

123

COMPARATIVE STATEMENT

NAME OF WORK :- Annual Periodical Maintenance and Operation of E&M Installations at C. A. Porbandar for two years (2020-22).

Sl. No.	Description of item	Unit	Qty	Justified Cost		Ascent Electrification Engineers (GSTN-24AAGF42574RT2U)		Tehna Electricals (GSTN-24AAGFT908M412C)		CENTRE TAP ENGINEERING (GSTN-24AGPPR8172K12P)		ADHISHEX ASSOCIATES (GSTN-24ADZP0439Q1ZT)		Menish Electricals (GSTN-22A8LPW8012E12Y)		S. N ELECTRICALS (GSTN-07AKEPG8078R22B)	
				RATE	AMT	RATE	AMT	RATE	AMT	RATE	AMT	RATE	AMT	RATE	AMT	RATE	AMT
1	Operation and Maintenance of Electrical & Mechanical Installations at Terminal building, DVOB, MSSD, power house & other ancillary buildings as per specifications and conditions attached to provide uninterrupted power supply and deputing man power round the clock in Three shifts, General shift including attending complaints/faults/breakdowns to ensure serviceability, preventive maintenance, upkeeping maintenance records/documentation etc., on all working days including Sundays and Holidays complete as required.	Month	24.00	274673.00	6592152.00	244795.04	5875080.96	251322.00	6031728.00	246000.00	5904000.00	245888.00	5901312.00	253786.00	6090864.00	248500.00	5964000.00
2	Servicing, Checking and testing of 3 Ph, 11KV 800A HT Vacuum Circuit Breaker (VCB) including testing of wiring of breaker and minor repairing works complete as required including documentation, testing as per recommended standards (through authorised agency of OEM/reputed agency approved by Engineer-in-Charge) followed with submission of test report to AAI as per conditions of contract etc as required.	Job	6.00	5200.00	31200.00	3300.00	19800.00	2800.00	16800.00	5000.00	30000.00	5000.00	30000.00	4500.00	27000.00	3500.00	21000.00
3	Servicing, Checking and testing of followwng HT components installed on 3 Ph, 11 KV, 800 A, HT Vacuum Circuit Breaker (VCB) including testing of wiring of breaker and minor repairing works complete as required including documenting the testing as per recommended standards (through authorised agency of OEM/reputed agency approved by Engineer-in-Charge) followed with submission of test report to AAI as per condition of contract etc as required.																
3.1	11 KV Current Transformer (1 Set of Three)	Job	6.00	3200.00	19200.00	3600.00	21600.00	1500.00	9000.00	3000.00	18000.00	2500.00	15000.00	3000.00	18000.00	8500.00	51000.00
3.2	11 KV Potential Transformer	Job	2.00	2200.00	4400.00	3600.00	7200.00	1500.00	3000.00	2000.00	4000.00	2500.00	5000.00	3000.00	6000.00	5500.00	11000.00
4	Servicing & repairing of automatic float/boost battery charger for 11 KV HT starter panel including replacement of faulty parts, provision of 2 nos. new 88 Ah, 12 V batteries complete with testing & commissioning all as reqd.& as per the instruction of E.I.C.																
5	Servicing and Testing of the 500 KVA, 11 KV, 430 V distribution ONAN Transformer as per recommended standard and submission of report complete as required through authorised service agency of OEM/ reputed agency approved by engineer-in - charge. Testing should include Insulation Resistance test, Voltage Ratio & Tap Continuity test, Magnetic Balance Test, Vector Group Test, Accessories working etc. complete as reqd.	Job	1.00	20500.00	20500.00	12300.00	12300.00	17500.00	17500.00	9000.00	9000.00	5000.00	5000.00	17000.00	17000.00	2500.00	2500.00
6	Servicing, Checking and Testing of the 17 800 A Air Circuit Breakers including testing of wiring of breaker and minor repairing works complete as required including documenting the testing as per recommended standards (through authorised agency of OEM/reputed agency approved by Engineer-in-Charge) followed with submission of test report to AAI as per condition of contract etc as required.	Job	4.00	10500.00	42000.00	10000.00	40000.00	2500.00	10000.00	10000.00	40000.00	10000.00	40000.00	7800.00	31200.00	9500.00	38000.00
		Job	4.00	3800.00	15200.00	3900.00	15600.00	3000.00	12000.00	3500.00	14000.00	3500.00	14000.00	3300.00	13200.00	2500.00	10000.00

