouble shooting is limited to 1 hour per device. Hourly rates scope cannot conflict with scope identified on this feature code. Multiple occurrences may have Individual Price Reduction (IPR) based on volume.

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
561	Customer Switch Advance On-Site Test and Turn-Up LO Regular Hours	ATS-CNN- MCSA0000	Labor Only (LO) Regular Hours review customer provided configuration, review customer provided test plan and follow test plan for switch functionality. Layer 3 routing features, network policy integration, advanced security features to include DHCP Snooping, dynamic Advanced Routing Protocols (ARP) inspection, MAC filtering, and Layer 2 access lists. Remediate defective equipment and return to manufacturer based on customer purchased maintenance agreement as required. Must be ordered in conjunction with CALNET services. This does not include Staging, Installation and Configuration Support of device activities. Trouble shooting is limited to 2 hours per device. Hourly rates scope cannot conflict with scope identified on this feature code. Multiple occurrences may have Individual Price Reduction (IPR) based on volume.

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
562	Customer Router Basic On-Site Test and Turn-Up LO Regular Hours	ATS-CNN- MCRB0000	Labor Only (LO) Regular Hours review customer provided configuration, review customer provided test plan and follow test plan for router functionality. Basic includes static routing, stub dynamic routing, basic Network Address Translation (NAT), pre- defined Quality of Service (QoS) parameters, and simple access lists. Remediate defective equipment and return to manufacturer based on customer purchased maintenance agreement as required. Must be ordered in conjunction with CALNET services. This does not include Staging, Installation and Configuration Support of device activities. Trouble shooting is limited to 2 hours per device. Hourly rates scope cannot conflict with scope identified on this feature code. Multiple occurrences may have Individual Price Reduction (IPR) based on volume.

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
563	Customer Router Advanced On- Site Test and Turn- Up LO Regular Hours	ATS-CNN-MRAD0000	Labor Only (LO) Regular Hours review customer provided configuration, review customer provided test plan and follow test plan for router functionality. Advanced includes dynamic routing, more complex Network Address Translation (NAT), complex access lists, Policy- Based Routing (PBR), and non-default security. Remediate defective equipment and return to manufacturer based on customer purchased maintenance agreement as required. Must be ordered in conjunction with CALNET services. This does not include Staging, Installation and Configuration Support of device activities. Trouble shooting is limited to 2 hours per device. Hourly rates scope cannot conflict with scope identified on this feature code. Multiple occurrences may have Individual Price Reduction (IPR) based on volume.
564	Customer Security Appliance Basic On- Site Test and Turn-Up LO Regular Hours	ATS-CNN- MSTT0000	Labor Only (LO) Regular Hours review customer provided configuration, review customer provided test plan and follow test plan for device functionality. Basic includes simple access lists and basic Network Address Translation (NAT). Remediate defective equipment and return to manufacturer based on customer purchased maintenance agreement as required. Must be ordered in conjunction with CALNET services. This does not include Staging, Installation and Configuration Support of device activities. Hourly rates scope cannot conflict with scope identified on this feature code. Trouble shooting is limited to 1 hour per device.

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
565	Customer Security Appliance Advance On-Site Test and Turn-Up LO Regular Hours	ATS-CNN- MSAA0000	Labor Only (LO) Regular Hours review customer provided configuration, review customer provided test plan and follow test plan for device functionality. Advance includes complex access list, extensive Port Address Translation (PAT), basic Next Generation Security Appliances, basic IDS, basic IPS, and basic Policy-Based Routing (PBR). Remediate defective equipment and return to manufacturer based on customer purchased maintenance agreement as required. Must be ordered in conjunction with CALNET services. This does not include Staging, Installation and Configuration Support of device activities. Trouble shooting is limited to 2 hours per device. Hourly rates scope cannot conflict with scope identified on this feature code. Multiple occurrences may have Individual Price Reduction (IPR) based on volume.

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
566	Customer Switch/Router Configuration Support LO Regular Hours	ATS-CNN- MCSW000 0	Labor Only (LO) Regular Hours provide customer configuration support related to design assistance for switch activities to include Standard Layer 2 configuration with non-default security features, Layer 3 routing features, network policy integration, advanced security features to include DHCP Snooping, dynamic Advanced Routing Protocols (ARP) inspection, MAC filtering, and Layer 2 access lists. Router activities to include Static routing, stub dynamic routing, basic Network Address Translation (NAT), predefined Quality of Service (QoS) parameters, simple access lists, dynamic routing, more complex NAT, complex access lists, Policy- Based Routing (PBR), and non- default security. Configuration support will provide industry best practices and align with customer compliancy requirements. Must be ordered in conjunction with CALNET services. Not to exceed 16 hours per project. Multiple occurrences may have Individual Price Reduction (IPR) based on scope.

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
567	Customer Security Appliance Configuration Support LO Regular Hours	ATS-CNN- MCUA0000	Labor Only (LO) Regular Hours provide customer configuration support related to design assistance for switch activities to include Standard Layer 2 configuration with non-default security features, Layer 3 routing features, network policy integration, advanced security features to include DHCP Snooping, dynamic Advanced Routing Protocols (ARP) inspection, MAC filtering, and Layer 2 access lists. Router activities to include Static routing, stub dynamic routing, basic Network Address Translation (NAT), predefined Quality of Service (QoS) parameters, simple access lists, dynamic routing, more complex NAT, complex access lists, Policy-Based Routing (PBR), and non-default security. Configuration support will provide industry best practices and align with customer compliancy requirements. Must be ordered in conjunction with CALNET services. Not to exceed 16 hours per project. Multiple occurrences may have Individual Price Reduction (IPR) based on scope.

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
568	Technical PM Support Customer Equip LO Regular Hours	ATS-CNN- MTPM0000	Labor Only (LO) Regular Hours Technical Project Management Support provides for installation of devices supporting ancillary services efforts to develop and implement comprehensive project processes and plans. NWN project manager will coordinate all project resources including customer staff and other resources related to completing the effort. • Develop and coordinate schedule for configuration and deployment of customer provided devices. • Provide periodic status reports and updates to project schedule throughout duration of project. • Act as liaison between customer point of contact and other resources required to include but not limited to staging, rack and stack, on-site test and turn-up, and configuration support of devices. Provide customer final documentation for final close- out. Must be ordered in conjunction with CALNET services. Not to exceed 48 hours per project. Individual Price Reduction (IPR) may be available based on scope.

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
569	Staging Customer Sw/Rtr/Sec Equip LO Overtime Hours	ATS-CNN- STCO0000	Labor Only (LO) Overtime Hours staging for switch/router/security include unpackaging, power up device, and burn-in the equipment provided by the Customer. IOS will be upgraded to the agreed upon version and installation of customer provided configuration onto the device. Conduct appropriate pre- cutover testing. Inventory of device in Master Database by documenting device specific information (serial number, model and manufacturer), network specific information, such as IP address, subnet in spread sheet format and label each switch in accordance to customer labeling scheme. Create and place asset tags in accordance with customer Asset Tracking Inventory Process. Provide configuration documentation in electronic and hard copies. Remediate defective equipment and return to manufacturer based on customer purchased maintenance agreement as required. Must be ordered in conjunction with CALNET services. Does not include the network design related to the device or trouble shooting configurations not allowing device to work on customer network. Staging of Switch/Router/Security Appliance excludes Installation, Test and Turn-up and Configuration support of device activities. Hourly rates scope cannot conflict with scope identified on this feature code. Multiple occurrences may have Individual Price Reduction (IPR) based on volume.

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
570	Installation Customer Sw/Rtr/Sec Equip of Device LO Overtime Hours	ATS-CNN-ICOH0000	Labor Only (LO) Overtime Hours transport device (e.g. Device type can be, not limited to, the following: UPS, Switch, Wireless Access Point, Voice Gateways, Router, Security Appliance, Terminal Servers, etc.) to correct location from within the building, unpackage, attach applicable plates / racking brackets, placement of device in rack per customer direction, power up device, and connect the device to the customer provided network patch cords. This would include removing existing equipment from rack, if applicable, and clean up directly related to work performed. Technician will be deployed after customer has confirmed devices are onsite and accessible to perform this work. Must be ordered in conjunction with CALNET services. Does not include the Staging activities, testing post installation at customer site, troubleshooting of the device in the customer network, or Configuration Support related to the device. Switch not to exceed 48 ports. Hourly rates scope cannot conflict with scope identified on this feature code. Multiple occurrences may have Individual Price Reduction (IPR) based on volume.

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
571	Customer Switch Basic On-Site Test and Turn-Up LO Overtime Hours	ATS-CNN- CSBH0000	Labor Only (LO) Overtime Hours review customer provided configuration, review customer provided test plan and follow test plan for switch functionality (e.g. Switch or UPS). Standard Layer 2 configuration with non- default security features. Remediate defective equipment and return to manufacturer based on customer purchased maintenance agreement as required. Must be ordered in conjunction with CALNET services. This does not include Staging, Installation and Configuration Support of device activities. Trouble shooting is limited to 1 hour per device. Hourly rates scope cannot conflict with scope identified on this feature code. Multiple occurrences may have Individual Price Reduction (IPR) based on volume.

