



ASSAM ELECTRICITY GRID CORPORATION LIMITED

OFFICE OF THE MANAGING DIRECTOR

Regd. Office:(FIRST FLOOR), BIJULEE BHAWAN, PALTANBAZAR; GUWAHATI - 781001

CIN: U40101AS2003SGC007238 GSTIN: 18AAFCA4973J9Z3

PHONE: 0361-2739520 Web: www.aegcl.co.in Email: cgm.ppd@aegcl.co.in



CORRIGENDUM-IV

Bid Identification No.: AEGCL/MD/Tech-868/Amingaon GIS/2022/Retender/BID
IFB No.: AEGCL/MD/Tech-868/Amingaon GIS/2022/Retender/IFB, dtd 08.12.2022
NIT No.: AEGCL/MD/Tech-868/Amingaon GIS/2022/Retender/NIT, dtd 08.12.2022
Corrigendum-I No: AEGCL/MD/Tech-868/Amingaon GIS/2022/Retender/22, dtd 26.12.2022
Corrigendum-II No: AEGCL/MD/Tech-868/Amingaon GIS/2022/Retender/27, dtd 03.01.2023
Corrigendum-III No: AEGCL/MD/Tech-868/Amingaon GIS/2022/Retender/28, dtd 03.01.2023

Name of Work: "TURNKEY CONSTRUCTION OF 2X50 MVA, 132/33KV GIS (GAS INSULATED SUBSTATION) AT EXISTING 220/132KV AMINGAON GIS."

With reference to the above-mentioned Bid Identification, IFB, NIT & Corrigendum-I, II & III No. the following points may kindly be noted:

1. The following may be noted regarding the BOQ uploaded in the e-tender portal. (Annexure-I, for reference)

- The revised BOQ has been uploaded in the E-Portal as an excel file of name BOQ_44778 along with CORRIGENDUM-IV. Bidder is requested to download this BOQ attached with CORRIGENDUM-IV and submit the same as a part of their price bid.
- The earlier BOQ uploaded along with original bid and Corrigendum-II shall remain in the system, but that should not be considered.
- **Bidders are requested to exercise caution and only use BOQ_44778 issued along with CORRIGENDUM-IV.**
- If anyone has already submitted the bid which is inconsistent with the aforesaid corrigendum, may rectify the bid and resubmit the same complied with the aforesaid corrigendum.

2. Important Note of BOQ uploaded in Corrigendum-IV:

- For Supply BOQ1 and F&I BOQ2, due to technical constraint, Item SL No. 2.53 (Transformer protection panel-2 Nos) is split into two parts as follows:
 - a) Item 2.53 (Transformer protection panel-1 No).
 - b) Item 2.56 (Transformer protection panel-1 No).
- For Erection, testing & Commissioning (ETC) BOQ3, due to technical constraint, Item SL No. 2.42 (Transformer protection panel-2 Nos) is split into two parts as follows:
 - a) Item 2.42 (Transformer protection panel-1 No).
 - b) Item 2.45 (Transformer protection panel-1 No).

This is for reference of the bidders.

Bidders are requested to exercise caution while submission of price bid.



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3. The bid submission deadline for bids identified against the above referred Bid identification; IFB & NIT nos. is hereby extended as follows:

The tender submission deadline is extended up to **12:00 Hrs of 19.01.2023.**

Tender opening date: **14:00 Hrs. of 20.01.2023.**

All other terms and conditions shall remain same.

Sd/-

**Chief General Manager (PP&D)
Assam Electricity Grid Corporation Ltd
Bijulee Bhawan, Paltanbazar, Guwahati –1**

Memo No. AEGCL/MD/Tech-868/Amingaon GIS/2022/Retender/29

Dated: 10.01.2023

Copy to:

1. The AGM -IT, O/o the MD, AEGCL, for publication of the notice in AEGCL's Website.

Sd/-

**Chief General Manager (PP&D)
Assam Electricity Grid Corporation Ltd**

Annexure-I

Validate

Print

Help

Item Rate BoQ

Tender Inviting Authority: CGM(PP&D), AEGCL

Name of Work: Supply of 132/33 kV GIS Equipments for Amingaon GIS under NESIDS fund [Schedule 1-Supply]

Contract No: Nil

Name of the Bidder/ Bidding Firm / Company :	
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PRICE SCHEDULE

(This BOQ template must not be modified/replaced by the bidder and the same should be uploaded after filling the relevent columns, else the bidder is liable to be rejected for this tender. Bidders are allowed to enter the Bidder Name and Values only)

NUMBER #	TEXT #	NUMBER #	TEXT #	NUMBER #	NUMBER #	TEXT #
Sl. No.	Item Description	Quantity	Units	Unit ExWorks (exclusive of taxes) In Figures To be entered by the Bidder in Rs. P	TOTAL AMOUNT (Without Taxes) in Rs. P	TOTAL AMOUNT In Words
1	2	4	5	13	53	55
1	Supply of 132kV GIS Equipments(Supply A)					
1.10	145kV, 3150A, 40kA for 4 second, SF6 gas-insulated metal enclosed Transformer bay module each set comprising of One (1) number 3-phase, 3150A, SF6 insulated circuit breaker complete with operating mechanism; Three (3) numbers 1-phase, 5-core, multi ratio,600-300/1-1-1-1-1A current transformers; Three (3) numbers 3-phase, 3150A, group operated isolators/disconnectors, complete with manual and motor driven operating mechanisms; One (1) number 3-phase, group operated safety grounding switches, complete with manual and motor driven operating mechanisms; Gas monitoring devices, barriers, pressure switches, UHF PD Sensors, support structure etc. as required; Local Bay control cubicle.(Stand Alone or Integrated)	2	Sets		0.00	INR Zero Only

1.20	Three phase, 3150A, 40kA for 4 second, SF6 gas-insulated metal enclosed bus bar of 145kV, each set comprising of Bus bars enclosures running from the existing Bus bar Module to interconnect each of the Transformer circuit breaker bay modules in Double Bus bar configuration; Gas monitoring devices, barriers, pressure switches, UHF PD Sensors, support structure, foundation bolt etc. as required	2	Sets		0.00	INR Zero Only
1.30	145kV, 3150A, 40 kA for 4 sec, 3- phase SF6 to air bushings along with termination module & support structure for outdoor connections to connect GIS with 145kV side of Power transformer.	2	Sets		0.00	INR Zero Only
1.40	145kV, 3150A, 40kA for 4 second, 3-Ph encapsulated, SF6 Gas Insulated Bus Duct (GIB) outside GIS hall including Bus Duct support structure and associated accessories along with jointing elements	75	RM		0.00	INR Zero Only
1.50	Erection Hardware for 145kV GIS Termination arrangement for Transformer bay Modules	2	Nos		0.00	INR Zero Only
2.00	Supply of outdoor bay equipments (Supply B)					
2.01	Transformer					
2.02	50 MVA, 132/33 kV, 3-Ph, YNyn0, Z=12.5 %, ONAN/ONAF with copper wound Power Transformer with OLTC(+5% to -15% in steps of 1.25%) , RTCC panel including all cabling, insulating oil for the transformer plus 10% spare oil, supplied with Bushing mounted NCT on HV & LV side & complete with all fittings and accessories to meet the technical specification including cost of all routine test including loading and unloading at site.The Transformer shall be suitable for 4" Aluminium Tubular Conductor termination on HV and LV side.	2	No		0.00	INR Zero Only
2.03	Online DGA	2	No		0.00	INR Zero Only
2.04	Online Insulating oil drying system	2	Sets		0.00	INR Zero Only
2.05	Lightning Arrester					

2.06	120 kV, 10 kA, Metal Oxide type, heavy duty, station class 3, Lightning Arrestor complete with Pipe Structures, Surge Counter, Hardware fittings and Clamps and Connectors as per specification	6	No		0.00	INR Zero Only
2.07	30 kV,10 kA, Metal Oxide type, heavy duty, station class Lightning Arrestor complete with Pipe Structures, Surge Counter, Hardware fittings and Clamps and Connectors as per specification	6	No		0.00	INR Zero Only
2.08	Supply of 33kV XLPE Cable and Termination Kit					
2.09	1000 sqmm, 33kV, 1-Core, XLPE Armoured Cu cable alongwith related accessories	200	Mtr		0.00	INR Zero Only
2.10	33kV Cable Termination Kit (both indoor and outdoor) along with its accessories.	4	Set		0.00	INR Zero Only
2.11	33kV Support Structure for Outdoor Cable Termination Kit	2	Nos		0.00	INR Zero Only
2.12	LT Power Cable (1.1kV grade)					
2.13	(i) 2C, 6 mm2	400	Mtr		0.00	INR Zero Only
2.14	(ii) 4C, 16 mm2	400	Mtr		0.00	INR Zero Only
2.15	(iii) 3½ C, 35 mm2	400	Mtr		0.00	INR Zero Only
2.16	(iv) 3½ C, 70 mm2	400	Mtr		0.00	INR Zero Only
2.17	(v) 3½ C, 300 mm2	400	Mtr		0.00	INR Zero Only
2.18	(vi) Cable Supports and fittings	1	LS		0.00	INR Zero Only
2.19	LT Control Cable					
2.20	(i) 4C, 2.5 mm2	250	Mtr		0.00	INR Zero Only
2.21	(ii) 7C, 1.5 mm2	250	Mtr		0.00	INR Zero Only
2.22	(iii) 12C, 1.5 mm2	250	Mtr		0.00	INR Zero Only
2.23	(iv) 19C, 1.5 mm2	250	Mtr		0.00	INR Zero Only
2.24	Earthing					