Signature
4/10/2020



Signature
04.12.20

JR EXECUTIVE (E-E)
AAI, C. A. PORBANDAR

ASST. GEN. MANAGER (E-E)
AAI, C. A. PORBANDAR

2/3

R. No.	Description of Item	Unit	Qty	Justified Cost		Ascent Electrification Engineers (GSTN- 24AAOF4374R12U)		Techno Electricals (GSTN- 24AAOF T908M12O)		CENTRE TAP ENGINEERING (GSTN- 24AGPFP817K12P)		ABHISHEK ASSOCIATES (GSTN- 24ADZPD433Q12T)		Manish Electricals (GSTN- 22ABLP0012E12Y)		S. N ELECTRICALS (GSTN- 07AKEPQ087R22B)	
				RATE	AMT	RATE	AMT	RATE	AMT	RATE	AMT	RATE	AMT	RATE	AMT	RATE	AMT
7	Servicing, Testing and Calibration of the following relays as per recommended standard and submission of calibration report complete as required through authorised service agency of OEM/ reputed agency approved by Engineer-in-Charge.																
7.1	Over Current & Earth Fault Relay (MC 31A of L&T make) for LT panel	Each	8.00	2000.00	16000.00	1345.00	10760.00	1500.00	12000.00	1800.00	14400.00	2000.00	16000.00	1500.00	12000.00	1000.00	8000.00
7.2	Auxiliary Relay for Buchholz, WTI, OTI tripping for 11 KV HT VCB panel	Each	8.00	3500.00	28000.00	1645.00	13160.00	750.00	6000.00	2200.00	17600.00	3500.00	28000.00	2000.00	16000.00	1000.00	8000.00
7.3	Master Tripping relay (CGMH1 of CG make) for 11KV HT VCB panel	Each	6.00	3500.00	21000.00	1650.00	9900.00	1500.00	9000.00	2200.00	13200.00	3500.00	21000.00	2000.00	12000.00	1000.00	6000.00
7.4	Over Current & Earth Fault Relay (CGI 14N of CG make) for 11 KV HT VCB panel	Each	6.00	3500.00	21000.00	1750.00	10500.00	1500.00	9000.00	2200.00	13200.00	3500.00	21000.00	2500.00	15000.00	1000.00	6000.00
8	Dehydration and filtration of transformer oil at site including testing the BOV before and after filtration and submitting the test reports etc., as required for 500 KVA Transformer (Approx. 415 Ltr.oil tank capacity)																
9	Supply and Topping up the transformer oil in conservator tank upto a required level with new treated transformer oil complete as required.	Each	4.00	8000.00	32000.00	6500.00	26000.00	6000.00	24000.00	10000.00	40000.00	7500.00	30000.00	6000.00	24000.00	12500.00	50000.00
10	Servicing, repairing, rewinding and replacement of defective bearings / bushing including transporting from site to contractors workshop & back to site, testing and commissioning etc. complete as required.	Ltr.	85.00	130.00	11050.00	130.00	11050.00	150.00	12750.00	120.00	10200.00	100.00	8500.00	140.00	11900.00	125.00	10625.00
10.1	Ceiling fan / wall fan / pedestal fan	Each	10.00	400.00	4000.00	300.00	3000.00	300.00	3000.00	350.00	3500.00	350.00	3500.00	400.00	4000.00	150.00	1500.00