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
572	Customer Switch Advance On-Site Test and Turn-Up LO Overtime Hours	ATS-CNN- CSAH0000	Labor Only (LO) Overtime Hours review customer provided configuration, review customer provided test plan and follow test plan for switch functionality. Layer 3 routing features, network policy integration, advanced security features to include DHCP Snooping, dynamic Advanced Routing Protocols (ARP) inspection, MAC filtering, and Layer 2 access lists. Remediate defective equipment and return to manufacturer based on customer purchased maintenance agreement as required. Must be ordered in conjunction with CALNET services. This does not include Staging, Installation and Configuration Support of device activities. Trouble shooting is limited to 2 hours per device. Hourly rates scope cannot conflict with scope identified on this feature code. Multiple occurrences may have Individual Price Reduction (IPR) based on volume.

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
573	Customer Router Basic On-Site Test and Turn-Up LO Overtime Hours	ATS-CNN- CROH0000	Labor Only (LO) Overtime Hours review customer provided configuration, review customer provided test plan and follow test plan for router functionality. Basic includes static routing, stub dynamic routing, basic Network Address Translation (NAT), pre- defined Quality of Service (QoS) parameters, and simple access lists. Remediate defective equipment and return to manufacturer based on customer purchased maintenance agreement as required. Must be ordered in conjunction with CALNET services. This does not include Staging, Installation and Configuration Support of device activities. Trouble shooting is limited to 2 hours per device. Hourly rates scope cannot conflict with scope identified on this feature code. Multiple occurrences may have Individual Price Reduction (IPR) based on volume.

Line Item	Feature Name	Bidder's Product	Bidder's Product Description, Restrictions and Limitations
574	Customer Router Advanced On- Site Test and Turn- Up LO Overtime Hours	ATS-CNN- CRAO0000	Labor Only (LO) Overtime Hours review customer provided configuration, review customer provided test plan and follow test plan for router functionality. Advanced includes dynamic routing, more complex Network Address Translation (NAT), complex access lists, Policy- Based Routing (PBR), and nondefault security. Remediate defective equipment and return to manufacturer based on customer purchased maintenance agreement as required. Must be ordered in conjunction with CALNET services. This does not include Staging, Installation and Configuration Support of device activities. Trouble shooting is limited to 2 hours per device. Hourly rates scope cannot conflict with scope identified on this feature code. Multiple occurrences may have Individual Price Reduction (IPR) based on volume.
575	Customer Security Appliance Basic On- Site Test and Turn-Up LO Overtime Hours	ATS-CNN- CSAP0000	Labor Only (LO) Overtime Hours review customer provided configuration, review customer provided test plan and follow test plan for device functionality. Basic includes simple access lists and basic Network Address Translation (NAT). Remediate defective equipment and return to manufacturer based on customer purchased maintenance agreement as required. Must be ordered in conjunction with CALNET services. This does not include Staging, Installation and Configuration Support of device activities. Hourly rates scope cannot conflict with scope identified on this feature code. Trouble shooting is limited to 1 hour per device.

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
576	Customer Security Appliance Advance On-Site Test and Turn-Up LO Overtime Hours	ATS-CNN- CSOH0000	Labor Only (LO) Overtime Hours review customer provided configuration, review customer provided test plan and follow test plan for device functionality. Advance includes complex access list, extensive Port Address Translation (PAT), basic Next Generation Security Appliances, basic IDS, basic IPS, and basic Policy-Based Routing (PBR). Remediate defective equipment and return to manufacturer based on customer purchased maintenance agreement as required. Must be ordered in conjunction with CALNET services. This does not include Staging, Installation and Configuration Support of device activities. Trouble shooting is limited to 2 hours per device. Hourly rates scope cannot conflict with scope identified on this feature code. Multiple occurrences may have Individual Price Reduction (IPR) based on volume.

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
577	Customer Switch/Router Configuration Support LO Overtime Hours	ATS-CNN- CSRC0000	Labor Only (LO) Overtime Hours provide customer configuration support related to design assistance for switch activities to include Standard Layer 2 configuration with non-default security features, Layer 3 routing features, network policy integration, advanced security features to include DHCP Snooping, dynamic Advanced Routing Protocols (ARP) inspection, MAC filtering, and Layer 2 access lists. Router activities to include Static routing, stub dynamic routing, basic Network Address Translation (NAT), predefined Quality of Service (QoS) parameters, simple access lists, dynamic routing, more complex NAT, complex access lists, Policy- Based Routing (PBR), and non-default security. Configuration support will provide industry best practices and align with customer compliancy requirements. Must be ordered in conjunction with CALNET services. Not to exceed 16 hours per project. Multiple occurrences may have Individual Price Reduction (IPR) based on scope.

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
578	Customer Security Appliance Configuration Support LO Overtime Hours	ATS-CNN- CSAC0000	Labor Only (LO) Overtime Hours provide customer configuration support related to design assistance for Security Appliance activities to include simple access lists, and Network Address Translation (NAT), Complex access list, extensive Port Address Translation (PAT), Next Generation Security Appliances, IDS, IPS, Policy-Based Routing (PBR). Configuration support will provide industry best practices and align with customer compliancy requirements. Must be ordered in conjunction with CALNET services. Not to exceed 16 hours per project. Multiple occurrences may have Individual Price Reduction (IPR) based on scope.

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
579	Technical PM Support Customer Equip LO Overtime Hours	ATS-CNN-TPME0000	Labor Only (LO) Overtime Hours staging for switch/router/security include unpackaging, power up device, and burn-in the equipment provided by the Customer. IOS will be upgraded to the agreed upon version and installation of customer provided configuration onto the device. Conduct appropriate pre-cutover testing. Inventory of device in Master Database by documenting device specific information (serial number, model and manufacturer), network specific information, such as IP address, subnet in spread sheet format and label each switch in accordance to customer labeling scheme. Create and place asset tags in accordance with customer Asset Tracking Inventory Process. Provide configuration documentation in electronic and hard copies. Remediate defective equipment and return to manufacturer based on customer purchased maintenance agreement as required. Must be ordered in conjunction with CALNET services. Does not include the network design related to the device or trouble shooting configurations not allowing device to work on customer network. Staging of Switch/Router/Security Appliance excludes Installation, Test and Turn-up and Configuration support of device activities. Multiple occurrences may have Individual Price Reduction (IPR) based on volume.

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
580	Staging Customer Sw/Rtr/Sec Equip LO Sunday and Holiday Hours	ATS-CNN- SRSH0000	Labor Only (LO) Sunday and Holiday Hours staging for switch/router/security include unpackaging, power up device, and burn-in the equipment provided by the Customer. IOS will be upgraded to the agreed upon version and installation of customer provided configuration onto the device. Conduct appropriate pre- cutover testing. Inventory of device in Master Database by documenting device specific information (serial number, model and manufacturer), network specific information, such as IP address, subnet in spread sheet format and label each switch in accordance to customer labeling scheme. Create and place asset tags in accordance with customer Asset Tracking Inventory Process. Provide configuration documentation in electronic and hard copies. Remediate defective equipment and return to manufacturer based on customer purchased maintenance agreement as required. Must be ordered in conjunction with CALNET services. Does not include the network design related to the device or trouble shooting configurations not allowing device to work on customer network. Staging of Switch/Router/Security Appliance excludes Installation, Test and Turn-up and Configuration support of device activities. Hourly rates scope cannot conflict with scope identified on this feature code. Multiple occurrences may have Individual Price Reduction (IPR) based on volume.

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
581	Installation Customer Sw/Rtr/Sec Equip of Device LO Sunday and Holiday Hours	ATS-CNN-ICRS0000	Labor Only (LO) Sunday and Holiday Hours transport device (e.g. Device type can be, not limited to, the following: UPS, Switch, Wireless Access Point, Voice Gateways, Router, Security Appliance, Terminal Servers, etc.) to correct location from within the building, unpackage, attach applicable plates / racking brackets, placement of device in rack per customer direction, power up device, and connect the device to the customer provided network patch cords. This would include removing existing equipment from rack, if applicable, and clean up directly related to work performed. Technician will be deployed after customer has confirmed devices are onsite and accessible to perform this work. Must be ordered in conjunction with CALNET services. Does not include the Staging activities, testing post installation at customer site, troubleshooting of the device in the customer network, or Configuration Support related to the device. Switch not to exceed 48 ports. Hourly rates scope cannot conflict with scope identified on this feature code. Multiple occurrences may have Individual Price Reduction (IPR) based on volume.

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
582	Customer Switch Basic On-Site Test and Turn-Up LO Sunday and Holiday Hours	ATS-CNN- CSWB0000	Labor Only (LO) Sunday and Holiday Hours review customer provided configuration, review customer provided test plan and follow test plan for switch functionality (e.g. Switch or UPS). Standard Layer 2 configuration with non-default security features. Remediate defective equipment and return to manufacturer based on customer purchased maintenance agreement as required. Must be ordered in conjunction with CALNET services. This does not include Staging, Installation and Configuration Support of device activities. Trouble shooting is limited to 1 hour per device. Hourly rates scope cannot conflict with scope identified on this feature code. Multiple occurrences may have Individual Price Reduction (IPR) based on volume.

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
583	Customer Switch Advance On-Site Test and Turn-Up LO Sunday and Holiday Hours	ATS-CNN- CSWA0000	Labor Only (LO) Sunday and Holiday Hours review customer provided configuration, review customer provided test plan and follow test plan for switch functionality. Layer 3 routing features, network policy integration, advanced security features to include DHCP Snooping, dynamic Advanced Routing Protocols (ARP) inspection, MAC filtering, and Layer 2 access lists. Remediate defective equipment and return to manufacturer based on customer purchased maintenance agreement as required. Must be ordered in conjunction with CALNET services. This does not include Staging, Installation and Configuration Support of device activities. Trouble shooting is limited to 2 hours per device. Hourly rates scope cannot conflict with scope identified on this feature code. Multiple occurrences may have Individual Price Reduction (IPR) based on volume.