2.25	Main Earthing Conductor 40mm dia MS Rod	600	meter		0.00	INR Zero Only
2.26	Earthing Conductor: 40mm dia MS Rod For Riser From The Burial Earth Mat To Equipment,Structure Etc)	600	meter		0.00	INR Zero Only
2.27	Earthing Conductor: 75X12mm GI Flat For Equipment and Structure Earthing	300	meter		0.00	INR Zero Only
2.28	Earthing Conductor: 50X6 mm GI(HDG) Flat For Riser For Console Box,Lt Panels,Dc Panels,Marshalling Boxes, Cable Trenches Etc)	150	meter		0.00	INR Zero Only
2.29	Earthing Device & Associated Accessories (50 mm Heavy Duty GI Perforated Pipe 3 Mtrs Long For Treated Earth Pit)	6	Nos.		0.00	INR Zero Only
2.30	Earthing Device & Associated Accessories 40Mm Ms Rod 3 Mtrs Long For Non Treated Earth Pit)	60	Nos.		0.00	INR Zero Only
2.31	Separate Earthing For 145 Kv GIS Modules	1	JOB		0.00	INR Zero Only
2.32	Separate Earthing For 145 Kv GIS Building	1	JOB		0.00	INR Zero Only
2.33	Separate Earthing For 36 Kv Indoor AIS Equipment	1	JOB		0.00	INR Zero Only
2.34	Separate Earthing For 36 Kv Indoor AIS Building	1	JOB		0.00	INR Zero Only
2.35	Other Earthing Accessories	1	Lot		0.00	INR Zero Only
2.36	Fire Protection System for Transformer					
2.37	NIFPS					
2.38	N2 Fire Prevention and extinguishing System for transformer with complete accessories and related Civil and Electrical works.	2	No		0.00	INR Zero Only
2.39	HVWS					
2.40	HVW spray system, Hydrant System and complete U/G and O/G Piping and accessories etc and associated Civil Works for fire protection system for 2 nos 50 MVA 132/33kV Transformer	1	Set		0.00	INR Zero Only

2.41	HVWS System for 50 MVA ICT	2	Set		0.00	INR Zero Only
2.42	Portable/Wheel/ Trolley mounted Fire Extinguishers					
2.43	22.5 Kg capacity FE CO2 type, Trolley Mounted	4	Nos		0.00	INR Zero Only
2.44	25 Kg Capacity FE DCP type, Trolley Mounted	4	Nos		0.00	INR Zero Only
2.45	DCP 10 Kg Capacity, Wall mounted	6	Nos		0.00	INR Zero Only
2.46	FE CO2 6.5 Kg capacity, Wall mounted	4	Nos		0.00	INR Zero Only
2.47	DCP 5 Kg Capacity, Wall mounted	5	Nos		0.00	INR Zero Only
2.48	Foam Type 9 liter Capacity, Wall mounted	4	Nos		0.00	INR Zero Only
2.49	Water CO2 9 liter, Wall mounted	6	Nos		0.00	INR Zero Only
2.50	Fire Buckets (12 Nos. with stand in one set)	1	Set		0.00	INR Zero Only
2.51	Supply of indoor floor mounted, SIMPLEX type control and relay panels, with mimic & annunciation panel for 132kV system as per specification comprising of the C & R panels and shall be complete with Numerical Relays and SAMAST Compliant ABT meters as per the Technical specifications & shall be compatible for SCADA/SAS.					
2.52	132kV Panels					
2.53	Transformer Protection Panel	1	No		0.00	INR Zero Only
2.54	Substation Automation System					
2.55	Necessary Hardware, Software and License for Modification/ Upgradation of the existing SAS (including transmittal of telemetry data for HV & LV side of both the Transformer) for 132 kV System.	1	LS		0.00	INR Zero Only
2.56	Transformer Protection Panel	1	No		0.00	INR Zero Only
2.57	Conductor / IPS Al Tube					
2.58	4" IPS Al Tube	80	Mtr		0.00	INR Zero Only
2.59	Lightning protection					

2.60	Lightning Mast (LM)- 40m	1	No		0.00	INR Zero Only
2.61	illumination system for Outdoor Lighting (Switchyard and Street lighting)					
2.62	Lighting Panel					
2.63	Lighting Panel Type ACP-2	1	Nos		0.00	INR Zero Only
2.64	Sub lighting panel type SLP	2	Nos		0.00	INR Zero Only
2.65	lighting Fixtures and Receptacles including junction box, lighting wires and flexible conduit (if required) from junction box to lighting fixture, mounting arrangement and other accessories/ materials etc as required for complete installation and commissioning of lighting fixture					
2.66	Lighting Fixture Type SF1	4	Nos		0.00	INR Zero Only
2.67	Lighting Fixture Type SF2	2	Nos		0.00	INR Zero Only
2.68	Lighting Fixture Type SF4	2	Nos		0.00	INR Zero Only
2.69	Mandatory Spare Parts					
2.70	For 132/33KV,50MVA Transformers					
2.71	145kV H.V. Bushing with metal parts and Gaskets	2	No		0.00	INR Zero Only
2.72	HV side neutral bushing	2	No		0.00	INR Zero Only
2.73	36KV LV bushing	2	No		0.00	INR Zero Only
2.74	36kV Neutral Bushing with metal parts and gaskets	2	No		0.00	INR Zero Only
2.75	Local and remote winding temperature indicators with alarm and trip contacts and maximum reading pointer	2	Set		0.00	INR Zero Only
2.76	Oil temperature indicator with alarm and trip contacts and maximum reading pointer	2	Set		0.00	INR Zero Only
2.77	Pressure relief device for main tank	4	Set		0.00	INR Zero Only
2.78	Pressure relief device for OLTC	4	Set		0.00	INR Zero Only

2.79	Silica Gel/ Maintenance free breather assembly (one of each type) for Conservator and OLTC	2	Set		0.00	INR Zero Only
2.80	Magnetic oil level gauge with low oil level alarm contacts	2	Set		0.00	INR Zero Only
2.81	Oil Flow indicator with contacts	2	Set		0.00	INR Zero Only
2.82	Coller Pump with Motor	2	Set		0.00	INR Zero Only
2.83	Cooler fan with motor.	4	No		0.00	INR Zero Only
2.84	Buchholz relay.	4	No		0.00	INR Zero Only
2.85	Tap position Indicator (Local and remote)	2	No		0.00	INR Zero Only
2.86	Oil Sampling Bottle	4	No		0.00	INR Zero Only
2.87	Oil Surge Relay	4	No		0.00	INR Zero Only
2.88	Complete set of gasket (complete set for one transformer)	2	Set		0.00	INR Zero Only
2.89	Set of valves (complete set for one transformer)	2	Set		0.00	INR Zero Only
2.90	For 132KV Transformer Control and Relay Panel					
2.91	Differential relay	1	No		0.00	INR Zero Only
2.92	Master Trip relay	1	No		0.00	INR Zero Only
2.93	Trip Circuit Supervision relay	1	No		0.00	INR Zero Only
2.94	Testing Kit for Transformers					
2.95	Automatic Transformer Oil BDV Testing Kit	1	No		0.00	INR Zero Only
2.96	Stainless Steel Oil sampling bottle (One Litre Capacity)	2	No		0.00	INR Zero Only
2.97	Syringes for sampling oil (50ml capacity)	4	No		0.00	INR Zero Only
3.00	Supply of 33kV Equipments and Panels (Supply C)					

3.01	33kV,3 Phase, 13 Unit Panel (8 Line Bays, 2 Transformer incomer Bays, 1 Bus Sectionalizer Bay and 2 PT Bay) Indoor Drawn out type switchgear as per specification (Single bus with sectionalizer)	1	Set		0.00	INR Zero Only
3.02	30 kV,10 kA, Metal Oxide type, heavy duty, station class Lightning Arrestor complete with Pipe Structure, Surge Counter, Hardware fittings and Clamps and Connectors as per specification	24	No		0.00	INR Zero Only
3.03	Outdoor type 36 kV, 1250 A, 3-Ph gang operated, Double Break centre Post rotating outdoor type motor operated Disconnecter (Isolator) with solid core Post Insulator, Pipe Structures, Clamps and Connectors					
3.04	With one earth switch	8	Sets		0.00	INR Zero Only
3.05	Supply of 33kV XLPE Cable and Termination Kit					
3.06	300 sqmm, 33kV, 1-Core, XLPE Armoured Cu cable alongwith related accessories	900	Mtr		0.00	INR Zero Only
3.07	33kV Cable Termination Kit (both indoor and outdoor) along with its accessories and related structure for outdoor type.	16	Set		0.00	INR Zero Only
3.08	33kV Support Structure for Outdoor Cable Termination Kit	8	Nos		0.00	INR Zero Only
3.09	LT Power Cable (1.1kV grade)					
3.10	(i) 2C, 6 mm2	400	Mtr		0.00	INR Zero Only
3.11	(ii) 4C, 16 mm2	400	Mtr		0.00	INR Zero Only
3.12	(iii) 3½ C, 35 mm2	400	Mtr		0.00	INR Zero Only
3.13	(iv) 3½ C, 70 mm2	400	Mtr		0.00	INR Zero Only
3.14	(v) 3½ C, 300 mm2	400	Mtr		0.00	INR Zero Only
3.15	LT Control Cable					
3.16	(i) 4C, 2.5 mm2	250	Mtr		0.00	INR Zero Only
3.17	(ii) 7C, 1.5 mm2	250	Mtr		0.00	INR Zero Only