10.2	Exhaust fan of all sizes	Each	4.00	600.00	2400.00	300.00	1200.00	300.00	1200.00	500.00	2000.00	350.00	1400.00	600.00	2400.00	150.00	600.00
11	Rewinding of the upto 3/5 HP submersible/monoblock pump/motor sets with suitable gauge copper wire /C warming, baking etc as required, job includes transportation from site to contractor's workshop & back to site.	Each	2.00	1800.00	3600.00	1500.00	3000.00	2000.00	4000.00	1500.00	3000.00	500.00	1000.00	2000.00	4000.00	3500.00	7000.00
12	Calibration of CCR & Sensitivity of relay on 4 KW to 20 KW CCR of AMA/NASU make CCR including submitting reports etc., complete as required.	Each	8.00	3850.00	30800.00	2900.00	23200.00	3000.00	24000.00	3500.00	28000.00	5500.00	44000.00	4000.00	32000.00	5500.00	44000.00
13	Calibration of PAPI Clinometer etc. complete as required.	Each	1.00	2000.00	2000.00	10000.00	10000.00	2000.00	2000.00	4000.00	4000.00	9000.00	9000.00	3000.00	3000.00	12500.00	12500.00
14	Inspection, servicing, setting, testing, adjustment, calibration and submission of calibration certificate of following instruments including minor repairs etc.all as reqd.																
14.1	Earth Tester	Each	1.00	400.00	400.00	500.00	500.00	500.00	500.00	350.00	350.00	400.00	400.00	500.00	500.00	1500.00	1500.00
14.2	Multimeter (digital)	Each	1.00	400.00	400.00	500.00	500.00	500.00	500.00	350.00	350.00	400.00	400.00	500.00	500.00	1500.00	1500.00
14.3	Lux Meter	Each	1.00	400.00	400.00	500.00	500.00	500.00	500.00	350.00	350.00	400.00	400.00	500.00	500.00	1500.00	1500.00
15	Painting of Runway / Taxiway Light installed GLE fittings including base plate with two coats of the synthetic enamel paint of aviation yellow colour of approved make to give an even shade and painting the base concrete with white colour water base road marking paint including numbering with black paint on white back ground, cleaning the surface with suitable means as per the instructions of the Engineer in Charge etc. complete as required.																
16	Painting of PAPI fittings including base plate with two coats of the synthetic enamel paint of aviation yellow colour of approved make to give an even shade, cleaning the surface with suitable means as per the instructions of the Engineer in Charge etc. complete as required.	Each	185.00	100.00	18500.00	60.00	11100.00	55.00	10175.00	95.00	17575.00	90.00	16650.00	80.00	14800.00	150.00	27750.00
		Each	8.00	400.00	3200.00	300.00	2400.00	350.00	2800.00	250.00	2000.00	100.00	800.00	280.00	2240.00	150.00	1200.00