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
584	Customer Router Basic On-Site Test and Turn-Up LO Sunday and Holiday Hours	ATS-CNN-CRBT0000	Labor Only (LO) Sunday and Holiday Hours review customer provided configuration, review customer provided test plan and follow test plan for router functionality. Basic includes static routing, stub dynamic routing, basic Network Address Translation (NAT), pre-defined Quality of Service (QoS) parameters, and simple access lists. Remediate defective equipment and return to manufacturer based on customer purchased maintenance agreement as required. Must be ordered in conjunction with CALNET services. This does not include Staging, Installation and Configuration Support of device activities. Trouble shooting is limited to 2 hours per device. Hourly rates scope cannot conflict with scope identified on this feature code. Multiple occurrences may have Individual Price Reduction (IPR) based on volume.

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
585	Customer Router Advanced On- Site Test and Turn- Up LO Sunday and Holiday Hours	ATS-CNN- CRTH0000	Labor Only (LO) review customer provided configuration, review customer provided test plan and follow test plan for router functionality. Advanced includes dynamic routing, more complex Network Address Translation (NAT), complex access lists, Policy-Based Routing (PBR), and non-default security. Remediate defective equipment and return to manufacturer based on customer purchased maintenance agreement as required. Must be ordered in conjunction with CALNET services. This does not include Staging, Installation and Configuration Support of device activities. Trouble shooting is limited to 2 hours per device. Hourly rates scope cannot conflict with scope identified on this feature code. Multiple occurrences may have Individual Price Reduction (IPR) based on volume.
586	Customer Security Appliance Basic On- Site Test and Turn-Up LO Sunday and Holiday Hours	ATS-CNN- CSAB0000	Labor Only (LO) Sunday and Holiday Hours review customer provided configuration, review customer provided test plan and follow test plan for device functionality. Basic includes simple access lists and basic Network Address Translation (NAT). Remediate defective equipment and return to manufacturer based on customer purchased maintenance agreement as required. Must be ordered in conjunction with CALNET services. This does not include Staging, Installation and Configuration Support of device activities. Hourly rates scope cannot conflict with scope identified on this feature code. Trouble shooting is limited to 1 hour per device.

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
587	Customer Security Appliance Advance On-Site Test and Turn-Up LO Sunday and Holiday Hours	ATS-CNN- CSCS0000	Labor Only (LO) Sunday and Holiday Hours review customer provided configuration, review customer provided test plan and follow test plan for device functionality. Advance includes complex access list, extensive Port Address Translation (PAT), basic Next Generation Security Appliances, basic IDS, basic IPS, and basic Policy-Based Routing (PBR). Remediate defective equipment and return to manufacturer based on customer purchased maintenance agreement as required. Must be ordered in conjunction with CALNET services. This does not include Staging, Installation and Configuration Support of device activities. Trouble shooting is limited to 2 hours per device. Hourly rates scope cannot conflict with scope identified on this feature code. Multiple occurrences may have Individual Price Reduction (IPR) based on volume.
588	Customer Security Appliance Configuration Support LO Sunday and Holiday Hours	ATS-CNN- CSSN0000	Labor Only (LO) Sunday and Holiday Hours provide customer configuration support related to design assistance for Security Appliance activities to include simple access lists, and Network Address Translation (NAT), Complex access list, extensive Port Address Translation (PAT), Next Generation Security Appliances, IDS, IPS, Policy- Based Routing (PBR). Configuration support will provide industry best practices and align with customer compliancy requirements. Must be ordered in conjunction with CALNET services. Not to exceed 16 hours per project. Multiple occurrences may have Individual Price Reduction (IPR) based on scope.

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
589	Technical PM Support Customer Equip LO Sunday and Holiday Hours	ATS-CNN- TPMS0000	Labor Only (LO) Sunday and Holiday Hours Technical Project Management Support provides for installation of devices supporting ancillary services efforts to develop and implement comprehensive project processes and plans. NWN project manager will coordinate all project resources including customer staff and other resources related to completing the effort. • Develop and coordinate schedule for configuration and deployment of customer provided devices. • Provide periodic status reports and updates to project schedule throughout duration of project. • Act as liaison between customer point of contact and other resources required to include but not limited to staging, rack and stack, on-site test and turn-up, and configuration support of devices. Provide customer final documentation for final close- out. Must be ordered in conjunction with CALNET services. Not to exceed 48 hours per project. Individual Price Reduction (IPR) may be available based on scope.

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
590	MLAN - Monitor and Notify - Small	ATS-CNN- MLNS0000	Managed LAN - Monitor & Notify - Small provides the monitoring of a Small managed device. The device is polled on a regular basis, and a repeated failure of the device to respond to polls will indicate a fault condition and will generate alarms. The fault will be isolated to access, transport, or CPE and a trouble ticket will be opened on the customer's behalf, and the customer will be proactively notified of the outage. NWN will own the resolution of the access and transport issues related to the fault. The customer retains responsibility for resolving all physical and logical Customer Premise Equipment (CPE) issues.
591	MLAN - Monitor and Notify - Small	ATS-CNR- MLNS0000	Managed LAN - Monitor & Notify - Small provides the monitoring of a Small managed device. The device is polled on a regular basis, and a repeated failure of the device to respond to polls will indicate a fault condition and will generate alarms. The fault will be isolated to access, transport, or Customer Premise Equipment (CPE) and a trouble ticket will be opened on the customer's behalf, and the customer will be proactively notified of the outage. NWN will own the resolution of the access and transport issues related to the fault. The customer retains responsibility for resolving all physical and logical CPE issues.

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
592	MLAN - Monitor and Notify - Medium	ATS-CNN- MLNM0000	Bidder's Product Description: Managed LAN - Monitor & Notify - Medium provides everything provided by Managed LAN Monitor & Notify - Small except this service is for LAN equipment classified as a Medium sized device. MLAN - Monitor and Notify - Medium features include: Device Availability and Health Monitoring, Trouble Ticket Generation, and Proactive Outage Notification.
593	MLAN - Monitor and Notify - Medium	ATS-CNR- MLNM0000	Bidder's Product Description: Managed LAN - Monitor & Notify - Medium provides everything provided by Managed LAN Monitor & Notify - Small except this service is for LAN equipment classified as a Medium sized device. MLAN - Monitor and Notify – Medium features include: Device Availability and Health Monitoring, Trouble Ticket Generation, and Proactive Outage Notification.
594	MLAN - Monitor and Notify - Large	ATS-CNN- MLNL0000	Bidder's Product Description: Managed LAN - Monitor & Notify - Large provides everything provided by Managed LAN Monitor & Notify - Small except this service is for LAN equipment classified as a Large sized device. MLAN - Monitor and Notify – Large features include: Device Availability and Health Monitoring, Trouble Ticket Generation, and Proactive Outage Notification.

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
595	MLAN - Monitor and Notify - Large	ATS-CNR- MLNL0000	Bidder's Product Description: Managed LAN - Monitor & Notify - Large provides everything provided by Managed LAN Monitor & Notify - Small except this service is for LAN equipment classified as a Large sized device. MLAN - Monitor and Notify – Large features include: Device Availability and Health Monitoring, Trouble Ticket Generation, and Proactive Outage Notification.
596	MLAN - Physical - Small	ATS-CNN- MPSM0000	Bidder's Product Description: Managed LAN - Physical - Small provides all of the monitoring features of Managed LAN Monitor and Notify – Small as well as NWN owning the resolution of any physical CPE issues. The customer retains responsibility for resolving all logical Customer Premise Equipment (CPE) issues. MLAN - Physical – Small features include: Device Availability and Health Monitoring, Fault Isolation, Trouble Ticket Generation, and Proactive Outage Notification.
597	MLAN - Physical - Small	ATS-CNR- MPSM0000	Bidder's Product Description: Managed LAN - Physical - Small provides all of the monitoring features of Managed LAN Monitor and Notify – Small as well as NWN owning the resolution of any physical CPE issues. The customer retains responsibility for resolving all logical Customer Premise Equipment (CPE) issues. MLAN - Physical – Small features include: Device Availability and Health Monitoring, Fault Isolation, Trouble Ticket Generation, and Proactive Outage Notification.

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
598	MLAN - Physical - Medium	ATS-CNN- MPMD000 0	Bidder's Product Description: Managed LAN - Physical - Medium provides all of the monitoring features of Managed LAN Monitor and Notify – Medium as well as NWN owning the resolution of any physical Customer Premise Equipment (CPE) issues. The customer retains responsibility for resolving all logical CPE issues. MLAN - Physical - Medium features include: Device Availability and Health Monitoring, Fault Isolation, Trouble Ticket Generation, and Proactive Outage Notification.
599	MLAN - Physical - Medium	ATS-CNR- MPMD000 0	Bidder's Product Description: Managed LAN - Physical - Medium provides all of the monitoring features of Managed LAN Monitor and Notify – Medium as well as NWN owning the resolution of any physical Customer Premise Equipment (CPE) issues. The customer retains responsibility for resolving all logical CPE issues. MLAN - Physical - Medium features include: Device Availability and Health Monitoring, Fault Isolation, Trouble Ticket Generation, and Proactive Outage Notification.
600	MLAN - Physical - Large	ATS-CNN- MPLG0000	Bidder's Product Description: Managed LAN - Physical - Large provides all of the monitoring features of Managed LAN Monitor and Notify – Large as well as NWN owning the resolution of any physical CPE issues. The customer retains responsibility for resolving all logical Customer Premise Equipment (CPE) issues. MLAN - Physical - Large features include: Device Availability and Health Monitoring, Fault Isolation, Trouble Ticket Generation, and Proactive Outage Notification.

