

REQUEST FOR PROPOSAL (RFP)

FOR

Design, Supply, installation, Testing, commissioning and support post installation for NGFW based SD-WAN solution and related services at Assam Electricity Grid Corporation Limited.

**(To be submitted through e-Tender portal:
<https://www.assamtenders.gov.in>)**



Bid identification No: AEGCL/MD/IT/NGFW-SDWAN/08

Corporate Office Address: AEGCL, Bijulee Bhawan, First Floor, Paltanbazar, Guwahati-01
Email ID: infosec@aegcl.co.in

Quotation Inviting Authority

Sd/-

**Chief General Manager (PP&D),
Assam Electricity Grid Corporation Limited,
Bijulee Bhawan, Paltan Bazar
Guwahati-01**

SECTION 1

1.1.0 INTRODUCTION:

Assam Electricity Grid Corporation Limited, a vibrant growth oriented Public Sector Company registered under 'Company Act, 1956'. It was formed out of restructured Assam State Electricity Board in 2003 and was notified as the State Transmission Utility (STU). Its core business is to efficiently transport electrical power from electrical power bulk heads to the distribution company networks in the state of Assam. Assam Electricity Grid Corporation Limited inherited 3862 circuit kms of EHV lines above 66 kV voltage class and 38 numbers of EHV sub-stations having a total transformation capacity of 1636.50 MVA at its birth in 2003.

After 2003 with the inclusion of new sub stations and transmission lines its transmission capacity is increased upto 7583 MVA , line length 5784 Ckt kilometer and 78 nos. of EHV Grid Substations.

Assam Electricity Grid Corporation Limited is playing a strategic role as it is the largest 'STU' in the NE region. It also understands its responsibility towards the entire North East India and is always extending a helping hand by way of transporting a fair share of power to the other sister states of the region.

Assam Electricity Grid Corporation Limited has consistently maintained the transmission system availability over 99% which is at par with other National Transmission Utilities.

Assam Electricity Grid Corporation Limited vows to ever strive till all transmission bottlenecks get eradicated. It pledges to deliver unrelenting brilliance in performance, deliver power efficiently but economically, show high safety standards, and is committed to respecting environmental and heritage issues.

The Chief General Manager (PP&D) on behalf of Assam Electricity Grid Corporation Ltd(AEGCL), hereinafter referred to as AEGCL or Purchaser invites single stage two envelope e-bids for the following work from eligible manufacturers/firms/companies/contractors.

a) Name of work: Design, Supply, installation, Testing, commissioning and support post installation for NGFW based SD-WAN and related services at Assam Electricity Grid Corporation Ltd.

INTENT OF THE TENDER ENQUIRY:

The intent of the Tender Enquiry is to invite proposals from the prospective and relevantly experienced and financially sound contractor(s) /firms to carry out the works as specified in this bidding document.

1.2.0 SCOPE OF WORK:

At present all the offices are not connected to central locations. The objective of this bid is to connect all branch offices with Head office. The proposed WAN shall serve

the purpose of upcoming ERP project as well as implementation different cyber security policies.

AEGCL desires to deploy Integrated NGFW (Next Generation Fire Wall) & SDWAN {Software Defined WAN (Wide Area Network) solution for Assam Electricity Grid Corporation Ltd. (Corporate office and Branch Offices).

The proposed SDWAN solution shall have the following architecture-

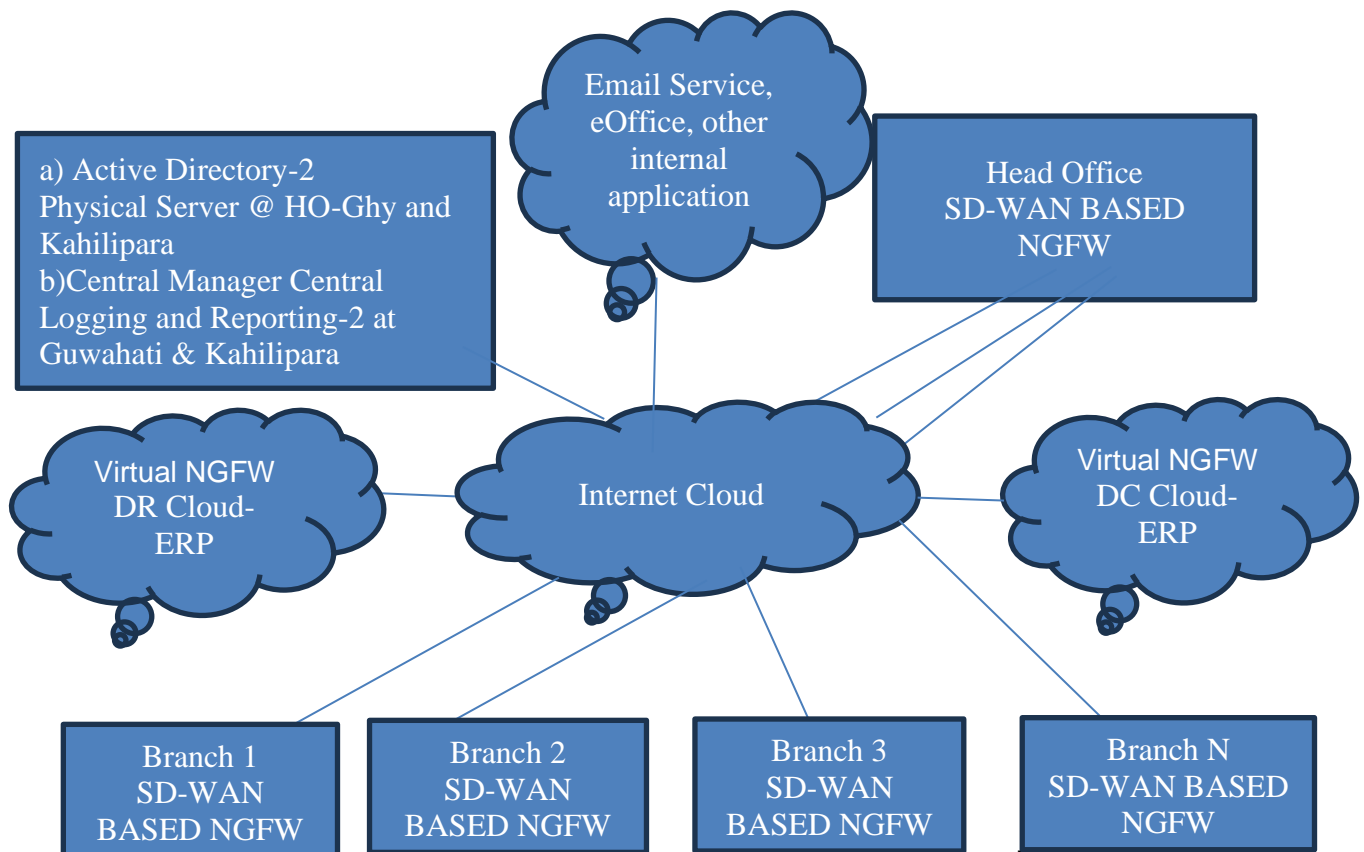


Fig: Proposed SD-WAN Architecture

The major Scope of the works are as follows-

- 1) Bidder has to provide onsite warranty and support for the period of 3 years from the date of complete delivery. The warranty, support and licensing may be extended to another 2 years based on mutually agreed terms and conditions.
- 2) Its bidder's responsibility to do site survey before installation and report for the same to be submitted for all the sites
- 3) Bidder has to do installation on the site for each locations for Rack, UPS, SD-WAN Devices, earthing, Basic Electrification at Site (Electrical Cable Laying from the MCB to Rack UPS - 30 Mtr. Max Distance from MCB to Rack) etc.
- 4) Bidder has to do complete installation of the proposed items and Integration with our existing network.
- 5) Bidder has to install SD-WAN controller in HQ and One of the branch office in Guwahati to Maintain High Availability of the resources.
- 6) Bidder has to deploy and install **Active Directory** as a PDC and ADC in two locations to maintain High Availability.
- 7) Post Installation documentation and Training as per RFP to be given.

1.3.0 Site for Installation and Commissioning of SDWAN devices-

Please refer Site location at Section-III

1.4.0 Technical Specification of NGFW & SDWAN-

The integrated solution shall have NGFW and SD-WAN capabilities as per the trailing functional specifications. One set of devices shall be installed in every office of AEGCL in high available manner. The Contractor shall design the appropriate topology and deployment architecture in consultation with AEGCL.

1.4.1. Architecture

a. Controller Device: This device makes path optimization decisions and configuration of application-based forwarding policy and security rules are to be done on this device. All policy and security rule configurations are done at the Controller device. The Contractor may offer the controller capability/services from AEGCL's proposed data centre in Bijulee Bhawan, Paltanbazar, Assam (primary) and secondary is proposed at Kahilipara with their own devices.

Controller devices make path optimization decision for the respective sites and receives policy configurations from the Controller device.

b. WAN Edge Device: This is the device where WAN interfaces terminate. Edge device in each site make dynamic fully meshed encrypted overlay paths to every other edge device. This device forwards traffic to other branches over WAN including direct Internet access.

c. Centralized Network Management & Monitoring: This device provides comprehensive solution to manage, visualize, provision, automate configuration and monitor the proposed SD-WAN infrastructure from a single graphical interface. The Contractor may offer the monitoring capability/services from AEGCL's proposed data centre in Bijulee Bhawan, Paltanbazar, Guwahati, Assam with their own devices.

1.5.0 Functional requirement

1.5.1. Technical Specification of SD-WAN Solution Central Management and Logging & Reporting

List of Items (Bill of Materials):

Sr.#	Product	Qty
1	SD-WAN Firewall Appliance at DC-DR in High Availability mode with 3 Years UTP Subscription, Warranty, Support Contract and Licensing-Type 1	2

Sr.#	Product	Qty
2	SD-WAN Firewall Appliance @ Branch with 3 Years UTP Subscription, Warranty, Support Contract and Licensing - Type 2	7
3	SD-WAN Firewall Appliance @ very small branch with 3 Years UTP Subscription, Warranty, Support Contract and Licensing, Type - 3	114
4	SD-WAN Virtual Firewall Appliance @ DC & DR with 3 Years Subscription, Warranty, Support Contract and Licensing (for Secure ERP Access), Type – 4	2
5	On premise SD-WAN Management and Logging with 3 Years Warranty, Support Contract and Licensing with all necessary Server hardware and Software's High Availability.	1 set
6	VPN Server and VPN Client License for 100 Users with 3 Years support	1 set
7	Server with MS Windows Server 2022 - Standard	2
8	27 U Floor Mount Server Rack for DC-DR	2
9	6 U Wall mount Rack for Branches	121
10	2 Mtr. Cat 6 UTP Cable	400
11	600 VA Line-Interactive UPS - 1 years Warranty on both UPS and Battery	121
12	5 KVA Online UPS with 30 min. battery backup-3 years Warranty on both UPS and Battery	2
13	Basic Electrification at Site (Electrical Cable Laying from the MCB to Rack UPS - 30 Mtr. Max Distance from MCB to Rack)	121
14	Electrical Earthing for DC and DR center	2
15	Electrical Earthing Branch	121
16	2 Days Training for Officials of AEGCL	1
17	One time Installation, Configuration and commissioning of complete SD-WAN Solution and Active Directory Implementation and Documentation and Project management	1

Note: 1) Bidder must submit the BoM indicating the Make, Model of the relevant equipments to be supplied in their letter head.

2) The bidder shall provide an undertaking in their offer confirming that the proposed solution (including all the hardware and software) shall have a minimum of 05 (Five) years of end-of-life support from the date of installation and commissioning and shall submit in this regard respective OEM documentation (hardware as well as software) at the time of installation and commissioning.

Technical Specifications:

1) Technical Specification of SD-WAN Solution Central Management and Logging & Reporting- 2 nos.

Note: To be submitted by OEM on their letter head by authorized signatory.

