

Name of Work: ARMO of E & M Installations at Rajahmundry Airport for the Year 2021 - 23.
Sub - Head: Job Contract for Operation & Maintainence of E & M Installations and Other Allied Works.

Sl. No.	Description	Qty	Unit	JUSTIFIED COST		M/s Shraddha Engineering & Facility Services, Visakhapatnam. (1/15)		M/s. Lakshmi Electrical Enterprises, Chennai.(2/15)		M/s. NS Engineers, Ahmedabad.(3/15)		M/s. Centre Tap Engineering, Ahemedabad.(4/15)		M/s. Chennai Engineering Services, Chennai (5/15)	
1	Job Contract for Operation & Maintenance of E&M Installations. Operation and maintenance of Power supply HT & LT installations, Standby DG Sets, Airfeild lighting systems,UPSs, Internal & External electrical & mechanical installations, Water supply pumps, Fire Alarm & Fire Hydrant System, Sewerage Pumps, Elevators etc., by deploying required manpower as per special conditions of contract (Annexure-A) for operation, monitoring, recording performance log books, carrying out preventive maintenance activities & maintaining records, attending breakdown complaints and minor repair works on round the clock basis i/c. Sundays and Holidays etc. complete as required.	24	Month	706,182.00	16,948,368.00	665,202.00	15,964,848.00	629,600.00	15,110,400.00	612,000.00	14,688,000.00	650,000.00	15,600,000.00	663,459.00	15,923,016.00
2	Execution of any item of Delhi Schedule of Rates (E&M) -2018: Limit Rs.5,00,000/-. DSR (E&M) - 2018 rates are reference and final through out the contract period to evaluate quoted rate. (Guidance : if the quoted rate is Rs. 0.90 for this item, quoted amount shall be Rs.4,50,000/- for executing DSR- (E&M)2018 items of amount Rs.5,00,000/- OR if the quoted rate is Rs. 1.10 for this item, quoted amount shall be Rs.5,50,000/- for executing DSR(E&M)-2018 items of amount Rs.5,00,000/- (For Eg: if Rs.5,00,000/- is executed amount for DSR (E&M) - 2018 items then after removing GST [Rs.5,00,000 /1.1405]), the base amount will be = Rs.4,38,404/- . GST as per actual will be considered during billing)	438404	Each	1.00	438,404.00	0.85	372,643.40	0.90	394,563.60	0.80	350,723.20	0.50	219,202.00	1.00	438,404.00
3	Filtration of transformer oil to attain acceptable di-electric strength by hot streamline process including arranging plant, transportation etc. complete as required.														
3.01	For 1st Year (2021-22)	1550	Litres	8.00	12,400.00	8.00	12,400.00	7.00	10,850.00	7.50	11,625.00	10.00	15,500.00	2.99	4,634.50
3.02	For 2nd Year(2022-23)	1550	Litres	8.50	13,175.00	8.00	12,400.00	7.00	10,850.00	9.50	14,725.00	10.00	15,500.00	3.99	6,184.50
4	Testing of transformer oil sample including conducting BDV test & acidity test in reputed Govt. approved labs and producing test report etc complete as required.														
4.01	For 1st Year (2021-22)	2	Job	3,535.00	7,070.00	2,250.00	4,500.00	750.00	1,500.00	2,000.00	4,000.00	3,000.00	6,000.00	999.00	1,998.00
4.02	For 2nd Year(2022-23)	2	Job	3,712.00	7,424.00	2,250.00	4,500.00	850.00	1,700.00	2,500.00	5,000.00	3,500.00	7,000.00	999.00	1,998.00
5	Supply and replacement of silica gel blue of breather units of transformers as required	8	Kg	129.00	1,032.00	275.00	2,200.00	350.00	2,800.00	900.00	7,200.00	120.00	960.00	499.00	3,992.00
6	Supply of Transformer Oil conforming to IS:335 to be supplied in non-returnable barrel	210	Litres	88.00	18,480.00	92.00	19,320.00	115.00	24,150.00	130.00	27,300.00	100.00	21,000.00	89.00	18,690.00
7	Calibration of different types of relays on 11 KV HT Panel like control relays of buchholz alarm and trip, oil temperature increase, winding temperature increase, master relay/Over current/earth fault relays, including submitting test report by OEM Service dealers/Government Approved Agencies etc complete as required.														