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
601	MLAN - Physical - Large	ATS-CNR- MPLG0000	Bidder's Product Description: Managed LAN - Physical - Large provides all of the monitoring features of Managed LAN Monitor and Notify – Large as well as NWN owning the resolution of any physical Customer Premise Equipment (CPE) issues. The customer retains responsibility for resolving all logical CPE issues. MLAN - Physical - Large features include: Device Availability and Health Monitoring, Fault Isolation, Trouble Ticket Generation, and Proactive Outage Notification.
602	MLAN - Full - Small	ATS-CNN- MLFS0000	Bidder's Product Description: Managed LAN - Full - Small provides all of the monitoring features of Managed LAN Physical - Small as well as NWN owning the resolution of any logical Customer Premise Equipment (CPE) issues.
603	MLAN - Full - Small	ATS-CNR- MLFS0000	Bidder's Product Description: Managed LAN - Full - Small provides all of the monitoring features of Managed LAN Physical - Small as well as NWN owning the resolution of any logical Customer Premise Equipment (CPE) issues.
604	MLAN - Full - Medium	ATS-CNN- MLFM0000	Bidder's Product Description: Managed LAN - Full - Medium provides all of the monitoring features of Managed LAN Physical - Medium as well as NWN owning the resolution of any logical Customer Premise Equipment (CPE) issues.
605	MLAN - Full - Medium	ATS-CNR- MLFM0000	Bidder's Product Description: Managed LAN - Full - Medium provides all of the monitoring features of Managed LAN Physical - Medium as well as NWN owning the resolution of any logical Customer Premise Equipment (CPE) issues.

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
606	MLAN - Full - Large	ATS-CNN- MLLG0000	Bidder's Product Description: Managed LAN - Full - Large provides all of the monitoring features of Managed LAN Physical - Large as well as NWN owning the resolution of any logical Customer Premise Equipment (CPE) issues.
607	MLAN - Full - Large	ATS-CNR- MLLG0000	Bidder's Product Description: Managed LAN - Full - Large provides all of the monitoring features of Managed LAN Physical - Large as well as NWN owning the resolution of any logical Customer Premise Equipment (CPE) issues.
608	MLAN Takeover of existing device	ATS-CNN- MLTO0000	Bidder's Product Description: Managed LAN - Takeover of Existing Device provides for the takeover process of previously installed and working device for management.
609	MLAN - Device Installation	ATS-CNN- MLIN0000	Bidder's Product Description: Managed LAN - Device Installation provides for the process of installing, implementing, and activating a new device under management
610	MLAN - Order Expedite	ATS-CNN- MLOE0000	Bidder's Product Description: Managed LAN - Order Expedite provides for an expedited process for activating a LAN device in fifteen (15) days or less. This service is solely for the purposes of expediting the Customer Premise Equipment (CPE) installation process and does not affect circuit installation and activation.

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
611	Technical Services Support I - Standard Hours/Regular Rate (8am - 5pm local time)	ATS-CNN- TCSV0001	Basic Network Skillset - Standard Hours: Pre or Post implementation site survey and network support. Provides basic Networking skills. For example: Installs equipment, powers up equipment. Performs Cross Connects. Places Phone sets. Inventory equipment. Can only be sold in conjunction with services supported on CALNET
612	Technical Services Support I - Non-Standard Hours	ATS-CNN- TCSN0001	Basic Network Skillset - Non Standard Hours Pre or Post implementation site survey and network support. Provides basic Networking skills. For Example: Installs equipment, powers up equipment. Performs Cross Connects. Places Phone sets. Inventory equipment. Can only be sold in conjunction with services supported on CALNET
613	Technical Services Support II - Standard Hours/Regular Rate (8am - 5pm local time)	ATS-CNN- TCSV0002	Basic Plus Network Skillset - Standard Hours: Pre or Post- implementation site survey and network design. Provides advanced networking skills. For example: Conducts assessments for complex installations or network solutions. Network configurations of router, switches and firewalls. Can only be sold in conjunction with services supported on CALNET
614	Technical Services Support II - Non-Standard Hours	ATS-CNN- TCSN0002	Basic Plus Network Skillset -Non Standard Hours: Pre or Post- implementation site survey and network design. Provides advanced networking skills. For example: Conducts assessments for complex installations or network solutions. Network configurations of router, switches. Can only be sold in conjunction with services supported on CALNET

Line Item	Feature Name	Bidder's Product	Bidder's Product Description, Restrictions and Limitations
		Identifier	and Emilianons
615	Network Engineer - Standard Hours/Regular Rate (8am - 5pm local time)	ATS-CNN- NTWE0000	Advanced Network Engineering Skillset-Standard Hours: Pre or Post-implementation site survey and network design. Performs advanced on-site installation and tests interoperability with other products For example: Network configurations of router, switches, Firewall & VoIP. Can only be sold in conjunction with services supported on CALNET
616	Network Engineer - Non-Standard Hours	ATS-CNN- NWEN0000	Advanced Network Engineering Skillset-Non-Standard Hours: Pre or Post-implementation site survey and network design. Performs advanced on-site installation and tests interoperability with other products For example: Network configurations of router, switches, Firewall & VolP. Can only be sold in conjunction with services supported on CALNET.
617	Network Engineer II - Standard Hours/Regular Rate (8am - 5pm local time)	ATS-CNN- NESR0000	Advanced Plus Network Engineering Skillset - Standard Hours: Pre or Post- implementation site survey and network design. Performs advanced on-site installation and tests interoperability with other products For example: Complex Network configurations of router, switches, Firewall & VoIP. Skillset to understand MPLS and SDN. Can only be sold in conjunction with services supported on CALNET
618	Network Engineer II - Non-Standard Hours	ATS-CNN- NENS0000	Advanced Plus Network Engineering Skillset - Non-Standard Hours: Pre or Post- implementation site survey and network design. Performs advanced on-site installation and tests interoperability with other products For example: Complex Network configurations of router, switches, Firewall & VoIP. Skillset to understand MPLS and SDN. Can only be sold in conjunction with services supported on CALNET

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
619	Professional Services - Senior Engineer - Standard Hours/Regular Rate (8am - 5pm local time)	ATS-CNN- PRSE0000	Professional Network Engineer: Person may hold a degree or industry certifications in specific specialization. Security, cyber security, disaster recovery and business continuity and Advanced networking specific to manufacturer. Can only be sold in conjunction with services supported on CALNET
620	Professional Services Principal Architect I - Standard Hours/Regular Rate (8am - 5pm local time)	ATS-CNN- PRNA0001	Multi-Skillset Individual providing Network oversight: Pre or Post- implementation site survey and network design. Provides highly advanced consulting skills across multiple disciplines. For example: Security, Networking, MPLS, Standards and best practices Conducts assessments, design, and overall technical oversight for highly complex installations involving multiple technologies. Can only be sold in conjunction with services supported on CALNET
621	Professional Services - Principal Architect II - Standard Hours/Regular Rate (8am - 5pm local time)	ATS-CNN- PRNA0002	Multi-Skillset Individual providing network design function and oversight. Pre or Postimplementation site survey and network design. Provides highly advanced consulting skills across multiple disciplines. For example: Security, Networking, MPLS, Standards and best practices. Works with customer to integrate legacy technology, Conducts assessments, design, and overall technical oversight for highly complex installations involving multiple technologies. Can only be sold in conjunction with services supported on CALNET

20.2.9.4 MPLS 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

20.2.10 Additional Unsolicited MPLS Services and Features

The Bidder may offer additional unsolicited MPLS Services and Features in Table 20.2.10.

Table 20.2.10 – Unsolicited MPLS Services and Features

			Bidder's Product
Line		Bidder's Product	Description, Restrictions and
Item	Feature Name	Identifier	Limitations
	On Service to activate port/		
	Infrastructure - Procured wit		
Not a	vailable as a standalone de	edicated internet access se	rvice.
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
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

			Bidder's Product
Line		Bidder's Product	Description, Restrictions and
Item	Feature Name	Identifier	Limitations
13	Bundled Internet Access	ATS-MSN-INT-MPLS500M	Not Applicable for Port
	- 500Mbps NRC		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
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 Core MPLS Infrastructure - Procured with MPLS Port & Access or MPLS Bundled Services. 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

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
28	Twenty-nine Static IP addresses	ATS-AAS-IPA-29S	NWN Support Services
29	Mobile Connection 10M	ATS-AAS-MC-10M	NWN Support Services
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	NWN Support Services
36	MPLS port, access and Layer 3 routing device bundled service at 1 Mbps (NRC)	ATS-AAS-MPLS-R1N	Unbundled Mandatory Service for ATS-BUN- MPLS-R1M - Only available when purchased with Bundled Service ATS- MSN-MPLS-R1M
37	MPLS port, access and Layer 3 routing device bundled service at 1 Mbps (MRC)	ATS-MSN-MPLS-R1M	Unbundled Mandatory Service for ATS-BUN- MPLS-R1M - Only available when purchased with Bundled Service ATS- AAS-MPLS-R1N
38	MPLS port, access and Layer 3 routing device bundled service at 3 Mbps (NRC)	ATS-AAS-MPLS-R3N	Unbundled Mandatory Service for ATS-BUN- MPLS-R3M - Only available when purchased with Bundled Service ATS- MSN-MPLS-R3M