Minimum Technical Specification for SD-WAN Solution:

Sr No	Minimum Specifications	Compliance - Yes / No
1	The SDWAN solution should be software based and should run on OEM's dedicated hardware and also capable of running on general purpose X86 hardware.	
2	The SDWAN solution should provide capability to be hosted on cloud-based and on-premise deployment.	
3	SDWAN Solution is preferred to be service-centric, session-oriented and Zero Trust Led for building context aware networks	
4	SDWAN Solution is preferred to use protocols fully compatible and interoperable with existing Standard network protocols and architectures.	
5	The SDWAN Solution is preferred to be session aware, and session based with directionality information for application routing decisions	
6	All Component of SD WAN should be on premise meeting the end user requirements.	
	Management plane: - (Control Plane & Data Plane)	
7	The centralized SDWAN controller should be separate from the Hub device and should provide complete orchestration and automation of SDWAN network	
8	Management plane is responsible for configuration of SD- WAN policies including routing, security, SLA etc. The controller should provide the details of inline performance monitoring.	
9	The solution should be implemented as true software defined WAN network architecture. SD-WAN network architecture should have clear separation of management/ control, and data plane functions.	
10	The SDWAN controller should be deployed in redundant mode at DC and DR location.	
11	Should provide details of the bandwidth optimization with encryption and without encryption.	
12	Management and control plane should be centralized with capability to be separated for each VRF/Tenant in such a way that management, control, and data traffic are not dropped.	
13	The controller should provide the details of inline performance monitoring.	
14	Control plane/SDWAN controller must support single pane of glass for configuration management, security configuration and monitoring and must validate the configuration before apply it to running configuration	
15	The control plane should provide GUI, CLI , REST, Remote access , Upgrade and Zero Touch provisioning , template based configuration .	
16	Data Plane: Data plane is responsible to forward traffic with choices of encrypting traffic across applications with or without Tunnels, apply local policy like QoS, ACL etc.	
17	The network should be implemented as true software defined network architecture with a centralized control plane residing in the Central Controller, also Data Plane and Control Plane should be separate end-to-end	
18	There should be no impact on data plane if the centralized controller is not reachable during failure.	
	Architectural Specification	

Sr No	Minimum Specifications	Compliance - Yes / No
19	Proposed solution should be in the form of Virtual Appliance or hardware appliance from same OEM or approved 3rd party hardware for OEM software and should be able to support High-Availability at branch CPE and Central Location as per the requirement	
20	The data plane at the branch locations, data center & DR should be programmable from the central software defined network controller and should provide single pane of glass form complete WAN network.	
21	SDWAN Solution is preferred for ease of definitions and management of VRF/Tenant's by using routing logic with words and relationships between named elements and not just IP Address based logic.	
22	The communication between the software defined network controller and the branch device running on the remote entity should be secure and encrypted.	
23	The WAN path Selection at the branch locations should be based on applications/custom applications /URL/IP address and port with the near real time analytics of the WAN Links Capacity & Quality (Packet loss, Latency & Jitter) and should provide sub-second failover in case of link shift. Real-time applications like VoIP, Video Conference etc. should not be impacted due to link failure.	
24	The architecture should allow for internet break out at the local at branch, centralized location, remote entity (remote location) based on the application and the policy defined in the SDWAN solution	
25	The selection of WAN links to anchor the traffic flows for an application traffic should be dynamic and policy driven.	
26	The system architecture should be transport agnostic and should support MPLS, LL, ILL, BB, LTE and other transport with no limitations of physical WAN links connectivity	
27	The system architecture should allow to use the most preferred link based upon Link characteristics (Latency, Jitter, Packet loss, MOS score) for critical applications as defined in policy	
28	The SD-WAN solution should be able to distribute the sessions across all the links to effective use and load balance of the links. There should be no limit on the number of WAN links in the solution.	
29	The SD-WAN solution must be able to apply Qos policies to all the traffic seen in network, including both optimized and non-optimized traffic flows, including TCP, UDP traffic types.	
30	The SDWAN Solution must have REST APIs available for 3rd party integration or integration with custom automation tools.	
31	SD-WAN solution should have capability to mitigate the effect of packet drop in underlay up to some extent for specific or all applications using Forward Error Correction or Packet Replication to improve end-user experience	
32	SD-WAN solution must support Hub-Spoke, Full-Mesh, Spoke-Hub-Hub-Spoke and Partial Mesh topologies. Any to Any Architecture without dependency on tunnels for overlay is preferred as this will avoid the overhead due to tunnel creation.	
33	SD-WAN solution should have intelligence to route/path-selection for Voice and video traffic based on MOS (mean opinion score) score or similar	

Sr No	Minimum Specifications	Compliance - Yes / No
34	The system should be able to retrieve the network information without any peering protocols like BGP, OSPF or any other routing protocol over WAN.	
35	The system should be able to select the optimum path based on the network parameters like Latency, Jitter, packet loss, MOS value and based on the application the sessions should be distributed across all the links to ensure load balancing	
36	The system should be able to automatically steer traffic flows to the optimum path, based on policy definition through the SDWAN Controller	
37	The system should ensure that the session is not impacted when switching between paths with fast fail-over and needs to be demonstrated with Low latency Real-time applications like Voice and Video	
38	The system should be able to support multiple internet break out points based on the application (e.g. The system should do a direct internet break out at the branch location for internet traffic while rest of the internet traffic should be egressed through a centralized security infrastructure in the data center or the cloud).	
39	The SLA management should have fallback mechanism in place i.e., in case if both the links at a branch location fail to meet SLA, the traffic should not drop.	
40	The proposed SDWAN solution should support Multicast.	
41	Proposed solution must support Server load balancer function and distribute the traffic to Application Server according to the policy	
42	Orchestrator/controller must support geographical redundancy in active-active fashion. When the primary orchestrator down, backup orchestrator must be ready without impacting operational.	
	Security	
43	Proposed solution is preferred to support zero trust security architecture. System must maintain strict security control, without configuring access policy explicitly, traffic is not allowed to access all service	
44	Proposed solution capable and experience on large scale deployment with minimum 500 branch	
45	The Proposed SDWAN CPE solution should support Intrusion detection and prevention for local breakout internet traffic	
46	The Proposed SDWAN CPE solution should support URL filtering for local net b sessions.	
47	The SDWAN solution should behave like Distributed stateful firewall for increased security.	
48	SDWAN Solution should have capabilities to define VRF/Tenant and service information is propagated network wide within an organization for application driven architecture with inherent security	
49	SDWAN Solution is preferred to be intelligent to not to encrypt the traffic already encrypted like TLS/HTTPS etc.	
50	SDWAN Solution is preferred to provide encryption of user traffic for enhanced security for each session separately with or without IPSEC	
51	SDWAN solution should be able to apply Denial of Service (DOS) and Distributed Denial of Service (DDOS) protection to every session passing through the SDWAN CPE not only at the edge but wherever CPE are deployed.	
52	Proposed solution is preferred to be FIPS-140-2 compliant	

Sr No	Minimum Specifications	Compliance - Yes / No
53	Proposed solution is preferred to be PCI-DSS compliant	
	Reporting	
54	Solution should support packet capture per device & per interface from orchestration layer.	
55	Solution should provide complete view of the network	
56	Solution should provide various reports such as	
55.1	Link shift event	
55.2	SLA per link	
55.3	Application usage per site	
55.4	Top talkers	
	SDWAN CPE Devices for DC & DR - Physical specification & SDWAN License	
58	The SDWAN CPE for DC & DR should have min 6 GE Copper and 2 GE Fiber with license for Encrypted IMIX performance of 500 Mbps, expandable up to 1 Gbps. It should have min 16 GB RAM and 120 GB of Storage; USB 3.0 port and 1GbE RJ-45 Console port. Two CPE should be deployed in HA at DC and single CPE is to be deployed at DR. Necessary operating system, software, and licenses (if any) are to be included.	
	SDWAN CPE Devices for Remote Sites - Physical specification & SDWAN License	
	The SDWAN CPE for DC & DR should have min 6 GE Copper and 2 GE Fiber with license for Encrypted IMIX performance of 100 Mbps, expandable up to 500 Mbps. It should have min 16 GB RAM and 120 GB of Storage; USB 3.0 port and 1GbE RJ-45 Console port. Proposed CPE must have at least 1 X 3G/4G/LTE interface in Active/Backup mode. The device should have atleast 1 SIM slot.	
59	The SDWAN CPE for Remote Office should have min 4 GE Copper and 2 GE Fiber with license for Encrypted IMIX performance of 10 Mbps, expandable up to 200 Mbps for future scalability with license upgrade only. It should have min 8 GB RAM and 120 GB of Storage; USB 3.0 port and 1GbE RJ-45 Console port. Proposed CPE must have at least 1 X 3G/4G/LTE interface in Active/Backup mode. The device should have atleast 1 SIM slot.	
	SDWAN Controller at DC & DR - Physical specification	
60	The SDWAN Controller for DC & DR should have min 4x1/10GE SFP+, 6 GE Copper. It should have min 64 GB RAM and SSD 256 GB of Storage; USB 3.0 port and 1GbE RJ-45 Console port. Necessary operating system, software, and licenses (if any) are to be included.	
61	All the solution component Branch CPE, DC & DR CPE/HUB and Management / controller to be provided form day1	
	Functional Requirements of the SDWAN Solution	
62	The proposed SDWAN solution components should include zero touch provisioning, centralized network management and operation facilities for the edge devices running in the remote branch from day 1.	
63	The proposed SD WAN Solution should support to utilize all the Service Provider Communication Links (MPLS/LTE/4G/Broadband/VSAT) simultaneously and share the traffic among the links.	
64	The SD-WAN should be able to load balance across links simultaneously.	
65	The system should support end-to-end packet classification, marking, and bandwidth allocation.	

Sr No	Minimum Specifications	Compliance - Yes / No
66	The system should support advance security features like: Intrusion Prevention System (IPS), URL Filtering, DNS proxy and Zero-trust security architecture, etc. Necessary licenses are to be included from day-1	
67	SD-WAN solution must support Hub-Spoke, Full-Mesh, and Partial Mesh topologies. The SDWAN solution should also support the hierarchical architecture required for AEGCL.	
68	SD-WAN solution should have intelligence to route Voice traffic based on MOS (mean opinion score) score or similar.	
69	In the proposed SD WAN solution, the WAN path selection should be dynamically selected based on the policy set from the Central controller/manager placed at DC/DR.	
70	The system should implement a stateful firewall with Access Lists and/or Time-based Access lists to provide supervision and control on the branch device that can be centrally provisioned and managed from the software defined network controller.	
71	The SD-WAN should support packet-based or flow-based load sharing across all links simultaneously to achieve better application performance	
72	The system should allow definition and enforcement of traffic load balancing policies that allow utilization of all the available WAN links simultaneously.	
73	The SDWAN solution should be for 3 years including all hardware, software, licenses and 5x8xNBD support from OEM.	
74	The Central Logging and Reporting Solution also should provide logs and report from all the branch location devices centrally and logs/reports to be kept in the system for 6 months (180 Days). Both the Solution may be proposed appliance hardware based or VM based in Active – Passive High Availability mode. Required Support, Subscription/ Licenses for all to be included from day 1. Specific sizing for Server or hardware appliance to be done by the bidder as per the requirement without any performance issue	

2) 600 VA Line-Interactive UPS for AEGCL Branch Offices (Across Assam): 114 No.

Sr.#	Parameter	Specification	Compliance (Yes/No)
1	Rating	600 VA	
2	Input System	220/230 VAC Single Phase	
3	Input Voltage	160V – 280VAC	
4	Input Frequency	45Hz – 65Hz (Auto Sensing)	
5	Output System	220/230 VAC Single Phase	
6	Output Voltage Regulation	$\pm 10\%$ on mains mode, $\pm 2\%$ on battery mode	
7	Output Frequency	(Same as input) on mains mode, 50 Hz ± 0.5 Hz on battery mode	

Sr.#	Parameter	Specification	Compliance (Yes/No)
8	Battery Type	Internal SMF batteries 1 no. 12V-9AH	
9	Transfer Time	2-6 milli seconds	
10	Recharge Time	6-8 hrs up to 90% after full discharge	
11	Indicators	LED for backup mode, mains present, Fault	
12	Alarm	Audible alarm for backup mode, low battery and overload	
13	Protection	Input AC high / low, DC low, overload	
14	Temperature	0 deg C to 40 deg C	
15	Relative humidity	0-95% condensing	
16	Acoustic Noise	Less than 35 DB at 1 meter distance	
17	Warranty	3 years onsite	

3) 5 KVA Online UPS for AEGCL 2 Offices: 2 No.