3.18	(iii) 12C, 1.5 mm2	250	Mtr		0.00	INR Zero Only
3.19	(iv) 19C, 1.5 mm2	250	Mtr		0.00	INR Zero Only
3.20	Supply of Indoor floor mounted, SIMPLEX type control and relay panels, with mimic & annunciation panel with SAMAST Compliant ABT Meters for 33kV system as per specification					
3.21	33 kV Panels					
3.22	33KV Line Protection & Control Panel with LBB	8	Nos		0.00	INR Zero Only
3.23	33KV Transformer I/C Protection & Control Panel on 33 kV side of Power Transformer	2	Nos		0.00	INR Zero Only
3.24	33KV Protection & Control Panel for Bus Section	1	Nos		0.00	INR Zero Only
3.25	Substation Automation System and Integration with existing SAS					
3.26	Necessary Hardware, Software and License for Modification/ Upgradation of the existing SAS for 33kV System	1	LS		0.00	INR Zero Only
3.27	Conductor					
3.28	ACSR Panther	0.3	Km		0.00	INR Zero Only
3.29	Bay Steel Structures except equipment mounting structures					
3.30	COLUMNS					
3.31	Column Type 'C5'	3	Nos		0.00	INR Zero Only
3.32	Column Type 'C6'	6	Nos		0.00	INR Zero Only
3.33	BEAMS					
3.34	Beam Type 'B5'	8	Nos		0.00	INR Zero Only
3.35	Insulator and hardwares					
3.36	33 kV, 90kN Tension String insulators and hardwares suitable for Single Panther conductors	25	Sets		0.00	INR Zero Only

3.37	33 kV, 70kN Suspension String insulators and hardwares suitable for Single Panther conductors	25	Sets		0.00	INR Zero Only
3.38	Illumination System					
3.39	Indoor Illumination system for the 33kV Indoor Switchgear Room	1	LS		0.00	INR Zero Only
3.40	Lightning protection (Lightning spikes, shield wires, down conductors etc.)	1	LS		0.00	INR Zero Only
Total in Figures					0.00	
Quoted Rate in Words		INR Zero Only				

Validate

Print

Help

Item Rate BoQ

Tender Inviting Authority: CGM(PP&D), AEGCL

Name of Work: **Supply of 132/33 kV GIS Equipments for Amingaon GIS under NESIDS fund** [Schedule 1A-Freight & Insurance]

Contract No: Nil

Name of the Bidder/ Bidding Firm / Company :	
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PRICE SCHEDULE

(This BOQ template must not be modified/replaced by the bidder and the same should be uploaded after filling the relevent columns, else the bidder is liable to be rejected for this tender. Bidders are allowed to enter the Bidder Name and Values only)

NUMBER #	TEXT #	NUMBER #	TEXT #	NUMBER #	NUMBER #	TEXT #
Sl. No.	Item Description	Quantity	Units	Unit ExWorks (exclusive of taxes) In Figures To be entered by the Bidder in Rs. P	TOTAL AMOUNT (Without Taxes) in Rs. P	TOTAL AMOUNT In Words
1	2	4	5	13	53	55
1	Supply of 132kV GIS Equipments(F&I A)					
1.10	145kV,3150A, 40kA for 4 second, SF6 gas-insulated metal enclosed Transformer bay module each set comprising of One (1) number 3-phase, 3150A, SF6 insulated circuit breaker complete with operating mechanism; Three (3) numbers 1-phase, 5-core, multi ratio,600-300/1-1-1-1-1A current transformers; Three (3) numbers 3-phase, 3150A, group operated isolators/disconnectors, complete with manual and motor driven operating mechanisms; One (1) number 3-phase, group operated safety grounding switches, complete with manual and motor driven operating mechanisms; Gas monitoring devices, barriers, pressure switches, UHF PD Sensors, support structure etc. as required; Local Bay control cubicle.(Stand Alone or Integrated)	2	Sets		0.00	INR Zero Only

1.20	Three phase, 3150A, 40kA for 4 second, SF6 gas-insulated metal enclosed bus bar of 145kV, each set comprising of Bus bars enclosures running from the existing Bus bar Module to interconnect each of the Transformer circuit breaker bay modules in Double Bus bar configuration; Gas monitoring devices, barriers, pressure switches, UHF PD Sensors, support structure, foundation bolt etc. as required	2	Sets		0.00	INR Zero Only
1.30	145kV, 3150A, 40 kA for 4 sec, 3- phase SF6 to air bushings along with termination module & support structure for outdoor connections to connect GIS with 145kV side of Power transformer.	2	Sets		0.00	INR Zero Only
1.40	145kV, 3150A, 40kA for 4 second, 3-Ph encapsulated, SF6 Gas Insulated Bus Duct (GIB) outside GIS hall including Bus Duct support structure and associated accessories along with jointing elements	75	RM		0.00	INR Zero Only
1.50	Erection Hardware for 145kV GIS Termination arrangement for Transformer bay Modules	2	Nos		0.00	INR Zero Only
2.00	Supply of outdoor bay equipments (F&I B)					
2.01	Transformer					
2.02	50 MVA, 132/33 kV, 3-Ph, YNyn0, Z =12.5 %, ONAN/ONAF with copper wound Power Transformer with OLTC(+5% to -15% in steps of 1.25%) , RTCC panel including all cabling, insulating oil for the transformer plus 10% spare oil, supplied with Bushing mounted NCT on HV & LV side & complete with all fittings and accessories to meet the technical specification including cost of all routine test including loading and unloading at site.The Transformer shall be suitable for 4" Aluminium Tubular Conductor termination on HV and LV side.	2	No		0.00	INR Zero Only

2.03	Online DGA	2	No		0.00	INR Zero Only
2.04	Online Insulating oil drying system	2	Sets		0.00	INR Zero Only
2.05	Lightning Arrester					
2.06	120 kV, 10 kA, Metal Oxide type, heavy duty, station class 3, Lightning Arrestor complete with Pipe Structures, Surge Counter, Hardware fittings and Clamps and Connectors as per specification	6	No		0.00	INR Zero Only
2.07	30 kV, 10 kA, Metal Oxide type, heavy duty, station class Lightning Arrestor complete with Pipe Structures, Surge Counter, Hardware fittings and Clamps and Connectors as per specification	6	No		0.00	INR Zero Only
2.08	Supply of 33kV XLPE Cable and Termination Kit					
2.09	1000 sqmm, 33kV, 1-Core, XLPE Armoured Cu cable alongwith related accessories	200	Mtr		0.00	INR Zero Only
2.10	33kV Cable Termination Kit (both indoor and outdoor) along with its accessories.	4	Set		0.00	INR Zero Only
2.11	33kV Support Structure for Outdoor Cable Termination Kit	2	Nos		0.00	INR Zero Only
2.12	LT Power Cable (1.1kV grade)					
2.13	(i) 2C, 6 mm ²	400	Mtr		0.00	INR Zero Only
2.14	(ii) 4C, 16 mm ²	400	Mtr		0.00	INR Zero Only
2.15	(iii) 3½ C, 35 mm ²	400	Mtr		0.00	INR Zero Only
2.16	(iv) 3½ C, 70 mm ²	400	Mtr		0.00	INR Zero Only
2.17	(v) 3½ C, 300 mm ²	400	Mtr		0.00	INR Zero Only
2.18	(vi) Cable Supports and fittings	1	LS		0.00	INR Zero Only
2.19	LT Control Cable					
2.20	(i) 4C, 2.5 mm ²	250	Mtr		0.00	INR Zero Only
2.21	(ii) 7C, 1.5 mm ²	250	Mtr		0.00	INR Zero Only