Line	Farelana Nama	Bidder's Product	Bidder's Product Description, Restrictions and
39	Feature Name MPLS port, access and Layer 3 routing device bundled service at 3 Mbps (MRC)	Identifier ATS-MSN-MPLS-R3M	Limitations Unbundled Mandatory Service for ATS-BUN- MPLS-R3M - Only available when purchased with Bundled Service ATS- AAS-MPLS-R3N
40	MPLS port, access and Layer 3 routing device bundled service at 4 Mbps (NRC)	ATS-AAS-MPLS-R4N	Unbundled Mandatory Service for ATS-BUN- MPLS-R4M - Only available with Bundled Service for ATS-MSN- MPLS-R4M
41	MPLS port, access and Layer 3 routing device bundled service at 4 Mbps (MRC)	ATS-MSN-MPLS-R4M	Unbundled Mandatory Service for ATS-BUN- MPLS-R4M - Only available with Bundled Service for ATS-AAS- MPLS-R4N
42	MPLS port, access and Layer 3 routing device bundled service at 5 Mbps (NRC)	ATS-AAS-MPLS-R5N	Unbundled Mandatory Service for ATS-BUN- MPLS-R5M - Only available with Bundled Service for ATS-MSN- MPLS-R5M
43	MPLS port, access and Layer 3 routing device bundled service at 5 Mbps (MRC)	ATS-MSN-MPLS-R5M	Unbundled Mandatory Service for ATS-BUN- MPLS-R5M - Only available with Bundled Service for ATS-AAS- MPLS-R5N
44	MPLS port, access and Layer 3 routing device bundled service at 7 Mbps (NRC)	ATS-AAS-MPLS-R7N	Unbundled Mandatory Service for ATS-BUN- MPLS-R7M - Only available with Bundled Service for ATS-MSN- MPLS-R7M

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
45	MPLS port, access and Layer 3 routing device bundled service at 7 Mbps (MRC)	ATS-MSN-MPLS-R7M	Unbundled Mandatory Service for ATS-BUN- MPLS-R7M - Only available with Bundled Service for ATS-AAS- MPLS-R7N
46	MPLS port, access and Layer 3 routing device bundled service at 9 Mbps (NRC)	ATS-AAS-MPLS-R9N	Unbundled Mandatory Service for ATS-BUN- MPLS-R9M - Only available with Bundled Service for ATS-MSN- MPLS-R9M
47	MPLS port, access and Layer 3 routing device bundled service at 9 Mbps (MRC)	ATS-MSN-MPLS-R9M	Unbundled Mandatory Service for ATS-BUN- MPLS-R9M - Only available with Bundled Service for ATS-AAS- MPLS-R9N
48	MPLS port, access and Layer 3 routing device bundled service at 10 Mbps (NRC)	ATS-AAS-MPLS-R10N	Unbundled Mandatory Service for ATS-BUN- MPLS-R10M - Only available with Bundled Service for ATS-MSN- MPLS-R10M
49	MPLS port, access and Layer 3 routing device bundled service at 10 Mbps (MRC)	ATS-MSN-MPLS-R10M	Unbundled Mandatory Service for ATS-BUN- MPLS-R10M - Only available with Bundled Service for ATS-AAS- MPLS-R10N
50	MPLS port, access and Layer 3 routing device bundled service at 12 Mbps (NRC)	ATS-AAS-MPLS-R12N	Unbundled Mandatory Service for ATS-BUN- MPLS-R12M - Only available with Bundled Service for ATS-MSN- MPLS-R12M

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
51	MPLS port, access and Layer 3 routing device bundled service at 12 Mbps (MRC)	ATS-MSN-MPLS-R12M	Unbundled Mandatory Service for ATS-BUN- MPLS-R12M - Only available with Bundled Service for ATS-AAS- MPLS-R12N
52	MPLS port, access and Layer 3 routing device bundled service at 15 Mbps (NRC)	ATS-AAS-MPLS-R15N	Unbundled Mandatory Service for ATS-BUN- MPLS-R15M - Only available with Bundled Service for ATS-MSN- MPLS-R15M
53	MPLS port, access and Layer 3 routing device bundled service at 15 Mbps (MRC)	ATS-MSN-MPLS-R15M	Unbundled Mandatory Service for ATS-BUN- MPLS-R15M - Only available with Bundled Service for ATS-AAS- MPLS-R15N
54	MPLS port, access and Layer 3 routing device bundled service at 20 Mbps (NRC)	ATS-AAS-MPLS-R20N	Unbundled Mandatory Service for ATS-BUN- MPLS-R20M - Only available with Bundled Service for ATS-MSN- MPLS-R20M
55	MPLS port, access and Layer 3 routing device bundled service at 20 Mbps (MRC)	ATS-MSN-MPLS-R20M	Unbundled Mandatory Service for ATS-BUN- MPLS-R20M - Only available with Bundled Service for ATS-AAS- MPLS-R20N
56	MPLS port, access and Layer 3 routing device bundled service at 30 Mbps (NRC)	ATS-AAS-MPLS-R30N	Unbundled Mandatory Service for ATS-BUN- MPLS-R30M - Only available with Bundled Service for ATS-MSN- MPLS-R30M

Line	Foothers Name	Bidder's Product	Bidder's Product Description, Restrictions and
57	MPLS port, access and Layer 3 routing device bundled service at 30 Mbps (MRC)	Identifier ATS-MSN-MPLS-R30M	Limitations Unbundled Mandatory Service for ATS-BUN- MPLS-R30M - Only available with Bundled Service for ATS-AAS- MPLS-R30N
58	MPLS port, access and Layer 3 routing device bundled service at 40 Mbps (NRC)	ATS-AAS-MPLS-R40N	Unbundled Mandatory Service for ATS-BUN- MPLS-R40M - Only available with Bundled Service for ATS-MSN- MPLS-R40M
59	MPLS port, access and Layer 3 routing device bundled service at 40 Mbps (MRC)	ATS-MSN-MPLS-R40M	Unbundled Mandatory Service for ATS-BUN- MPLS-R40M - Only available with Bundled Service for ATS-AAS- MPLS-R40N
60	MPLS port, access and Layer 3 routing device bundled service at 50 Mbps (NRC)	ATS-AAS-MPLS-R50N	Unbundled Mandatory Service for ATS-BUN- MPLS-R50M - Only available with Bundled Service for ATS-MSN- MPLS-R50M
61	MPLS port, access and Layer 3 routing device bundled service at 50 Mbps (MRC)	ATS-MSN-MPLS-R50M	Unbundled Mandatory Service for ATS-BUN- MPLS-R50M - Only available with Bundled Service for ATS-AAS- MPLS-R50N
62	MPLS port, access and Layer 3 routing device bundled service at 60 Mbps (NRC)	ATS-AAS-MPLS-R60N	Unbundled Mandatory Service for ATS-BUN- MPLS-R60M - Only available with Bundled Service for ATS-MSN- MPLS-R60M

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
63	MPLS port, access and Layer 3 routing device bundled service at 60 Mbps (MRC)	ATS-MSN-MPLS-R60M	Unbundled Mandatory Service for ATS-BUN- MPLS-R60M - Only available with Bundled Service for ATS-AAS- MPLS-R60N
64	MPLS port, access and Layer 3 routing device bundled service at 70 Mbps (NRC)	ATS-AAS-MPLS-R70N	Unbundled Mandatory Service for ATS-BUN- MPLS-R70M - Only available with Bundled Service for ATS-MSN- MPLS-R70M
65	MPLS port, access and Layer 3 routing device bundled service at 70 Mbps (MRC)	ATS-MSN-MPLS-R70M	Unbundled Mandatory Service for ATS-BUN- MPLS-R70M - Only available with Bundled Service for ATS-AAS- MPLS-R70N
66	MPLS port, access and Layer 3 routing device bundled service at 80 Mbps (NRC)	ATS-AAS-MPLS-R80N	Unbundled Mandatory Service for ATS-BUN- MPLS-R80M - Only available with Bundled Service for ATS-MSN- MPLS-R80M
67	MPLS port, access and Layer 3 routing device bundled service at 80 Mbps (MRC)	ATS-MSN-MPLS-R80M	Unbundled Mandatory Service for ATS-BUN- MPLS-R80M - Only available with Bundled Service for ATS-AAS- MPLS-R80N
68	MPLS port, access and Layer 3 routing device bundled service at 90 Mbps (NRC)	ATS-AAS-MPLS-R90N	Unbundled Mandatory Service for ATS-BUN- MPLS-R90M - Only available with Bundled Service for ATS-MSN- MPLS-R90M