Sr.#	Parameter	Specification	Compliance (Yes/No)
1	Rating	5 KVA	
2	Technology	True On-Line Double Conversion UPS IGBT based & DSP controlled with Built In isolation Transformer.	
3	Input System	160VAC – 260VAC, 230V single phase 2 wire	
4	Input Power Factor	0.99	
5	Input Frequency	45Hz – 55Hz	
6	Output System	220/230/240 VAC single Phase $\pm 1\%$	
7	Output Frequency	50 Hz ± 0.05 Hz	
8	Output Power Factor	0.99	
9	Over Load Capacity	125% for 5 mins & 150% for 1 mins	
10	Output Waveform	Pure Sinewave	
11	Total Harmonic Distortion	<2% for linear load and <5% for nonlinear load	
12	Efficiency (AC to AC)	>94%	
13	Crest Factor	3:1	
14	Degree of protection	IP-20 as per EN 62401-1/ EN 6240-2/ EN 6240-3 IS-16242:2014 (certificate to be provided)	
15	Isolation Transformer	Built in the UPS cabinet	
16	Charging Duration	90% of Battery capacity in 4 hrs	

Sr.#	Parameter	Specification	Compliance (Yes/No)
17	Protection	IP circuit breaker, Charger OV, Battery low cut, battery over charger cut, OP over load and OV trip, short circuit	
18	Indicators / Display	User friendly Mimic panel, LCD Display for monitoring UPS status, Battery Level, Load Level, fault code	
19	Operating temp	10 to 50 deg C	
20	Acoustic Noise	<60 DB at 1 meter distance	
21	Battery bank details	<ul style="list-style-type: none"> 30 mins with 4320 VAH 	
		<ul style="list-style-type: none"> Bidder should mention brand and model of SMF battery quoted and submit combination of no. of batteries and AH rating of batteries for achieving the above desired VAH 	
		<ul style="list-style-type: none"> ISO 9001 and ISO 14001 certificate of battery OEM needs to be submitted. 	
		<ul style="list-style-type: none"> MS rack for housing of batteries along with interconnecting cables, UPS to battery cables should be supplied. 	
22	Warranty	3 years on both battery and UPS onsite	

4) Server for MS Windows Active Directory, Qty: 2 no.

Sr.#	Parameter	Detailed Specification	Compliance (Yes / No)
1	Form Factor	Max. 2U rack mounted, front locking bezel, sliding rail	
2	Processor	Intel Xeon 3rd Gen 16 Core / 32 Thread Processor @ 2.4 Ghz base frequency	
3	Memory	Minimum 64 GB (2 x 32 GB) DDR4 Upgradable up to 1TB	
4	Storage	2 x 480 GB SATA SSD Hot-plug (Hypervisor-OS)	
		2 x 1.92TB SATA SSD Hot-Plug (VM Instances)	
5	RAID	RAID Controller - 8GB cache, providing RAID 0, 1, 5, 6, 10 options	
6	Network Port	6 x 1 Gbps RJ45 LAN	
7	OS	Should be supplied with MS Windows Server 2022 - Standard - 16 Core Lic. With 1500 Windows Server Device CAL Licenses from day 1	
8	OS Certification	Certified for latest Windows Server, RHEL, SUSE, Ubuntu	

9	Virtualization	Certified for Citrix, Hyper-V, VMware ESXi	
10	Power supply	80Plus Platinum certified redundant power supply	
11	Management	Should provide virtual media, virtual folders, remote file share, virtual console support	
12	Monitoring & alerting	Monitoring fan, power supply, memory, CPU, RAID, NIC for impending failure	
13	Authentication	Directory services (AD, LDAP), two-factor authentication & single sign-on support	
		TPM 1.2/2.0	
		Automatic BIOS recovery	
		Firmware drift detection & alerting	
		System lockdown feature to lock down configuration and firmware, protecting the server from inadvertent or malicious changes	
		Drive security, including secure system erase for HDD, SSD & NVMe	
		Dynamically enabled / disable USB ports to protect from USB-based attacks	
		UEFI secure boot with custom certificates	
14	Intrusion alert	Intrusion alert in case chassis being opened	
15	Accessories	24 inch LED Monitor, Keyboard, Mouse	
16	Warranty	3 years on site comprehensive onsite warranty	
		Supplied product warranty must be visible in the manufacturer's official website in respect to each product serial number)	
17	Installation	Bidder has to deploy virtualization on the Server & Install and configure MS Active Directory as per AEGCL requirement. Two server to be installed on different location in Guwahati to Achieve High Availability for the Services.	

5) 6 U Network Racks, Qty: 114 no.

Sr.#	Hardware Specification	Compliance (Yes/No)
1	6 U Wall mount network rack with Glass door and lock system	
2	Dimension should be 500 mm Width x 500 mm Depth	
3	Min. 6 Socket 5 Amp PDU and Fan on the Top for heat ventilation	
4	Accessories like cable manager and mounting Hardware kit	

6) 27 U Server Rack, Qty: 2 no.

Sr.#	Hardware Specification	Compliance (Yes/No)
1	27 U Floor Stand Server rack with Glassdoor/metal door and lock system	
2	Dimension should be 800 mm Width x 1000 mm Depth	
3	Dual PDU with Min. 6 Socket 5/15 Amp PDU and Fan on the Top for heat ventilation	
4	Accessories like cable manager and Mounting Hardware kit, Casters Set of 4	

7) Misc. Items for Passive Works and Services for AEGCL (Across Assam)

Sr.#	Product	Compliance (Yes / No)
1	2 Mtr. Cat 6 UTP Cable. It should be 24 AWG, LSZH	
2	Basic Electrification at Site (Electrical Cable Laying from the MCB to Rack UPS - 30 Mtr. Max Distance from MCB to Rack)	
3	Proper Electrical Earthing for HO and Kahilipara Office	
4	Proper Electrical Earthing at Branch Offices	
5	3 Days Training for the IT Officials of AEGCL - 10 Persons. Training arrangement to be arranged by the bidder.	
6	One time Installation, Configuration and commissioning of complete SD-WAN Solution and Active Directory Implementation and Documentation and Project management	

1.6.0 Installation and Commissioning:

1.6.1. The team of installation engineers must be physically present at all sites during the installation and commissioning phase of the solution.

1.6.2. The Contractor shall be responsible for migration of existing firewall policies to the new firewall as per AEGCL's requirements.

1.6.3. The Contractor must provide documentation for installation and configuration after commissioning of the solution. The documentation must include step-by-step procedures to configure the devices.

1.6.4. The Contractor shall be responsible for any configuration changes required in the existing equipment like router, switches, firewall, servers etc. to integrate the solution with the existing infrastructure.

1.6.5. Cable dressing and management with tagging: The Contractor shall be responsible for cable dressing and management with tagging for all the interconnecting cables within the solution scope. Necessary Cable ties, cable channels and cable lacing cord, tag marker etc. must be supplied by the Contractor.

1.6.6. The Contractor shall ensure proper electrical earthing during physical installation of the equipment.

1.6.7. The UAT (User Acceptance Testing) shall be conducted by the Contractor in presence of AEGCL's personnel as per the UAT Plan. After successful completion of UAT, the Contractor shall submit detailed UAT report.

1.6.8. The installation and commissioning of the solution shall be deemed complete when all of the following requirements are met:

- Completion of delivery of all the items
- Set up of NGFW capabilities in the devices in all branches of AEGCL
- Set up of WAN comprising all branch offices with SD-WAN capabilities.
- Completion of installation, configuration and integration for all the items
- Successful completion of User Acceptance Test
- Delivery of all the documentation
- Validation of the solution to ascertain that the implementation has been done as per the design document.

1.7.0 Training:

1.7.1. The Contractor must impart training to AEGCL's IT Personnel's to be nominated by AEGCL. The training duration for each batch shall preferably be for a minimum 2 (two) days.

1.7.2. The training content must at least include the following:

- a) Basics of SDWAN technology
- b) Features and capabilities of the supplied product
- c) Administration and management of the supplied product
- d) Troubleshooting and maintenance of the supplied product
- e) Lab sessions
- f) Active Directory

1.7.3. The training infrastructure shall be provided by AEGCL. The training must be conducted by OEM certified instructor only.

1.7.4. Complete OEM published training material as per OEM curriculum must be provided either in hardcopy or softcopy to each participant. The training material provided must be standard course material provided as part of the course. The training material shall not be tailor-made for AEGCL.

1.7.5. Cost of transportation and accommodation of the AEGCL personnel for training shall be borne by AEGCL.

1.8.0 Managed Services:

1.8.1. The Contractor shall provide managed services for the SDWAN and NGFW solution valid for a period of 03 (three) years from the date of completion of installation and commissioning for the solution.

1.8.2. All necessary tools, tackles and accessories required to manage the solution as per tender document shall be provided by the Contractor, at no extra cost to AEGCL.

1.8.3. The Contractor shall provide the details of escalation matrix for the Managed Services Operation.

1.8.4. The Contractor must have own relevant back-office infrastructure (tools and qualified human resources) to provide support for managed services operation. The Contractor shall not hire/outsource the required back-office capabilities from a third-party bidder.

1.8.5. The Contractor must follow a documented change management process for any activity in any component of the solution.

1.8.6. The scope of the managed services shall include the following:

- a) Rectification of any defects, faults and failures in the hardware and software components in the solution.
- b) Preventive Maintenance: Physical Inspection, testing, satisfactory execution of all diagnostics, cleaning and removal of dust and dirt from the interior and exterior of the equipment, and necessary repair of the equipment at least once every quarter. Bidder's service engineer must visit each of the site to carry out this activity once in a quarter.
- c) Health and performance monitoring of the solution: Continuous monitoring of the health and performance parameters of the solution and take necessary corrective actions.
- d) Firewall log monitoring and security policy administration: Round the clock monitoring of the firewall logs and review and modification of security policies.
- e) Any new configuration/modification of configuration to achieve any new requirement of AEGCL is in the scope of the bidder. The configuration related to establishing and monitoring new/existing IPSEC/ tunnel between AEGCL and CSPs is in the scope of the bidder.
- f) Reporting: Submission of periodic report containing health and performance statistics of the solution, security events recorded in the Firewall logs and status of service requests for the week.
- g) Investigation and analysis of security events recorded in the Firewall solution and recommendation of mitigation steps.

- h) Supply and implementation of any firmware/Operating System Update/software update/Patch released by the OEM. Such updates must be provided free of cost.
- i) Coordination with respective OEMs.
- j) Backup and recovery management for the solution: Critical system files, configuration files or any necessary files which is needed to restore normal functionality of the solution in the event of any failure within the solution must be backed up. Necessary backup infrastructure will be provided by AEGCL.
- k) Software License management for the solution.
- l) Management/renewal of Content update/signature update subscriptions for the solution.

1.9.0 The managed services shall be governed by the following Service Level Agreement (SLA):

All the activities in the scope of managed services shall be categorized into the following:

Service Level Agreement (SLA):

- 1) It is complete bidder's responsibility to maintain the uptime in the AEGCL SD-WAN network.
- 2) Bidders have to keep some branch devices in stock to maintain the SLA of replacing within 24 Hrs.

Penalty clause:-

In case if monthly uptime falls below the guaranteed level, AEGCL shall impose a penalty as per below mentioned slab of that particular equipment value and same will be deducted from any bill payable to the vendor during the contract / warranty period.

Uptime of the individual Network/Services	Penalty of (%) of Total hardware cost of respective location
Set of Devices (Hardware/Software) component failure leading to the complete disruption of the objective performed by the said devices. (Both DC/DR down at the same time)	10% of cost of hardware on each occasion 100% of hardware cost of affected location if problem not resolved within 24 Hours
>= 99.50%	0
> 98.50 to < 99.50	2.5
> 97.50 to < 98.50	5
> 96.50 to < 97.50	10
> 95.50 to < 96.50	15
> 95.00 to < 95.50	20
> 90.00 to < 95.00	25
< 90	100

The percentage uptime shall be calculated on monthly basis as follows:

$$= \frac{\text{Total hours in a month} - \text{total outage hours in that month}}{\text{Total hours in that month}} \times 100$$

Service Delivery Requirement: The following table defines the service delivery requirement for the solution:

Category	Maximum resolution time
Service Request	2 hours
Software issue/Security incidents	4 hours
Hardware issue	12 hours

1.10.0 TIME SCHEDULE:

The successful bidder shall have to complete the works within **150 (One Hundred Fifty Days) days** from the date of contract commencement.