04.12.20

Signature of the official

JR EXECUTIVE (E-E)
AAI, C.A. PORBANDAR

Name of Work: "Annual Periodical Maintenance & Operation of E & M Installations at C.A. Porbandar for 2 years (2020-22)."

Tender ID: 2020_AAL_62353_1

Contract No: AAUPORAGM(E-J)/e-NT-04/20-21

SCHEDULE OF WORK / ITEM(S)

SL.No	Description of Work / Item(s)	No. of Qty	Units	Estimated Rate	Ascent Electrification Engineers (SSTN-244AGF/4257AR1ZU)		Techno Electricals (GSTN-244AGF/0068M1ZD)		CENTRE TAP ENGINEERING (GSTN-244AGPP617K1ZP)		ABHISHEK ASSOCIATES (GSTN-244DZPD4239Q1ZT)		Manish Electricals (GSTN-22ABLPW6M1ZE1ZY)		S. N. ELECTRICALS (GSTN-07YAKPG3879R2Z9)		L1 Amount	L1 Vendor
					Rate	Amount	Rate	Amount	Rate	Amount	Rate	Amount	Rate	Amount	Rate	Amount		
1.00	Operation and Maintenance of Electrical & Mechanical Installations at Terminal building, DVOR, MISR, power house & other ancillary buildings as per specifications and conditions attached to provide uninterrupted power supply and depeding man power round the clock in Three shifts, General shift including attending complaints/sub-breakdowns to ensure serviceability, preventive maintenance, upkeeping maintenance records/documentation etc., on all working days including Sundays and Holidays complete as required.	24.00	Month		244795.04	5875080.96	251322.00	6031726.00	246000.00	5904000.00	245888.00	5901312.00	253766.00	6096984.00	248500.00	5944000.00	5875080.96	Ascent Electricals on Engineers
2.00	Service, Checking and testing of 3 Ph 11KV 800A HT Vacuum Circuit Breaker (VCB) including testing of wiring of breaker and minor repairing works complete as required including documentation, testing as per recommended standards (through authorised agency of OEM/reputed agency approved by Engineer-in-Charge) followed with submission of test report to AAI as per conditions of contract etc as required.	6.00	Job		3300.00	19800.00	2800.00	16800.00	5000.00	30000.00	5000.00	30000.00	4500.00	27000.00	3500.00	21000.00	16800.00	Techno Electricals
3.00	Service, Checking and testing of following HT components installed on 3 Ph, 11 KV, 800 A, HT Vacuum Circuit Breaker (VCB) including testing of wiring of breaker and minor repairing works complete as required including documentation, testing as per recommended standards (through authorised agency of OEM/reputed agency approved by Engineer-in-Charge) followed with submission of test report to AAI as per condition of contract etc as required.																	
3.10	11 KV Current Transformer (1 Set of Three)	6.00	Job		3600.00	21600.00	1500.00	9000.00	3000.00	18000.00	2500.00	15000.00	3000.00	18000.00	8500.00	51000.00	9000.00	Techno Electricals
3.20	11 KV Potential Transformer	2.00	Job		3600.00	7200.00	1500.00	3000.00	2000.00	4000.00	2500.00	5000.00	3000.00	6000.00	5500.00	11000.00	3000.00	Techno Electricals
4.00	Service & repairing of automatic float/boost battery charger, 11 KV HT starter panel including replacement of fuses, provision of 2 nos. new 89 Ah, 12 V batteries complete with testing & commissioning all as reqd & as per the instruction of E.I.C.	1.00	Job		12300.00	12300.00	17500.00	17500.00	9000.00	9000.00	5000.00	5000.00	17000.00	17000.00	2500.00	2500.00	2500.00	S. N. ELECTRICALS
5.00	Service and Testing of the 500 KVA, 11 KV, 430 V distribution ONAN Transformer as per recommended standard and submission of report complete as required through authorised service agency of OEM/ reputed agency approved by engineer-in-charge. Testing should include Insulation Resistance test, Voltage Ratio & Tap Continuity test, Magnetic Balance Test, Vector Group Test, Accessories working etc. complete as reqd.	4.00	Job		10000.00	40000.00	2500.00	10000.00	10000.00	40000.00	10000.00	40000.00	7800.00	31200.00	9500.00	38000.00	10000.00	Techno Electricals
6.00	Service, Checking and Testing of the LT 800 A Air Circuit Breakers including testing of wiring of breaker and minor repairing works complete as required including documenting the testing as per recommended standards (through authorised agency of OEM/reputed agency approved by Engineer-in-Charge) followed with submission of test report to AAI as per condition of contract etc as required.	4.00	Job		3900.00	15600.00	3000.00	12000.00	3500.00	14000.00	3500.00	14000.00	3300.00	13200.00	2500.00	10000.00	10000.00	S. N. ELECTRICALS
7.00	Service, Testing and Calibration of the following relays as per recommended standard and submission of calibration report complete as required through authorised service agency of OEM/ reputed agency approved by Engineer-in-Charge.																	

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 2020.12.20
 (18.1)