2.22	(iii) 12C, 1.5 mm2	250	Mtr		0.00	INR Zero Only
2.23	(iv) 19C, 1.5 mm2	250	Mtr		0.00	INR Zero Only
2.24	Earthing					
2.25	Main Earthing Conductor 40mm dia MS Rod	600	meter		0.00	INR Zero Only
2.26	Earthing Conductor: 40mm dia MS Rod For Riser From The Burial Earth Mat To Equipment,Structure Etc)	600	meter		0.00	INR Zero Only
2.27	Earthing Conductor: 75X12mm GI Flat For Equipment and Structure Earthing	300	meter		0.00	INR Zero Only
2.28	Earthing Conductor: 50X6 mm GI(HDG) Flat For Riser For Console Box,Lt Panels,Dc Panels,Marshalling Boxes, Cable Trenches Etc)	150	meter		0.00	INR Zero Only
2.29	Earthing Device & Associated Accessories (50 mm Heavy Duty GI Perforated Pipe 3 Mtrs Long For Treated Earth Pit)	6	Nos.		0.00	INR Zero Only
2.30	Earthing Device & Associated Accessories 40Mm Ms Rod 3 Mtrs Long For Non Treated Earth Pit)	60	Nos.		0.00	INR Zero Only
2.31	Separate Earthing For 145 Kv GIS Modules	1	JOB		0.00	INR Zero Only
2.32	Separate Earthing For 145 Kv GIS Building	1	JOB		0.00	INR Zero Only
2.33	Separate Earthing For 36 Kv Indoor AIS Equipment	1	JOB		0.00	INR Zero Only
2.34	Separate Earthing For 36 Kv Indoor AIS Building	1	JOB		0.00	INR Zero Only
2.35	Other Earthing Accessories	1	Lot		0.00	INR Zero Only
2.36	Fire Protection System for Transformer					
2.37	NIFPS					
2.38	N2 Fire Prevention and extinguishing System for transformer with complete accessories and related Civil and Electrical works.	2	No		0.00	INR Zero Only
2.39	HVWS					

2.40	HVW spray system, Hydrant System and complete U/G and O/G Piping and accessories etc and associated Civil Works for fire protection system for 2 nos 50 MVA 132/33kV Transformer	1	Set		0.00	INR Zero Only
2.41	HVWS System for 50 MVA ICT	2	Set		0.00	INR Zero Only
2.42	Portable/Wheel/ Trolley mounted Fire Extinguishers					
2.43	22.5 Kg capacity FE CO2 type, Trolley Mounted	4	Nos		0.00	INR Zero Only
2.44	25 Kg Capacity FE DCP type, Trolley Mounted	4	Nos		0.00	INR Zero Only
2.45	DCP 10 Kg Capacity, Wall mounted	6	Nos		0.00	INR Zero Only
2.46	FE CO2 6.5 Kg capacity, Wall mounted	4	Nos		0.00	INR Zero Only
2.47	DCP 5 Kg Capacity, Wall mounted	5	Nos		0.00	INR Zero Only
2.48	Foam Type 9 liter Capacity, Wall mounted	4	Nos		0.00	INR Zero Only
2.49	Water CO2 9 liter, Wall mounted	6	Nos		0.00	INR Zero Only
2.50	Fire Buckets (12 Nos. with stand in one set)	1	Set		0.00	INR Zero Only
2.51	Supply of Indoor floor mounted, SIMPLEX type Control and Relay Panels, with mimic & annunciation panel for 132kV system as per specification comprising of the C & R Panels and shall be complete with Numerical Relays and SAMAST Compliant ABT Meters as per the Technical specifications & shall be compatible for SCADA/ SAS .					
2.52	132kV Panels					
2.53	Transformer Protection Panel	1	No		0.00	INR Zero Only
2.54	Substation Automation System					
2.55	Necessary Hardware, Software and License for Modification/ Upgradation of the existing SAS (including transmittal of telemetry data for HV & LV side of both the Transformer) for 132 kV System.	1	LS		0.00	INR Zero Only
2.56	Transformer Protection Panel	1	No		0.00	INR Zero Only
2.57	Conductor / IPS Al Tube					

2.58	4" IPS AI Tube	80	Mtr		0.00	INR Zero Only
2.59	Lightning protection					
2.60	Lightning Mast (LM)- 40m	1	No		0.00	INR Zero Only
2.61	Illumination system for Outdoor Lighting (Switchyard and Street lighting)					
2.62	Lighting Panel					
2.63	Lighting Panel Type ACP-2	1	Nos		0.00	INR Zero Only
2.64	Sub lighting panel type SLP	2	Nos		0.00	INR Zero Only
2.65	lighting Fixtures and Receptacles including junction box, lighting wires and flexible conduit (if required) from junction box to lighting fixture, mounting arrangement and other accessories/ materials etc as required for complete installation and commissioning of lighting fixture					
2.66	Lighting Fixture Type SF1	4	Nos		0.00	INR Zero Only
2.67	Lighting Fixture Type SF2	2	Nos		0.00	INR Zero Only
2.68	Lighting Fixture Type SF4	2	Nos		0.00	INR Zero Only
2.69	Mandatory Spare Parts					
2.70	For 132/33KV,50MVA Transformers					
2.71	145kv H.V. Bushing with metal parts and Gaskets	2	No		0.00	INR Zero Only
2.72	HV side neutral bushing	2	No		0.00	INR Zero Only
2.73	36KV LV bushing	2	No		0.00	INR Zero Only
2.74	36kv Neutral Bushing with metal parts and gaskets	2	No		0.00	INR Zero Only
2.75	Local and remote winding temperature indicators with alarm and trip contacts and maximum reading pointer	2	Set		0.00	INR Zero Only
2.76	Oil temperature indicator with alarm and trip contacts and maximum reading pointer	2	Set		0.00	INR Zero Only

2.77	Pressure relief device for main tank	4	Set		0.00	INR Zero Only
2.78	Pressure relief device for OLTC	4	Set		0.00	INR Zero Only
2.79	Silica Gel/ Maintenance free breather assembly (one of each type) for Conservator and OLTC	2	Set		0.00	INR Zero Only
2.80	Magnetic oil level gauge with low oil level alarm contacts	2	Set		0.00	INR Zero Only
2.81	Oil Flow indicator with contacts	2	Set		0.00	INR Zero Only
2.82	Coller Pump with Motor	2	Set		0.00	INR Zero Only
2.83	Cooler fan with motor.	4	No		0.00	INR Zero Only
2.84	Buchholz relay.	4	No		0.00	INR Zero Only
2.85	Tap position Indicator (Local and remote)	2	No		0.00	INR Zero Only
2.86	Oil Sampling Bottle	4	No		0.00	INR Zero Only
2.87	Oil Surge Relay	4	No		0.00	INR Zero Only
2.88	Complete set of gasket (complete set for one transformer)	2	Set		0.00	INR Zero Only
2.89	Set of valves (complete set for one transformer)	2	Set		0.00	INR Zero Only
2.90	For 132KV Transformer Control and Relay Panel					
2.91	Differential relay	1	No		0.00	INR Zero Only
2.92	Master Trip relay	1	No		0.00	INR Zero Only
2.93	Trip Circuit Supervision relay	1	No		0.00	INR Zero Only
2.94	Testing Kit for Transformers					
2.95	Automatic Transformer Oil BDV Testing Kit	1	No		0.00	INR Zero Only
2.96	Stainless Steel Oil sampling bottle (One Litre Capacity)	4	No		0.00	INR Zero Only

2.97	Syringes for sampling oil (50ml capacity)	4	No		0.00	INR Zero Only
3.00	Supply of 33kV Equipments and Panels (F&I C)					
3.01	33kV,3 Phase, 13 Unit Panel (8 Line Bays, 2 Transformer incomer Bays, 1 Bus Sectionalizer Bay and 2 PT Bay) Indoor Drawn out type switchgear as per specification (Single bus with sectionalizer)	1	Set		0.00	INR Zero Only
3.02	30 kV,10 kA, Metal Oxide type, heavy duty, station class Lightning Arrestor complete with Pipe Structure, Surge Counter, Hardware fittings and Clamps and Connectors as per specification	24	No		0.00	INR Zero Only
3.03	Outdoor type 36 kV, 1250 A, 3-Ph gang operated, Double Break centre Post rotating outdoor type motor operated Disconnecter (Isolator) with solid core Post Insulator, Pipe Structures, Clamps and Connectors					
3.04	With one earth switch	8	Sets		0.00	INR Zero Only
3.05	Supply of 33kV XLPE Cable and Termination Kit					
3.06	300 sqmm, 33kV, 1-Core, XLPE Armoured Cu cable alongwith related accessories	900	Mtr		0.00	INR Zero Only
3.07	33kV Cable Termination Kit (both indoor and outdoor) along with its accessories and related structure for outdoor type.	16	Set		0.00	INR Zero Only
3.08	33kV Support Structure for Outdoor Cable Termination Kit	8	Nos		0.00	INR Zero Only
3.09	LT Power Cable (1.1kV grade)					
3.10	(i) 2C, 6 mm ²	400	Mtr		0.00	INR Zero Only
3.11	(ii) 4C, 16 mm ²	400	Mtr		0.00	INR Zero Only
3.12	(iii) 3½ C, 35 mm ²	400	Mtr		0.00	INR Zero Only
3.13	(iv) 3½ C, 70 mm ²	400	Mtr		0.00	INR Zero Only
3.14	(v) 3½ C, 300 mm ²	400	Mtr		0.00	INR Zero Only
3.15	LT Control Cable					
3.16	(i) 4C, 2.5 mm ²	250	Mtr		0.00	INR Zero Only