1.4.0 ELIGIBILITY CRITERIA:

S.No	Clause	Documents required
	<p>Subject to meeting the Qualifying Requirements, a Bidder may be a firm or company.</p> <p>a) When the bidder is a firm, the names and address of the partners should be indicated and a copy of the certificate of registration with the concerned Registrar of firms should be enclosed with the Bid.</p> <p>b) When the bidder is a Company, the company registration document along with Memorandum of Association should be submitted.</p> <p>c) When the bidder is an individual carrying on business in a firm's name, the tender should be submitted by the owner of the firm, who may describe himself as carrying on business in the firm's name.</p> <p>d) When the bidder is a Joint Venture (JV) of two firms/company as partners, all partners shall be jointly and severally liable. The JV shall legally authorize one of the partners as the lead partner for the purpose of submitting the bid, incur liabilities; receive payments and instructions on behalf of the others. A copy of the notarized JV agreement, executed on Non-Judicial stamp paper, shall be submitted with the bid. However, in case of successful bid, the agreement shall be signed by all the partners, so as to be legally binding on all the partners.</p>	<p>a) copy of the certificate of registration with the concerned Registrar of firms.</p> <p>b) Company registration document along with Memorandum of Association</p> <p>c) Firm registration certificate.</p> <p>d) A copy of the registered/notarized JV agreement, executed on Non-Judicial stamp paper</p>

	A bid submitted by a JV shall be signed by JV partners so as to be legally binding on all partners.	
2	The Bidder should have a minimum average annual turnover of More than Rs. 2 Crores in last three financial years.	Attested audited copies of bidder's annual reports for the last three financial years / Chartered Accountant Certificate for Turnover
3	The Bidder should have positive net worth for the last three financial years	Chartered Accountant certificate for Net-worth.
4	The Bidder should have technical expertise in networking and server related works, which includes installation, configuration, commissioning in the last 3 years.	Copy of Work Order.
5	Bidder (single entity/any one of JV partner) must have experience of successfully executing/completing 'supply & commissioning of NGFW (Next Generation Firewall)' in at least 2 (two) locations and commissioning of associated networking components.	Copy of Work Order.
6	The offered SDWAN solution must have been deployed in at least 50 locations in a govt. department/state PSU/Central PSU/Bank in the last 3 years.	Copy of Work Order.
7	The OEM/ Bidder should have ISO 9001/ ISO 27001/ ISO 20000-1 Certification	Copy of Valid certificate
8	The Bidder should have valid GSTIN and PAN Certification	Copy of Valid certificate
9	The Bidder should have a support/Local office in Assam	Copy of valid rental agreement / Landline Bill/GST Doc
10	The Bidder must have more than 10 professionals.	List of manpower
11	The Bidder shall not be under a Declaration of Ineligibility for corrupt or fraudulent practices or debarred or blacklisted with any of the Government agencies, as on Bid Submission date.	Self-Declaration in this regard by the authorized signatory
12	The bidder should submit notarized power of attorney certifying the authorized signatory.	Power of Attorney executed by the Bidder
13	The bidder shall provide an undertaking in their offer confirming that the OEM whose product/solution is proposed, shall have technical support centre in India for providing Technical support. The details of location of their support centre to be mentioned in their undertaking.	Undertaking from OEM in their letter head.
14	The bidder shall provide an undertaking in their offer confirming that the proposed solution (including all the hardware and software) shall have a minimum of 05 (Five) years of end-of-life support from the date of installation and commissioning and shall submit in this regard respective OEM documentation (hardware as well as software) at the time of installation and	Undertaking from OEM in their letter head.

	commissioning. Bidder shall also confirm any firmware upgradation without any financial involvement to AEGCL.	
15	Bidder has to Submit Manufacturer Authorization (MAF) Letter from the respective OEM specific to this tender	Letter from OEM to be Submitted as per Annexure-I
16	Bidder has to Submit a SD-WAN solution design document along with the Bid for SD-WAN Implementation. Bidder may have to give the technical presentation for the same during the process of evaluation.	Solution Design Doc to be Submitted

1.4.1. FINANCIALS:

- i. As a minimum, a Bidder's net worth calculated as the difference between total assets and total liabilities should be positive. As supporting document, bidder should submit audited balance sheets or other financial statements acceptable to the Purchaser, for last 3 (three) financial years to demonstrate the current soundness of the Bidders financial position and its prospective long-term profitability. Apart from audited balance sheet, bidder shall submit duly filled and signed **Form 'FIN-1'** given in Section 2. Using the 'Form LIT – 1' (Section 2, Bidding Form), bidder shall list all Pending Litigation. All pending litigation shall be treated as resolved against the Bidder and so shall in total not represent more than 50% percent of the Bidder's net worth.
- ii. Bidder must have minimum **Average Annual Turnover (AAT) of Rs2,00,00,000/- (Rupees Two Crore Only)**. AAT shall be calculated by averaging total certified payments received for contracts in progress or completed, for the last 3 (three) years. The bidder shall furnish, along with its bid, audited balance sheets and duly filled up Form '**FIN-2**' in support of this Clause.
- iii. Bidder must demonstrate access to, or availability of, financial resources such as liquid assets, unencumbered real assets, lines of credit, and other financial means.
Bidder must submit duly filled and signed **Form FIN-3** of section 2 in support of this clause.

1.5.0 SITE VISIT:

i. The Bidders are advised to visit and examine the sites where the works are to be carried out and its surroundings and obtain for itself on its own responsibility all information that may be necessary for preparing the bid and entering into a contract for the provision of plant and services. The costs of visiting the sites shall be at the Bidder's own expense.

ii. The Bidders and any of its personnel or agents will be granted permission by the Purchaser to enter upon its premises and lands for the purpose of such visit, but only upon the express condition that the Bidder, its personnel, and agents will release and indemnify the Purchaser and its personnel and agents from and against all liability in respect thereof, and will be responsible for death or personal injury, loss of or damage to property, and any other loss, damage, costs, and expenses incurred as a result of the inspection.

1.6.0 QUANTUM OF WORK:

The quantum of work is stated in the PRICE SCHEDULE at the end of section 2 – bidding forms.

1.7.0 QUERY ON THE BIDDING DOCUMENT:

Prospective bidder may submit queries, if felt necessary, requesting clarification of any bid clause . Such queries must be submitted through **email (infosec@aegcl.co.in)** by the **Tender clarification end date and time** mentioned in the Bid Data Sheet as per the format mentioned in **Annexure-II**. Purchaser as per the following format shall clarify to the extent felt necessary or issue corrigendum for any amendment required in the bidding document. Such corrigendum/clarification shall be made available in the e tendering portal and official website of AEGCL, www.aegcl.co.in .

1.8.0 CLARIFICATION OF BIDS:

To assist in the examination, evaluation, and comparison of the Technical and Price Bids, and qualification of the Bidders, the Purchaser may, at its discretion, ask any Bidder for a clarification of its bid. Any clarification submitted by a Bidder that is not in response to a request by the Purchaser shall not be considered. The Purchaser's request for clarification and the response shall be in writing. No change in the substance of the Technical Bid or prices in the Price Bid shall be sought, offered, or permitted, except to confirm the correction of arithmetic errors discovered by the Purchaser in the evaluation of the bids. If a Bidder does not provide clarifications of its bid by the date and time set in the Purchaser's request for clarification, its bid may be rejected.

1.9.0 DEADLINE FOR SUBMISSION OF BIDS:

Bids shall be received ONLINE only on or before the date and time indicated in the **Bid Data Sheet (BDS)**.The Purchaser may, at its discretion, extend the deadline for the submission of bids by amending the Bidding Document, in which case all rights and obligations of the Purchaser and Bidders previously subject to the deadline shall thereafter be subject to the deadline as extended.

1.10.0 SUBMISSION OF BID:

The bidder shall submit the techno commercial & price bid through e-tendering portal <https://assamtenders.gov.in>. All documents as required by this bidding document shall be scanned and uploaded in the portal. Price schedule should be submitted in the format provided in the online portal. Bidder must go through the document checklist provided in this bidding document and submit all required document. Bidders are also requested to submit the information in the format provided in this bidding document where applicable.

In addition to the online bid submission, (i) Original copy of **EMD/Online EMD payment receipt**, (ii) Duly filled and signed **tender submission form** and (iii) **Authorization letter of bid signatory** must be submitted in a sealed envelope superscribed with the name of bidder, full address, IFB reference, name of work etc. at the office of the Managing Director, Assam Electricity Grid Corporation Ltd, Bijulee Bhawan, Paltan Bazar Guwahati-781001 **one hour prior to bid submission end date and time**. **In case these documents are not received, the bid shall be summarily rejected.**

1.11.0 BID VALIDITY:

The validity of bid shall be for **180 (One Hundred Eighty) days** from the date of bid submission end date.

1.12.0 OPENING OF TECHNO-COMMERCIAL BIDS

The Purchaser shall conduct the opening of Technical Bids through online process at the address, date and time specified in the BDS. Bidders at their discretion may attend the techno-commercial bid opening.

Price bid of those bidders shall only be opened whose techno-commercial bids are found to be responsive to the requirement of the bidding document.

1.13.0 TENDER FEE

Bidders must make online deposit of non-refundable tender processing fee of **Rs.5,000.00** (Rupees Five Thousand) only while online submission of tenders in <https://assamtenders.gov.in>.

1.14.0 EARNEST MONEY DEPOSIT (EMD):

EMD amount mentioned in BDS must be submitted online through e-tendering portal. Copy of the EMD payment receipt should be submitted along with Techno-Commercial bid. Alternatively, if allowed bidders may submit EMD BG from schedule banks in favour of Managing Director, AEGCL. The earnest money will be released to the unsuccessful bidders on finalization of the tenders. The EMD to the successful bidder will be released on submission of Security Deposit after execution of the contract agreement.

1.15.0 TENDER FEE AND EMD EXEMPTION:

The Earnest Money Deposit and Tender Fees will be exempted for bidders which comes under the Micro and Small (MSE) category having relevant NSIC/UDYAM registration subject to submission of adequate documentary evidence in support of their enlistment in the specific category. The NSIC/UDYAM registration copy must be submitted along with the technical bid for verification. In case, it is found that the NSIC/UDYAM certificate is invalid, the concerned bid will be rejected, and appropriate action may be initiated as per law.

1.16.0 PRICE BASIS:

Cost quoted by the bidder shall be inclusive of all scope of work as specified in this bidding document including any related services that is implicit to carry out the work successfully. Price will be firm and no price variation will be allowed within the completion period given in the work order.

1.17.0 DEVIATIONS, RESERVATIONS, AND OMISSIONS:

During the evaluation of bids, the following definitions apply:

- a) "Deviation" is a departure from the requirements specified in the Bidding Document;
- b) "Reservation" is the setting of limiting conditions or withholding from complete acceptance of the requirements specified in the Bidding Document; and
- c) "Omission" is the failure to submit part or all of the information or documentation required in the Bidding Document.

1.18.0 PRELIMINARY EXAMINATION OF TECHNICAL BIDS:

The Purchaser shall examine the Techno-commercial Bid to confirm that all documents and technical documentation requested in this bidding document have been provided, and to determine the completeness of each document submitted. If any of these documents or information is missing, **the Bid may be rejected.**

The Purchaser shall confirm that the following documents and information have been provided in the Technical Bid. If any of these documents or information is missing, the offer **shall be rejected.**

- (a) Original copy of **EMD BG or Online EMD payment receipt/MSME** Registration Certificate
- (b) Duly filled and signed **tender submission form** and
- (c) **Authorization letter of bid signatory**

Bidder should submit hard copies of the documents mentioned above in (a), (b) and (c) in a physical envelope prior to deadline for technical bid submission. Techno-commercial bids shall be summarily rejected if these three documents are not submitted in hard copy deadline for technical bid submission.