Signature
 2020.12.20

SL No	Description of Work / Item(s)	No. of Qty	Units	Estimated Rate	Ascent Electrification Engineers (GSTIN: 24AOPF2374R12U)	Techno Electronics (GSTIN: 24AAGF10068M12G)	CENTRE TAP ENGINEERING (GSTIN: 24AGPP9912K12T)	ABHISHEK ASSOCIATES (GSTIN: 24AUGP04236Q1ZT)	Marish Electricals (GSTIN: 22ABIPN401E1E1Y)	S. N. ELECTRICALS (GSTIN: 07AKEP0675R229)	L1 Amount	L1 Vendor
					Rate	Amount	Rate	Amount	Rate	Amount		
7.10	Over Current & Earth Fault Relay (MC 31A of L&T make) for LT panel	8.00	Each		1345.00	10760.00	1500.00	12000.00	1500.00	12000.00	8000.00	S. N. ELECTRICALS
7.20	Auxiliary Relay for Buchholz, WTI, OTI tripping for 11 KV HT VCB panel	8.00	Each		1845.00	13160.00	750.00	6000.00	2000.00	16000.00	6000.00	Techno Electronics
7.30	Master Tripping relay (CGRH1 of CG make) for 11KV HT VCB panel	6.00	Each		1650.00	9900.00	1500.00	9000.00	2000.00	12000.00	6000.00	S. N. ELECTRICALS
7.40	Over Current & Earth Fault Relay (CGI 14N of CG make) for 11 KV HT VCB panel	6.00	Each		1750.00	10500.00	1500.00	9000.00	2500.00	15000.00	6000.00	S. N. ELECTRICALS
8.00	Dehydration and filtration of transformer oil at site including testing the BDV before and after filtration and submitting the test reports etc. as required for 500 KVA Transformer (Approx. 415 Lit of tank capacity)	4.00	Each		6500.00	26000.00	6000.00	24000.00	6000.00	24000.00	24000.00	Techno Electronics, Marish Electricals
9.00	Supply and Topping up the transformer oil in conservator tank upto a required level with new treated transformer oil complete as required.	85.00	Ltr.		150.00	11050.00	150.00	12750.00	140.00	11900.00	10525.00	ABHISHEK ASSOCIATE
10.00	Servicing, repairing, rewinding and replacement of defective bearings / bushing including transporting from site to contractors workshop & back to site, testing and commissioning etc. complete as required.											
10.10	Ceiling fan (wall fan) pedestal fan	10.00	Each		300.00	3000.00	300.00	3000.00				
10.20	Exhaust fan of all sizes	4.00	Each		300.00	1200.00	300.00	1200.00	600.00	2400.00	600.00	S. N. ELECTRICALS
11.00	Rewinding of the upto 3/5 HP submersible/motorblock pump/motor sets with suitable gauge copper wire IC varnishing, baking etc as required, job includes transportation from site to contractor's workshop & back to site.	2.00	Each		1500.00	3000.00	2000.00	4000.00	2000.00	4000.00	1000.00	ABHISHEK ASSOCIATE
12.00	Calibration of CCR & Sensitivity of relay on 4 KW to 20 KW CCR of AMANASU make CCR including submitting reports etc., complete as required.	8.00	Each		2600.00	23200.00	3000.00	24000.00			23200.00	Ascent Electricals on Engineers
13.00	Calibration of PAPI Clinometer etc. complete as required.	1.00	Each		10000.00	10000.00	2000.00	2000.00	3000.00	3000.00	12500.00	Techno Electronics
14.00	Inspection, servicing, setting, adjustment, calibration and submission of calibration certificate of following instruments including minor repairs etc. all as reqd.											
14.10	Earth Tester	1.00	Each		500.00	500.00	500.00	500.00			350.00	CENTRE
14.20	Multimeter (digital)	1.00	Each		900.00	900.00	900.00	900.00			350.00	CENTRE
14.30	Lux Meter	1.00	Each		900.00	900.00	500.00	500.00			350.00	CENTRE
15.00	Painting of Runway / Taxiway Light installed GLF fittings including base plate with two coats of the synthetic enamel paint of aviation yellow colour of approved make to give an even shade and painting the base concrete with white colour water base road marking paint including numbering with black paint on white back ground, cleaning the surface with suitable means as per the instructions of the Engineer in Charge etc. complete as required.	185.00	Each		60.00	11100.00	55.00	10175.00	80.00	14800.00	10175.00	Techno Electronics
16.00	Painting of PAPI fittings including base plate with two coats of the synthetic enamel paint of aviation yellow colour of approved make to give an even shade, cleaning the surface with suitable means as per the instructions of the Engineer in Charge etc. complete as required.	8.00	Each		300.00	2400.00	350.00	2800.00	260.00	2240.00	1200.00	ABHISHEK ASSOCIATE