Line		Bidder's Product	Bidder's Product Description, Restrictions and
Item	Feature Name	Identifier	Limitations
69	MPLS port, access and Layer 3 routing device bundled service at 90 Mbps (MRC)	ATS-MSN-MPLS-R90M	Unbundled Mandatory Service for ATS-BUN- MPLS-R90M - Only available with Bundled Service for ATS-AAS- MPLS-R90N
70	MPLS port, access and Layer 3 routing device bundled service at 100 Mbps (NRC)	ATS-AAS-MPLS-R100N	Unbundled Mandatory Service for ATS-BUN- MPLS-R100M - Only available with Bundled Service for ATS-MSN- MPLS-100M
71	MPLS port, access and Layer 3 routing device bundled service at 100 Mbps (MRC)	ATS-MSN-MPLS-100M	Unbundled Mandatory Service for ATS-BUN- MPLS-R100M - Only available with Bundled Service for ATS-AAS- MPLS-100N
72	MPLS port, access and Layer 3 routing device bundled service at 150 Mbps (NRC)	ATS-AAS-MPLS-R150N	Unbundled Mandatory Service for ATS-BUN- MPLS-R150M - Only available with Bundled Service for ATS-MSN- MPLS-150M
73	MPLS port, access and Layer 3 routing device bundled service at 150 Mbps (MRC)	ATS-MSN-MPLS-150M	Unbundled Mandatory Service for ATS-BUN- MPLS-R150M - Only available with Bundled Service for ATS-AAS- MPLS-150N
74	MPLS port, access and Layer 3 routing device bundled service at 200 Mbps (NRC)	ATS-AAS-MPLS-R200N	Unbundled Mandatory Service for ATS-BUN- MPLS-R200M - Only available with Bundled Service for ATS-MSN- MPLS-200M

			Bidder's Product
			Description,
Line	Foothers Names	Bidder's Product	Restrictions and
Item	Feature Name	Identifier	Limitations
75	MPLS port, access and Layer 3 routing device bundled service at 200 Mbps (MRC)	ATS-MSN-MPLS-200M	Unbundled Mandatory Service for ATS-BUN- MPLS-R200M - Only available with Bundled Service for ATS-AAS- MPLS-200N
76	MPLS port, access and Layer 3 routing device bundled service at 250 Mbps (NRC)	ATS-AAS-MPLS-R250N	Unbundled Mandatory Service for ATS-BUN- MPLS-R250M - Only available with Bundled Service for ATS-MSN- MPLS-R250M
77	MPLS port, access and Layer 3 routing device bundled service at 250 Mbps (MRC)	ATS-MSN-MPLS-R250M	Unbundled Mandatory Service for ATS-BUN- MPLS-R250M - Only available with Bundled Service for ATS-AAS- MPLS-R250N
78	MPLS port, access and Layer 3 routing device bundled service at 300 Mbps (NRC)	ATS-AAS-MPLS-R300N	Unbundled Mandatory Service for ATS-BUN- MPLS-R300M - Only available with Bundled Service for ATS-MSN- MPLS-300M
79	MPLS port, access and Layer 3 routing device bundled service at 300 Mbps (MRC)	ATS-MSN-MPLS-300M	Unbundled Mandatory Service for ATS-BUN- MPLS-R300M - Only available with Bundled Service for ATS-AAS- MPLS-300N
80	MPLS port, access and Layer 3 routing device bundled service at 400 Mbps (NRC)	ATS-AAS-MPLS-R400N	Unbundled Mandatory Service for ATS-BUN- MPLS-R400M - Only available with Bundled Service for ATS-MSN- MPLS-400M

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
81	MPLS port, access and Layer 3 routing device bundled service at 400 Mbps (MRC)	ATS-MSN-MPLS-400M	Unbundled Mandatory Service for ATS-BUN- MPLS-R400M - Only available with Bundled Service for ATS-AAS- MPLS-400N
82	MPLS port, access and Layer 3 routing device bundled service at 500 Mbps (NRC)	ATS-AAS-MPLS-R500N	Unbundled Mandatory Service for ATS-BUN- MPLS-R500M - Only available with Bundled Service for ATS-MSN- MPLS-500M
83	MPLS port, access and Layer 3 routing device bundled service at 500 Mbps (MRC)	ATS-MSN-MPLS-500M	Unbundled Mandatory Service for ATS-BUN- MPLS-R500M - Only available with Bundled Service for ATS-AAS- MPLS-500N
84	MPLS port, access and Layer 3 routing device bundled service at 600 Mbps (NRC)	ATS-AAS-MPLS-R600N	Unbundled Mandatory Service for ATS-BUN- MPLS-R600M - Only available with Bundled Service for ATS-MSN- MPLS-600M
85	MPLS port, access and Layer 3 routing device bundled service at 600 Mbps (MRC)	ATS-MSN-MPLS-600M	Unbundled Mandatory Service for ATS-BUN- MPLS-R600M - Only available with Bundled Service for ATS-AAS- MPLS-600N
86	MPLS port, access and Layer 3 routing device bundled service at 700 Mbps (NRC)	ATS-AAS-MPLS-R700N	Unbundled Mandatory Service for ATS-BUN- MPLS-R700M - Only available with Bundled Service for ATS-MSN- MPLS-700M

Line		Bidder's Product	Bidder's Product Description, Restrictions and
Item	Feature Name	Identifier	Limitations
87	MPLS port, access and Layer 3 routing device bundled service at 700 Mbps (MRC)	ATS-MSN-MPLS-700M	Unbundled Mandatory Service for ATS-BUN- MPLS-R700M - Only available with Bundled Service for ATS-AAS- MPLS-700N
88	MPLS port, access and Layer 3 routing device bundled service at 1 Gbps (NRC)	ATS-AAS-MPLS-R1GN	Unbundled Mandatory Service for ATS-BUN- MPLS-R1G - Only available with Bundled Service for ATS-MSN- MPLS-R1GM
89	MPLS port, access and Layer 3 routing device bundled service at 1 Gbps (MRC)	ATS-MSN-MPLS-R1GM	Unbundled Mandatory Service for ATS-BUN- MPLS-R1G - Only available with Bundled Service for ATS-AAS- MPLS-R1GN
90	MPLS port, access and Layer 3 routing device bundled service at 2 Gbps (NRC)	ATS-AAS-MPLS-R2GN	Unbundled Mandatory Service for ATS-BUN- MPLS-R2G - Only available with Bundled Service for ATS-MSN- MPLS-R2GM
91	MPLS port, access and Layer 3 routing device bundled service at 2 Gbps (MRC)	ATS-MSN-MPLS-R2GM	Unbundled Mandatory Service for ATS-BUN- MPLS-R2G - Only available with Bundled Service for ATS-AAS- MPLS-R2GN
92	MPLS port, access and Layer 3 routing device bundled service at 3 Gbps (NRC)	ATS-AAS-MPLS-R3GN	Unbundled Mandatory Service for ATS-BUN- MPLS-R3G - Only available with Bundled Service for ATS-MSN- MPLS-R3GM

Line	Foothura Nama	Bidder's Product	Bidder's Product Description, Restrictions and Limitations
93	Feature Name MPLS port, access and Layer 3 routing device bundled service at 3 Gbps (MRC)	Identifier ATS-MSN-MPLS-R3GM	Unbundled Mandatory Service for ATS-BUN- MPLS-R3G - Only available with Bundled Service for ATS-AAS- MPLS-R3GN
94	MPLS port, access and Layer 3 routing device bundled service at 4 Gbps (NRC)	ATS-AAS-MPLS-R4GN	Unbundled Mandatory Service for ATS-BUN- MPLS-R4G - Only available with Bundled Service for ATS-MSN- MPLS-R4GM
95	MPLS port, access and Layer 3 routing device bundled service at 4 Gbps (MRC)	ATS-MSN-MPLS-R4GM	Unbundled Mandatory Service for ATS-BUN- MPLS-R4G - Only available with Bundled Service for ATS-AAS- MPLS-R4GN
96	MPLS port, access and Layer 3 routing device bundled service at 5 Gbps (NRC)	ATS-AAS-MPLS-R5GN	Unbundled Mandatory Service for ATS-BUN- MPLS-R5G - Only available with Bundled Service for ATS-MSN- MPLS-R5GM
97	MPLS port, access and Layer 3 routing device bundled service at 5 Gbps (MRC)	ATS-MSN-MPLS-R5GM	Unbundled Mandatory Service for ATS-BUN- MPLS-R5G - Only available with Bundled Service for ATS-AAS- MPLS-R5GN
98	MPLS port, access and Layer 3 routing device bundled service at 6 Gbps (NRC)	ATS-AAS-MPLS-R6GN	Unbundled Mandatory Service for ATS-BUN- MPLS-R6G - Only available with Bundled Service for ATS-MSN- MPLS-R6GM

			Bidder's Product Description,
Line Item	Feature Name	Bidder's Product Identifier	Restrictions and Limitations
99	MPLS port, access and Layer 3 routing device bundled service at 6 Gbps (MRC)	ATS-MSN-MPLS-R6GM	Unbundled Mandatory Service for ATS-BUN- MPLS-R6G - Only available with Bundled Service for ATS-AAS- MPLS-R6GN
100	MPLS port, access and Layer 3 routing device bundled service at 7 Gbps (NRC)	ATS-AAS-MPLS-R7GN	Unbundled Mandatory Service for ATS-BUN- MPLS-R7G - Only available with Bundled Service for ATS-MSN- MPLS-R7GM
101	MPLS port, access and Layer 3 routing device bundled service at 7 Gbps (MRC)	ATS-MSN-MPLS-R7GM	Unbundled Mandatory Service for ATS-BUN- MPLS-R7G - Only available with Bundled Service for ATS-AAS- MPLS-R7GN
102	MPLS port, access and Layer 3 routing device bundled service at 8 Gbps (NRC)	ATS-AAS-MPLS-R8GN	Unbundled Mandatory Service for ATS-BUN- MPLS-R8G - Only available with Bundled Service for ATS-MSN- MPLS-R8GM
103	MPLS port, access and Layer 3 routing device bundled service at 8 Gbps (MRC)	ATS-MSN-MPLS-R8GM	Unbundled Mandatory Service for ATS-BUN- MPLS-R8G - Only available with Bundled Service for ATS-AAS- MPLS-R8GN
104	MPLS port, access and Layer 3 routing device bundled service at 9 Gbps (NRC)	ATS-AAS-MPLS-R9GN	Unbundled Mandatory Service for ATS-BUN- MPLS-R9G - Only available with Bundled Service for ATS-MSN- MPLS-R9GM