1.19.0 RESPONSIVENESS OF TECHNO-COMMERCIAL BID:

The Purchaser's determination of a bid's responsiveness is to be based on the contents of the bid itself. A substantially responsive Techno-commercial Bid is one that meets the requirements of the Bidding Document without material deviation, reservation, or omission. A material deviation, reservation, or omission is one that,

- a) If accepted, would:
 - (i). Affect in any substantial way the scope, quality, or performance of the plant and services specified in the Contract; or
 - (ii). Limit in any substantial way, inconsistent with the Bidding Document, the Purchaser's rights or the Bidder's obligations under the proposed Contract; or
- b) If rectified, would unfairly affect the competitive position of other Bidders presenting substantially responsive bids.

The Purchaser shall examine the Techno-commercial Proposal, to confirm that the requirement of the bidding document have been met without any material deviation or reservation.

If a bid is not substantially responsive to the requirements of the Bidding Document, it shall be rejected by the Purchaser and may not subsequently be made responsive by correction of the material deviation, reservation, or omission.

1.20.0 EVALUATION OF PRICE BIDS:

The Purchaser shall use the criteria and methodologies listed in this Clause. No other evaluation criteria or methodologies shall be used. To evaluate a Price Bid, the Purchaser shall consider the following:

- a) The bid price excluding taxes as quoted in the Price Schedules;
- b) Price adjustment for correction of arithmetical errors.

1.21.0 AWARD CRITERIA:

Purchaser shall in general award the contract to the lowest substantially responsive bidder. However, the purchaser reserves the right to not award contract to the lowest substantially responsive bidder without thereby incurring any liability to Bidders.

1.22.0 PURCHASER'S RIGHT TO ACCEPT ANY BID, AND TO REJECT ANY OR ALL BIDS:

The Purchaser reserves the right to accept or reject any bid, and to annul the bidding process and reject all bids at any time prior to contract award, without thereby incurring any liability to Bidders. In case of annulment, all bids submitted and specifically, bid securities, shall be promptly returned to the Bidders.

1.23.0 NOTIFICATION OF AWARD:

Prior to the expiration of the period of bid validity, the Purchaser shall notify the successful Bidder, in writing, that its bid has been partially or fully accepted quoting acceptance of the bid. The notification letter (hereinafter called the "Notification of Award") shall specify the sum that the Purchaser will pay the Contractor (hereinafter called "Contract Price") in consideration of the execution and completion of the services. Until a formal contract is prepared and executed, the notification of award shall constitute a binding Contract.

1.24.0 PERFORMANCE SECURITY:

Within 15 (five) days of receipt of the Notification of Award from AEGCL, the successful bidder shall furnish to AEGCL a performance security in an amount of **10 (Ten) percent** of the Contract Price in accordance with the Conditions of Contract. The form of performance security provided in Section 3 of the bidding documents may be used or some other form acceptable to AEGCL. The performance guarantee BG shall be valid through 60 days beyond the guarantee period.

1.25.0 SIGNING OF CONTRACT AGREEMENT:

Within **15 (Fifteen) days** of receipt of the Notification of Award, the successful Bidder shall be required to sign the Contract Agreement with AEGCL using for that purpose, the contract form provided with this bidding document failing which AEGCL at its discretion may cancel the award.

Annexure to SECTION 1
BID DATA SHEET

Name of Work	Design, Supply, installation, Testing, commissioning and support post installation for NGFW based SD-WAN solution and related services at Assam Electricity Grid Corporation Limited.
Location of Work	All offices of AEGCL
NIT No.	AEGCL/MD/IT/NGFW-SDWAN/09
Bid Identification No.	AEGCL/MD/IT/NGFW-SDWAN/08
Estimate(In Indian Rupees)	
Tender Document Fee	Rs. 5000.00 (Five Thousand) Only
Earnest Money Deposit(EMD)	Rs. 10,00,000.00 (Ten Lakhs) Only
Purchase's Address for correspondence	<p>The Chief General Manager (PP&D), AEGCL 1st Floor, Bijulee Bhawan, Paltanbazar Guwahati (Assam) 781001</p> <p>Telephone: +91 361 2739520</p> <p>Electronic mail address: infosec@aegcl.co.in</p>
Bid query	Bidders shall submit queries to the bid as per the format mentioned in Annexure-II within 17:00 hrs of 27:09:2023. Queries received after due that will not be entertained.
Bid submission mode	E-tenders shall be accepted through online portal https://assamtenders.gov.in only
Address for bid opening	<p>The Chief General Manager (PP&D), AEGCL Floor/Room number: First Floor Street Address: Bijulee Bhawan, Paltanbazar City: Guwahati (Assam) PIN Code: 781001 Country: India</p>
Key dates	<p>Tender start date: 12:00 Hrs 21/09/2023 Tender submission start date: 10:00 Hrs 03/10/2023 Tender clarification end date: 17:00 Hrs 27/09/2023 Tender submission end date and time: 12:00 Hrs 06/10/2023 Techno-commercial bid opening date: 14:00 Hrs 07/10/2023</p>

SECTION 2 BIDDING FORMS

(This Section contains the forms which are to be completed by the Bidder and submitted as part of his Bid)

Form – 1

Document checklist

SL. No.	Document to be submitted	Submitted(Yes/No)	Name of uploaded PDF
1.	Letter of technical bid (Form-2)		
2.	Notarised Power of attorney for the person signing the tender		
3.	Tender Fee		
4.	Bank Guarantee for EMD (Form-3)		
5.	Bidders company/firm registration certificate/certificate of incorporation		
6.	GST registration		
7.	Filled up Form ELI-1		
8.	Filled up Form LIT		
9.	Filled up Form FIN-1		
10.	Filled up Form FIN-2		
11.	Filled up Form FIN-3		
12.	Audited Balance sheet for last three years		
13.	Bank solvency certificate/other supporting document		
14.	Filled up Form EXP-1		
15.	Order/Contract copies establishing past experience		
16.	Completion certificate of work executed		
17.	Completion schedule bar chart		
18.	Documents relating to Personnel Capability of the Bidder*		
19.	Documents relating to Equipment Capabilities of the bidder**		
20.	Additional documents a) Non-malicious code declaration from SD WAN OEM b) Non-blacklisting declaration of SDWAN OEM by any state govt./central govt./PSU/National Bank c) Spare depot availability in India from SD WAN OEM		

	d) Support and Service commitment document from SDWAN OEM e) End of Life (EOL) document from SDWAN OEM		
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*The Bidder (single entity/any one of JV partner) must have suitably qualified personnel to fill positions required for contract implementations. The Bidder will supply information of the key personnel, design & engineering staff, support staff, field staff giving details of experience in a) Supply, installation, commissioning and after installation support for NGFW based SD-WAN solution and b) Active Directory implementation at Assam Electricity Grid Corporation Ltd..

Note: Bidders are requested to submit all required documents in e-tender portal and **physical copies of i) Letter of technical bid, ii) EMD iii) Power of Attorney(notarized) for bid signatory to Tender inviting authority and iv) registered/notarized JV agreement if applicable**

(In bidder's letterhead)

Form-2
Letter of technical bid

Date:

To

The Chief General Manager (PP&D)
AEGCL, 1st Floor, Bijulee Bhawan,
Paltan Bazar, Guwahati-01

Bid Identification No:

Sir,

I/We the undersigned, declare that, we, [insert name of the bidder/incase of JV insert JV partners name] having registered office at [insert address of the registerd office/incase of JV insert address of partners] having experience in Execution of similar works, have read the bid document and do not have any reservation to any of the clause therein. We offer to execute the work of:

- a) Supply, installation, commissioning and after installation support for NGFW based SD-WAN solution**
- and**
- b) Active Directory implementation at Assam Electricity Grid Corporation Ltd.**

in conformity with the bid specification. Our Bid shall be valid for a period of **180 (One Hundred Eighty)** days from the date fixed for the bid submission deadline and it shall remain binding upon us at any time before the expiration of that period.

Common Seal and Signature of the authorised person:

Name:

Designation:

Bank Guarantee
(To be stamped in accordance with Stamp Act)
(The non-Judicial Stamp Paper should be in the name of issuing Bank)

Bank's Name:

Address of Issuing Branch or Office:

Email id and phone no for correspondence:

Beneficiary: The Managing Director, AEGCL

Name and Address of Purchaser

Bid Security No.:

We have been informed that *name of the Bidder*. (Hereinafter called "the Bidder") intends to submit to you its bid against *Bid ref* for Hotline OPGW Stringing in 132 KV Kahilipara-Dispur Line.

Furthermore, we understand that, according to your conditions, bids must be supported by a bid guarantee.

At the request of the Bidder, we *name of Bank with address*. hereby irrevocably undertake to pay you any sum or sums not exceeding in total an amount of *amount in figures* (*amount in words*) upon receipt by us of your first demand in writing accompanied by a written statement stating that the Bidder is in breach of its obligation(s) under the bid conditions, because the Bidder:

- (a) has withdrawn its Bid during the period of bid validity specified by the Bidder in the Form of Bid; or
- (b) does not accept the correction of errors in accordance with the Instructions to Bidders (hereinafter "the ITB"); or
- (c) having been notified of the acceptance of its Bid by the Purchaser during the period of bid validity, (i) fails or refuses to execute the Contract Agreement, or (ii) fails or refuses to furnish the Performance Security, in accordance with the ITB.

This guarantee will expire: (a) if the Bidder is the successful Bidder, upon our receipt of copies of the Contract Agreement signed by the Bidder and the performance security issued to you upon the instruction of the Bidder; and (b) if the Bidder is not the successful Bidder, upon the earlier of (i) our receipt of a copy your notification to the Bidder of the name of the successful Bidder; or (ii) twenty-eight days after the expiration of the Bidder's bid.

Consequently, any demand for payment under this guarantee must be received by us at the office on or before that date.

BG expiry date:

BG claim date:

Bank's seal and authorized signature(s)

NOTE

1. *All italicized text is for use in preparing this form and shall be deleted from the final document. An amount is to be inserted by the Guarantor, representing the EMD amount as per bid.*
2. *This guarantee shall be valid upto 30 days beyond the bid validity.*
3. *For BG amount equal to or more than 50,000.00, BG should be signed by two bank officers to be valid.*
4. *Address of the banker with email and phone number for correspondence with banker should be clearly mentioned. Any correspondence related to the BG with the banker shall be made to the address mentioned in the BG.*

Sl. No.	Particulars	Bidders response
1	Bidders name and registered address	
2	Bidders authorised representative, designation and contacts	
3	GST registration no.	
4	Bid validity	180 (One Hundred Twenty) Days
5	MSME/SSI registration Udyog Adhaar/NSIC registration available?	Yes/No
6	EMD exemption claimed	Yes/No

(Signature and common seal)

Name:

Designation:

Date:

Year	Matter in Dispute	Value of Pending Claim in Rupees	Value of Pending Claim as a Percentage of Net Worth

(Signature and common seal)

Name:

Designation:

Date:

Information from Balance Sheet

Financial Data for Previous 3 Years [Rupees]	Year 1 [Mention Financial Year]	Year 2 [Mention Financial Year]	Year 3 [Mention Financial Year]
Total Assets			
Total Liabilities			
Net Worth			
Current Assets			
Current Liabilities			

Information from Income Statement

Total Revenues			
Profits Before Taxes			
Profits After Taxes			

Note: To be supported by audited financial documents

(Signature and common seal)

Name:

Designation:

Date:

Annual Turnover Data for the Last 3 Years		
Year	Amount (Rupees)	
Average Annual Turnover		

The information supplied should be the Annual Turnover of the Bidder in terms of the amounts billed to clients for each year for contracts in progress or completed.

(Signature and common seal)

Name:

Designation:

Date

Bidders should provide information on their current commitments on all contracts that have been awarded, or for which a letter of intent or acceptance has been received, or for contracts approaching completion, but for which an unqualified, full completion certificate has yet to be issued.

No.	Contract No., Customer and name of work	Contract value(Rs.)	Estimated Completion Date	Value of Outstanding Work (Rs.)
1				
2				
3				
4				
5				
6				

(Signature and common seal)

Name:

Designation:

Date:

**Form – EXP-1
EXPERIENCE**

Each Bidder must fill in this form

Sl. No.	Customer name	Contract No. and date	Work order value	Brief description of work	Completion date

Note: Order/contract copies are to be submitted as supporting document. Performance/ completion certificate to be submitted wherever applicable.