Handwritten signature and date:
 11/10/2020

Sl.No	Description of Work / Item(s)	No. of Qty	Units	Estimated Rate	Ascent Electrification Engineers (GSTN: 24AAOF43574R1ZU)		Techno Electricals (GSTN: 24AAAG19068H1ZG)		CENTRE TAP ENGINEERING (GSTN: 24AAGP98172K1ZP)		ABHISHEK ASSOCIATES (GSTN: 24AD2P04230Q1Z1)		Manish Electricals (GSTN: 22ABLP46012E1Z1)		S. N. ELECTRICALS (GSTN: 07AKGP06875R2Z5)		L1 Vendor
					Rate	Amount	Rate	Amount	Rate	Amount	Rate	Amount	Rate	Amount	Rate	Amount	
17.00	Supply and fixing of flame retardant electrical insulation mat of 2.5 mm thick to withstand upto 11 KV conforming to IS 15652:2006 with upto date amendments and having minimum width 1000mm (+/- 20mm). The sufficient adhesive / compound shall be supplied to fix the insulation mat on the front/rear side of electrical installation. Mat shall be ISI marked. Its leakage current at 11 KV shall not be more than 10 MA. The mat shall be welded by hot gas welding with filler material method by making V groove cut at joints with suitable welding cord of insulating material of matching colour to provide a seamless jointed surface as per IS : 8002 (Type Test Certificates from reputed laboratories such as CPRI, ERDA shall be submitted)	20.00	Sq. Mtr		1200.00	24000.00	797.00	15940.00	1500.00	30000.00	1750.00	35000.00	1200.00	24000.00	150.00	3000.00	S. N. ELECTRICALS
18.00	Servicing, repairing, and replacement of defective parts of the 100 KVA capacity 3-phase Servo Voltage Stabilizer (Regulator) at MSSR including transporting from site to workshop & back to site complete with testing and commissioning etc. all as reqd. & as per the instructions of E.I.C.	1.00	Job		3500.00	3500.00	2252.00	2252.00	3500.00	3500.00	5000.00	5000.00	4500.00	4500.00	15000.00	2252.00	Techno Electricals
19.00	Servicing & complete overhauling of High Mast LC repairing, replacement of defective parts of which assembly, wire rope, trailing cable, control panel, complete with testing & commissioning all as per site requirement.	2.00	Job		13000.00	26000.00	2500.00	5000.00	10000.00	30000.00	15000.00	30000.00	10000.00	20000.00	10000.00	5000.00	Techno Electricals
20.00	Decoration of Terminal building facade with LED serial lighting and RGB pattern lighting on special requirements for the following: (i) Minimum no. of LED serial lighting - not less than 5000 LED lights. (ii) Pixel Chaser light batten running linearly on the top of the building. ATC tower, entry gate walls for a length of not more than 350 m. (iii) Halogen focus lights (Green or Yellow) for trees around terminal building - 20 Nos. Type of Decoration will be as per the theme of occasions and upto the satisfaction of the Engineer in-charge/Airport Director.																
20.10	Independence day / Republic day / AAI foundation day / Christmas / New Year (Starting from 18.00 hrs. on the Day before the Occasion to till 06.00 hrs on the day after the Occasion) Each occasion in an year shall be treated as one Job.	4.00	Each		15500.00	62000.00	15000.00	60000.00	25000.00	100000.00	19000.00	76000.00	21000.00	84000.00	35000.00	140000.00	Techno Electricals
21.00	Execution of Complete terms of CPWD Delhi schedule of rates (ESM) 2018 (Up to a Ceiling limit of Rs. 60,000 without GST). The materials used for executing the DSR items shall be as per the approved make list of AAI, as enclosed with the tender document.	160000.00	Select		.13	139984	.15	135000.00	.38	100000.00	.30	112000.00	.20	128000.00	.10	144000.00	CENTRE TAP ENGINEERING

Total In Figures

6387834.96

6440845.00

6458225.00

6470362.00

6615904.00

6607175.00

Lowest Amount Quoted BY: Ascent Electrification Engineers (6387834.96)

Signature
21/11/2020



BOQ Summary Details

Tender Title: Annual Periodical Maintenance and Operation of E and M Installations at C. A. Porbandar for two years (2020-22)

Tender ID: 2020_AAI_62353_1

Sheet Name	Sl.No	Bidder Name	Amount	Bid Rank
BoQ1	1	Ascent Electrification Engineers	6387834.96	L1
	2	Techno Electricals	6440645.00	L2
	3	CENTRE TAP ENGINEERING	6458225.00	L3
	4	ABHISHEK ASSOCIATES	6470362.00	L4
	5	S. N ELECTRICALS	6607175.00	L5
	6	Manish Electricals	6618604.00	L6

Signature
4/12/2020



Signature Not Verified

Digitally signed by Chandrashekhar Devikisan Sharma

Date: 2020.12.04 17:41:35 IST

Location: eProcurement System for Central PSUs