7.01	For 1st Year (2021-22)	16	Each	2,525.00	40,400.00	2,200.00	35,200.00	5,000.00	80,000.00	700.00	11,200.00	2,400.00	38,400.00	999.00	15,984.00
7.02	For 2nd Year(2022-23)	16	Each	2,651.00	42,416.00	2,200.00	35,200.00	5,000.00	80,000.00	1,000.00	16,000.00	2,500.00	40,000.00	999.00	15,984.00
8	Calibration & discrimination of different types of relays in the existing LT Panel board like IDMT relay, master trip relay, reverse power relay, over current/earth fault relays including submitting test certificates by OEM Service dealers/ Government Approved Agencies etc complete as required.														
8.01	For 1st Year (2021-22)	16	Each	2,424.00	38,784.00	2,350.00	37,600.00	1,500.00	24,000.00	700.00	11,200.00	2,400.00	38,400.00	1,199.00	19,184.00
8.02	For 2nd Year(2022-23)	16	Each	2,545.00	40,720.00	2,350.00	37,600.00	1,500.00	24,000.00	1,000.00	16,000.00	2,500.00	40,000.00	1,199.00	19,184.00
9	Painting of HT Panels and LT panels such as APFC panels, MOCB panels, MBD/SMDB panels, AMF panels, battery charger panels, Distribution Boards, Outdoor Feeder Pillars, Transformers, DG sets, diesel tanks, fuel pipes, radiator, DG Set support frames, bus bar duct, pumps, motors & its supporting frame , pump panel, conveyor side covers, earth pits, etc with two coats of Synthetic enamel paint of approved make colour, quality including scrapping, cleaning, painting with primer(Wherever if required) etc. as required	1000	Sqmt	124.00	124,000.00	100.00	100,000.00	90.00	90,000.00	140.00	140,000.00	100.00	100,000.00	349.00	349,000.00
10	Lettering with synthetic enamel paint of approved quality and brand with stencil of suitable letter size (Height of letter 4 cm to 6 cm) and spacing as per the direction of Engineer-in-charge at various panels / equipments etc as reqd. (Lettering of a single Alphabet/Number/Symbol is considered as 1 Letter)	1500	Litres	10.00	15,000.00	8.00	12,000.00	6.00	9,000.00	600.00	900,000.00	8.00	12,000.00	299.00	448,500.00
11	Carrying out proper cleaning of raw sewage sump, aeration tanks, settling tanks and chlorine contact tanks etc. of 60 KLD STP Plant to ensure smooth operation of the plant and activity time schedule shall be submitted to AAI before planning the cleaning of tanks to avoid hampering of terminal operations etc. complete as required.	1	Job	40,400.00	40,400.00	6,000.00	6,000.00	30,000.00	30,000.00	100,000.00	100,000.00	6,000.00	6,000.00	24,999.00	24,999.00
12	Supply and replacement of Filter Media as required for pressure sand filter & activated carbon filters of 60 KLD Sewage Treatment plant as specified in the special conditions of the contract etc. complete as required.	1	Job	52,070.00	52,070.00	45,000.00	45,000.00	155,000.00	155,000.00	150,000.00	150,000.00	50,000.00	50,000.00	149,999.00	149,999.00
13	Carrying out Effluent water analysis of the treated outlet water for testing the parameters such as pH, TDS, TSS, COD, BOD, Oil & Grease etc. in quarterly basis in the presence of AAI's representative and submitting the duly attested test reports to AAI etc. complete as required.	8	Job	1,414.00	11,312.00	1,200.00	9,600.00	5,500.00	44,000.00	3,000.00	24,000.00	2,000.00	16,000.00	9,999.00	79,992.00
14	Servicing of following equipment of 60 KLD Sewage treatment plant including Dismantling,to & fro transportation Airport & workshop, re-installation and commissioning etc., as and when required.														