(Signature and common seal)

Name:

Designation:

Date:

Format of Price Schedule

(To be uploaded in e-Tender portal as per the format mentioned in the e-tender portal)

All prices are in Indian Rupees

Sr.#	Product	Qty	Unit Price	Total Price
1	SD-WAN Firewall Appliance at DC-DR in High Availability mode with 3 Years UTP Subscription, Warranty, Support Contract and Licensing- Type 1	2		
2	SD-WAN Firewall Appliance @ Branch with 3 Years UTP Subscription, Warranty, Support Contract and Licensing - Type 2	7		
3	SD-WAN Firewall Appliance @ very Small branch with 3 Years UTP Subscription, Warranty, Support Contract and Licensing, Type - 3	114		
4	SD-WAN Virtual Firewall Appliance @ DC & DR with 3 Years UTP Subscription, Warranty, Support Contract and Licensing (for Secure ERP Access), Type - 4	2		
5	On premise SD-WAN Management and Logging with 3 Years Warranty, Support Contract and Licensing with all necessary Server hardware and Software's High Availability.	1		
6	VPN Server and VPN Client License for 100 Users with 3 Years support	1		
7	Server with MS Windows Server 2022 - Standard	2		
8	27 U Floor Mount Rack for DC-DR	2		
9	6 U Wallmount Rack for Branches	121		
10	2 Mtr. Cat 6 UTP Cable	400		
11	600 VA Line-Interactive UPS - 3 years Warranty on both UPS and Battery	121		
12	5 KVA Online UPS with 30 min. battery backup-3 years Warranty on both UPS and Battery	2		
13	Basic Electrification at Site (Electrical Cable Laying from the MCB to Rack UPS - 30 Mtr. Max Distance from MCB to Rack)	121		
14	Electrical Earthing for DC and DR center	2		
15	Electrical Earthing Branch	121		
16	Training to AEGCL personnel	1		
17	One time Installation, Configuration and commissioning of complete SD-WAN Solution and Active Directory Implementation and Documentation and Project management	1		

	GST			
	Total with GST			

Note: The price schedule presented here is for reference only. Bidders must submit the price using the price schedule available in e-tendering portal. This is not to be submitted in the techno-commercial envelope.

- 1) If any item is not specifically mentioned in the price schedule but required to complete the job successfully, same shall be deemed to be included in any of the items of the price schedule.

List of office/establishment in AEGCL(excluding GSS)		
SL. No	Name of Office	Cell
1	Corporate Office	HQ
2	SLDC	SLDC
3	CGM, T&C and Comm., Narengi	T&C and Comm
4	AGM(C), Design & Project, Kahilipara	Civil
5	GM, LAZ, Narengi	ZONE
6	GM, CAZ, Nagaon	ZONE
7	GM, UAZ, Dibrugarh	Zone
8	DGM, T&T Circle Dibrugarh	Circle
9	AGM,132 KV GSS, Dibrugarh	DIVISION
10	AGM,220 KV GSS, Tinsukia	DIVISION
11	DGM, T&T Circle North Lakhimpur	Circle
12	AGM, N/Lakhimpur (including Nalkata GSS)	DIVISION
13	AGM,132 KV GSS, Dhemaaji	DIVISION
14	DGM, T&T Circle Jorhat	CIRCLE
15	AGM Golaghat	DIVISION
16	AGM,132 KV Gargaon GSS, Nazira	DIVISION
17	AGM,220 KV GSS, MARIANI	DIVISION
18	DGM, T&T Circle Tezpur	Circle
	AGM,132 KV GSS Type-II, Depota	DIVISION
	AGM, T&C Division, Tezpur	T&C DIVISION
19	AGM,T&T Division, Nagaon	DIVISION
20	AGM,220 KV GSS, Samaguri	DIVISION
21	DGM,T&T Circle Silchar	Circle
	AGM,T&C Division, Silchar	T&C DIVISION
	AGM,T&T Division, Silchar	DIVISION
	AGM,132 KV GSS, Panchgram	DIVISION
22	DGM,T&T Circle Guwahati	Circle
23	AGM,Guwahati Trans. Division Narengi,	DIVISION
24	AGM,132 KV GSS, Kahilipara	DIVISION
25	AGM,132 KV & 220 kV GSS, Rangia	DIVISION
26	AGM,220 KV GSS, Sarusajai	DIVISION
27	DGM,T&T Circle,BONGAIGAON	Circle
	AGM,T&C Division,Bongaigaon	T&C DIVISION
	AGM,132 KV GSS,Dhaligaon	DIVISION
28	AGM,220 KV GSS,Salakati	DIVISION
29	DGM,400 KV GSS,Kukurmara	Circle
30	AGM,220 KV GSS,Agia	DIVISION
31	DGM, LA T&C and Comm.,Guwahati	Circle
32	AGM, T&C,Guwahati	T&C Division
33	AGM, T&C ,Kukurmara	T&C Division
34	AGM, Comm LA ,Guwahati	COMM. DIVISION
35	DGM, CA, T&C Comm., Samaguri	Circle

36	AGM, T&C Division, Samaguri	T&C DIVISION
37	AGM, Comm. CA, Samaguri	COMM. DIVISION
38	DGM, UA T&C Circle, Dibrugarh	Circle
39	AGM T&C Dibrugarh	T&C DIVISION
40	AGM, T&C Division, N/Lakhimpur	T&C DIVISION
41	AGM T&C Jorhat	T&C DIVISION
42	AGM UA Comm div Dibrugarh	COMM. DIVISION
43	MRT Workshop, Guwahati	MRT Subdivision

List of GSS in AEGCL		
SL. No	Name of GSS	Type
1	220 KV GSS, Namrup	GSS
2	132 KV GSS, Moran	GSS
3	132 KV GSS, Behiating	GSS
4	132 KV GSS, Margherita (Ledo)	GSS
5	132 KV GSS, Rupai	GSS
6	132 KV GSS, Bordubi	GSS
7	132 KV GSS. Chapakhowa	GSS
8	132 KV GSS, Gohpur	GSS
9	132 KV GSS, Pavoi	GSS
10	132 KV GSS, Majuli	GSS
11	132 KV GSS, Silapthar	GSS
12	132 KV GSS, Golaghat	GSS
13	132 KV GSS, Teok	GSS
14	132 KV GSS, Jorhat(W)	GSS
15	132 KV GSS, Bokajan	GSS
16	132 KV GSS, Bokakhat	GSS
17	132 KV GSS, Sarupathar	GSS
18	132 KV GSS, DIPHU	GSS
19	132 KV GSS, Betbari	GSS
20	132 kV GSS, LTPS	GSS
21	132 KV GSS, Sonari	GSS
22	132KV GSS, Garmur	GSS
23	220 kV Amguri Solar Park GSS	GSS
24	132 KV GSS, Umrangsu	GSS
25	132 KV GSS, Khaloigaon	GSS
26	132 kV GSS Type-II, Tezpur	GSS
27	132 KV GSS, Rowta	GSS
28	132 KV GSS, Ghoramari	GSS
29	220 KV GSS, Sonabil	GSS
30	132 kV GSS, Tangla	GSS
31	132 KV GSS, Dhekiajuli	GSS
32	132 KV GSS, Sankardevnagar	GSS
33	132 KV GSS, Pailapool	GSS
34	132 KV GSS, Halflong	GSS
35	132 KV GSS, Srikona	GSS

36	132KV GSS, Hailakandi	GSS
37	132KV GSS, Dullavcherra	GSS
38	132 KV GSS, Karimganj	GSS
39	132 KV GSS, Narengi	GSS
40	220 KV Amingaon GSS	GSS
41	132 KV GSS, Baghjap	GSS
42	132 KV GSS, Sishugram	GSS
43	132KV GSS, Chandrapur	GSS
44	132KV GSS, Capital	GSS
45	132 KV GSS, Kamakhya	GSS
46	220 KV GSS, Sonapur	GSS
47	132 KV GSS, Sipajhar	GSS
48	132 KV GSS, Nalbari	GSS
49	220 KV GSS, Kamalpur	GSS
50	132 kV GSS Type-II, Barpeta	GSS
51	132 KV GSS, Jawaharnagar	GSS
52	132 kV Type II, AIIMS GSS	GSS
53	132KV GSS, Gauripur	GSS
54	132 KV GSS Joyma	GSS
55	132 KV GSS, Barnagar	GSS
56	132 KV GSS, Bilashipara	GSS
57	132/33 KV GSS, Kokrajhar	GSS
58	132KV GSS, Azara	GSS
59	220 KV GSS, Boko	GSS
60	132 KV GSS, Jogighopa	GSS
61	132 KV GSS, Matia	GSS
62	132 kV GSS Type-II, Hatsingimari	GSS
63	132 KV GSS, Dibrugarh	GSS
64	220 KV GSS, Tinsukia	GSS
65	132 KV Nalkata, GSS	GSS
66	132 KV GSS Dhemaji	GSS
67	132KV Gargaon GSS Nazira	GSS
68	220 KV GSS MARIANI	GSS
69	132 kV GSS Type-II Depota	GSS
70	220 KV GSS, Samaguri	GSS
71	132 kV GSS, Panchgram	GSS
72	132 KV GSS Kahilipara	GSS
73	132 KV & 220 kV GSS, Rangia	GSS
74	220 KV GSS, Sarusajai	GSS
75	132 KV GSS Dhaligaon	GSS
76	220 KV GSS, Salakati	GSS
77	400 KV GSS, Kukurmara	GSS
78	220 KV GSS, Agia	GSS

SECTION 4
General Conditions of Supply and Erection of AEGCL

This Section 'General Conditions of Supply and Erection of AEGCL' supplementary to Section -5 'Special Conditions of Contract' of this document and can be downloaded from www.aegcl.co.in.

Whenever there is a conflict, the provisions in SCC or the other Sections of this bid document shall prevail over those in the 'General Conditions of Supply and Erection of AEGCL'.

Special Conditions of Contract

5.1.0 DEFINITION OF TERMS

“Contract” means the Contract Agreement entered into between the Purchaser and the Contractor, together with the Contract Documents referred to therein; they shall constitute the Contract, and the term “the Contract” shall in all such documents be construed accordingly.

“Contract Documents” means the documents listed in Article 1.1 (Contract Document) of the Contract Agreement (including any amendments thereto).

“Contract Price” means the price payable to the Contractor as specified in the Agreement, subject to such additions and adjustments thereto or deductions therefrom, as may be made pursuant to the Contract.

“Day” means calendar day

“Year” means 365 days.

“Month” means calendar month.

“Party” means the “Purchaser” or the “Contractor”, as the context requires.

“Purchaser” means the Assam Electricity Grid Corporation Limited (in short AEGCL) and its assignees.

The “Contractor” shall mean the tenderer / bidder whose tender/ bid has been accepted by the “Purchaser” and shall include the bidder’s legal representatives, successors and assignees.

“Goods” means all of the commodities, raw material, machinery and equipment, and/or other materials that the Contractor is required to supply to the Purchaser under the Contract.

“Delivery” means the transfer of the Goods from the Contractor to the Purchaser in accordance with the terms and conditions set forth in the Contract.

“Completion” means the fulfilment of the Related Services by the Contractor in accordance with the terms and conditions set forth in the Contract.

“Related Services” means the services incidental to the supply of the goods, such as insurance, installation, training and initial maintenance and other similar obligations of the Contractor under the Contract.

The “Specification” shall mean the “Purchaser’s Requirements”.

“Contractor” means the natural person, a company/firm, or a combination of these, whose bid to perform the Contract has been accepted by the Purchaser and is named as such in the Agreement, and includes the legal successors or permitted assigns of the Contractor.

5.2.0 CONTRACT DOCUMENTS

- 5.2.1. Subject to Article 1.2 (Order of Precedence) of the Contract Agreement, all documents forming part of the Contract (and all parts thereof) are intended to be correlative, complementary and mutually explanatory. The Contract shall be read as a whole.

5.3.0 LEGAL JURISDICTION

- 5.3.1. For any litigation arising out of the contract which cannot be resolved through mutual agreement or through Arbitration the honorable Guwahati High Court will have sole jurisdiction of all settlement.

5.4.0 LANGUAGE

- 5.4.1. The ruling language of the Contract shall be English.