			Bidder's Product
			Description,
Line		Bidder's Product	Restrictions and
Item	Feature Name	Identifier	Limitations
105	MPLS port, access and Layer 3 routing device bundled service at 9 Gbps (MRC)	ATS-MSN-MPLS-R9GM	Unbundled Mandatory Service for ATS-BUN- MPLS-R9G - Only available with Bundled Service for ATS-AAS- MPLS-R9GN
106	MPLS port, access and Layer 3 routing device bundled service at 10 Gbps (NRC)	ATS-AAS-MPLS-R10GN	Unbundled Mandatory Service for ATS-BUN- MPLS-R10G - Only available with Bundled Service for ATS-MSN- MPLS-R10GM
107	MPLS port, access and Layer 3 routing device bundled service at 10 Gbps (MRC)	ATS-MSN-MPLS-R10GM	Unbundled Mandatory Service for ATS-BUN- MPLS-R10G - Only available with Bundled Service for ATS-AAS- MPLS-R10GN
108	Out-of-band access to the managed layer 3 routing device (NRC)	ats-aas-mpls-roban	Unbundled Mandatory Service for ATS-BUN- MPLS-ROBA - Only available with Bundled Service for ATS-MSN- MPLS-ROBAM
109	Out-of-band access to the managed layer 3 routing device (MRC)	ATS-MSN-MPLS-ROBAM	Unbundled Mandatory Service for ATS-BUN- MPLS-ROBA - Only available with Bundled Service for ATS-AAS- MPLS-ROBAN
110	Managed WLAN-WAP 802.11AC-NWN-Provided	NWNCA-WLAN11AC	Fully Managed WLAN Service that includes design and implementation of WLAN equipment plus includes: remote, proactive 24x7 monitoring of

Line		Bidder's Product	Bidder's Product Description, Restrictions and
Item	Feature Name	Identifier	Limitations
irem	reature Name	Identifier	equipment; management of PoE equipment including health checks, incident assessment & resolution,; coordination of equipment vendor support response; and scheduled maintenance & monthly analysis reports Fully Managed WLAN Service that includes design and implementation of WLAN equipment plus includes: remote, proactive 24x7 monitoring of equipment; management of PoE equipment including health checks, incident assessment & resolution,; coordination of equipment vendor support response; and scheduled maintenance & monthly analysis
111	Managad MI ANI MAD	NI\A/NIC A \A/! A NI 1 1 N	reports.
111	Managed WLAN-WAP	NWNCA-WLAN11N	Fully Managed WLAN
	802.11N-NWN-Provided		Service that includes

			Bidder's Product
			Description,
Line		Bidder's Product	Restrictions and
Item	Feature Name	Identifier	Limitations
			design and implementation of WLAN equipment plus includes: remote, proactive 24x7 monitoring of equipment; management of PoE equipment including health checks, incident assessment & resolution,; coordination of equipment vendor support response; and scheduled maintenance & monthly analysis
112	Managed WLAN-Wireless Controller-NWN-Provided	NWNCA-WLANCTR	reports. Fully Managed WLAN Service that includes design and implementation of WLAN equipment plus includes: remote, proactive 24x7 monitoring of equipment; management of PoE equipment including health checks, incident assessment & resolution,; coordination of equipment vendor support response; and

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
			scheduled maintenance & monthly analysis reports.
113	Remote Proactive Monitoring LAN Infrastructure Services - Customer Owned Equipment/Mana ged Take-Over	NWNCA-PoEMON	MLAN or WLAN Monitoring Services includes remote, proactive 24x7 monitoring of equipment; management of PoE equipment including health checks, incident assessment & resolution,; coordination of equipment vendor support response; and scheduled maintenance & monthly performance and health analysis reports.
114	NWN Fully Managed LAN- Implementation Services for Customer Owned Equipment (1-50 sites)	NWNCA-LANIMPL1	Technical Services for configuration and installation of Customer Owned LAN equipment.
115	NWN Fully Managed LAN- Implementation Services for Customer Owned	NWNCA-LANIMPL2	Technical Services for configuration and installation of Customer

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
	Equipment (51-		Owned LAN
11/	250 sites)	NIMANICA LANIMADIO	equipment.
116	NWN Fully Managed LAN- Implementation Services for Customer Owned Equipment (251- 500 sites)	NWNCA-LANIMPL3	Technical Services for configuration and installation of Customer Owned LAN equipment.
117	NWN Fully Managed LAN- Implementation Services for Customer Owned Equipment (500 + sites)	NWNCA-LANIMPL4	Technical Services for configuration and installation of Customer Owned LAN equipment.
118	NWN Professional and Technical Services	Several: See Items 119-128 below	Supplemental Engineering and Technical activities, including but not limited to network re-design and re-configuration to support additional protocols, re- addressing of the network and other agreed upon network changes. These activities will be defined on a per Customer basis (detailed Scope of Work required) with the defined deliverable

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
			being a design/configuration document. Pricing is based on the below Professional services rates
119	NWN Technical Services – Junior Engineer Standard Hours/Regular Rate (8am – 5pm local time)	nwnca-tsjr	2-4 Years of experience working in an enterprise level IT environment.
120	NWN Technical Services – Junior Engineer Non-Standard Hours	nwnca-tsjrot	2-4 Years of experience working in an enterprise level IT environment.
121	NWN Technical Services – Senior Engineer Standard Hours/Regular Rate (8am – 5pm local time)	nwnca-tssr	At least 7 years of experience that is directly related to the duties and responsibilities specified.
122	NWN Technical Services – Senior Engineer Non-Standard Hours	nwnca-tssrot	At least 7 years of experience that is directly related to the duties and responsibilities specified.
123	NWN Technical Services – Expert Engineer Standard	nwnca-tsexp	7+ years of experience with IT project management or technical experience.

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
	Hours/Regular Rate (8am – 5pm local time)		7+ years of experience with IT design for a Customer, including requirement definition and execution. 7+ years of experience developing project plans including a project plan that includes the charter, scope, project management approach, management plans, statement of work, cost estimates, schedule. 7+ years of experience leading crossfunctional teams and staff of all levels.
124	NWN Technical Services – Expert Engineer Non-Standard Hours	nwnca-tsexpot	7+ years of experience with IT project management or technical experience. 7+ years of experience with IT design for a Customer, including requirement definition and execution.

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
			7+ years of experience developing project plans including a project plan that includes the charter, scope, project management approach, management plans, statement of work, cost estimates, schedule. 7+ years of experience leading crossfunctional teams and staff of all levels.
125	NWN Technical Services – Senior Design Engineer Standard Hours/Regular Rate (8am – 5pm local time)	NWNCA-PSSR	10+ years of experience with IT project management or technical experience. 10+ years of experience with IT design for A Customer, including requirement definition and execution.

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
			10+ years of experience developing project plans including a project plan that includes the charter, scope, project management approach, management plans, statement of work, cost estimates, schedule. 12+ years of experience leading cross-functional teams and staff of all levels.
126	NWN Technical Services – Senior Design Engineer Non-Standard Hours	nwnca-pssrot	10+ years of experience with IT project management or technical experience. 10+ years of experience with IT design for A Customer, including requirement definition and execution.

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
			10+ years of experience developing project plans including a project plan that includes the charter, scope, project management approach, management plans, statement of work, cost estimates, schedule. 12+ years of experience leading cross-functional teams and staff of all levels.
127	NWN Technical Services – Expert Design Engineer Standard Hours/Regular Rate (8am – 5pm local time)	nwnca-psexp	10+ years of experience with IT project management or technical experience. 10+ years of experience with IT design for A Customer, including requirement definition and execution.

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
			10+ years of experience developing project plans including a project plan that includes the charter, scope, project management approach, management plans, statement of work, cost estimates, schedule. 12+ years of experience leading cross-functional teams and staff of all levels.
128	NWN Technical Services – Expert Design Engineer Non-Standard Hours	NWNCA-PSEXPOT	10+ years of experience with IT project management or technical experience. 10+ years of experience with IT design for A Customer, including requirement definition and execution.

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
			10+ years of experience developing project plans including a project plan that includes the charter, scope, project management approach, management plans, statement of work, cost estimates, schedule. 12+ years of experience leading cross-functional teams and staff of all levels.

20.3 OTHER SERVICES

20.3.1 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.

20.3.2 Services Related Infrastructure (SRI)

The Contractor shall offer infrastructure service as defined below.