3.17	(ii) 7C, 1.5 mm2	250	Mtr		0.00	INR Zero Only
3.18	(iii) 12C, 1.5 mm2	250	Mtr		0.00	INR Zero Only
3.19	(iv) 19C, 1.5 mm2	250	Mtr		0.00	INR Zero Only
3.20	Supply of Indoor floor mounted, SIMPLEX type control and relay panels, with mimic & annunciation panel with SAMAST Compliant ABT Meters for 33kV system as per specification					
3.21	33 kV Panels					
3.22	33KV Line Protection & Control Panel with LBB	8	Nos		0.00	INR Zero Only
3.23	33KV Transformer I/C Protection & Control Panel on 33 k V side of Power Transformer	2	Nos		0.00	INR Zero Only
3.24	33KV Protection & Control Panel for Bus Section	1	Nos		0.00	INR Zero Only
3.25	Substation Automation System and Integration with existing SAS					
3.26	Necessary Hardware, Software and License for Modification/ Upgradation of the existing SAS for 33kV System	1	LS		0.00	INR Zero Only
3.27	Conductor					
3.28	ACSR Panther	0.3	Km		0.00	INR Zero Only
3.29	Bay Steel Structures except equipment mounting structures					
3.30	COLUMNS					
3.31	Column Type 'C5'	3	Nos		0.00	INR Zero Only
3.32	Column Type 'C6'	6	Nos		0.00	INR Zero Only
3.33	BEAMS					
3.34	Beam Type 'B5'	8	Nos		0.00	INR Zero Only
3.35	Insulator and hardwares					

3.36	33 kV, 90kN Tension String insulators and hardwares suitable for Single Panther conductors	25	Sets		0.00	INR Zero Only
3.37	33 kV, 70kN Suspension String insulators and hardwares suitable for Single Panther conductors	25	Sets		0.00	INR Zero Only
3.38	Illumination System					
3.39	Indoor Illumination system for the 33kV Indoor Switchgear Room	1	LS		0.00	INR Zero Only
3.40	Lightning protection (Lightning spikes, shield wires, down conductors etc.)	1	LS		0.00	INR Zero Only
Total in Figures					0.00	
Quoted Rate in Words		INR Zero Only				

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Item Rate BoQ

Tender Inviting Authority: CGM(PP&D), AEGCL

Name of Work: **Supply of 132/33 kV GIS Equipments for Amingaon GIS under NESIDS fund** [Schedule 1B-Erection, Testing and Commissioning]

Contract No: Nil

Name of the Bidder/ Bidding Firm / Company :	
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PRICE SCHEDULE

(This BOQ template must not be modified/replaced by the bidder and the same should be uploaded after filling the relevent columns, else the bidder is liable to be rejected for this tender. Bidders are allowed to enter the Bidder Name and Values only)

NUMBER #	TEXT #	NUMBER #	TEXT #	NUMBER #	NUMBER #	TEXT #
Sl. No.	Item Description	Quantity	Units	Unit ExWorks (exclusive of taxes) In Figures To be entered by the Bidder in Rs. P	TOTAL AMOUNT (Without Taxes) in Rs. P	TOTAL AMOUNT In Words
1	2	4	5	13	53	55
1	Erection, Testing & Commissioning of 132kV GIS Equipments(Erection A)					
1.10	145kV, 3150A, 40kA for 4 second, SF6 gas-insulated metal enclosed Transformer bay module each set comprising of One (1) number 3-phase, 3150A, SF6 insulated circuit breaker complete with operating mechanism; Three (3) numbers 1-phase, 5-core, multi ratio,600-300/1-1-1-1-1A current transformers; Three (3) numbers 3-phase, 3150A, group operated isolators/disconnectors, complete with manual and motor driven operating mechanisms; One (1) number 3-phase, group operated safety grounding switches, complete with manual and motor driven operating mechanisms;Gas monitoring devices, barriers, pressure switches, UHF PD Sensors, support structure etc. as required; Local Bay control cubicle.(Stand Alone or Integrated)	2	Sets		0.00	INR Zero Only

1.20	Three phase, 3150A, 40kA for 4 second, SF6 gas-insulated metal enclosed bus bar of 145kV, each set comprising of Bus bars enclosures running from the existing Bus bar Module to interconnect each of the Transformer circuit breaker bay modules in Double Bus bar configuration; Gas monitoring devices, barriers, pressure switches, UHF PD Sensors, support structure, foundation bolt, design & construction of foundation etc. as required	2	Sets		0.00	INR Zero Only
1.30	145kV, 3150A, 40 kA for 4 sec, 3- phase SF6 to air bushings along with termination module & support structure for outdoor connections to connect GIS with 145kV side of Power transformer.	2	Sets		0.00	INR Zero Only
1.40	145kV, 3150A, 40kA for 4 second, 3-Ph encapsulated, SF6 Gas Insulated Bus Duct (GIB) outside GIS hall including Bus Duct support structure and associated accessories along with jointing elements, foundation bolt, design & construction of foundation etc. as required	75	RM		0.00	INR Zero Only
1.50	Erection Hardware for 145kV GIS Termination arrangement for Transformer bay Modules	2	Sets		0.00	INR Zero Only
2.00	Erection, Testing & Commissioning of outdoor bay equipments (Erection B)					
2.01	Transformer					
2.02	50 MVA, 132/33 kV, 3-Ph, YNyn0, Z =12.5 %, ONAN/ONAF with copper wound Power Transformer with OLTC(+5% to -15% in steps of 1.25%) , RTCC panel including all cabling, insulating oil for the transformer plus 10% spare oil, supplied with Bushing mounted NCT on HV & LV side & complete with all fittings and accessories to meet the technical specification including cost of all routine test including loading and unloading at site.The Transformer shall be suitable for 4" Aluminium Tubular Conductor termination on HV and LV side.	2	No		0.00	INR Zero Only
2.03	Online DGA	2	No		0.00	INR Zero Only

2.04	Online Insulating oil drying system	2	Sets		0.00	INR Zero Only
2.05	Lightning Arrester					
2.06	120 kV, 10 kA, Metal Oxide type, heavy duty, station class 3, Lightning Arrestor complete with Pipe Structures, Surge Counter, Hardware fittings and Clamps and Connectors as per specification	6	No		0.00	INR Zero Only
2.07	30 kV,10 kA, Metal Oxide type, heavy duty, station class Lightning Arrestor complete with Pipe Structures, Surge Counter, Hardware fittings and Clamps and Connectors as per specification	6	No		0.00	INR Zero Only
2.08	Erection of 33kV XLPE Cable and Termination Kit					
2.09	Laying of 1000 sqmm, 33kV, 1-Core, XLPE Armoured Cu cable alongwith related accessories in cable trenches and cable terminations including supply of cable end sealing boxes, construction of cable trenches etc	200	Mtr		0.00	INR Zero Only
2.10	33kV Cable Termination Kit (both indoor and outdoor) along with its accessories and related structure for outdoor type.	4	Set		0.00	INR Zero Only
2.11	33kV Support Structure for Outdoor Cable Termination Kit	2	Nos		0.00	INR Zero Only
2.12	Earthing					
2.13	Main Earthing Conductor 40mm dia MS Rod	600	meter		0.00	INR Zero Only
2.14	Earthing Conductor: 40mm dia MS Rod For Riser From The Burial Earth Mat To Equipment,Structure Etc)	600	meter		0.00	INR Zero Only
2.15	Earthing Conductor: 75X12mm GI Flat For Equipment and Structure Earthing	300	meter		0.00	INR Zero Only
2.16	Earthing Conductor: 50X6 mm GI(HDG) Flat For Riser For Console Box,Lt Panels,Dc Panels,Marshalling Boxes, Cable Trenches Etc)	150	meter		0.00	INR Zero Only

2.17	Earthing Device & Associated Accessories (50 mm Heavy Duty GI Perforated Pipe 3 Mtrs Long For Treated Earth Pit)	6	Nos.		0.00	INR Zero Only
2.18	Earthing Device & Associated Accessories 40Mm Ms Rod 3 Mtrs Long For Non Treated Earth Pit)	60	Nos.		0.00	INR Zero Only
2.19	Soil Resistivity Test And Soil Treatment As And When Required	1	JOB		0.00	INR Zero Only
2.20	Separate Earthing For 145 Kv GIS Modules	1	JOB		0.00	INR Zero Only
2.21	Separate Earthing For 145 Kv GIS Building	1	JOB		0.00	INR Zero Only
2.22	Separate Earthing For 36 Kv Indoor AIS Equipment	1	JOB		0.00	INR Zero Only
2.23	Separate Earthing For 36 Kv Indoor AIS Building	1	JOB		0.00	INR Zero Only
2.24	Other Earthing Accessories	1	Lot		0.00	INR Zero Only
2.25	Fire Protection System for Transformer					
2.26	NIFPS					
2.27	N2 Fire Prevention and extinguishing System for transformer with complete accessories and related Civil and Electrical works.	2	No		0.00	INR Zero Only
2.28	HVWS					
2.29	HVW spray system, Hydrant System and complete U/G and O/G Piping and accessories etc and associated Civil Works for fire protection system for 2 nos 50 MVA 132/33kV Transformer	1	Set		0.00	INR Zero Only
2.30	HVWS System for 50 MVA ICT	2	Set		0.00	INR Zero Only
2.31	Portable/Wheel/ Trolley mounted Fire Extinguishers					
2.32	22.5 Kg capacity FE CO2 type, Trolley Mounted	4	Nos		0.00	INR Zero Only
2.33	25 Kg Capacity FE DCP type, Trolley Mounted	4	Nos		0.00	INR Zero Only
2.34	DCP 10 Kg Capacity, Wall mounted	6	Nos		0.00	INR Zero Only
2.35	FE CO2 6.5 Kg capacity, Wall mounted	4	Nos		0.00	INR Zero Only