5.5.0 SCOPE OF WORK

- 5.5.1. The items to be supplied shall be as specified in section 3- Purchaser's requirement and quantity as stated in Price Schedule of Section -2, Bidding Forms.
- 5.5.2. Unless otherwise stipulated in expressly limited in the *Purchaser's Requirements*, the Scope of Work/Supply shall include all such items not specifically mentioned in the Contract but that can be reasonably inferred from the Contract as being required for attaining Delivery and Completion of the Goods and Related Services as if such items were expressly mentioned in the Contract.

5.6.0 DELIVERY SCHEDULE

- 5.6.1. Contract completion period shall be counted from contract commencement date. Completion of the work shall be within **120 (One Hundred Twenty) days** from Contract commencement.
- 5.6.2. The Delivery of the Goods and Completion of the Related Services shall be in accordance with the Delivery and Completion Schedule specified in the Article 3 of the Contract Agreement (Contract Forms) or within such extended time to which the Contractor shall be entitled under **SCC Clause 5.14.0** hereof.

5.7.0 CONTRACT PRICE

- 5.7.1. The Contract Price shall be as specified in **Article 2 (Contract Price)** of the Contract Agreement.
- 5.7.2. Unless an escalation clause is provided for in the **Article 2 (Contract Price)**, the Contract Price shall be a firm shall not subject to any alteration, except in the event of a Change in the scope or changes in applicable tax rates or as otherwise provided in the Contract.

5.8.0 TERMS OF PAYMENT

- 5.8.1. The contract price shall be paid as specified in subsequent sub-clauses, if not provided in Contract Forms, Section-6.
- 5.8.2. The terms of payment for the works shall be as follows
 - i. Invoice for 70% of the contract value may be raised by the bidder on delivery of the items as per BoQ other than earthing items and training. In this invoice, 10% advance payment shall be adjusted. The total payment shall be 60% of the contract value after adjusting the advance payment.
 - ii. Remaining 30% payment shall be paid after 100% completion of all the works.
 - iii. Remaining 10% shall be paid as per following-
 - a. 2.5% shall be paid after 1st year support.
 - b. 2.5% shall be paid after 2nd year support.
 - c. Remaining 5% shall be after 3rd year support.
- 5.8.3. Documents required along with invoice: Following documents need to be submitted along with invoice –
 - (i) Application for payment
 - (ii) Contractors invoice showing LOA reference, Goods description, quantity dispatched, unit reclamation price, total amount (6 Copies)
 - (iii) Packing List(for supply)
 - (iv) Railway receipt/ LR (For supply)
 - (v) Manufacturer's guarantee certificate of Quality (For supply)
 - (vi) Insurance certificate(For supply)
 - (vii) Physical verification certificate of material received at site by Purchaser/Purchaser's site representative (For supply).
 - (viii) Work completion certificate(for erection and stringing work)

5.8.4. ADVANCE PAYMENT

10% advance shall be paid against submission of Advance BG. The advance payment shall be adjusted against next progressive invoice.

The BG shall be submitted as per the format at Annexure-III

5.9.0 PERFORMANCE SECURITY DEPOSIT

5.9.4. The successful bidder shall have to deposit to the extent of **10% (Ten percent) of the Contract price** as performance security (Bank Guarantee), within fifteen (15) days of receipt of notification of award, duly pledged in favor of the Managing Director, AEGCL and such security deposits shall be valid up to 60 (sixty) days beyond the warranty period as per **clause 5.11.3**.

5.9.5. If the Contractor fails or neglects to observe, perform any of his obligations under the contract, it will be lawful for the "Purchaser" to forfeit either in full or in part at his absolute discretion, the security deposit furnished by the Contractor.

5.9.6. No interest shall be payable on such deposits.

5.10.0 RETENTION MONEY

5.10.4. Deduction shall be as per payment terms clause no. 5.8.2.

5.10.5. No interest shall be payable on such deductions/retentions.

5.11.0 WARRANTY

5.11.1. The Contractor/Manufacturer warrants that all the Goods are new, unused, and of the most recent or current models, and that they incorporate all recent improvements in design and materials, unless provided otherwise in the Contract.

5.11.2. The Contractor/Manufacturer further warrants that the Goods shall be free from defects arising from any act or omission of the Contractor or arising from design, materials, and workmanship, under normal use in the conditions prevailing in the country of final destination.

5.11.3. The warranty shall remain valid for a period of **thirty six months (36) months** from the date of completion of the project and accepted at the final destination as indicated in the Purchaser's Requirement. Bidder may at its discretion offer extra warranty.

5.11.4. If during the Period Warranty any defect should be found, the Purchaser shall give Notice to the Contractor/Manufacture stating the nature of any such defects together with all available evidence thereof, promptly following the discovery thereof. The Purchaser shall afford all reasonable opportunity for the Contractor/Manufacturer to inspect such defects.

5.11.5. If having been notified, the Contractor/Manufacturer fails to remedy the defect within a period of 15 (fifteen) days, the Purchaser may, following notice to the Contractor/Manufacturer, proceed to do such work, and the reasonable costs incurred by the Purchaser in connection therewith shall be paid to the Purchaser by the Contractor or may be deducted by the Purchaser from any monies due the Contractor or claimed under the Performance Security.

5.12.0 QUANTITY VARIATION

5.12.1. "Purchaser" shall have the right to increase/decrease the ordered quantity by 20% within 50 days of the period of completion and the same shall be carried out at the same rates /prices and terms and conditions stipulated in the contract except in regard to completion schedule, which shall be mutually agreed upon in case of enhancement of the ordered quantity.

5.13.0 FORCE MAJEURE

- 5.13.1. "Force Majeure" shall mean any event beyond the reasonable control of the Purchaser or of the Contractor, as the case may be, and which is unavoidable notwithstanding the reasonable care of the party affected, and shall include, without limitation, the following:
- (a) war, hostilities or warlike operations whether a state of war be declared or not, invasion, act of foreign enemy and civil war
 - (b) rebellion, revolution, insurrection, mutiny, usurpation of civil or military government, conspiracy, riot, civil commotion and terrorist acts
 - (c) confiscation, nationalization, mobilization, commandeering or requisition by or under the order of any government or de jure or de facto authority or ruler or any other act or failure to act of any local state or national government authority
 - (d) strike, sabotage, lockout, embargo, import restriction, port congestion, lack of usual means of public transportation and communication, industrial dispute, shipwreck, shortage or restriction of power supply, epidemics, quarantine and plague
 - (e) earthquake, landslide, volcanic activity, fire, flood or inundation, tidal wave, typhoon or cyclone, hurricane, storm, lightning, or other inclement weather condition, nuclear and pressure waves or other natural or physical disaster
 - (f) shortage of labor, materials or utilities where caused by circumstances that are themselves Force Majeure.
- 5.13.2. If either party is prevented, hindered or delayed from or in performing any of its obligations under the Contract by an event of Force Majeure, then it shall notify the other in writing of the occurrence of such event and the circumstances thereof within fourteen (14) days after the occurrence of such event.
- 5.13.3. The party who has given such notice shall be excused from the performance or punctual performance of its obligations under the Contract for so long as the relevant event of Force Majeure continues and to the extent that such party's performance is prevented, hindered or delayed. The Time for Completion shall be extended in accordance with **SCC Clause 5.14.0**.

5.14.0 EXTENSION OF TIME FOR COMPLETION

- 5.14.1. The Time(s) for Completion specified in the Article 3 of the Contract Agreement (Contract Forms) shall be extended if the Contractor is delayed or impeded in the performance of any of its obligations under the Contract by reason of any of the following:
- (a) any Change in the scope of works by the Purchaser; which justifies extension of completion time as provided in **SCC Clause 5.12.0**; and
 - (b) any occurrence of Force Majeure as provided in **SCC Clause 5.13.0**.
- 5.14.2. Except where otherwise specifically provided in the Contract, the Contractor shall submit to the Purchaser's Representative a notice of a claim for an extension of the Time for Completion, together with particulars of the event or circumstance justifying such extension as soon as reasonably practicable after the commencement of such event or circumstance. As soon as reasonably practicable after receipt of such notice and supporting particulars of the claim, the Purchaser and the Contractor shall agree upon the period of such extension. In the event that the Contractor does not accept the Purchaser's estimate of a fair and reasonable time extension, the Contractor shall be entitled to refer the matter to a Dispute Board, pursuant to **SCC Sub-Clause 5.17.0**.

5.15.0 LIQUIDATED DAMAGE

- 5.15.1. The Contractor guarantees that it shall attain Completion of the Works within the Time for Completion specified in the Contract Agreement pursuant to **SCC Sub-Clause**

5.6.2, or within such extended time to which the Contractor shall be entitled under **SCC Clause 5.14.0** hereof.

- 5.15.2. If the Contractor fails to attain Completion of the Works within the Time for Completion or any extension thereof under **SCC Clause 5.14.0**, the Contractor shall pay to the Purchaser liquidated damages at the rate of **1% (one percent)** of the total Contract Price per week or part thereof delay. The aggregate amount of such liquidated damages shall in no event exceed **10% (ten percent)** of the total contract price. However, the payment of liquidated damages shall not in any way relieve the Contractor from any of its obligations to complete the Works or from any other obligations and liabilities of the Contractor under the Contract.
- 5.15.3. Once the aggregated "Liquidated damage" reaches 10% of the total contract price, the Purchaser may consider following actions:
- (a) Procure the undelivered material/ equipment and/or complete the balance works from elsewhere giving notice to the Contractor and to recover any extra expenditure incurred thereby for having to procure these materials and works at higher price, at the risk and responsibility of the Contractor; or
 - (b) Cancel the contract wholly or in part and to complete the works at the full risk and cost of the Contractor and forfeit the security deposit.
 - (c) Declare it as a "Contractual Failure" and act in accordance with **SCC Clause 5.16.0**.

5.16.0 CONTRACTUAL FAILURE

- 5.16.1. In the event of contractual failure of any respect on the part of the Contractor, the Purchaser shall be entitled to operate security deposit or any deposit or any payment due to Contractor irrespective of whether his default relates to the particular orders or not towards the Purchaser's claim for damages arising out of the failure. In addition, the Purchaser may black-list or bans the "Contractor" or pending enquiry, suspend him or take any other steps considered suitable.

5.17.0 ARBITRATION

- 5.17.1. If at any time, any question, disputes or differences whatsoever shall rise between the Purchaser and the Contractor, upon or in relation to or in connection with the contract, either party may forthwith give notice to the other in writing of the existence of such question of dispute or difference and the same shall be referred to the adjudication of three Arbitrators, one to be nominated by the Purchaser the other by the Contractor and the third by the President of the Institution of Engineers, India/ Retired or Sitting Judge not below the status of a retired Judge of High Court of India. If either of the parties fail to appoint its arbitrators within 60(sixty) days after receipt of notice of the appointment of arbitrators then the President of the Institution of Engineers /retired or sitting Judge of India, as the case may be, shall have the power at request of either of the parties, to appoint an Arbitrator. A certified copy of the "President" making such an appointment shall be furnished to both parties
- 5.17.2. The arbitration shall be conducted as per provisions of the Indian Arbitration Act, shall be held at Guwahati or any other place as may be decided by the Purchaser. The decision of the majority of Arbitrators shall be final & binding upon the parties and the expenses of the arbitration shall be paid as may be determined by the Arbitrator. However, any dispute arising out of this contract will first be discussed and settled bilaterally between Purchaser and the Contractor.

SECTION 6 - Contract Forms

This Section contains the format for Notification of Award, the Contract Agreement and Appendices to the Contract Agreement which, once completed, will form the Contract along with the Section 4 and Section 5. The Bidder should note that this Section shall be completed fully at the time of Contract signing.

[AEGCL's letter head]

Notification of Award

[date]

To: [Name and address of the Contractor]

This is to notify you that your Bid dated *[date]* for execution of the *[name of the work]* against *[Bid identification number]* for the Contract Price in the aggregate of Rupees *[amounts in numbers and words]* (as per Price Schedule), as corrected and modified in accordance with the Instructions to Bidders is hereby accepted, and it is decided to award on you the ('_____ **Name of work** _____') **covering inter-alia supply of all equipment and services specified in bidding document.**

You are requested to furnish the Performance Security within fifteen (15) days in accordance with the Conditions of Contract, using for that purpose one of the Performance Security Forms included in Section 6 (Contract Forms) of the Bidding Document.