14.01	Sewage Transfer pumps (1HP, Make: Kirloskar)	2	Each	7,272.00	14,544.00	3,000.00	6,000.00	5,000.00	10,000.00	5,000.00	10,000.00	5,000.00	10,000.00	4,999.00	9,998.00
14.02	Filter feed pumps (1HP, Make: Kirloskar)	2	Each	7,272.00	14,544.00	3,000.00	6,000.00	4,000.00	8,000.00	5,000.00	10,000.00	5,000.00	10,000.00	4,999.00	9,998.00
14.03	Recirculation pump (1HP, Make: Kirloskar)	1	Each	7,272.00	7,272.00	3,000.00	3,000.00	4,500.00	4,500.00	5,000.00	5,000.00	5,000.00	5,000.00	4,999.00	4,999.00
14.04	Treated water Submersible pump (1HP)	1	Each	7,272.00	7,272.00	3,000.00	3,000.00	6,500.00	6,500.00	6,000.00	6,000.00	5,000.00	5,000.00	4,999.00	4,999.00
14.05	Air Blowers (5HP, Make: Welcome Enviro Engineers)	2	Each	25,250.00	50,500.00	15,000.00	30,000.00	11,000.00	22,000.00	6,000.00	12,000.00	25,000.00	50,000.00	24,999.00	49,998.00
14.06	Raw Sewage Submersible pump (1.5 HP. Make: Grundfoss)	2	Each	10,100.00	20,200.00	8,500.00	17,000.00	24,000.00	48,000.00	8,000.00	16,000.00	7,500.00	15,000.00	9,999.00	19,998.00
Total: Rs.				17965787.00		16776011.40		16191813.60		16535973.20		16320962.00		17621733.00	
				17965787.00		16776011.00		16191814.00		16535973.00		16320962.00		17621733.00	
						-6.62%		-9.87%		-7.96%		-9.16%		-1.92%	
Status				Below		Below		Below		Below		Below		Below	

Certified that I have personally conducted check of all tenders duly computed & Checked and satisfied my self that the checking work has been properly done and the rates quoted by the contractors totals are carried over correctly in the comparative statement.

STATEMENT

M/s. Leesha Electricals, Nagpur(6/15)		M/s. Shri Vaari Electricals Pvt. Ltd., Chennai(7/15)		M/s. Elbe Engineering Services, New Delhi(8/15)		M/s. Delite Systems Engineering (I) Pvt. Ltd., Mumbai(9/15)		M/s. Teja Power Tech, Hyderabad(10/15)		M/s. K.N. Construction, Ranchi(11/15)		M/s. S.N. Electric & Maintenance Private Limited, New Delhi.(12/15)		M/s. Manish Electricals, Gwalior(13/15)		M/s. Power Tech Engineering Services, Visakhapatnam(14/15)		M/s. Bharat Electric, Nagpur(15/15)	
655,000.00	15,720,000.00	695,000.00	16,680,000.00	638,000.00	15,312,000.00	672,346.00	16,136,304.00	645,000.00	15,480,000.00	660,085.50	15,842,052.00	637,805.00	15,307,320.00	636,500.00	15,276,000.00	576,235.00	13,829,640.00	615,200.00	14,764,800.00
1.00	438,404.00	1.10	482,244.40	0.80	350,723.20	1.03	451,556.12	0.85	372,643.40	0.40	175,361.60	0.80	350,723.20	0.85	372,643.40	0.90	394,563.60	0.88	385,795.52
10.00	15,500.00	6.00	9,300.00	5.00	7,750.00	11.00	17,050.00	5.00	7,750.00	38.00	58,900.00	6.50	10,075.00	10.00	15,500.00	20.00	31,000.00	150.00	232,500.00
10.00	15,500.00	7.00	10,850.00	5.00	7,750.00	11.00	17,050.00	5.50	8,525.00	42.00	65,100.00	7.50	11,625.00	10.00	15,500.00	30.00	46,500.00	150.00	232,500.00
500.00	1,000.00	4,500.00	9,000.00	1,500.00	3,000.00	900.00	1,800.00	500.00	1,000.00	5,000.00	10,000.00	1,500.00	3,000.00	1,500.00	3,000.00	3,500.00	7,000.00	10,000.00	20,000.00
500.00	1,000.00	5,500.00	11,000.00	1,500.00	3,000.00	900.00	1,800.00	600.00	1,200.00	5,000.00	10,000.00	1,500.00	3,000.00	1,500.00	3,000.00	4,000.00	8,000.00	10,000.00	20,000.00
50.00	400.00	350.00	2,800.00	500.00	4,000.00	600.00	4,800.00	120.00	960.00	1,100.00	8,800.00	180.00	1,440.00	400.00	3,200.00	300.00	2,400.00	500.00	4,000.00