2.36	DCP 5 Kg Capacity, Wall mounted	5	Nos		0.00	INR Zero Only
2.37	Foam Type 9 liter Capacity, Wall mounted	4	Nos		0.00	INR Zero Only
2.38	Water CO2 9 liter, Wall mounted	6	Nos		0.00	INR Zero Only
2.39	Fire Buckets (12 Nos. with stand in one set)	1	Set		0.00	INR Zero Only
2.40	Erection of Indoor floor mounted, SIMPLEX type Control and Relay Panels, with mimic & annunciation panel for 132kV system as per specification comprising of the C & R Panels and shall be complete with Numerical Relays and SAMAST Compliant ABT Meters as per the Technical specifications & shall be compatible for SCADA/ SAS .					
2.41	132kV Panels					
2.42	Transformer Protection Panel	1	No		0.00	INR Zero Only
2.43	Substation Automation System					
2.44	Integration with Existing SAS (including transmittal of telemetry data for HV & LV side of both the Transformer) for 132 kV System.	1	LS		0.00	INR Zero Only
2.45	Transformer Protection Panel	1	No		0.00	INR Zero Only
2.46	Conductor / IPS Al Tube					
2.47	4" IPS Al Tube	80	Mtr		0.00	INR Zero Only
2.48	Lightning protection					
2.49	Lightning Mast (LM)- 40m	1	No		0.00	INR Zero Only
2.50	Erection of mounting structures as required.					

2.51	132kV Equipments					
2.52	Lightning Arrester (1 Phase)	6	Nos		0.00	INR Zero Only
2.53	33kV Equipments					
2.54	Lightning Arrester (1 Phase)	6	Nos		0.00	INR Zero Only
2.55	Illumination system for Outdoor Lighting (Switchyard and Street lighting)					
2.56	Lighting Panel					
2.57	Lighting Panel Type ACP-2	1	Nos		0.00	INR Zero Only
2.58	Sub lighting panel type SLP	2	Nos		0.00	INR Zero Only
2.59	lighting Fixtures and Receptacles including junction box, lighting wires and flexible conduit (if required) from junction box to lighting fixture, mounting arrangement and other accessories/ materials etc as required for complete installation and commissioning of lighting fixture					
2.60	Lighting Fixture Type SF1	4	Nos		0.00	INR Zero Only
2.61	Lighting Fixture Type SF2	2	Nos		0.00	INR Zero Only
2.62	Lighting Fixture Type SF4	2	Nos		0.00	INR Zero Only
3.00	Erection, Testing & Commissioning of 33kV Equipments and Panels(Erection C)					
3.01	33kV,3 Phase, 13 Unit Panel (8 Line Bays, 2 Transformer incomer Bays, 1 Bus Sectionalizer Bay and 2 PT Bay) Indoor Drawn out type switchgear as per specification (Single bus with sectionalizer)	1	Set		0.00	INR Zero Only
3.02	30 kV,10 kA, Metal Oxide type, heavy duty, station class Lightning Arrester complete with Surge Counter & copper connecting lead	24	No		0.00	INR Zero Only

3.03	Outdoor type 36 kV, 1250 A, 3-Ph gang operated, outdoor type, Double Break centre Post rotating outdoor type motor operated Disconnecter (Isolator) with solid core Post Insulator.					
3.04	With one earth switch	8	Sets		0.00	INR Zero Only
3.05	Supply of 33kV XLPE Cable and Termination Kit					
3.06	300 sqmm, 33kV, 1-Core, XLPE Armoured Cu cable alongwith related accessories	900	Mtr		0.00	INR Zero Only
3.07	33kV Cable Termination Kit (both indoor and outdoor) along with its accessories and related structure for outdoor type.	16	Set		0.00	INR Zero Only
3.08	33kV Support Structure for Outdoor Cable Termination Kit	8	Nos		0.00	INR Zero Only
3.09	Erection of Control, Relay & Protection Panel(Simplex Type) with mimic & annunciation panel with ABT Meters for 33kV system as per specification					
3.10	33 kV Panels					
3.11	33KV Line Protection & Control Panel	8	Nos		0.00	INR Zero Only
3.12	33KV Transformer I/C Protection & Control Panel on 33 kV side of Power Transformer	2	Nos		0.00	INR Zero Only
3.13	33KV Protection & Control Panel for Bus Section	1	Nos		0.00	INR Zero Only
3.14	Substation Automation System and Integration with existing SAS					
3.15	Integration with Existing SAS for 33kV System	1	LS		0.00	INR Zero Only
3.16	Bay Steel Structures except equipment mounting structures					
3.17	COLUMNS					
3.18	Column Type 'C5'	3	Nos		0.00	INR Zero Only

3.19	Column Type 'C6'	6	Nos		0.00	INR Zero Only
3.20	Construction of foundations for lattice steel columns including supply of all foundation materials and labour etc.	1	Lot		0.00	INR Zero Only
3.21	BEAMS					
3.22	Beam Type 'B5'	8	Nos		0.00	INR Zero Only
3.23	Erection of Foundation Bolts (including nuts, checknut and washers for lattice and pipe structures)	1	Lot		0.00	INR Zero Only
3.24	Erection of Fasteners (nuts, bolts and washers) including step bolts for lattice and pipe structures	1	Lot		0.00	INR Zero Only
3.25	Erection of mounting structures as required					
3.26	33kV Equipments					
3.27	Isolator	8	Sets		0.00	INR Zero Only
3.28	Lightning Arrester (1 Phase)	24	Nos		0.00	INR Zero Only
3.29	Illumination System					
3.30	Indoor Illumination system for the 33kV Indoor Switchgear Room	1	LS		0.00	INR Zero Only
3.31	Lightning protection (Lightning spikes, shield wires, down conductors etc.)	1	LS		0.00	INR Zero Only
Total in Figures					0.00	
Quoted Rate in Words		INR Zero Only				

Tender Inviting Authority: CGM(PP&D), AEGCL

Name of Work: **Supply of 132/33 kV GIS Equipments for Amingaon GIS under NESIDS fund [Schedule 1C- Civil Works]**

Contract No: Nil

Name of the Bidder/ Bidding Firm / Company :	
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PRICE SCHEDULE

(This BOQ template must not be modified/replaced by the bidder and the same should be uploaded after filling the relevent columns, else the bidder is liable to be rejected for this tender. Bidders are allowed to enter the Bidder Name and Values only)

NUMBER #	TEXT #	NUMBER #	TEXT #	NUMBER #	NUMBER #	TEXT #
Sl. No.	Item Description	Quantity	Units	Unit ExWorks (exclusive of taxes) In Figures To be entered by the Bidder in Rs. P	TOTAL AMOUNT (Without Taxes) in Rs. P	TOTAL AMOUNT In Words
1	2	4	5	13	53	55
1	Site development, PCC and Gravelling work					
1.01	Clearing and grubbing road land including uprooting wild vegetation, grass, bushes, shrubs, saplings and trees of girth upto 300 mm, removal of stumps of such trees cut earlier and disposal of unserviceable materials and stacking of serviceable material to be used or auctioned, upto a lead of 1000 m including removal and disposal of top organic soil not exceeding 150 mm in thickness as per Technical Specification Clause 201. (i) By Manual Means. (b) In area of thorny jungle.	0.40	Hectare		0.00	INR Zero Only
1.02	Earth work in excavation by mechanical means (Hydraulic excavator)/manual means over areas (exceeding 30 cm in depth, 1.5 m in width as well as 10 sqm on plan) including getting out and disposal of excavated earth lead upto 50 m and lift upto 1.5 m, as directed by Engineer-in-charge. All kinds of soil.	5000.00	cum		0.00	INR Zero Only

1.03	Excavating, supplying and filling of local earth (including royalty) by mechanical transport upto a lead of 5km also including ramming and watering of the earth in layers not exceeding 20 cm in trenches, plinth, sides of foundation etc. complete. The Bill of Quantity for site development by Earthfilling shall be measured on fully compacted soil, therefore any shrinkage shall not be considered.	3500.00	Cum		0.00	INR Zero Only
1.04	Providing and laying in position ready mixed or site batched design mix cement concrete for plain cement concrete work; using coarse aggregate and fine aggregate derived from natural sources, Portland Pozzolana/Ordinary Portland /Portland Slag cement, admixtures in recommended proportions as per IS: 9103 to accelerate / retard setting of concrete, to improve durability and workability without impairing strength; including pumping of concrete to site of laying, curing, carriage for all leads; including the cost of centering, shuttering and finishing as per direction of the engineer-in-charge; for the following grades of concrete. Note: Extra cement up to 10% of the minimum specified cement content in design mix shall be payable separately. In case the cement content in design mix is more than 110% of the minimum specified cement content, the contractor shall have discretion to either re-design the mix or bear the cost of extra cement. Concrete of M10 grade with minimum cement content of 220 kg /cum	350.00	Cum		0.00	INR Zero Only
1.05	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply including all CPVC plain & brass threaded fittings This includes jointing of pipes & fittings with one step CPVC solvent cement, trenching, refilling & testing of joints complete as per direction of Engineer in Charge. 100 mm nominal dia Pipes	225.00	RM		0.00	INR Zero Only
1.06	Providing and fixing PTMT grating of approved quality and colour. Circular type 100 mm nominal dia	750.00	Each		0.00	INR Zero Only
1.07	Supplying and laying 100 mm thick machine crushed 25 mm stone aggregates in layers.	350.00	Cum		0.00	INR Zero Only