20.3.2.1 Extended Demarcation Wiring Services

The Contractor shall provide Extended Demarcation (Extended Demarc) wiring to support the services covered by this IFB 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 20.3.2.1

Table 20.3.2.1 – 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

Line Item	Feature Name	Feature Description	Bidder's Product Description, Restrictions and Limitations	Bidder's Product Identifier	Bidder Meets or Exceeds? Yes or No
2	Extended Demarcation - Copper – 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 of four-pair cable and an RJ48 or equivalent jack.		ATS-3PN- DMCCOP- AH	Yes
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

Line Item	Feature Name	Feature Description	Bidder's Product Description, Restrictions and Limitations	Bidder's Product Identifier	Bidder Meets or Exceeds? Yes or No
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. 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.		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
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, 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.		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
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, 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.		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
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, enclosures, connectors, and two SC-SC duplex patch cords for each single circuit extension. Includes associated troubleshooting, testing and labeling.		ATS-3PN- DMCFIB	Yes

Line Item		Feature Description	Bidder's Product Description, Restrictions and Limitations	Bidder's Product Identifier	Bidder Meets or Exceeds? Yes or No
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 duplex patch cords for each single circuit extension. Includes associated troubleshooting, testing and labeling.		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
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 extension. Includes associated troubleshooting, testing and labeling.		ATS-3PN- DMCFIB- AHW	Yes

20.3.2.2 Unsolicited Services Related Infrastructure

Bidder may offer additional unsolicited Services Related Infrastructure in Table 20.3.2.2.

Table 20.3.2.2 – Unsolicited Services Related Infrastructure

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
1			

Line Item	Feature Name	Bidder's Product Identifier	Bidder's Product Description, Restrictions and Limitations
2			
3			

20.3.3 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 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 20.3.3, 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 20.3.3

Table 20.3.3 – 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 responsibility of the Contractor.		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
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

20.4 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.

20.4.1 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:

- 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

20.4.2 Technical Requirements versus SLA Objectives

Sections 20.2 (MPLS Services) and 20.3 (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

20.4.3 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

20.4.4 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

20.4.5 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 G10.5.1), 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.

20.4.6 Technical SLA General Requirements

The Contractor shall adhere to the following general requirements which apply to all CALNET Technical SLAs (Section 20.4.8):

- 1. With the exception of the Provisioning SLA (Section 20.4.8.9), 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;

- 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 (Billing and Invoicing);

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.

20.4.7 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 20.4.7.a, 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 this requirement and shall meet or exceed it? Yes

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

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

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

Bidder understands this requirement and shall meet or exceed it? 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 20.4.7.a – 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 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.

Line		
Item	Stop Clock Condition (SCC)	SCC Definition
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 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

Line		
Item	Stop Clock Condition (SCC)	SCC Definition
8	STAFF	Any problem or delay to the extent caused by
		End-User's staff that prevents or delays
		Contractor's resolution of the problem. In such
		event, Contractor shall make a timely request to
		End-User staff to correct the problem or delay and
		document in trouble ticket.
9	APPLICATION	End-User software applications that interfere with
		repair of the trouble.
10	CPE	Repair/replacement of Customer Premise
		Equipment (CPE) not provided by Contractor if the
		problem has been isolated to the CPE. If
		determined later that the CPE was not the cause
		of the service outage, the CPE SCC will not apply.
11	NO RESPONSE	Failure of the trouble ticket originator or
		responsible End-User to return a call from
		Contractor's technician for on-line close 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
10	THIRD DADTY	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.

Line Item	Stop Clock Condition (SCC)	SCC Definition
14	FORCE MAJEURE	Force Majeure events, as defined in the eVAQ General Provisions - Telecommunications, Section
15	CUSTOMER ENVIRONMENTAL	28 (Force Majeure). 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.

The Contractor shall provide and manage the following Technical SLAs.

20.4.8 Technical Service Level Agreements (SLAs)

20.4.8.1 Availability (M-S)

SLA Name: Availability

Definition:

The percentage of time a CALNET MPLS Data Networks 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:

MPLS

Objective A:

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

Service Type	Basic (B)	Standard (S)	Premier (P)	Bidder's Objective Commitment (B, S or P)
DS1	≥ 99.2%	≥ 99.5%	≥ 99.8%	P
DS3	≥ 99.7%	≥ 99.8%	≥ 99.9%	P
Ethernet	≥ 99.2%	≥ 99.5%	≥ 99.8%	P

Rights and Remedies:

- 1. Per Occurrence:
 - N/A
- 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 this requirement and shall meet or exceed it? Yes

20.4.8.2 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 one or more of the following:

Failure of two or more service types, or Failure of ten access circuits, or

Failure of a single MPLS port or access circuit with a transport speed greater than or equal to 200 Mbps.

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:

MPIS

Objectives:

The objective restoral time will be:

Access Type	Basic (B)	Standard (S)	Premier (P)	Bidder's Objective Commitment (B, S or P)
MPLS	≤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

20.4.8.3 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:

MPIS

Objectives:

The objective restoral time will be:

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

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 2 fault.
- 2. Monthly Aggregated Measurements:
 - N/A

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

SLA Name: Catastrophic Outage 3 (CAT 3)

Definition:

The total loss of more than one CALNET DNCS service type in a 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:

MPLS

Objectives:

The objective restoral time will be:

Access Type	Basic (B)	Standard (S)	Premier (P)	Bidder's Objective Commitment (B or P)
MPLS	≤ 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 this requirement and shall meet or exceed it? Yes

20.4.8.5 Delay – Round Trip Transmission for MPLS Services (M-S)

SLA Name: Delay – Round Trip Transmission for MPLS Services

Definition:

The average round trip transfer delay measured from the Customer Edge (CE) to the remote CE back to CE (Site A to Site Z to Site A) within the geographic confines of the state of California.

Measurement Process:

The End-User/Customer is responsible for opening a trouble ticket with the Contractor's Customer Service Center (helpdesk) when the Customer suspects the delay is not meeting the committed level. CALNET CMO shall determine the sample interval, provided that a minimum of 100 pings or more shall constitute a test. The Contractor shall provide timely verification, consistent with industry standards. Trouble tickets opened as Delay – Round Trip Transmission for MPLS Services shall not count in availability or Time to Repair measurements unless and until the End-User reports service as unusable.

Service(s):

MPIS

Objective(s):

Based on a 1,000 byte ping:

Access Type	Basic (B)	Standard (S)	Premier (P)	Bidder's Objective Commitment (B or P)
MPLS ≥ 1.536 Mbps to < 10 Mbps	< 400ms	N/A	< 340ms	P
MPLS ≥ 11 Mbps to < 100 Mbps	< 400ms	N/A	< 340ms	P
MPLS ≥ 100 Mbps	< 400ms	N/A	< 340ms	P

Rights and Remedies:

- 1. Per Occurrence:
 - N/A
- 2. Monthly Aggregated Measurements:
 - 25% credit or refund of the TMRC per occurrence for the reported service.
 - The second consecutive month service fails to meet the committed SLA objectives shall result in a 35% rebate of TMRC.
 - Each additional consecutive month service fails to meet the committed SLA objective shall result in a 50% rebate of the TMRC.

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

20.4.8.6 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:

MPLS

Objectives:

The Unavailable Time objective shall not exceed:

Access Type	Basic (B)	Standard (S)	Premier (P)	Bidder's Objective Commitment (B, S or P)
MPLS	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 this requirement and shall meet or exceed it? Yes

20.4.8.7 Managed Service Proactive Notification (M-S)

SLA Name: Managed Service Proactive Notification

Definition:

The proactive outage notification provides credits if the Contractor fails to open a trouble ticket and notify Customer of an Outage for a managed router or

managed IP enabled device service. Notification to the Customer shall occur through means agreed to by Contractor and CALNET CMO.

An Outage is defined as an unscheduled period in which the managed router service is interrupted and unavailable for use by Customer for 60 continuous seconds or more than 60 cumulative seconds within a 15-minute period measured by the Contractor.

Measurement Process:

The Outage Duration start shall be determined by the first Contractor network alarm resulting from the outage-causing event or the opening of a trouble ticket by the Customer, whichever occurs first. The Contractor has fifteen minutes (Notification Period) to notify the Customer from the start point of the first network alarm. The Contractor is in compliance with the proactive outage notification SLA if the Customer opened the trouble ticket prior to the network alarm or Customer is notified by the Contractor within the Notification Period.

Services:

MPLS Access Transport Speeds
MPLS Port Transport Speeds
MPLS Port, Access and Layer 3 Bundled Transport Speeds

Objectives:

15 Minutes

Rights and Remedies:

- 1. Per Occurrence:
 - Internet 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 this requirement and shall meet or exceed it? Yes

20.4.8.8 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

20.4.8.9 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
MPLS Access Transport Speeds	35	Coordinated/Managed Project
MPLS Port Transport Speeds	35	Coordinated/Managed Project
MPLS Port, Access and Layer 3		
Bundled Transport Speeds	45	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)
MPLS Access Transport Speeds	≥ 90%	N/A	≥ 95%	P
MPLS Port Transport Speeds	≥ 90%	N/A	≥ 95%	P
MPLS Port, Access and Layer 3 Bundled Transport Speeds	≥ 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 this requirement and shall meet or exceed it? Yes

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

SLA Name: Time To Repair (TTR)

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:

MPIS

Objectives:

The Unavailable Time objective shall not exceed:

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

Rights and Remedies:

1. Per Occurrence:

- First month the service fails to meet the committed SLA objective shall result in a 25% credit or refund of 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

20.4.8.11 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 this requirement and shall meet or exceed it? Yes

20.4.8.12 Proposed Unsolicited Offerings

The Contractor shall provide SLAs as defined in SLA Section 20.3.8 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 this requirement and shall meet or exceed it? Yes

20.4.8.13 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 20.4.8.

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