[Authorized Signature]

[Name and Title of Signatory]

Assam Electricity Grid Corporation Limited

Attachment: 1) Price schedule (with arithmetic correction if any)
 2) Draft Contract agreement

STAMP (Rs. 100, Non Judicial)

1. Contract Agreement
(Supply and related services Contract)

THIS AGREEMENT made the _____ day of _____, _____,
BETWEEN

Assam Electricity Grid Corporation Limited (herein after referred to as AEGCL), a corporation incorporated under the laws of Company Act, 1956 and having its registered office at First Floor, Bijuli Bhawan, Paltanbazar, Guwahati-781001, Assam and [**name of Contractor**], a firm/company incorporated under the laws of Company Act, 1956 and having its principal place of business at [**address of Contractor**] (hereinafter called "the Contractor").
[in case of JV insert name and address of the Lead Partner as well as other Partners]

WHEREAS AEGCL desires to engage the Contractor to the 'Ex-works Supply Contract' (also referred to as the 'First Contract') covering inter-alia supply of all equipment and materials for the complete execution of \

a) Supply, installation, commissioning and after installation support for NGFW based SD-WAN solution and

b) Active Directory implementation at Assam Electricity Grid Corporation Ltd. as detailed in the Contract Document ("the Facilities"), and the Contractor has agreed to such engagement upon and subject to the terms and conditions hereinafter appearing.

NOW IT IS HEREBY AGREED as follows:

Article 1
Contract
Documents

1.1 Contract Documents (Reference SCC Clause 5.2.0)

The following documents shall constitute the Contract between the Purchaser and the Contractor, and each shall be read and construed as an integral part of the Contract:

- (a) This Contract Agreement and the Appendices hereto
- (b) Letter of Price Bid and Price Schedules submitted by the Contractor
- (c) Letter of Technical Bid and Technical Proposal submitted by the Contractor
- (d) Special Conditions of Contract
- (e) General Conditions of Supply and Erection
- (f) Specification (Purchaser's Requirements)
- (g) Drawings (Purchaser's Requirements)
- (h) Other completed Bidding Forms submitted with the Letters of Technical and Price Bids
- (i) Guaranteed and other Technical Particulars (as submitted with the Bid)
- (j) Any other documents shall be added here

1.2 Order of Precedence (Reference SCC Clause 5.2.0)

In the event of any ambiguity or conflict between the Contract Documents listed above, the order of precedence shall be the order in which the Contract Documents are listed in Article 1.1 (Contract Documents) above.

1.3 Definitions (Reference SCC Clause 5.1.0)

Capitalized words and phrases used herein shall have the same meanings as are ascribed to them in the SCC.

**Article 2
Contract Price
and Terms of
Payment**

2.1 Contract Price (Reference SCC Clause 5.7.0)

The Purchaser hereby agrees to pay to the Contractor the Contract Price in consideration of the performance by the Contractor of its obligations hereunder. The Contract Price shall [. . . **amounts in rupees in words** . . .], [. . . **amounts in figures**. . .] as specified in Price Schedule (Grand Summary) (Appendix – 4 Price Schedule)..
The Contract Price is fixed.

2.2 Terms of Payment (Reference SCC Clause 5.8.0)

The terms and procedures of payment according to which the Purchaser will pay the Contractor are given in the the Appendix -1 (SCC Clause 5.8.0 - Terms and Procedures of Payment).

**Article 3
Commencement
Date and
Completion Time**

3.1 Commencement Date (Reference SCC Clause 5.6.1)

The Commencement Date upon which the period until the Time for Completion of the Works shall be counted from is the date when this Contract Document is signed.

3.2 Completion Time (Reference SCC Clause 5.6.2)

The whole works under the scope of this Contract shall be completed **within 150 (One Hundred Fifty)** days from Contract Commencement Date as per completion schedule bar chart (Appendix – 2).

**Article 4.
Appendices**

4.1 The Appendices listed in the attached List of Appendices shall be deemed to form an integral part of this Contract Agreement.

4.2 Reference in the Contract to any Appendix shall mean the Appendices attached hereto, and the Contract shall be read and construed accordingly.

IN WITNESS WHEREOF the Purchaser and the Contractor have caused this Agreement to be duly executed by their duly authorized representatives the day and year first above written.

Signed by, for and on behalf of the
Purchaser

Signed by, for and on behalf of the
Contractor

[**Signature**]
[**Title**]

[**Signature**]
[**Title**]

in the presence of
[**Signature**]
[**Title**]

in the presence of
[**Signature**]
[**Title**]

APPENDICES

Appendix 1 -	Special Conditions of Contract
Appendix 2 -	Completion schedule (bar chart)
Appendix 3 -	Performance Security
Appendix 4 -	Price Schedule

Appendix 3 - Form of Performance Security Bank Guarantee

(To be stamped in accordance with Stamp Act)
(The non-Judicial Stamp Paper should be in the name of issuing Bank)

Bank's Name:

Address of Issuing Branch or Office:

Email id and phone no for correspondence:

Beneficiary: Managing Director, AEGCL

Name and Address of Purchaser

Bid Security No.:

WHEREAS _____ [*name and address of Contractor*]
(hereinafter called "the Contractor") has undertaken, in pursuance of NoA No. _____
dated _____ to execute _____ [*name of*
Contract and brief description of Works] (hereinafter called "the Contract");

AND WHEREAS it has been stipulated by you in the said Contract that the Contractor shall furnish you with a Bank Guarantee by a recognized/scheduled bank for the sum specified therein as security for compliance with its obligations in accordance with the Contract;

AND WHEREAS we have agreed to give the Contractor such a Bank Guarantee;

NOW THEREFORE we hereby affirm that we are the Guarantor and responsible to you, on behalf of the Contractor, up to a total of _____ [*amount of Guarantee*] _____ [*in words*], such sum being payable in the currencies in which the Contract Price is payable, and we undertake to pay you, upon your first written demand and without cavil or argument, any sum or sums within the limits of _____ [*amount of Guarantee*] as aforesaid without your needing to prove or to show grounds or reasons for your demand for the sum specified therein.

We hereby waive the necessity of your demanding the said debt from the Contractor before presenting us with the demand.

We further agree that no change or addition to or other modification of the terms of the Contract or of the Works to be performed there under or of any of the Contract documents which may be made between you and the Contractor shall in any way release us from any liability under this guarantee, and we hereby waive notice of any such change, addition or modification.

BG expiry date:

BG clam date:

Bank's seal and authorized signature(s)

NOTE

1. *All italicized text is for use in preparing this form and shall be deleted from the final document. An amount is to be inserted by the Guarantor, representing the percentage of the Contract Price specified in the Contract.*
2. *This guarantee shall be valid upto 30 days beyond the Warranty Period as per the Contract.*
3. *For BG amount equal to or more than 50,000.00, BG should be signed by two bank officers to be valid.*
4. **Address of the banker with email and phone number for correspondence with banker should be clearly mentioned. Any correspondence related to the BG with the banker shall be made to the address mentioned in the BG.**

NON-DISCLOSURE AGREEMENT

(TO BE EXECUTED ON A NON-JUDICIAL STAMPED PAPER of Rs. 100/)

WHEREAS, we, _____, having Registered Office at _____, hereinafter referred to as the COMPANY, are agreeable to execute “a) Design, Supply, installation, commissioning and after installation support for NGFW based SD-WAN solution and b) Active Directory implementation at Assam Electricity Grid Corporation Ltd” as per scope defined in the Request for Proposal RfP No. _____ for Assam Electricity Grid Corporation Ltd., having its registered office Bijulee Bhawan, First Floor, Paltanbazar, Guwahati-781001, hereinafter referred to as the CORPORATION

and, WHEREAS, the COMPANY understands that the information regarding the Corporation’s Infrastructure shared by the CORPORATION in their Request for Proposal is confidential and/or proprietary to the CORPORATION,

and WHEREAS, the COMPANY understands that in the course of submission of the offer for the said RfP and/or in the aftermath thereof, it may be necessary that the COMPANY may perform certain jobs/duties on the Corporation’s properties and/or have access to certain plans, documents, approvals, data or information of the CORPORATION;

NOW THEREFORE, in consideration of the foregoing, the COMPANY agrees to all of the following conditions, in order to induce the CORPORATION to grant the COMPANY specific access to the CORPORATION’s property/information:

The COMPANY will not publish or disclose to others, nor, use in any services that the COMPANY performs for others, any confidential or proprietary information belonging to the CORPORATION, unless the COMPANY has first obtained the CORPORATION’s written authorisation to do so;

The COMPANY agrees that information and other data shared by the CORPORATION or, prepared or produced by the COMPANY for the purpose of submitting the offer to the CORPORATION in response to the said RfP, will not be disclosed to during or subsequent to submission of the offer to the CORPORATION, to anyone outside the CORPORATION;

The COMPANY shall not, without the CORPORATION’s written consent, disclose the contents of this Request for Proposal (Bid) or any provision thereof, or any specification, plan, pattern, sample or information (to be) furnished by or on behalf of the CORPORATION in connection therewith, to any person(s) other than those employed/engaged by the COMPANY for the purpose of submitting the offer to the CORPORATION and/or for the performance of the Contract in the aftermath. Disclosure to any employed/engaged person(s) shall be made in confidence and shall extend only so far as necessary for the purposes of such performance.

Authorised Signatory

Name: Designation:

Office Seal:

Manufacturer's Authorization (MAF)

(To be submitted on OEM's letter head for each of the products quoted)

The Manufacturer's Authorization may be in Manufacturer's/OEM's own format containing the following-

- 1) RFP No.: ***[insert number of bidding process]***
- 2) Date: ***[insert date (as day, month and year) of Bid Submission]***
- 3) *Full name of Purchaser*
- 4) *Full Name & Address of the Bidder*
- 5) *Manufacturer's Address*
- 6) *Full guarantee and warranty as per RFP*
- 7) Commitment from OEM to make manufacturer's/Channel partner's technical and engineering staff fully available to the technical and engineering staff of the successful Bidder to assist that Bidder, on a reasonable and best effort basis, in the performance of all its obligations to the Purchaser under the Contract for the OEM's offered product.

For and on behalf of the Manufacturer

Signed: _____

Date: _____

Annexure II: Format for Pre-Bid queries

RFP Reference No:

Name and complete official address of Organization submitting query / request for clarification:

Emali ID:

Sl. No.	Clause no.	Page No.	Change requested/clarification required	Justification for change suggested.
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Signature:

Name of the Authorized

signatory: Company seal:

Date and Stamped

Beneficiary:
[Name and address of the Employer].....
Date:.....
Advance Payment Guarantee No.:.....

We have been informed that [name of the contractor] (hereinafter called "the Contractor") has entered into Contract No. [reference number of the contract dated [date] with you, for the execution of [name of contract and brief description of plant and services] (hereinafter called "the Contract").

Furthermore, we understand that, according to the Conditions of the Contract, an advance payment in the sum [name of the currency and amount in words] 10[amount in figures] is to be made against an advance payment guarantee.

At the request of the Contractor, we [name of the bank] hereby irrevocably undertake to pay you any sum or sums not exceeding in total an amount of [name of the currency and amount in words] [amount in figures] upon receipt by us of your first demand in writing accompanied by a written statement stating that the Contractor is in breach of its obligation under the Contract because the Contractor:

- (a) used the advance payment for purposes other than the costs of mobilization and cash flow support in respect of the Works; or
- (b) has failed to repay the advance payment when it has become due and payable in accordance with the conditions of the Contract, specifying the amount payable by the Contractor.

It is a condition for any claim and payment under this guarantee to be made that the advance payment referred to above must have been received by the Contractor on its account number [contractor's account number] at [name and address of the bank].

The maximum amount of this guarantee shall be progressively reduced by the amount of the advance payment repaid by the Contractor as indicated in copies of interim statements or payment certificates, which shall be presented to us. This guarantee shall expire, at the latest, upon our receipt of a copy of the interim payment certificate, indicating that 80% of the Contract Price has been certified for payment, or on the [date] day of [month], [year], whichever is earlier. Consequently, any demand for payment under this guarantee must be received by us at this office on or before that date.

[Signature(s) and seal of bank (where appropriate)]