1.08	Cost of Haulage excluding loading and unloading. Surface road. 25-5=20KM @ Rs.16.00 Cum/KM=20X16=320	350.00	Cum		0.00	INR Zero Only
1.09	Trenches work					
1.1	Earth work in excavation by mechanical means (Hydraulic excavator)/manual means over areas (exceeding 30 cm in depth, 1.5 m in width as well as 10 sqm on plan) including getting out and disposal of excavated earth lead upto 50 m and lift upto 1.5 m, as directed by Engineer-incharge. All kinds of soil.	56.25	Cum		0.00	INR Zero Only
1.11	Providing and laying in position ready mixed or site batched design mix cement concrete for plain cement concrete work; using coarse aggregate and fine aggregate derived from natural sources, Portland Pozzolana/Ordinary Portland /Portland Slag cement, admixtures in recommended proportions as per IS: 9103 to accelerate / retard setting of concrete, to improve durability and workability without impairing strength; including pumping of concrete to site of laying, curing, carriage for all leads; including the cost of centering, shuttering and finishing as per direction of the engineer-in-charge; for the following grades of concrete. Note: Extra cement up to 10% of the minimum specified cement content in design mix shall be payable separately. In case the cement content in design mix is more than 110% of the minimum specified cement content, the contractor shall have discretion to either re-design the mix or bear the cost of extra cement. Concrete of M10 grade with minimum cement content of 220 kg /cum	7.03	Cum		0.00	INR Zero Only

1.12	<p>Providing and laying in position ready mixed or site batched design mix cement concrete for reinforced cement concrete work; using coarse aggregate and fine aggregate derived from natural sources, Portland Pozzolana / Ordinary Portland /Portland Slag cement, admixtures in recommended proportions as per IS: 9103 to accelerate / retard setting of concrete, to improve durability and workability without impairing strength; including pumping of concrete to site of laying, curing, carriage for all leads; including the cost of centering, shuttering, finishing and reinforcement as per direction of the engineer-in-charge; for the following grades of concrete.</p> <p>Note: Extra cement up to 10% of the minimum specified cement content in design mix shall be payable separately. In case the cement content in design mix is more than 1.10 times of the specified minimum cement content, the contractor shall have discretion to either re-design the mix or bear the cost of extra cement.</p> <p>Concrete of M25 grade with minimum cement content of 330 kg /cum</p>	45.54	Cum		0.00	INR Zero Only
1.13	<p>Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete upto plinth level.</p> <p>Thermo-Mechanically Treated bars of grade Fe-500D or more.</p>	21,265.00	Kg		0.00	INR Zero Only
1.14	<p>Structural steel work riveted, bolted or welded in built up sections, trusses and framed work, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer all complete.</p>	1,200.00	Kg		0.00	INR Zero Only
1.15	<p>Providing and fixing on wall face unplasticised Rigid PVC rain water pipes conforming to IS : 13592 Type A, including jointing with seal ring conforming to IS : 5382, leaving 10 mm gap for thermal expansion, (i) Single socketed pipes. 110 mm diameter.</p>	100.00	Rm		0.00	INR Zero Only
1.16	Boundary / Retaining wall					
1.17	<p>Earth work in excavation by mechanical means (Hydraulic excavator)/manual means over areas (exceeding 30 cm in depth, 1.5 m in width as well as 10 sqm on plan) including getting out and disposal of excavated earth lead upto 50 m and lift upto 1.5 m, as directed by Engineer-incharge. All kinds of soil.</p>	924.00	cum		0.00	INR Zero Only

1.18	<p>Providing and laying in position ready mixed or site batched design mix cement concrete for plain cement concrete work; using coarse aggregate and fine aggregate derived from natural sources, Portland Pozzolana/Ordinary Portland /Portland Slag cement, admixtures in recommended proportions as per IS: 9103 to accelerate / retard setting of concrete, to improve durability and workability without impairing strength; including pumping of concrete to site of laying, curing, carriage for all leads; including the cost of centering, shuttering and finishing as per direction of the engineer-in-charge; for the following grades of concrete.</p> <p>Note: Extra cement up to 10% of the minimum specified cement content in design mix shall be payable separately. In case the cement content in design mix is more than 110% of the minimum specified cement content, the contractor shall have discretion to either re-design the mix or bear the cost of extra cement.</p> <p>Concrete of M10 grade with minimum cement content of 220 kg /cum</p>	30.80	cum		0.00	INR Zero Only
1.19	<p>Providing and laying in position ready mixed or site batched design mix cement concrete for reinforced cement concrete work; using coarse aggregate and fine aggregate derived from natural sources, Portland Pozzolana / Ordinary Portland /Portland Slag cement, admixtures in recommended proportions as per IS: 9103 to accelerate / retard setting of concrete, to improve durability and workability without impairing strength; including pumping of concrete to site of laying, curing, carriage for all leads; including the cost of centering, shuttering, finishing and reinforcement as per direction of the engineer-in-charge; for the following grades of concrete.</p> <p>Note: Extra cement up to 10% of the minimum specified cement content in design mix shall be payable separately. In case the cement content in design mix is more than 1.10 times of the specified minimum cement content, the contractor shall have discretion to either re-design the mix or bear the cost of extra cement.</p>					
1.2	<p>All works upto plinth level Concrete of M25 grade with minimum cement content of 330 kg /cum</p>	93.10	cum		0.00	INR Zero Only
1.21	<p>All works above plinth level upto floor V level Concrete of M25 grade with minimum cement content of 330 kg /cum</p>	28.57	cum		0.00	INR Zero Only

1.22	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete upto plinth level. Thermo-Mechanically Treated bars of grade Fe-500D or more.	1642.40	Kg		0.00	INR Zero Only
1.23	Coursed rubble masonry (first sort) with hard stone in foundation and plinth with : Cement mortar 1:6 (1 cement : 6 coarse sand)	980.00	cum		0.00	INR Zero Only
1.24	Tower foundations					
1.25	Earth work in excavation by mechanical means (Hydraulic excavator)/manual means over areas (exceeding 30 cm in depth, 1.5 m in width as well as 10 sqm on plan) including getting out and disposal of excavated earth lead upto 50 m and lift upto 1.5 m, as directed by Engineer-incharge. All kinds of soil.	159.08	cum		0.00	INR Zero Only
1.26	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete upto plinth level. Thermo-Mechanically Treated bars of grade Fe-500D or more.	11135.00	Kg		0.00	INR Zero Only

1.27	<p>Providing and laying in position ready mixed or site batched design mix cement concrete for plain cement concrete work; using coarse aggregate and fine aggregate derived from natural sources, Portland Pozzolana/Ordinary Portland /Portland Slag cement, admixtures in recommended proportions as per IS: 9103 to accelerate / retard setting of concrete, to improve durability and workability without impairing strength; including pumping of concrete to site of laying, curing, carriage for all leads; including the cost of centering, shuttering and finishing as per direction of the engineer-in-charge; for the following grades of concrete.</p> <p>Note: Extra cement up to 10% of the minimum specified cement content in design mix shall be payable separately. In case the cement content in design mix is more than 110% of the minimum specified cement content, the contractor shall have discretion to either re-design the mix or bear the cost of extra cement.</p> <p>Concrete of M10 grade with minimum cement content of 220 kg /cum</p>	7.58	cum		0.00	INR Zero Only
1.28	<p>Providing and laying in position ready mixed or site batched design mix cement concrete for reinforced cement concrete work; using coarse aggregate and fine aggregate derived from natural sources, Portland Pozzolana / Ordinary Portland /Portland Slag cement, admixtures in recommended proportions as per IS: 9103 to accelerate / retard setting of concrete, to improve durability and workability without impairing strength; including pumping of concrete to site of laying, curing, carriage for all leads; including the cost of centering, shuttering, finishing and reinforcement as per direction of the engineer-in-charge; for the following grades of concrete.</p> <p>Note: Extra cement up to 10% of the minimum specified cement content in design mix shall be payable separately. In case the cement content in design mix is more than 1.10 times of the specified minimum cement content, the contractor shall have discretion to either re-design the mix or bear the cost of extra cement.</p> <p>All works upto plinth level</p> <p>Concrete of M25 grade with minimum cement content of 330 kg /cum</p>	58.54	cum		0.00	INR Zero Only
1.29	Equipment foundations					