100.00	21,000.00	150.00	31,500.00	119.00	24,990.00	219.00	45,990.00	195.00	40,950.00	150.00	31,500.00	125.00	26,250.00	180.00	37,800.00	150.00	31,500.00	125.00	26,250.00
2,000.00	32,000.00	5,500.00	88,000.00	500.00	8,000.00	5,500.00	88,000.00	450.00	7,200.00	15,000.00	240,000.00	1,000.00	16,000.00	1,000.00	16,000.00	5,000.00	80,000.00	3,500.00	56,000.00
2,000.00	32,000.00	6,000.00	96,000.00	500.00	8,000.00	5,500.00	88,000.00	475.00	7,600.00	17,100.00	273,600.00	1,000.00	16,000.00	1,000.00	16,000.00	5,500.00	88,000.00	3,500.00	56,000.00
2,000.00	32,000.00	5,500.00	88,000.00	500.00	8,000.00	5,500.00	88,000.00	450.00	7,200.00	7,500.00	120,000.00	2,500.00	40,000.00	1,500.00	24,000.00	5,000.00	80,000.00	2,500.00	40,000.00
2,000.00	32,000.00	6,000.00	96,000.00	500.00	8,000.00	5,500.00	88,000.00	500.00	8,000.00	8,000.00	128,000.00	2,500.00	40,000.00	1,800.00	28,800.00	5,500.00	88,000.00	2,500.00	40,000.00
50.00	50,000.00	150.00	150,000.00	140.00	140,000.00	220.00	220,000.00	40.00	40,000.00	60.00	60,000.00	100.00	100,000.00	150.00	150,000.00	200.00	200,000.00	67.00	67,000.00
5.00	7,500.00	40.00	60,000.00	5.00	7,500.00	66.00	99,000.00	5.00	7,500.00	80.00	120,000.00	8.00	12,000.00	10.00	15,000.00	15.00	22,500.00	10.00	15,000.00
2,000.00	2,000.00	10,000.00	10,000.00	150,000.00	150,000.00	50,000.00	50,000.00	30,000.00	30,000.00	2,000.00	2,000.00	10,000.00	10,000.00	40,000.00	40,000.00	8,000.00	8,000.00	7,500.00	7,500.00
5,000.00	5,000.00	75,000.00	75,000.00	80,000.00	80,000.00	99,000.00	99,000.00	10,000.00	10,000.00	6,000.00	6,000.00	10,000.00	10,000.00	15,000.00	15,000.00	9,000.00	9,000.00	4,855.00	4,855.00
1,000.00	8,000.00	2,500.00	20,000.00	8,000.00	64,000.00	3,000.00	24,000.00	15,000.00	120,000.00	2,000.00	16,000.00	8,500.00	68,000.00	3,000.00	24,000.00	3,500.00	28,000.00	1,000.00	8,000.00
2,000.00	4,000.00	10,000.00	20,000.00	2,000.00	4,000.00	5,000.00	10,000.00	2,000.00	4,000.00	5,200.00	10,400.00	9,500.00	19,000.00	2,500.00	5,000.00	2,000.00	4,000.00	2,500.00	5,000.00
1,000.00	2,000.00	10,000.00	20,000.00	2,000.00	4,000.00	5,000.00	10,000.00	1,500.00	3,000.00	18,000.00	36,000.00	9,500.00	19,000.00	2,500.00	5,000.00	2,500.00	5,000.00	2,500.00	5,000.00
1,000.00	1,000.00	10,000.00	10,000.00	2,000.00	2,000.00	5,000.00	5,000.00	1,500.00	1,500.00	16,000.00	16,000.00	9,500.00	9,500.00	2,800.00	2,800.00	3,000.00	3,000.00	2,500.00	2,500.00
1,000.00	1,000.00	10,000.00	10,000.00	2,000.00	2,000.00	5,000.00	5,000.00	1,500.00	1,500.00	8,000.00	8,000.00	9,500.00	9,500.00	3,300.00	3,300.00	3,000.00	3,000.00	2,500.00	2,500.00
1,000.00	2,000.00	30,000.00	60,000.00	5,000.00	10,000.00	7,500.00	15,000.00	300.00	600.00	65,000.00	130,000.00	45,000.00	90,000.00	3,300.00	6,600.00	5,000.00	10,000.00	2,500.00	5,000.00
1,000.00	2,000.00	18,000.00	36,000.00	3,000.00	6,000.00	7,500.00	15,000.00	1,800.00	3,600.00	13,000.00	26,000.00	19,500.00	39,000.00	3,000.00	6,000.00	6,000.00	12,000.00	2,500.00	5,000.00
16425304.00		18075694.40		16214713.20		17580350.12		16164728.40		17393713.60		16211433.20		16084143.40		14991103.60		16005200.52	
16425304.00		18075694.00		16214713.00		17580350.00		16164728.00		17393714.00		16211433.00		16084143.00		14991104.00		16005201.00	
-8.57%		0.61%		-9.75%		-2.15%		-10.02%		-3.18%		-9.76%		-10.47%		-16.56%		-10.91%	
Below		Above		Below		Below		Below		Below		Below		Below		Below		Below	