1.3	Earth work in excavation by mechanical means (Hydraulic excavator)/manual means over areas (exceeding 30 cm in depth, 1.5 m in width as well as 10 sqm on plan) including getting out and disposal of excavated earth lead upto 50 m and lift upto 1.5 m, as directed by Engineer-in-charge. All kinds of soil.	510.68	cum		0.00	INR Zero Only
1.31	<p>Providing and laying in position ready mixed or site batched design mix cement concrete for plain cement concrete work; using coarse aggregate and fine aggregate derived from natural sources, Portland Pozzolana/Ordinary Portland /Portland Slag cement, admixtures in recommended proportions as per IS: 9103 to accelerate / retard setting of concrete, to improve durability and workability without impairing strength; including pumping of concrete to site of laying, curing, carriage for all leads; including the cost of centering, shuttering and finishing as per direction of the engineer-in-charge; for the following grades of concrete.</p> <p>Note: Extra cement up to 10% of the minimum specified cement content in design mix shall be payable separately. In case the cement content in design mix is more than 110% of the minimum specified cement content, the contractor shall have discretion to either re-design the mix or bear the cost of extra cement.</p> <p>Concrete of M10 grade with minimum cement content of 220 kg /cum</p>	23.17	cum		0.00	INR Zero Only

1.32	<p>Providing and laying in position ready mixed or site batched design mix cement concrete for reinforced cement concrete work; using coarse aggregate and fine aggregate derived from natural sources, Portland Pozzolana / Ordinary Portland /Portland Slag cement, admixtures in recommended proportions as per IS: 9103 to accelerate / retard setting of concrete, to improve durability and workability without impairing strength; including pumping of concrete to site of laying, curing, carriage for all leads; including the cost of centering, shuttering, finishing and reinforcement as per direction of the engineer-in-charge; for the following grades of concrete. Note: Extra cement up to 10% of the minimum specified cement content in design mix shall be payable separately. In case the cement content in design mix is more than 1.10 times of the specified minimum cement content, the contractor shall have discretion to either re-design the mix or bear the cost of extra cement.</p> <p>All works upto plinth level Concrete of M25 grade with minimum cement content of 330 kg /cum</p>	149.48	cum		0.00	INR Zero Only
1.33	<p>Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete upto plinth level. Thermo-Mechanically Treated bars of grade Fe-500D or more.</p>	12333.00	Kg		0.00	INR Zero Only
1.34	<p>50 MVA Power Transformer foundation-2 Nos</p>					
1.35	<p>Earth work in excavation by mechanical means (Hydraulic excavator)/manual means over areas (exceeding 30 cm in depth, 1.5 m in width as well as 10 sqm on plan) including getting out and disposal of excavated earth lead upto 50 m and lift upto 1.5 m, as directed by Engineer-incharge. All kinds of soil.</p>	313.96	cum		0.00	INR Zero Only

1.36	<p>Providing and laying in position ready mixed or site batched design mix cement concrete for plain cement concrete work; using coarse aggregate and fine aggregate derived from natural sources, Portland Pozzolana/Ordinary Portland /Portland Slag cement, admixtures in recommended proportions as per IS: 9103 to accelerate / retard setting of concrete, to improve durability and workability without impairing strength; including pumping of concrete to site of laying, curing, carriage for all leads; including the cost of centering, shuttering and finishing as per direction of the engineer-in-charge; for the following grades of concrete.</p> <p>Note: Extra cement up to 10% of the minimum specified cement content in design mix shall be payable separately. In case the cement content in design mix is more than 110% of the minimum specified cement content, the contractor shall have discretion to either re-design the mix or bear the cost of extra cement. Concrete of M10 grade with minimum cement content of 220 kg /cum</p>	20.96	cum		0.00	INR Zero Only
1.37	<p>Providing and laying in position ready mixed or site batched design mix cement concrete for reinforced cement concrete work; using coarse aggregate and fine aggregate derived from natural sources, Portland Pozzolana / Ordinary Portland /Portland Slag cement, admixtures in recommended proportions as per IS: 9103 to accelerate / retard setting of concrete, to improve durability and workability without impairing strength; including pumping of concrete to site of laying, curing, carriage for all leads; including the cost of centering, shuttering, finishing and reinforcement as per direction of the engineer-in-charge; for the following grades of concrete.</p> <p>Note: Extra cement up to 10% of the minimum specified cement content in design mix shall be payable separately. In case the cement content in design mix is more than 1.10 times of the specified minimum cement content, the contractor shall have discretion to either re-design the mix or bear the cost of extra cement.</p> <p>All works upto plinth level Concrete of M25 grade with minimum cement content of 330 kg /cum</p>	53.25	cum		0.00	INR Zero Only

1.38	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete upto plinth level. Thermo-Mechanically Treated bars of grade Fe-500D or more.	6390.00	Kg		0.00	INR Zero Only
1.39	Structural steel work riveted, bolted or welded in built up sections, trusses and framed work, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer all complete.	18384.00	Kg		0.00	INR Zero Only
1.4	Fire Protection wall- 1 Nos					
1.41	Earth work in excavation by mechanical means (Hydraulic excavator)/manual means over areas (exceeding 30 cm in depth, 1.5 m in width as well as 10 sqm on plan) including getting out and disposal of excavated earth lead upto 50 m and lift upto 1.5 m, as directed by Engineer-in-charge. All kinds of soil.	59.36	cum		0.00	INR Zero Only
1.42	Providing and laying in position ready mixed or site batched design mix cement concrete for plain cement concrete work; using coarse aggregate and fine aggregate derived from natural sources, Portland Pozzolana/Ordinary Portland /Portland Slag cement, admixtures in recommended proportions as per IS: 9103 to accelerate / retard setting of concrete, to improve durability and workability without impairing strength; including pumping of concrete to site of laying, curing, carriage for all leads; including the cost of centering, shuttering and finishing as per direction of the engineer-in-charge; for the following grades of concrete. Note: Extra cement up to 10% of the minimum specified cement content in design mix shall be payable separately. In case the cement content in design mix is more than 110% of the minimum specified cement content, the contractor shall have discretion to either re-design the mix or bear the cost of extra cement. Concrete of M10 grade with minimum cement content of 220 kg /cum	1.54	cum		0.00	INR Zero Only

1.43	Brick on edge flooring with bricks of class designation 7.5 on a bed of 12 mm cement mortar, including filling the joints with same mortar, with common burnt clay non modular bricks: 1:6 (1cement : 6 coarse sand)	22.19	Sqm		0.00	INR Zero Only
1.44	5.33 Providing and laying in position ready mixed or site batched design mix cement concrete for reinforced cement concrete work; using coarse aggregate and fine aggregate derived from natural sources, Portland Pozzolana / Ordinary Portland /Portland Slag cement, admixtures in recommended proportions as per IS: 9103 to accelerate / retard setting of concrete, to improve durability and workability without impairing strength; including pumping of concrete to site of laying, curing, carriage for all leads; including the cost of centering, shuttering, finishing and reinforcement as per direction of the engineer-in-charge; for the following grades of concrete. Note: Extra cement up to 10% of the minimum specified cement content in design mix shall be payable separately. In case the cement content in design mix is more than 1.10 times of the specified minimum cement content, the contractor shall have discretion to either re-design the mix or bear the cost of extra cement.					
1.45	All works upto plinth level Concrete of M25 grade with minimum cement content of 330 kg /cum	8.81	cum		0.00	INR Zero Only
1.46	All works above plinth level upto floor V level Concrete of M25 grade with minimum cement content of 330 kg /cum	3.66	cum		0.00	INR Zero Only
1.47	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete upto plinth level. Thermo-Mechanically Treated bars of grade Fe-500D or more.	929.000	kg		0.00	INR Zero Only
1.48	Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in superstructure above plinth level up to floor V level in all shapes and sizes in : Cement mortar 1:4 (1 cement : 4 coarse sand)	29.07	cum		0.00	INR Zero Only

1.49	15 mm cement plaster on the rough side of single or half brick wall of mix : (1 cement: 6 fine sand)	148.29	Sqm.		0.00	INR Zero Only
1.5	Applying one coat of water thinnable cement primer of approved brand and manufacture on wall surface : Water thinnable cement	148.29	Sqm.		0.00	INR Zero Only
1.51	Finishing walls with water proofing cement paint of required shade : New work (Two or more coats applied @ 3.84 kg/10 sqm)	148.29	Sqm.		0.00	INR Zero Only
1.52	VCB Building					
1.53	Design and Construction of VCB Building (Ht=6.00 meter) with all finishes, Sanitary System,Plumbing,Electrification,AIR Conditioning etc as per the drawing ,specification and direction of Engineer In Charge .Rate shall include supply of all material and labour.	175.00	SqMeter		0.00	INR Zero Only
1.54	PCC Road					
1.55	Brick on edge flooring with bricks of class designation 7.5 on a bed of 12 mm cement mortar, including filling the joints with same mortar, with common burnt clay non modular bricks: 1:6 (1cement : 6 coarse sand)	750.00	Sqm		0.00	INR Zero Only
1.56	Providing and laying in position specified grade of reinforced cement concrete, excluding the cost of centering, shuttering, finishing and reinforcement - All work up to plinth level : 1:2:4 (1 cement : 2 coarse sand (zone-III) derived from natural sources : 4 graded stone aggregate 20 mm nominal size derived from natural sources)	112.50	Cum		0.00	INR Zero Only
Total in Figures					0.00	
Quoted Rate in Words		INR Zero Only				